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United Nations
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Reclaiming the Fields of War: Mainstreaming Mine Action in Development

The initial purpose and motivation of the mine action initiative – which has existed as a civilian activity for only 15 years – was to prevent deaths and injuries caused directly by mines. While mine action retains – and ought to retain – its strong focus on the humanitarian impact of the global landmine problem, it is now widely recognized that landmines and explosive remnants of war (ERW) also represent a serious obstacle for post-conflict development. Indeed, as mine-affected countries move away from a state of war, the numbers of direct casualties from mines and ERW tend to fall and the development impacts of the landmine problem gain in significance. In such a situation, the mine action sector is faced with a new set of challenges related to planning, coordination with other actors, and funding. In addition to addressing the humanitarian threat posed by mines, a comprehensive mine action programme should aim to contribute as constructively as possible to development through the consolidation of nationally owned capacities tailored to particular problems encountered in specific cases.

This study was commissioned by the UNDP Mine Action Team in response to increasing demands from mine-affected countries and donor governments for guidance on the development dimension of mine action. The report reviews the history of mine action from a mainstreaming perspective and examines its socio-economic impact. In addition, it looks at how mine action is currently organized in terms of policies, institutional arrangements and resources – and asks to what extent the present approach is conducive to mainstreaming. Addressing mine action and development stakeholders at the international, national and operational levels, the report outlines a course of action for mainstreaming mine action in development.

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R E P O R T

The report can be ordered from:
International Peace Research Institute,
Oslo (PRIO)
Fuglehauggt. 11,
NO 0260 Oslo, Norway
E-mail: amac@prio.no
www.prio.no



International Peace Research Institute, Oslo
Institutt for fredsforskning

United Nations Development Programme
Bureau for Crisis Prevention and Recovery
Mine Action Team
One United Nations Plaza, 20th Floor
New York, NY 10023
mineaction@undp.org
www.undp.org/bcpr



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FOREWORD AND ACKNOWLEDGEMENTS

IN MANY COUNTRIES, mine action is not simply a humanitarian imperative, it is a major development issue as well. In addition to killing and maiming 15,000–20,000 people a year, landmines keep people from returning to their homes and resuming a normal way of life long after conflicts have ended. Landmines and other explosive remnants of war inhibit rehabilitation and reconstruction, agriculture, health, education, water supply, infrastructure development, environmental protection, industrial and commercial growth, and domestic and foreign investment. It is evident that landmines and unexploded ordnance constitute a serious obstacle to human development – but we also know that this obstacle can be addressed in a cost-effective manner by mine action programmes that are well conceived and managed.

The NGO community put forth the first recommendations on how to address the development dimension of mine action – most notably through the ‘Bad Honnef’ Guidelines, which were formulated as early as 1997. NGOs also led efforts to develop landmine impact surveys, which helped shift the attention away from numbers of landmines and towards their impact on people. States parties to the Ottawa Convention have emphasized the importance of addressing the long-term consequences of landmines at a number of forums, including the Resource Mobilization Contact Group. Affected states have begun to incorporate a mine action dimension in their development policies, programmes and budgets, and a growing number of donor governments now emphasize the socio-economic consequences of the landmine problem. Donor governments have also exchanged views on and discussed strategies for this issue, for example within the New York-based Mine Action Support Group. While the development dimension of mine action is increasingly recognized, only limited research and policy work is available on the subject to date.

This study is a step towards a better understanding of what it means to mainstream mine action and why we should pursue it. The report explores existing linkages between mine action and development, and argues that both mine action and development interventions stand to gain from greater synchronization.

Mine action directly supports three of the Millennium Development Goals (MDGs): poverty reduction (MDG 1), environmental sustainability (MDG 7) and global partnerships for development (MDG 8). This report demonstrates that mine action has made a significant contribution to poverty reduction in many countries. Mine action also contributes to environmental safety and protection by removing explosives that

degrade soil and have a long-lasting toxic effect on the environment. Last but not least, mine action has provided a unique example of how global partnerships can support development causes. It is in the spirit of this success story that new challenges such as mainstreaming mine action are explored, and all stakeholders are called upon to undertake the necessary action.

Authors

The team responsible for the research, analysis and presentation of findings in this report was made up of two people: Kristian Berg Harpviken of the International Peace Research Institute, Oslo (PRIO) and Jan Isaksen of the Chr. Michelsen Institute (CMI), Bergen. Additional inputs were provided by Taylor Owen of PRIO and Knut Nygaard of CMI.

Advisory Panel and Consultation Process

The study benefited from various consultation meetings with the mine action community, most notably during the 2004 February and June Intersessionals in Geneva and at a meeting of the New York-based Mine Action Support Group in June 2004. A large number of consultations with individual members of the mine action and development communities were realized during the first half of 2004. Last but not least, numerous individuals and organizations contributed generously with information, comments and ideas during field visits to Afghanistan, Croatia and Mozambique.

An advisory panel made up of international and national experts provided guidance and advice in the finalization of the study. The panel included Sayed Aqa (United Nations Development Programme, UNDP), Martin Barber (United Nations Mine Action Services, UNMAS), Mahamoud Bechir (Chad's National High Commission for Demining), Stefano Calabretta (Intersos), Hanne B. Elmelund (Danish Ministry of Foreign Affairs), Darvin Lisica (Bosnia and Herzegovina Mine Action Centre), Ian Mansfield (Geneva International Centre for Humanitarian Demining, GICHD) and Sudarshan (UNDP). Critical inputs during the review process were received from Markus Haake (Actiongroup Landmine.de), Thomas Gebauer (Medico International), Ted Paterson (GICHD), Eric Filippino (GICHD), Phil Bean (GICHD), John Flanagan (UNMAS), Justin Brady (UNMAS), Archie Law (UNMAS), Reuben McCarthy (UNICEF), Earl Turcotte (UNDP), Eva Busza (UNDP) and numerous staff members in UNDP Country Offices worldwide. On behalf of UNDP, Katrin Kinzelbach was responsible for overall coordination and editing of the report.

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We hope that this common effort to better understand the challenges and benefits of mainstreaming mine action in longer-term development planning and programming will make an important contribution to our main goal: freeing the world from the effects of landmines.



Sayed Aqa
Head of the UNDP Mine Action Team
Bureau for Crisis Prevention and Recovery, New York

INTRODUCTION

LANDMINES AND EXPLOSIVE REMNANTS OF WAR (ERW) represent a major obstacle to development in a number of countries worldwide. In response, mine action programmes – aimed at removing the threat or reducing the effects of landmines and ERW – have emerged as a significant sector in international development assistance. Over the past few years, important steps have been taken to bring mine action practice more into line with general development practice, and to foster awareness of mine action within the larger development community. However, despite this trend towards a greater mainstreaming of mine action in development, there is a dearth of comprehensive studies, a scarcity of data and a lack of concrete recommendations to guide mine action and development practitioners alike.

This study maps the current state of affairs in relation to the mainstreaming of mine action in development, including a brief look at the history of mine action. It seeks to address the issue of mainstreaming in a comprehensive manner, both in terms of looking at policies and practices at multiple levels (from the local community to the multilateral institution) and in terms of covering the full range of variation between mine-affected countries. Key questions guiding the study are:

- What are the impacts of mine action, and to what extent can mine action be justified as development assistance?
- To what extent is mine action today an integrated part of development assistance?
- In what ways can mine action be mainstreamed in development, and what limitations does the process of mainstreaming face?¹

The findings are based on a desk review of existing research, interviews with a broad range of stakeholders in mine action and development, and field visits to Afghanistan, Croatia and Mozambique.²

The mine action sector has taken important steps towards aligning itself with the policies and practices of wider development practice, and has been at the forefront in pioneering new approaches of general value in a number of ways – for example, in the use of new information technologies. Furthermore, development practitioners have

¹ For the full terms of reference for the study, see Appendix I.

² For more information on methodology, see Appendix II.

increasingly recognized the potential impact of landmines and ERW on development, as well as the importance of mine action as an integral part of their programmes.

The first chapter of this report examines the mainstreaming concept and provides a historical review of how it has affected mine action throughout the sector's brief history. Mainstreaming is not a precise concept, and the term is used and understood in a variety of ways. In the most general sense, though, mainstreaming is about changing modes of thinking within an organization or set of institutions so that a particular concern is reflected at all levels and in all tasks. A critical factor for success is commitment at the leadership level. As a specialized sector rooted in the processes surrounding the implementation of the Anti-Personnel Mine Ban Treaty, the mine action sector has a high degree of vertical integration, and actors from all levels within the sector interact closely. While undoubtedly part of the reason for the success of mine action internationally, this strong sectoral integration has, to a certain extent, restricted the mainstreaming of mine action concerns horizontally, in relation to other relevant actors and sectors. The challenge the sector now faces is to maintain a strong sector identity while at the same time broadening the base for mine action sideways, and at all levels – from the field level to the international level.

The second chapter provides a review of the evidence on the socio-economic impact of landmines and ERW, and the impact of mine action, with an emphasis on quantitative studies and cost–benefit analysis. Existing studies demonstrate that mine action can often be justified on economic grounds alone. Going beyond economic development, mine action also contributes towards human development and security – for example, through the reduction of fear, the resettlement of displaced persons and the building of confidence. Today, mine action programmes focus increasingly on the impact of mines on populations. The effects of mine action are measured with a socio-economic perspective, focusing on broader impacts (for example, economic improvements brought about through a reduced sense of fear) rather than more narrowly perceived outputs (such as numbers of mines cleared or numbers of prosthetics fitted). This reorientation has brought mine action closer to the development sphere, and has brought insights from development planning and implementation closer to mine action. Experience in a number of countries demonstrates that the development impact of mine action is already considerable, although the sector has an uneven record in building development expertise. Similarly, and despite the sector's significant contribution towards development outcomes, traditional development actors often lack adequate understanding of the mine action sector.

The third chapter looks at the existing international support system for mine action, mapping both its weaknesses and its strengths in relation to mainstreaming. While there has been considerable progress in recent years, the international support system for mine action is not yet fully conducive to the mainstreaming of mine action in development. Although UNDP has taken a lead in promoting such mainstreaming on behalf of the UN system, and several bilateral donors and development NGOs have integrated it into their policies and funding practices, significant blockages remain. Development funding is – and should be – a complement to rather than a replacement

for funding motivated primarily by emergency or peacebuilding concerns. Nonetheless, all mine action plans and programmes need to take the developmental impact of mine action activities into consideration, ensuring that scarce funds and capacities are used as efficiently and effectively as possible.

The national level (including central government ministries and UN or NGO resident offices) is the focus of the fourth chapter of the report. This is the level at which the governments of mine-affected countries plan and execute development action, supported by international donors, NGOs, UN organizations and international financial institutions. It is at this level that national priorities are set and planning and supervision of local government institutions take place. In many ways, it is also at the national level that everything comes together. Consequently, successful mainstreaming is most likely to come about as a result of a focused effort at this level, with all relevant actors in mine action and development working together to ensure integration in national policies, programming and implementation. In addition, the task of national coordination may also build on planning processes at the provincial level, as in Cambodia, where provincial mine action committees are being set up as part of that country's mine action programme. Under the responsibility of the provincial governors, these committees work with land management and rural development committees to select and prioritize the clearance of minefields according to local and provincial development plans.

The fifth chapter examines the operational level, which is where the effects of poor mainstreaming can be most easily identified in the form of wasted resources and a lack of efficiency, or even in terms of the exposure of local populations to an increased risk of mines. It was at this level that a concern for the development impact of mines was first expressed in the mid-1990s. Almost a decade later, there has been considerable progress at this particular level, not least in terms of data collection and management. In some places, this led to increased local involvement in decisionmaking processes. At the same time, though, implementing bodies within mine action and development often continue to operate as though they were in separate spheres, despite their mutual responsibility to enhance integration.

Chapters 3, 4 and 5 each conclude with a set of recommendations on how to strengthen mainstreaming at the particular level examined – with most of the recommendations encompassing several or all types of actors at that level. A brief conclusion revisits and sums up the current state of affairs in relation to the mainstreaming of mine action in development, focusing on the broad set of tools available for this purpose: policy formulation, institutional restructuring and resource allocation. A mainstreaming strategy is unlikely to succeed unless it is linked to all three types of tools in a complementary manner. Ultimately, however, mainstreaming is not just about tools: it is also about attitudes. And the success of new orientations gradually being adapted hinges on the will of centrally placed individuals to drive reorientation.

MAINSTREAMING AND MINE ACTION

THE ROOTS OF MINE ACTION as a sector within international assistance can be traced back to the late 1980s. Since its very inception, various discussions have taken place within the sector about the development impact of mine action, while discussions about mainstreaming – in the form of a more thorough integration of mine action and development – are of more recent date. The mainstreaming concept, widely applied to issues such as gender and the environment, has only recently entered the mine action discourse, and both the definition and the implications of mainstreaming have been outlined only in a piecemeal fashion. Taking the mainstreaming concept and its application to mine action as a point of departure, this chapter will trace the role of ‘mainstreaming’ throughout the short history of mine action.

What Is Mainstreaming?

As noted above, the application of the mainstreaming concept to mine action is relatively recent and has been inspired by mainstreaming in other areas – such as gender, human rights and the environment.¹ A range of definitions have been developed by numerous actors, varying considerably in content and often reflecting the particularities of individual organizations.² There are considerable differences between mainstreaming environmental or gender concerns into an organizational or institutional context and mainstreaming mine action into development. In relation to environmental or gender issues, mainstreaming is fundamentally about a ‘transformation’.³ It is about changing the mode of thinking within an organization or set of institutions, and the issue at hand is usually both fundamental and relevant in any given context. The point of departure for mainstreaming mine action into development is the conviction that landmines and ERW represent fundamental obstacles to development, even though it is recognized that the mine problem is only

¹ The mainstreaming concept can be traced back to the Platform of Action from the 1995 UN Conference on Women in Beijing. See UN Fourth World Conference on Women, 1995. ‘Global Platform for Action’, Beijing: United Nations Publishing.

² Woodward, A. E., 2001. *Gender Mainstreaming in European Policy: Innovation or Deception*, Berlin: Wissenschaftszentrum Berlin für Sozialforschung.

³ See, for example, UNDP, 2000. *Gender in Development*, New York: United Nations Development Programme.

an issue in certain countries and contexts, and is in principle finite. Whereas a vision of success for mainstreaming gender or environmental concerns might be the dissolution of specialized entities mandated to work on those particular issues, a similar dissolution of specialized mine action capacities would seem to be rather impractical at this point in time.

Mainstreaming has a vertical dimension, where the focus is on integration between different levels. If we conceive mainstreaming as working on a number of interrelated levels (ranging from the international institutions at the helm of policy development and funding to the operators on the ground), it becomes clear that in order for mainstreaming to become effective, all of these different levels must be addressed. The initiatives that trigger a mainstreaming process may be bottom-up, rooted in the experiences of mine action workers on the ground, or top-down, coming from a global or regional agency. What is important is that a mainstreaming initiative is incorporated in all domains, from policy to practice, and at all levels, from the international arena to the mine action unit operating in the field.

Mainstreaming also has a horizontal dimension, represented by the need to move beyond sectoral confinement to ensure the integration of a particular issue within all relevant sectors. In relation to gender, which is an issue that is relevant in all contexts, mainstreaming may mean the gradual dissolution of specialized bodies at all levels as gender concerns are effectively addressed in all sectors. For mine action, a concrete activity that is relevant in mine-affected areas only, it is more likely to mean tight cooperation at all levels, and with all other bodies operating in the same environment. The means of enhancing such cooperation are many, and they vary from level to level. Fundamentally, coordination and cooperation depend on goodwill – both from actors in the mine action sector and from those in the larger developmental sphere.

As it was explicitly formulated in a 1997 ECOSOC definition, mainstreaming ‘is a strategy for making [a certain issue] ... an integral dimension of the design, implementation, monitoring and evaluation of policies and programmes’.⁴ In the vocabulary of development assistance, this means that a particular issue is integrated at all stages of the ‘project cycle’, i.e. from the early initiative to the post-implementation assessment, including a ‘lessons learned’ function so that the effectiveness and efficiency of future initiatives may be further improved.

What tools are available for enhancing and safeguarding mainstreaming? The responses to this question fall into three categories:⁵

- *Formulation of policy.* This raises the questions of who influences or formulates policies, and to what extent it is possible to convert policy into practice.

⁴ Cited in UNDP, 2000. *Gender in Development*, New York: United Nations Development Programme.

⁵ Kanji, N., 2003. *Mind the Gap: Mainstreaming Gender and Participation in Development*, London: International Institute for Environment and Development/Sussex: Institute for Development Studies.

- *Institutional Restructuring.* Aiming ultimately to transform organizational structures and practices (including ingrained organizational cultures), this includes training programmes and the insertion of specialized competence into an organization. The role of innovators within the organization, particularly at mid- and senior-level management, may be critical to stimulating change. Furthermore, it is important to develop tools that can be applied in survey, monitoring and evaluation.
- *Resource allocation:* Funding modalities serve to encourage certain policies and projects at the expense of others. This may be achieved through the earmarking of resources for particular purposes or through specifying minimum criteria that help ensure that the relevant dimension (in this case, developmental impact) is addressed.

There are challenges involved with using these tools. Institutional restructuring through inserting specialized competence (often in advisory functions and on a short-term basis) may turn out to be counterproductive, serving to detract the attention of internal management. Restructuring is unlikely to succeed unless there is existing support for change within the organization, and unless it is tied to internal training and evaluation measures. In a related manner, devising tools for baseline surveys, monitoring and evaluation may aim at simple add-on packages or at new comprehensive packages. The former are often more tempting, particularly when there is a high degree of organizational resistance. Yet this may be precisely when more thorough reforms are required. The end result may otherwise simply be window-dressing.

The Origins of Mine Action

Until recently, the activity now known as mine action was conducted by various governmental institutions, such as the military or health services, with the individual state at the helm. Prior to the mid-1980s, there was little or no public interest in the problems caused by landmines and ERW, and no international framework to address those problems. In many countries, the problems of landmine contamination remained unaddressed, either as a result of scarce resources or because they were not perceived as being important. Clearance of mines and ERW, when conducted, was the responsibility of national military forces.

Mine action emerged in Afghanistan in the late 1980s, as a direct response to development imperatives.⁶ The first clearance project was set up in 1987 by World Vision, an international NGO engaged in the rehabilitation of roads and irrigation channels in the eastern province of Paktia. The first large-scale humanitarian response to the landmine problem was established in Afghanistan in 1988, initiated by the UN

⁶ McGrath, R., 2000. *Landmines and Unexploded Ordnance: A Resource Book*, London: Pluto Press, p. 116.

Country Coordinator, who soon went on to create a number of Afghan national NGOs that would act as the implementing arms of the programme. The Afghan programme relied initially on international military staff as technical advisers, but gradually developed a strong core of Afghan managers.

Clearing Kuwait after the 1991 Gulf War was the next major mine action initiative. Here, the main actors were commercial companies with primarily military expertise, competing for attractive contracts offered by the Kuwaiti government. In 1992, mine clearance was initiated in Cambodia, and in the next few years programmes were established in northern Iraq, Mozambique and Angola. By 2003, mine action programmes were reportedly ongoing in 35 countries.

The emergence of a field-based activity, including demining, mine awareness training and victim assistance, was closely linked to the emergence of a political initiative. By 1992, a group consisting of six NGOs launched the International Campaign to Ban Landmines (ICBL), which played a key role in bringing about the 1997 Landmine Convention. The ICBL was awarded the 1997 Nobel Peace Prize. A parallel anti-landmine campaign mounted by the International Committee of the Red Cross (ICRC) was also important in changing attitudes to landmines. The ICBL was led mainly by NGO activists, yet it successfully coordinated with demining on the ground, rooting its credibility in its access to the field and its ability to act practically. The ICBL was instrumental in defining the landmine problem and placing it on the political agenda. In the first half of the 1990s, its diagnosis was focused on loss of life and limbs, though this focus was gradually complemented by an awareness of the more indirect effects of landmine contamination, including those related to development.

Today, the 1997 Landmine Convention – or Mine Ban Treaty, as it is also known – enjoys the express support of 150 countries.⁷ The Convention places the principal responsibility for mine action on mine-affected states themselves, with an obligation for ‘each state party in a position to do so’ to provide assistance.⁸ The Convention also obliges each state party to destroy all ‘anti-personnel mines in mined areas under its jurisdiction or control’ within ten years of acceding to the treaty. We are now halfway to 2009, when the first state parties will begin to meet that deadline, and there is increasing discussion of what it means to be ‘mine free’ under the terms of the Convention, with interpretations ranging from ‘full clearance’ to ‘risk free’ or ‘impact free’.

Policy Orientations in Mine Action

As mentioned above, international interest in the mine issue was overwhelmingly driven by a concern for the direct victims of landmines. By the mid-1990s, attention

⁷ Of these 150 countries, 141 have ratified or acceded to the treaty, while another nine have signed.

A total of 44 countries, including the USA, Russia, China, India, Pakistan and Israel have not joined the treaty regime. See the ICBL webpage at <http://www.icbl.org> (accessed 8 May 2004).

⁸ See ‘Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Anti-personnel Mines and on their Destruction’, available at <http://www.icbl.org/treaty/text> (accessed 7 November 2004).

began also to be directed at the effects of landmines on development. However, development concerns were generally treated as an add-on to what was still perceived as being the major issue, rather than as representing a major category of effects that required remedy. Furthermore, while attention began to be given to the development impact of landmines and ERW in the larger international debate, the prevention of victims continued to be the overwhelming concern in the prioritization of scarce resources at the field level.

Criticism of how mine action activities were being conducted in the field intensified, however. Many saw the emerging sector as overly focused on technicalities rather than affected populations, and as failing to coordinate with or learn from the larger aid community. In hindsight, 1997 – the year of the Landmine Convention – also stands out as a turning point in redefining mine action policies:

- In March 1997, the UN launched its International Standards for Humanitarian Mine Clearance Operations, the outcome of a conference in Copenhagen the previous year. While relatively traditional, both in focusing on demining alone and in being concerned mainly with the technical aspects of landmines, this effort represented a significant attempt to establish global standards for mine action.⁹ In October of the same year, the UN Mine Action Service (UNMAS) was established, with a mandate to serve as the UN's coordination body for mine action.
- An international conference in June 1997 led to the publication of 'Guidelines for Mine Action Programmes from a Development-Oriented Point of View', also known as the 'Bad Honnef Guidelines' (after the location of the conference).¹⁰ The 1997 version of these guidelines was critical of existing practices, arguing that mine action ought to learn from development practices more generally, and it advocated three principles for all mine action initiatives: participation (of the people affected by landmines), coherence (with other reconstruction and development programmes), and solidarity (as well as autonomy for affected communities).
- In November 1997, three of the major demining NGOs (Handicap International, Mines Advisory Group and Norwegian People's Aid) launched

⁹ United Nations, 1997. 'International Standards for Humanitarian Mine Clearance Operations', available at http://www.mineactionstandards.org/1997Standards/overview_body.htm (accessed 8 May 2004).

¹⁰ German Initiative to Ban Landmines, 1997. 'Guidelines for Mine Action Programmes from a Development-Oriented Point of View ("The Bad Honnef Framework")', Frankfurt: Medico International, 1997; available at <http://www.minesactioncanada.com/techdocuments/bh2-e.html> (accessed 13 July 2004); German Initiative to Ban Landmines, 1999. 'Mine Action Programmes: From a Development-Oriented Point of View ("The Bad Honnef Framework")', Berlin; available at http://www.landmine.de/fix/BH_English.pdf (accessed 13 July 2004).

the term ‘humanitarian mine action’ at a meeting in Brussels.¹¹ A short statement flagged principles that challenged existing practice at the time, drawing attention to the need for data on needs and impact, a ‘realistic’ approach to technology, the gradual transfer of competence to local staff and better coordination arrangements.

The 1997 meetings initiated an enduring effort to redefine the landmine problem. The move towards such a redefinition was to a large degree driven by individuals active at the field level, who rooted their critique in shortcomings they had identified through reflecting upon common practice. In that sense, the process of redefining policies was bottom-up rather than top-down. With some notable exceptions, the new insights were, however, slow to be converted into field practice.

As a concrete follow-up to the development-oriented debates, the Global Landmine Survey initiative came to life in 1998. This was an attempt to comprehensively map the impact of landmines and ERW in all major mine-affected countries, with a view to promoting resource allocation, strengthening planning and providing baseline data for implementation. The effort was rooted in a joint initiative by mine action NGOs, UNMAS and the Geneva International Centre for Humanitarian Demining (GICHD) that led to the establishment of the Survey Working Group, with the Washington-based Survey Action Centre (SAC) as its coordinating body.¹²

The term ‘mine action’, increasingly common from 1997 onwards, represents an effort to integrate some of the new insights. In the 2001 version of the UN International Mine Action Standards, mine action is defined as ‘activities which aim to reduce the social, economic and environmental impact of mines and UXO’, and includes the following ‘groups of complementary activities’:¹³

- demining – including survey, mapping and marking;
- mine risk education;
- victim assistance – including rehabilitation and reintegration;
- stockpile destruction; and
- advocacy to stigmatize the use of landmines.

Importantly, the term was coined not just to underline the close relationship between the various components of mine action; an additional ambition was to emphasize the close relationship between mine action and reconstruction as well as development efforts more generally.

¹¹ Handicap International et al., 1997. ‘Formation of Working Group on Humanitarian Mine Action: Statement of Principles’, Brussels: Handicap International/Mines Advisory Group/Norwegian People’s Aid.

¹² See <http://www.sac-na.org/index.html> (accessed 26 September 2004). For further information on the SAC methodology, see Chapter 2 (below).

¹³ UNMAS, 2001. ‘International Mine Action Standards (IMAS)’, New York: United Nations Mine Action Services.

The Institutions of Mine Action

In the early history of mine action, international NGOs were the driving force, working increasingly in close cooperation with a number of UN organizations. The UN's role has mainly been in policy development, national capacity development, resource mobilization and coordination. Following an influential 'lessons learned' report by the UN Department of Humanitarian Affairs in 1997,¹⁴ the general rule has been to distinguish between coordination and implementation. The UN is now mainly involved in coordination, including through the establishment of so-called Mine Action Centres (MACs) at the national level. The UN is also on occasion involved as the responsible executing body, either when mine action is implemented as part of a peacekeeping operation, in the absence of a functioning government or at the request of the local government.

The establishment of MACs (entities created at the national level and tasked with developing and overseeing the implementation of mine action priorities within a given country) represents a distinctive feature of mine action. Other problems of a similar scale are normally addressed within a larger administrative apparatus, rather than organized via a separate sector spanning all levels, from field to national and international levels. The existence of a specialized coordination structure at the national level contributes to setting mine action apart from other sectors.¹⁵

The implementation level continues to be dominated by NGOs. In a few programmes, Afghanistan being a case in point, solid national NGOs are important implementing bodies. In addition, commercial companies, which were dominant in Kuwait, have played a major role in the Balkans and may become more important as new projects are put out to tender. Finally, national armies implement mine action in some countries (e.g. in Cambodia, Yemen, Thailand and a number of countries in Latin America). The general assumption, which may not always hold true, has been that NGOs are more development-oriented than commercial companies and army units.

Until recently, the mine action sector, unlike other sectors of international assistance, has mainly recruited people with military backgrounds for its senior- and mid-level managerial positions. The divergence between military and developmental organizational cultures has been identified as an obstacle to mine action becoming more developmental. Traditionally, there has been a division of labour under which former military staff have managed demining, survey and stockpile destruction, while civilians have taken care of mine risk education, victim assistance and advocacy. More recently, this division of labour is being complemented by one in which managing positions are increasingly filled by personnel with development experience.¹⁶

¹⁴ Eaton, R.; C. Horwood & N. Niland, 1997. 'Study Report: The Development of Indigenous Mine Action Capacities', New York: United Nations Department of Humanitarian Affairs, Lessons Learned Unit, Policy Analysis Division.

¹⁵ Kjellman, K. E. et al., 2003. 'Acting as One? Coordinating Responses to the Landmine Problem', *Third World Quarterly* 24(5): 855-871.

¹⁶ Harpviken, K. B. & H. Helland, 2004. 'Competition or Cohesion: Professional Struggles in the Landmine Field', unpublished manuscript, Oslo.

The orientation of mine action in practical terms depends on the nature of available data regarding the impact of landmines, and on how the data are applied in decisionmaking. Some of the most significant initiatives in mine action in recent years have focused on expanding the types of data that are considered relevant for planning mine action interventions: from the technical focus of the early 1990s (types of mine, soil type, logistical constraints, etc.) to the inclusion of broader data on the social and economic impact of landmines.¹⁷ Similarly, a certain amount of work has been carried out on developing tools for decision support. The dominant initiative for data-gathering is the Landmine Impact Survey (LIS), which is run by the Survey Action Centre with the backing of major NGOs and UN agencies. The primary data-management tool is the Information Management System for Mine Action (IMSMA), which is owned by the GICHD. Critical voices have asked whether the implementing and coordinating bodies have the necessary competence, and some have questioned the wisdom of investing heavily in expensive countrywide surveys in countries that undergo a period of extreme change in the immediate wake of an armed conflict.

Over the last decade and a half, the mine action sector has evolved into a large apparatus, with activities ranging from implementation in the field to international coordination. Despite its potential shortcomings, the sector has also celebrated huge successes, and at it is generally unrealistic to suggest major alterations to its current structure. Rather, we need to pin down both the challenges the sector faces and the resources it has at its disposal – and to look at how, and to what extent, it can be merged with the development mainstream.

The Resources of Mine Action

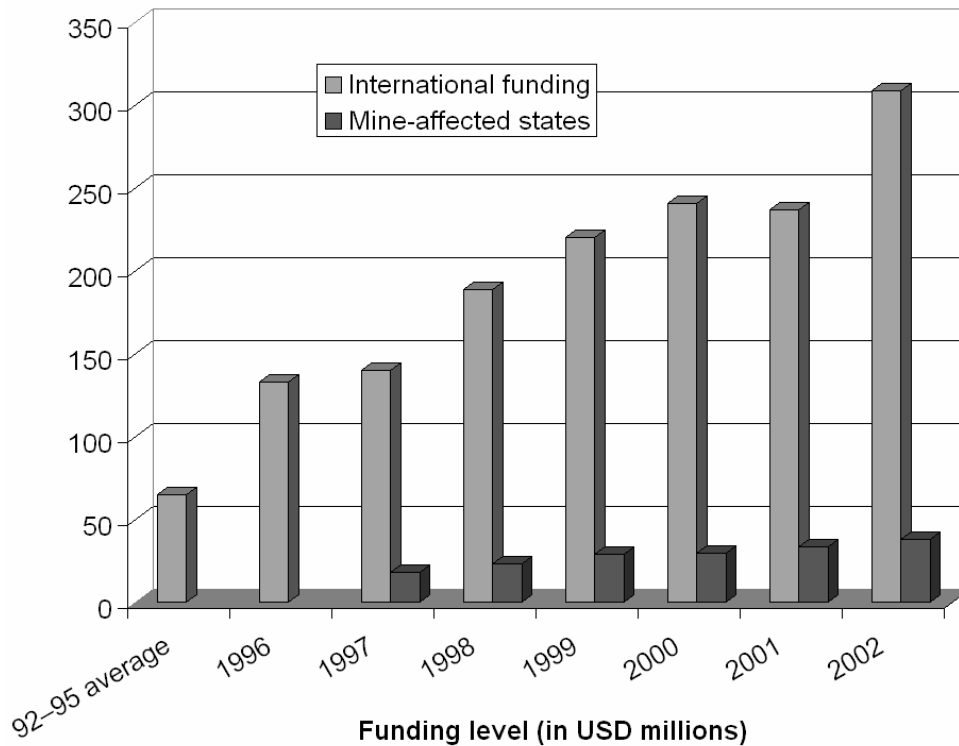
The mine action sector has been through a period of remarkable growth, not only in terms of institutions but also in terms of funding. The funding level for 2002 was roughly five times the estimated average for the years 1992–95. There was also a marked escalation in funding (some 35%) from 1997 to 1998, following the signing of the Landmine Convention. In addition, after a year of stagnation, there was a marked increase in funding from 2001 to 2002 (more than two-thirds of this increase went to Afghanistan alone as part of the post-Taliban assistance to that country).

Public and political interest in the landmine problem peaked in the first couple of years following the signing of the Mine Ban Treaty in 1997. It has been commonly assumed that funding levels would decline in parallel with declining political interest. While the figures noted above show that the funding level has consistently increased over the first five years of the treaty's life, a significant group of donors – including major ones such as the USA, the UK and Sweden – have consistently decreased their funding levels over the 2000–02 period, apparently for differing reasons (though in 2004 the USA announced a 50% increase in funding). Three donors (Canada, Japan

¹⁷ Harpviken, K. B. et al., 2003. 'Measures for Mines: Approaches to Impact Assessment in Humanitarian Mine Action', *Third World Quarterly* 24(5): 889–908.

and Norway) had made five-year pledges of mine action funding that expired in 2002. Of these, only Canada has been willing to formally renew its commitment. Hence, there is continued concern over the future of mine action funding, with the possibility that funding will start to decline dramatically after the Nairobi Summit on a Mine Free World in late 2004 – the first review conference of the Mine Ban Treaty.

Figure 1.1. Estimated Mine Action Funding by Year (USD millions)¹⁸



If we look further at the statistics, we can see that only a few mine-affected countries put much of their own resources into mine action, whatever the anticipated economic return. In 2002, the countries affected by mines that committed more than USD 1 million to demining were Bosnia and Herzegovina, Chad, Croatia, Jordan, Nicaragua and Yemen. In total, 16 countries from across the globe committed national funds to mine action in 2002, with an overrepresentation of countries in the Balkans

¹⁸ Figures on international funding are taken from the International Campaign to Ban Landmines, 2003a. 'Landmine Monitor Report 2003: Executive Summary', Washington, DC: Human Rights Watch (figures are for total values of 'reported' and 'estimated' contributions; research and development are not included). Figures on funding by mine-affected states are taken from Resource Mobilization Contact Group, 2003. 'Resources To Achieve the Convention's Humanitarian Aims: A Preliminary Review', Geneva (no figures available before 1997).

and Latin America. From 1997 to 2002, funding by affected states more than doubled, from USD 18 million to USD 38 million, which in percentage does not exceed the increase of international donations to mine action. It is worth noting, however, that available statistics on funding may be particularly weak on contributions by mine-affected governments, and that in-kind contributions (such as staff or equipment and facilities) are not included.

As is clear from Table 1.1, the bulk of the donor funding for mine action (85%) came from ten major donors. More than half of the donor funding in 2003 (57%) was contributed by just four donors: the USA, Japan, the European Union and Norway. In comparison, 52% of total Overseas Development Assistance (ODA) was contributed by these same donors, which means that external funding for mine action is marginally more dependent on these four donors than ODA in general. As a whole, the European Union (i.e. the European Commission and major EC donor countries) is by far the biggest donor, contributing a total of USD 98.7 million (about one-third of the global donor contribution) to mine action in 2002, followed by the USA, which provided more than one-fifth.

Table 1.1. Major Donors for Mine Action Funding, 2002*

USA	63,7
Japan	49,4
European Commission	38,7
Norway	25,2
Germany	19,4
Netherlands	16,0
Canada	15,1
UK	14,0
Denmark	10,6
Switzerland	9,1
Total – ten major donors	261,2
Total funding 2002	309,0

* All figures in USD millions

Source: International Campaign to Ban Landmines, 2003b. '*Landmine Monitor* Report 2003: Executive Summary', Washington DC: Human Rights Watch.

The *Landmine Monitor* has calculated that donor contributions for mine action stood at USD 237 million in 2001, and at USD 309 million in 2002. The figure for 2002 represents approximately 0.5% of total world ODA, which stood at USD 59.1 billion for that year according to the Organization for Economic Cooperation and Development (OECD).¹⁹ As per the statistics from the OECD Development

¹⁹ OECD, 2003. 'Statistical Annex of the 2003 Development Co-operation Report', Paris: OECD, Table 1.

Assistance Committee (DAC), mine action constituted 4.0% of the ODA donated under the category ‘Emergency and Distress’ in 2002.²⁰

Table 1.2. Mine Action Funding in Countries Most Affected by Mines, 2002*

	External funding	Domestic funding	Total budget
Afghanistan	64,3		64,3
Croatia	10,4	17,9	28,3
Iraq	30,6		30,6
Cambodia	27,3		27,3
Angola	21,2		21,2
Bosnia and Herzegovina	15,8	1,3	17,1
Vietnam	17,7		17,7
Mozambique	16,9	0,6	17,5
Eritrea	11,1		11,1
Laos	8,0		8,0
Ethiopia	4,9		4,9
Total	228,2	19,8	248,0

* All figures in USD millions

Source: External funding from International Campaign to Ban Landmines, 2003b. ‘*Landmine Monitor* Report 2003: Executive Summary’, Washington DC: Human Rights Watch. Domestic funding from Resource Mobilization Contact Group, 2003. ‘Resources To Achieve the Convention’s Humanitarian Aims: A Preliminary Review’, Geneva. Funding by international development banks not included.

According to Table 1.2, close to 75% of all donor funding goes to 11 mine-affected countries. About half of the total international funding is concentrated on only four countries: Afghanistan, Iraq, Cambodia and Angola. Recent funding increases have largely been for Afghanistan and Iraq, despite the fact that an increasing number of countries are launching mine action programmes. The mine-affected countries listed in Table 1.2 generally spend relatively little of their own resources on mine action (the major exception being Croatia, which is not a developing country and domestically finances some 65% of its overall effort).

Concerns that mine action funding may have reached its peak led to a discussion of the sustainability of existing mine action capacities. Despite significant adaptations, mine action remains a specialized sector, highly dependent on international expertise and funding, and not always thoroughly integrated with the administration and development plans of host states. This renders the sector vulnerable to major cuts in international funding. In addition, there has been an intensifying quest for a socio-economic rationale for mine action (including in comparison to that of alternative

²⁰ OECD Creditor Reporting System, CRS/Aid Activities – Disbursements, Landmine Clearance, Item 15066.

sectors) which provides a stark contrast to the Mine Ban Treaty's requirement of clearance of mined areas within ten years after entrance to the treaty regime.

Conclusion

Mainstreaming is not a precise concept, and the term is used and understood in a range of ways. At the most general level, mainstreaming is about changing modes of thinking within an organization or set of institutions, so that a particular concern is reflected at all levels and in all tasks. Mainstreaming has both a vertical and a horizontal dimension. As a specialized sector rooted in the processes surrounding the implementation of the Anti-Personnel Mine Ban Treaty, the mine action sector has a high degree of vertical integration, and actors from all levels of the sector interact closely. While undoubtedly part of the reason for the success of mine action internationally, this strong sectoral integration has, to a certain extent, restricted the mainstreaming of mine action concerns horizontally, in relation to other relevant actors and sectors. The challenge the sector now faces is to maintain a strong sector identity while at the same time broadening the base for mine action sideways, at all levels: from the field level to the international level.

Until the late 1980s, when the first civilian demining programme was launched in Afghanistan, various components of mine action were undertaken by government agencies. Demining, for example, was a job for the army. Throughout the 1990s, international campaigning for a ban on landmines went hand in hand with a growing international effort to address the mine problem at the field level. The 1997 Mine Ban Treaty places an obligation on member-states to carry out mine action, including victim assistance, and to become 'mine free' ten years after acceding to the treaty, which for many countries means by 2009. Given the scale of the problem and competing priorities in many affected states, there is now increasing discussion about what it means to be 'mine free' and a number of stakeholders advocate the concept of 'impact free'.

Since the mid-1990s, the policies of mine action have been modified to incorporate the effects of landmines. In the early stages, this reorientation was largely driven by experienced field practitioners, particularly within implementing NGOs, noting that the impact of landmines and ERW went far beyond that of direct victims. Simultaneously, the International Standards for Mine Action were being developed, establishing minimum standards for all aspects of mine action, including its realization of development objectives.

Institutionally, mine action has been heavily influenced by the military. The management level of several mine action organizations is still dominated by former and seconded military personnel, particularly in relation to demining. There has been massive institutional growth, and the sector is relatively self-contained as a whole, with strong mine action entities existing at all levels – an example being the Mine Action Centres (MACs) that coordinate all mine action within a given country at the

national level. From the late 1990s, there have been several important initiatives to promote mainstreaming, including the Landmine Impact Survey (LIS) and the Information Management System for Mine Action (IMSMA).

The mine action sector has experienced steady growth in international funding, from an average of USD 65 million per year in the period 1992–95 to USD 309 million in 2002. Funding by affected states has grown at a parallel pace over the past few years, representing roughly one-tenth of the international funding and concentrated mainly on affected middle-income countries. In relation to mainstreaming, there is reason to be concerned by the small amount of interest displayed both by many affected states and by development departments of the main mine action donors to fund mine action.

Most important in terms of mainstreaming mine action is to ensure the enhanced involvement of all actors from the international to the community level – mine action and development actors alike – to maximize the development impact of scarce mine action resources.

SOCIO-ECONOMIC IMPACT

THE NEED TO MEASURE EFFORT, output and impact has long been recognized for development interventions, and increasingly so for mine action. In the early stages of mine action, the emphasis of measurement was largely on numbers of mines lifted out of the ground, areas of land demined or suspected of containing mines, and similar output measures. The rapid change in emphasis within both the mine action and the development communities towards a focus on the impact of mines on human populations has necessitated changes in measurement methodology and practice in two ways. The focus for measurement has shifted towards a socio-economic angle, and the depth of measurement is moving away from physical effort and output towards economic effort and impact. In itself, this has brought mine action closer to the development sphere, as well as bringing insights from development planning and implementation closer to mine action.

The assessment of socio-economic impact has both a ‘proving’ and an ‘improving’ function.¹ First, there is the ‘proving’ function: establishing the extent to which a mine action intervention has ameliorated the conditions of communities affected by landmines. Second, there is the ‘improving’ function: providing feedback to planners and operators that may lead to improvements in project implementation, both in terms of effectiveness (whether the right intervention was carried out) and in terms of efficiency (whether the intervention was carried out right).² The mine action sector – which is already comparatively advanced in terms of quality standards, training requirements and monitoring – is well placed to make the best of advances in impact assessment.

This chapter aims to review the socio-economic impact of landmines and the impact of mine action. It is organized in accordance with those two main purposes. After a brief presentation of the various methods currently used to measure socio-economic impact, it examines the results of studies on impact, with a primary focus on findings from various forms of economic analysis and, in particular, cost–benefit analysis (CBA). An assessment of the impacts on livelihoods, including the relationship between landmines and poverty, is presented, before the chapter moves on to the question of injuries and deaths. A review of the role of mine action in relation to

¹ Hulme, D., 2000. ‘Impact Assessment Methodologies for Microfinance: Theory, Experience and Better Practice’, *World Development* 28(1): 79–98.

² See, for example, Roche, C., 1999. *Impact Assessment for Development Agencies: Learning to Value Change*, London: Oxfam.

peacebuilding is followed by an examination of the use of impact-measurement information to improve interventions within the mine action sector. Finally, the chapter rounds off with an examination of resource flows for mine action and some concluding remarks.

Impact Measurement

The approaches currently used for assessing the impact of mine action are the Landmine Impact Survey (LIS), cost-benefit analysis (CBA) and community studies. Whereas information is key to mine action implementation and the achievement of lowest-cost and greatest-benefit solutions for affected communities, it is clear that there are considerable costs connected with data-gathering and analysis. Table 2.1 illustrates the strengths and weaknesses of the various approaches in different contexts.³ The differences highlighted reveal that none of the various methods covers all needs best at lowest cost. Thus, the approaches are to a considerable extent complementary. To explore this further, brief outlines of the LIS, community studies and alternative methods follow, before a more thorough discussion of CBA and existing studies in mine action.

Landmine Impact Surveys

The LIS establishes the impact of landmines on communities, but not the impact of mine action interventions per se. It is based on a rapid participatory appraisal technique, with focus group interviews conducted at the community level, ensuring a degree of ownership and legitimacy. The survey is informed by a broad perception of impact, with a strong emphasis on humanitarian aspects (i.e. death and injury). The survey produces a composite indicator that is based on three types of variables: the presence of landmines or ERW, the blocking of access to vital resources, and landmine accidents. LIS datasets are snapshots of the situation at hand, which is particularly problematic in dynamic postwar settings. Hence, there needs to be a capacity for systematic updating. The LIS is compatible with IMSMA (Information Management System for Mine Action), which brings it directly into the process of planning and managing mine action.⁴

³ Harpviken, K. B. et al., 2003. 'Measures for Mines: Approaches to Impact Assessment in Humanitarian Mine Action', *Third World Quarterly* 24(5): 889-908.

⁴ See Annex 4 for the SAC composite indicator, and Annex 5 for further information on IMSMA. As of May 2004, impact surveys have been completed in eight countries (Azerbaijan, Cambodia, Chad, Kosovo, Mozambique, Somalia, Thailand and Yemen) and are under way in another seven (Afghanistan, Angola, Bosnia and Herzegovina, Eritrea, Ethiopia, Lebanon and Vietnam). See <http://www.sac-na.org/surveys.html> (accessed 11 May 2004). The most recently completed surveys are those in Azerbaijan and Somalia.

Community Studies

Community studies are based on qualitative inquiry (often complemented by survey data) and have a greater degree of flexibility than the other methods discussed here. Community studies stress sensitivity to community opinions and are adaptable to varying social and political contexts.⁵ The flexibility of the approach may also give it an advantage in situations where mine action is but one aspect of the development needs of a community. The wider scope of community studies makes it possible to detect community preferences and to take on board economic analyses that might prioritize other interventions, while still retaining a focus on mine action. Community studies, however, are demanding in terms of competence, time and, ultimately, cost. To the extent that findings from community studies are reported qualitatively, it is difficult to aggregate data to regional or national levels and to use the data as a basis for priority decisions. One remedy for this may be to combine community studies with standardized measures, as in a recent study from Eritrea that attempts to incorporate CBA as part of community studies based on focus group interviews.⁶

Alternative Approaches

There are a range of other methods that are frequently used in various sectors of development that have yet to be adapted to mine action. Economic analysis may go beyond CBA and, for example, consider mine action as an ordinary economic sector, mapping its relation to the rest of the economy. For countries where the mine action sector is sizeable in relation to the rest of the economy, macro-economic analysis (looking at gross domestic product, balance of payments, and fiscal and monetary issues) might be useful. The use of various simulation techniques may be appropriate when planning major mine action efforts with a focus on community impact. While formerly looked at as a hi-tech method for developed countries, *micro simulation* has lately been used for analysis of the poverty and income effects of public sector measures in developing countries.

A type of multi-criteria analysis, supported by GIS tools, has been developed by a research team at the Faculty of Civil Engineering of the University of Split. The Split team argues that its method has advantages compared with alternative approaches in terms of data-collection costs, analysis, transparency and the involvement of

⁵ Community studies have been pursued by the Assistance to Mine-Affected Communities (AMAC) project at the International Peace Research Institute, Oslo (PRIO). See Millard, A. S., 2002. *Assessing Landmine Impact at the Community Level: A Training Manual*, Oslo: PRIO; Millard, A. S. & K. B. Harpviken, 2001. *Community Studies in Practice: Implementing a New Approach to Landmine Impact Assessment with Illustrations from Mozambique*, PRIO Report 1/2001. Oslo: PRIO.

⁶ Ramakrishna, R. & E. C. Evgeniou, 2004. 'Landmines in Eritrea: The Socio Economic Impact, Prioritisation and Integration on the Basis of Community Visits', pro bono report for UNDP, Asmara: PricewaterhouseCoopers, 17 August 2004.

stakeholders in the decision process.⁷ Similarly, a recent study by the Mine Action Information Centre (MAIC) at James Madison University has considered multi-criteria approaches for prioritization of mine-clearing activities.⁸ Case studies from Ethiopia and Thailand illustrated CBA's neglect of a range of important intangible benefits, and the authors proposed that combining CBA with what they call an 'analytical hierarchy process' (AHP) would yield results that fostered both collaboration and transparency. Among its broader recommendations, the MAIC study suggests a larger role for socio-economic concerns in prioritization once the immediate post-conflict period is over and risk reduction is no longer crucial.

Cost–Benefit Analysis

CBA estimates the economic value of both the costs and the benefits of a given project to establish whether it is worthwhile in an economic sense. The result of CBA for any project is expressed as either the cost–benefit ratio or the rate of return.⁹ The cost–benefit ratio is the ratio of net benefits to costs at present values. The rate of return is defined as the interest (discount) rate that, when used to discount future costs and benefits, brings the difference between the two to zero. Non-economic factors, such as life and injury, may be converted to monetary terms using various assumptions, though this is controversial on both ethical and practical grounds. Finally, while CBA applications tend to focus on general growth, models may be adjusted to accommodate alternative economic objectives, such as equal distribution and poverty reduction.

A main advantage of CBA is that it takes *cost* into account. As detailed later, *ex ante* use of CBA may provide guidance in the selection of the most efficient techniques and in the prioritization of locations for demining. Also, CBA allows comparison of net benefits across sectors, so that mine action may be compared with other development interventions.

⁷ Mladineo N. & Knezic S., 2003. 'Hierarchic Approach to Mine Action in Croatia', *Journal of Mine Action* 7(2); available at <http://maic.jmu.edu/journal/7.2/focus/mladineo/mladineo.htm> (accessed 1 July 2004).

⁸ Knickrehm K. M. & D. L. Stewart, 2004a. 'Decision Making To Prioritize Mine Clearance Projects in Support of the US Department of State Strategic Plan and National Policy Guidance', report submitted to US Department of State by James Madison University, Virginia, USA.

⁹ CBA compares the present values of costs and benefits by using a discount rate reflecting peoples' time preferences (e.g. \$1 now is better than \$1 tomorrow). If the rate is set so that it equalizes the present value of cost and benefits, it is called the internal rate of return (IRR). Alternatively, it is called the social rate of return if social aspects like income distribution are included in the calculation.

Table 2.1. Approaches to Impact Assessment in Mine Action

Method	Data needs/cost	Feedback	Planning	Reflecting impact on communities
<i>Landmine Impact Surveys</i>	Standardized simple survey instruments keep unit costs low. The objective of national coverage makes LIS costly.	Wide coverage and relatively rapid feedback to mine action organizations on selected key variables.	Created primarily as an instrument for strategic planning and prioritization of mine action interventions at the national level – well suited to those purposes.	Few and standardized variables – including death and injury, blockage of main resources, presence of mines or ERW – reflect impact.
<i>Community Studies</i>	Requires high level of input from qualified and experienced personnel, with a high unit cost. Therefore, unlikely to attain high coverage.	May be adapted to give whatever type of feedback required and may be modified to incorporate elements of CBA or other approaches. Major strength is the level of interaction with the community.	Adaptable – may give any planning support needed. Aggregation of data may be complicated by the qualitative character of reporting.	Potential to probe deeper than the other methods. Adaptable to the problem at hand – well suited to analyzing social, political and cultural issues. Strong as a learning tool for practitioners and host communities.
<i>Cost–Benefit Analysis</i>	Most commonly develops templates that may be applied across cases. Extensive needs for data and analytical expertise drive costs up.	Feedback on impact as well as cost of intervention. Strong pedagogic effect through the production of a single indicator. Turns focus exclusively towards quantifiable aspects.	Focus on cost – a useful tool for selecting type of intervention (efficiency) and locality or type of task (effectiveness). Ensuring relevant country-coverage is expensive.	Main role in reflecting economic and livelihood impacts of interventions. Certain social and non-economic benefits (including death and injury) may be included, but this is controversial.

While CBA is not widely applied in mine action, there have been several studies in the past few years, all of them focusing on mine clearance:

- In 2000, economist Geoff Harris published an article on Cambodia that applied CBA to mine clearance for the first time. He has since followed up with similar studies for Afghanistan and Mozambique.¹⁰ Harris has been

¹⁰ Harris, G., 2000a. 'The Economics of Landmine Clearance: Case Study of Cambodia', *Journal of International Development* 12: 219–225; Harris, G., 2000b. 'Cost–Benefit Analysis and Mine Clearance', in G. Elliott, ed., *Beyond De-Mining: Capacity Building and Socio-Economic Consequences*, Johannesburg: South African Institute of International Affairs, pp. 87–97; Harris, G., 2002. 'The Economics of Landmine Clearance in Afghanistan.', *Disasters* 26: 49–54.

widely criticized both for his methodology and for his basic assumptions.¹¹ It has been argued that the Cambodia study in particular was severely misconceived.

- The GICHD conducted a study for UNDP, published in 2001, that included case studies of Kosovo, Laos and Mozambique applying a CBA framework.¹² Ted Paterson served as the lead economist for this study.
- As part of the Watching Brief Project, the World Bank and UNDP carried out a comprehensive and rigorous CBA study in Afghanistan, published in 2001.¹³ This was made possible by the meticulous data-collection that has characterized the Afghan programme since the early 1990s, as well as an earlier economic analysis presented by the Mine Clearance Planning Agency.¹⁴
- A partial CBA has been conducted for Bosnia and Herzegovina, focusing mainly on the impact of mines through death and disability.¹⁵ A more comprehensive analysis was not possible because of a lack of data.
- A 2004 MAIC study for the US Department of State includes four local CBA applications: two from Ethiopia and two from Thailand.¹⁶

Of the above studies, the most significant are the World Bank/UNDP study from Afghanistan and the GICHD/UNDP study. The absence of similar studies focusing on other components of mine action, such as MRE or victim assistance, is unfortunate.

One challenge for CBA is the capture of costs for mine action, an issue that had not received much attention until Robert Keeley's contribution towards a standard for cost capture in 2003.¹⁷ Importantly, neither the costs of demining nor its benefits are likely to be static over time. The GICHD/UNDP impact study based on cost-capture data

¹¹ See, for example, Paterson, T., 2001. 'Commentary on Harris, Geoff. "The Economics of Landmine Clearance: Case Study of Cambodia"', *Journal of International Development* 13: 629–634'.

¹² GICHD, 2001a. *A Study of Socio-Economic Approaches to Planning and Evaluating Mine Action*, Geneva: Geneva International Centre for Humanitarian Demining; GICHD, 2002. *Socio-Economic Approaches to Mine Action: An Operational Handbook*, Geneva: Geneva International Centre for Humanitarian Demining.

¹³ Byrd, W. A. & Bjorn Gildestad, 2001. 'The Socio-Economic Impact of Mine Action in Afghanistan: A Cost-Benefit Analysis', Islamabad: World Bank.

¹⁴ Mine Clearance Planning Agency, 1998. *Socio-Economic Impact Study of Mine Action Operations Afghanistan: Interim Report*, Islamabad: Mine Action Centre for Afghanistan.

¹⁵ Mitchell, S., forthcoming. 'Death, Disability, Displaced Persons and Development: The Case of Landmines in Bosnia and Herzegovina', *World Development* 32(12).

¹⁶ Knickrehm K. M. & D. L. Stewart, 2004a. 'Decision Making To Prioritize Mine Clearance Projects in Support of the US Department of State Strategic Plan and National Policy Guidance', report submitted to US Department of State by James Madison University, Virginia, USA.

¹⁷ Keeley, R., 2003. 'The Cost Capture Issue in Humanitarian Mine Action', *Journal of Mine Action* 7(3); available at <http://maic.jmu.edu/journal/7.3/notes/keeley/keeley.htm> (accessed 7 November 2004).

from UXO LAO came out with preliminary estimates for financial and economic benefits, and concluded that the UXO programme in Laos would be justifiable on the basis of its economic rate of return alone once it came out of the build-up phase, where costs were driven up by major capital investments.

CBA is a complex method, and there is no detailed and generally accepted ‘cookbook’ to ensure that each analysis is done properly. This may be a particular problem for applications related to mine action, where socio-economic effects often emerge from the removal of barriers to various other development activities, often giving rise to developments far beyond those triggered by the mine action project alone. This situation is often referred to as the attribution problem, which applies to impact-assessment generally.

Using CBA for the valuation of non-economic impacts, particularly placing a monetary value on deaths and injuries, is controversial. As emphasized by the MAIC study, which argues for the integration of CBA into a multi-factor analysis, some of the major values brought about through mine action will ultimately remain resistant to quantification.¹⁸ This is illustrative of the more general problem that CBA focuses on a relatively narrow set of impacts – a problem all too easily compounded by the convincing power that lies in presenting findings through the use of a single number.

Economic Impact

The economic impacts of mine action are multiple, and not all types of economic impact are easily captured. Here, the focus will be on the findings of existing CBA studies, which will be complemented by a discussion of more indirect economic effects, including effects at the macro-economic level.

Removing Obstacles to Production

Landmines block access to vital resources, including agricultural land, water, housing, public buildings, infrastructure and transport routes. This often results in injuries to persons who are travelling or performing activities of economic necessity, such as farming, collecting wood, fetching water or tending animals. Mines are frequently planted in rural areas, where farming and grazing are the primary means of livelihood.¹⁹ Farming, woodcutting and herding tend to be the activities that are most restricted by the presence of mines. People living close to minefields may in fact be forced to return to hunting and gathering or to so-called substitution activities. Prior to mine contamination, such activities are typically only viewed as useful and risk-free

¹⁸ GICHD, 2001b. ‘Evaluation of the NPA Mine Action Program in Bosnia & Herzegovina’, Geneva: Geneva International Centre for Humanitarian Demining.

¹⁹ Walsh, N. E. & W. S. Walsh. 2003. ‘Rehabilitation of Landmine Victims: The Ultimate Challenge’, *Bulletin of the World Health Organization* 81(9): 665–670.

supplements to incomes gained from agriculture.²⁰ In addition, the contamination of roads and other commercial areas by mines severely impedes the movement of commodities once they have been produced.²¹ Such disincentives to trade, and hence investment, impede economic growth. Not all of these economic effects are easily captured in economic analysis.

The GICHD/UNDP *Study of Socio-Economic Approaches to Planning and Evaluating Mine Action* contains both a presentation of cost-benefit analysis as applied to mine action and case studies of Laos, Mozambique and Kosovo.²² The report presents a basic cost-benefit model, on the basis of cost of clearance versus future benefits per square meter of land. In the Laos case, the key example is the clearance of ERW from 'wet season' rice paddy, which represents a valuable asset in the relatively homogenous economy of Laotian agricultural communities. Benefits are calculated on the basis of the expected net crop over the next 20 years and an assumed sales value by Year 20. Future benefits are discounted at 12%. This gives an expected benefit ('net present value') of USD 3,540 per hectare. Total costs are composed of clearance costs (USD 4,000–4,400 in 1999) plus labour costs (estimated at USD 50, the rural daily wage rate). The conclusion is that ERW clearance of 'wet season' rice paddy cannot be justified solely on economic grounds given the existing costs of the programme. The programme, however, has suggested that clearance costs can be brought down significantly – to USD 3,000 – which would shift the balance and give a purely economic positive return to investments, still leaving out the broader humanitarian and social impacts. It was also inferred that the economic case is considerably stronger for clearance of irrigated rice land, for agricultural land for higher-value export crops, and for houses, markets and social infrastructure such as schools, health clinics, etc. in villages. Also, the economic case for ERW clearance would become stronger as agricultural productivity and rural incomes grew in Lao PDR.

In the Mozambique case, the use of cost-benefit analysis had to be tailored to the different types of agricultural production systems employed within the country in view of the great regional differences that existed. The GICHD/UNDP economic analysis from Mozambique draws on data from a household economic study in Nampula Province. The same formula as in the Lao case is applied. Here, clearance costs are higher, estimated at USD 7,000 per hectare. The net present value of benefits from clearance is calculated for three different production practices: high yield at USD 2,273; improved practices at USD 1,279; and traditional at USD 711. As in the Laotian case, mine clearance of agricultural land cannot be justified solely on economic grounds. An alternative example finds very positive returns from clearance

²⁰ Davies, P., 1994. *War of the Mines: Cambodia, Landmines and the Impoverishment of a Nation*, London: Pluto.

²¹ McGrath, R., 2000. *Landmines and Unexploded Ordnance: A Resource Book*, London: Pluto.

²² GICHD, 2001a. *A Study of Socio-Economic Approaches to Planning and Evaluating Mine Action*, Geneva: Geneva International Centre for Humanitarian Demining; GICHD, 2002. *Socio-Economic Approaches to Mine Action: An Operational Handbook*, Geneva: Geneva International Centre for Humanitarian Demining.

of access to a village water point, which frees up a scarce resource: women's time for activities other than fetching water, such as crop production. In Mozambique, land in itself is rarely a scarce resource, which also explains why it scores negatively in a conventional cost-benefit analysis. The conclusions reached in the application of CBA to Mozambique, however, should not be interpreted as a case against mine action in that country. The conclusions are merely that:

- certain kinds of mine action cannot be justified *purely on economic grounds* (but may very well be justified when taking larger impacts into account); and
- there is a positive economic case for mine clearance if areas with higher economic potential are prioritized.

The joint World Bank/UNDP Afghanistan study, which is arguably the most solid existing CBA analysis of mine action, has an unambiguous positive conclusion.²³ The main finding is that mine clearance has an overall rate of return of 28%. This rate compares favourably with most other investments, even with what is expected for commercial investments in the private sector. In a comparison of average rates of return for investments in various sectors, calculated by the World Bank for the period 1983–92, the figure for demining in Afghanistan comes very close to the highest figure, which is 29% for highways (see Table 2.2), and it is double the average return for all sectors.

The study was based on data collected over a long time by the Mine Clearance Planning Agency, complemented with eight stylized case studies representative of agricultural activities carried out on 95% of irrigated land and 85% of rain-fed land in the country, in addition to case studies on road clearance. The data also made it possible to analyse the costs and benefits of different demining techniques. In addition to enabling the possibility of considering different types of land and other objects for mine clearance, as well as the use of different methods, the study conducted sensitivity analysis by ignoring the estimated human welfare benefits and reducing the estimated number of mine victims by an additional 50%. In the first case the rate of return fell to 21%, and in the second it dropped to 19%, which is still a very respectable rate of return, safely over the World Bank average of 15% reported in Table 2.2.

The study gave useful feedback for future clearance in several ways. It suggested new emphases in terms of techniques; it suggested further improvements in terms of data; it highlighted the importance of greater community participation in planning and prioritization; and it suggested that cost differences between demining agencies should be examined. So far, other CBA studies have not been fine grained enough to provide a similarly strong basis for operational advice.

²³ Byrd, W. A. & B. Gildestad, 2001. 'The Socio-Economic Impact of Mine Action in Afghanistan: A Cost-Benefit Analysis', Islamabad: World Bank.

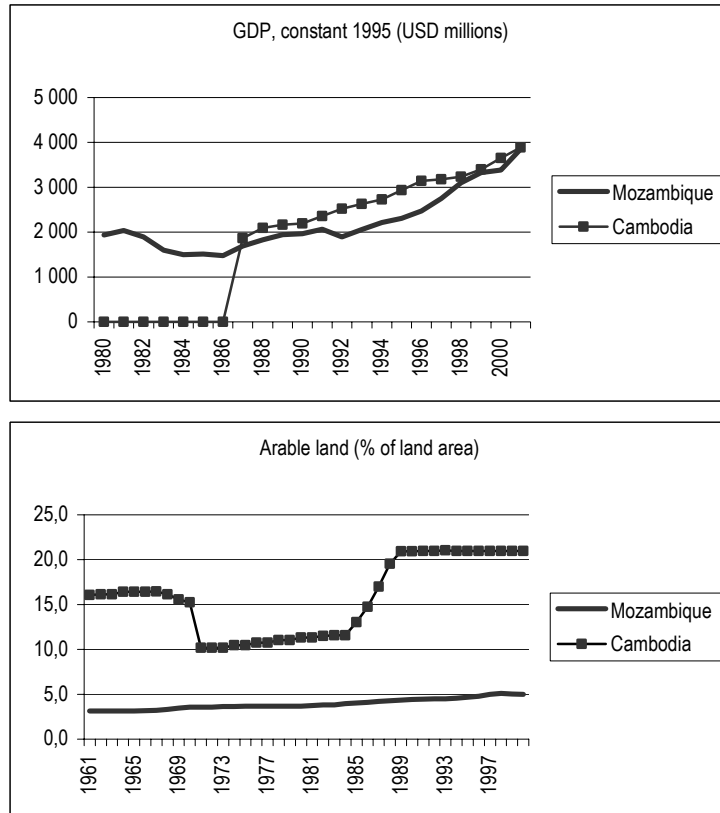
Table 2.2. Average Economic Rates of Return on World Bank-Supported Projects, 1983–92

Irrigation and drainage	13%
Telecommunications	19%
Transport	21%
Airports	15%
Highways	29%
Ports	20%
Railways	12%
Power	11%
Urban development	23%
Infrastructure projects	16%
All World Bank operations	15%

The returns from demining identified by the Afghan study varied considerably, as a result of a number of different factors. First, results tended to vary with the function of the object being cleared. For example, clearance of irrigation systems and roads yielded the highest returns. The immediate conclusion is that priority should be given to those tasks, but this raises a concern about the value of freeing up infrastructure that serves areas that still contain mines and ERW, as in the case where an irrigation channel is cleared while the agricultural fields it serves remain contaminated. A second point, strongly emphasized in the study, is the importance of clearing land that will immediately be put back into productive use. Third, the study argued that the method used to clear mines had a dramatic effect on the net benefits, although it is increasingly realized that there is no one preferable technology and the challenge for efficient demining lies in finding the best mix of methods, whether that involves manual teams, the use of dogs or various machines.

The impact of warfare and landmines on arable land, and hence a country's potential agricultural production, varies considerably from country to country. This is clearly illustrated by the cases of Cambodia and Mozambique. The graphs below depict arable land and GDP in constant 1995 US dollars for each of the two countries.²⁴ Cambodia shows a distinct drop in the percentage of arable land in the late 1960s with the Vietnam War. This share bounced back after 1985, and in 1987 it was at a higher level than before the war started, stabilizing at 21% from 1991 onwards. GDP data for Cambodia are only available from 1987, but we see that the expansion of arable land was accompanied by a persistent and strong annual growth in Cambodia's GDP.

²⁴ Arable land includes land defined by the Food and Agriculture Organization (FAO) as land under temporary crops (double-cropped areas are counted once), temporary meadows for mowing or pasture, land under market or kitchen gardens, and land temporarily fallow. Land abandoned as a result of shifting cultivation is excluded. Data source: *World Development Indicators 2003*.

Figure 2.1. GDP and Land Under Cultivation, Mozambique and Cambodia²⁵

There does not seem to be a similar relationship in the data for Mozambique. From its independence from Portugal in 1975 until 1980, the share of arable land in Mozambique is reported at a constant 3.7%. The Mozambique National Resistance (RENAMO) was formed in 1977, but its guerrilla campaign to overthrow the government of Mozambique greatly expanded in reach and impact from 1980, when its operations were funded by South Africa. The effect on Mozambique's economy was devastating: from 1980 to 1986, GDP contracted at an average annual rate of 4.6%.²⁶ Nevertheless, from 1980 onwards the share of arable land has been steadily increasing. Thus, even though the civil war severely disrupted economic activity in Mozambique, agricultural production seems to have simply moved to areas less affected by the conflict. These statistics indicate that in areas where access to arable land is already constrained, the effects of warfare and the hazards of landmines most severely impact the potential of the agricultural sector.

²⁵ Graphs and analysis by Knut Nygård, Chr. Michelsen Institute, Bergen.

²⁶ GDP data for Mozambique available from 1980.

Macro- and Meso-Level Impact?

Many of the world's mine-affected countries are extremely poor. Afghanistan, Ethiopia, Eritrea and Mozambique are among the poorest countries in the world, while Bosnia and Herzegovina and Iraq have somewhat higher GDPs per capita. Croatia is the only middle-income country among the eleven countries most affected by mines. In the poorest countries, where the inflow of resources for mine action is considerable and the returns from demining high, the results of mine action may even be noticeable at the macro-economic level. An example would be Afghanistan, with a GDP estimated at USD 6.6 billion in 2002.²⁷ With an investment in mine clearance of some USD 60 million and a net return of USD 1.20 on every dollar invested, this would mean a benefit of over USD 70 million, which is over 1% of current GDP.²⁸ The case of Afghanistan might be considered unique, given the scope of the mine programme in the country as well as the high CBA results showing a 28% rate of return. Meso-level impacts, however, will tend to be much more noticeable, since mine problems and mine action are normally concentrated within certain sectors and geographic areas. Benefits to communities and populations in areas where mine action takes place may be experienced as much more significant than macro-economic magnitudes and country averages might indicate.

Distorted Economic Behaviour

People living with mines and ERW in their proximity live in fear and may undergo a distortion of social and economic behaviour. The impact of this fear varies greatly in different cultural contexts, and it is difficult to capture in quantitative terms. In many mine-affected countries, the risk of mines is only one of a range of serious threats to life and well-being. The impact of fear on economic activity is hard to measure, yet findings such as the reported 93% of villagers covered by a study in Kosovo who reported reduced levels of stress in the aftermath of clearance indicate that such impact may be very significant.²⁹ The ways in which landmine threats build up economic distortion from the individual, household and enterprise levels to impact whole mine-affected regions has not been systematically studied. The CBA analyses that have examined the benefits of mine action gives us an inkling of the effects, but they focus on project-related issues and do not link the national and global effects of changes in economic behaviour.

²⁷ Government of Afghanistan et al., 2004. 'Securing Afghanistan's Future: Accomplishments and the Strategic Path Forward', Kabul: Government of Afghanistan/Asian Development Bank/United Nations Assistance Mission to Afghanistan/United Nations Development Programme/World Bank, Table 1.5.

²⁸ Assumptions based on Byrd, W. A. & B. Gildestad, 2001. 'The Socio-Economic Impact of Mine Action in Afghanistan: A Cost-Benefit Analysis', Islamabad: World Bank.

²⁹ Horwood, C., 2001. 'Socio-Economic Impact Study of Dan Church Aid Mine Action in Kosovo: July 1999–December 2001', Channel Research.

Landmines, Livelihoods and Poverty

Economic analysis of the impact of landmines does not commonly have poverty reduction and equal distribution as ultimate objectives, but rather emphasizes the impact of mine action on economic growth more generally. Most mine-affected countries have significant poverty problems, and it would be in accordance with the Millennium Development Goals to prioritize disadvantaged population groups when targeting mine action. The available evidence also indicates that people are often adversely impacted by landmines and ERW, to the extent that households of mine victims are caught in 'poverty traps'.

Adverse Impacts on the Poor

Early studies of mine impact often focused on direct effects. One of the very first surveys of the socio-economic impact of landmines was undertaken in Afghanistan, Cambodia, Mozambique and Bosnia from May 1994 to March 1995, interviewing 174,489 people from 32,904 households.³⁰ Many households reported that their daily activities were affected by landmines, ranging from 19% in Mozambique to 78% in parts of Afghanistan. The study also found that households that included a mine victim were, on average, 40% more likely to report difficulty in providing food for the family. Moreover, the most frequently mentioned socio-economic consequence of landmine accidents was reduced productivity.

In an ongoing study of human security in Cambodia that combines geospatial and statistical analysis, preliminary findings display interesting correlations between the presence of landmines and poverty (see Figure 2.1).³¹ This particular study combines data on a total of 13 variables related to human security, including the presence of landmines and ERW, with the commune level (1,600 in total) serving as the main unit of analysis. Findings related to poverty include the following:

- There is a significant relationship between levels of poverty and being at risk of landmine accidents.
- Areas that are most severely affected by landmines also tend to be among the poorest.
- The presence of landmines is strongly correlated with both the number of landmine victims and poverty.

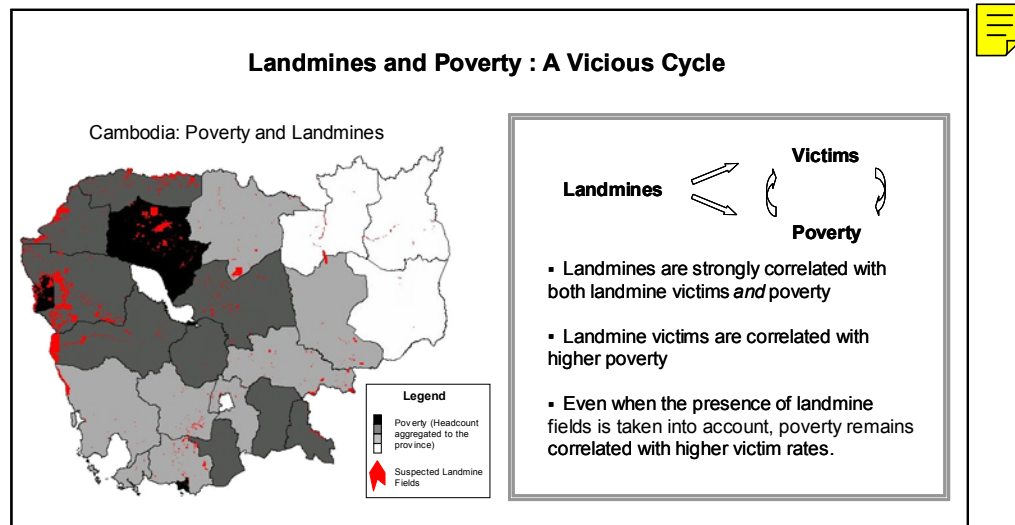
An extension of this analysis to measure the impact of demining on poverty (and victims) would require reliable data on demining as well as time-series data for the

³⁰ Andersson, N.; C. P. da Sousa & S. Paredes, 1995. 'Social Cost of Landmines in Four Countries: Afghanistan, Bosnia, Cambodia and Mozambique', *British Medical Journal* 311: 718–721.

³¹ Owen, T. & A. A. Benini, 2004. 'Human Security in Cambodia: A Statistical Analysis of Large-Sample Sub-National Vulnerability Data', draft report, International Peace Research Institute, Oslo (PRIO).

other variables, none of which are currently available. This analysis however, drawing on a unique set of data on a variety of threats, indicates a strong link between the presence of landmines and poverty. It also indicates that when living in the vicinity of a minefield, the poor have a greater risk of becoming victims.

Figure 2.2. Landmines and Poverty³²



These broad findings are in line with qualitative studies showing how, in some cases, poverty drives people to take extraordinary risks, including undertaking their own demining.³³ In parts of Cambodia, where poverty is endemic and agricultural land is scarce, so-called village demining is widely practised – by some accounts, representing a large share of the total demining conducted in the country. Those engaging in this dangerous activity are normally well aware of the associated risks and conduct demining only after careful consideration, balancing the risks associated with clearing mines against other risks for the household, such as food scarcity. In the Chamkani district of Paktia Province in Afghanistan, there were two costs for ploughing agricultural land in the late 1980s: the equivalent of USD 80 per hectare for safe land and USD 150 where it was thought that land might contain mines.³⁴ Relatedly, in the Herat area of Afghanistan in the late 1990s, mine-suspected areas were ploughed by oxen only.³⁵ In both cases, the costs involved in restoring agricultural production were prohibitive, particularly for the poor, who would either

³² Figure prepared by Taylor Owen, PRIO.

³³ Bottomley, R., 2003. *Crossing the Divide: Landmines, Villagers and Organizations*, PRIO Report 1/2003, Oslo: Handicap International Belgium/PRIO/UNICEF.

³⁴ Personal communication, Sayed Aqa, UNDP.

³⁵ Millard, A. S.; K. B. Harpviken & K. E. Kjellman, 2002. 'Risk Removed? Steps Toward Building Trust in Humanitarian Mine Action', *Disasters* 26(2): 161–174.

have to face the risks themselves or seek alternative, but short-term, means of survival. The presence of landmines and ERW, teaming up with other factors, is vital in driving cycles of poverty.

Fringe Benefits for the Poor

A mine operation, and particularly a demining operation, which may have an enduring presence, also has an indirect economic impact on the hosting community. In Mozambique, for example, it is often argued that villagers will attempt to get a demining team to work in their local area because of the advantages related to the presence of such an organization – while the reported minefield may be only a figment of their imagination. There are several aspects to this. First, limited services such as access to water, repair of rural infrastructure and basic medical assistance might be supplied. Second, the activity of mine clearance creates a micro-economic booster that may appear considerable in a poor remote village. On a different note, however, this represents a short-term distortion of the economy and the influx of mine-clearing personnel may inflate the local market price of basic commodities or increase the spread of HIV/AIDS and other STDs in poor and remote areas.

An example from rural Mozambique illustrates this fringe effect of mine clearance. In rural parts of the country, the total monthly consumption expenditure per head is estimated to be around USD 10.³⁶ A deminer has a monthly salary of USD 170, and in addition a subsistence allowance of maybe USD 50. In many cases, deminers will purchase most of what they need locally. This means, for example, that it is entirely possible for a family of five to derive most of their income from one deminer while he or she is in the area. Obviously, this will come to an end when the team leaves, but it may have led to some limited saving and the possibility of purchasing efficiency-increasing tools, which will have an effect on the poor community in the long run. While the informal business surrounding mine action could have a considerable effect on a local community in certain cases, it is not commonly included in cost-benefit analysis.

Landmines, Life and Health

Accident rates, even in densely mined areas, need not be significant.³⁷ In fact, a study conducted in the heavily mined Afghan province of Kandahar found that more people

³⁶ Based on recent household data from Mozambique. See Instituto Nacional de Estatística, 2004. 'Inquerito aos Agregados Familiares sobre Orcamento familiar', Maputo: INE, as well as data from mine action operators.

³⁷ Kumar, K., ed., 1997. *Rebuilding Societies After Civil War: Critical Roles for International Assistance*, Boulder, CO: Lynne Rienner.

had been disabled by poliomyelitis than by landmines.³⁸ One study from Eritrea finds that landmine injuries fell dramatically three months after the armed conflict ended.³⁹ A possible explanation for this is that people learn what areas to avoid and adapt their behaviour accordingly. Thus, although of great importance for a humanitarian intervention, the respective accident rates may be poor indicators of the larger socio-economic impacts of landmines. Other studies, however, have found that the indirect health consequences of landmines include increases in the incidence of waterborne diseases, diarrhoea, malnutrition, infectious diseases and the spread of HIV linked to increased use of blood, in addition to taking up more resources than other accidents typical in areas of armed conflict.⁴⁰ Hence, both blocked access to vital resources (such as safe drinking water) and the burden posed on health services generally tend to multiply the public health effects of landmines and ERW.

Mine injuries are extraordinarily demanding in terms of surgery and rehabilitation care, and they place a heavy burden on a weak health system. Average figures from hospitals run by the ICRC show that landmine victims require twice the resources of patients wounded by bullets or fragments in terms of days of hospitalization, number of operations performed and units of blood used.⁴¹ A study of landmines in Bosnia and Herzegovina estimated the costs of acute care for landmine survivors at USD 4,500 (excluding physical rehabilitation), most of that stemming from emergency medical care.⁴² A study of landmine victims in Cambodia and northern Iraq found that poverty was the one factor most closely associated with long-term pain, which indicates that the household of a victim becomes caught in a poverty trap that can have dire psychosocial effects.⁴³

Whether or not to place an economic value on death and injury is a matter of great controversy. Although the impact of a death may be said to be infinitely great, and some would argue that it is even unethical to place an economic value on human life, others have found it useful to 'measure' this type of impact on a social or economic scale. The World Bank's CBA study from Afghanistan assigned an economic cost to somebody being killed by a landmine. The estimated 'production and welfare loss per person' from a fatal casualty arrived at was USD 11,663.⁴⁴ Compared with other international calculations, this is an extremely low figure. Vicusi & Aldy set the 'value

³⁸ Lambert, M. L. et al., 1997. 'Household Survey of Locomotor Disability Caused by Poliomyelitis and Landmines in Afghanistan', *British Medical Journal* 315: 1424–1425.

³⁹ Hanevik, K. & G. Kvåle, 2000. 'Landmine Injuries in Eritrea', *British Medical Journal* 321: 1189.

⁴⁰ Kakar, F. et al., 1996. 'The Consequence of Land Mines on Public Health', *Prehospital and Disaster Medicine* 11(1): 2–10.

⁴¹ Walsh, N. E. & W. S. Walsh. 2003. 'Rehabilitation of Landmine Victims: The Ultimate Challenge', *Bulletin of the World Health Organization* 81(9): 665–670, on p. 666.

⁴² Mitchell, S., forthcoming. 'Death, Disability, Displaced Persons and Development: The Case of Landmines in Bosnia and Herzegovina', *World Development* 32(12).

⁴³ Husum, H. et al., 2002. 'Chronic Pain in Land Mine Accident Survivors in Cambodia and Kurdistan', *Social Science and Medicine* 55: 1813–1816.

⁴⁴ See Byrd, W. A. & B. Gildestad, 2001. 'The Socio-Economic Impact of Mine Action in Afghanistan: A Cost-Benefit Analysis', Islamabad: World Bank, Table 5.5 (p. 18).

of a statistical life' as somewhere within a range of USD 4–9 million.⁴⁵ Although these values were based on whole-life US labour market data and pension and labour market values, not the part of a productive life destroyed, they do not appear to be even in the same ballpark as those of the Afghan study. A few estimates obtained from other countries show similar vast differences, with values of USD 0.8 million (South Korea) and USD 1.2–1.5 million (India).⁴⁶ The same authors also compiled a table of the statistical value of an *injury*. India came out with values of between USD 150 and USD 560, while Taiwan (through a survey of petrochemical workers) came out at USD 49,700. The Afghanistan study, for example, assumed USD 7,800 in economic loss for a severe injury.⁴⁷ Ultimately, the great variation in 'life values' that may be used makes it entirely possible for differing assumptions to virtually determine the results.

Ultimately, there is little doubt that landmines and ERW have a severe impact through causing death and injury. However, as pointed out by Ted Paterson in a recent paper for UNDP, it has proven difficult to establish the contribution made by mine action in terms of reducing this impact.⁴⁸ Over time, we see a significant reduction in incidents in countries such as Afghanistan and Mozambique, yet it remains hard to establish the extent to which this is the result of mine action or the result of other factors, such as increasing adaptation.⁴⁹

Peacebuilding

Landmines and ERW are active leftovers and reminders of war, and by helping to remove or control them mine action may play an important role in peacebuilding.⁵⁰ In Sudan, for example, mine action initiatives successfully engaged two warring parties. In addition to demonstrating opportunities for concrete collaboration despite conflict, this produced positive outcomes – such as the opening of a 'humanitarian highway'

⁴⁵ Vicusi, W. K. & J. E. Aldy, 2002. 'The Value of a Statistical Life: A Critical Review of Market Estimates Throughout the World', Harvard Law and Economics Discussion Paper no. 392, Boston, MA: Harvard Law School.

⁴⁶ Comparable value is somewhat higher because the Viscusi & Aldy study looks at the statistical value of a life, whereas Byrd & Gildestad look at the rest of a life terminated by a landmine incident.

⁴⁷ Calculated on the basis of Byrd, W. A. & B. Gildestad, 2001. 'The Socio-Economic Impact of Mine Action in Afghanistan: A Cost-Benefit Analysis', Islamabad: World Bank, Table 5.6 (p. 19).

⁴⁸ Paterson, T., 2004a. 'Evidence on Mine Action and Development', unpublished paper, New York, UNDP. See also Paterson, T., 2004b. 'Mine Action and Development: Doing the Right Job', in S. Maslen, *Mine Action After Diana: Progress in the Struggle Against Landmines*, London: Pluto, pp. 99–131.

⁴⁹ Benini, A.; L. Moulton & C. Conley, 2002. 'Landmines and Local Community Adaptation', *Journal of Contingencies and Crisis Management* 10(2): 82–94.

⁵⁰ Harpviken, K. B. & B. A. Skåra, 2003. 'Humanitarian Mine Action and Peacebuilding', *Third World Quarterly* 24(5): 809–822; Harpviken, K. B. & R. Roberts, eds, 2004. *Preparing the Ground for Peace: Mine Action in Support of Peacebuilding*, PRIO Report 2/2004, Oslo: PRIO.

through the Nuba Mountains. Mine action projects have proved instrumental in confidence-building in many cases, including Sri Lanka and Sudan. Elsewhere, the engagement of the army in clearing mines and ERW has had a reconciliatory effect, as in Guatemala. In Afghanistan, community-based demining has been linked to the demobilization of soldiers as a means of offering a sustainable path to reintegration, both in economic and in social terms.⁵¹ To the extent that mine action directly fosters the restoration of peace and stability, it also contributes importantly to development.

Impact Measurement, Planning and Implementation

Solid information is a key requirement for the proper planning and implementation of mine action.⁵² Scarce resources will have to be shared between the different components of mine action to maximize effectiveness and efficiency. Mine action should also be compared with other development interventions, and the use of resources for mine action reviewed in contrast to alternative uses. Most importantly, the planners and implementers need to know about real and perceived effects on affected communities. This information may not only be obtained through structured studies of impact, but also depends on open lines of communication between implementers and host populations.

Mine action is often planned and takes place under difficult circumstances both logistically and security-wise, and in many cases also under time pressures that are not conducive to the gathering of socio-economic information and the performing of thorough analyses. However, the overall context in which mine action takes place changes over time. It may start out as an emergency or a war situation, and over time change to a more stable situation of 'normal development'. The potential for conducting impact assessments, as well as the need for such assessments, will thus change over time. At first, there is a pressing need to find out where mines are and, in rough terms, how they might affect people's activities, including repatriation and resettlement. Later, there will be greater scope and need for fine-grained planning and analysis.

As mine action is increasingly mainstreamed with development, impact assessment will become more complex. Since the objectives of an intervention will be broader and several interventions may aim at achieving the same objective, the issue of attribution will become increasingly problematic. Additionally, various stakeholders may have differing opinions on what forms of impact are the most important and how they are

⁵¹ Strand, A., 2004. 'The Mine Action for Peace Programme : A Workshop Report', Landmine Memo no. 10, International Peace Research Institute, Oslo; available at http://www.prio.no/page/Project_detail/9244/45284.html (accessed 28 September 2004).

⁵² For a discussion related specifically to the LIS, see Demex & Scanteam, 'Evaluation of the Global Landmine Survey Process', Final Report, Oslo, February 2004; see also 'Impact Assessment and Communication' in Chapter 5 (below) for more on the role of impact assessments in planning at the operational level.

most properly assessed. There is no panacea available to address such problems. The processes of data-gathering and planning may be used to foster consensus, but it needs to be recognized that any given approach to impact assessment has its own strengths and weaknesses, and must be tailored to the particular objectives of each case.

When these issues are viewed from an administrative angle, the question of who will carry the responsibility for impact assessment also emerges. Would the responsibility for assessment of a project that aims to simulate agricultural production, for example, lie with the mine action organization, with the FAO, or with the national ministry of agriculture? Again, the answer would vary from one situation to another. In an emergency phase, institutional capacity may be minimal, and it makes sense for mine action to conduct its own impact assessments. As the situation stabilizes and the capacities of the government and other actors increase, the mine action sector may play only a secondary role in assessing impacts.

Croatia ensures feedback from its mine-affected communities mostly by administrative means and has put relatively little emphasis on analysis of socio-economic effects. One reason for this may be that 75% of its mine action is funded domestically and is therefore not subject to donor pressure for formal justification of the use of resources. Another reason, as revealed by country visits, is that the mine action sector is very well integrated within development planning, and local governments (at the county level) play a prominent role in deciding the priorities of mine action in their areas. Channels for feedback from the local communities appear open through the development of annual plans for demining, which are linked to general development planning. This clearly has to do with the fact that Croatia is the richest of the mine-affected countries and generally has a well functioning public administration.

An example of a poorer country that also places considerable reliance on administrative links for the planning and implementation of mine action is Laos. Here, the close involvement of local governments in setting priorities for mine action indicates that perceptions of benefits at the grass roots are taken seriously by the central government. This may well be a positive indication of the benefits accruing from provincial mine action operations.

Conclusion

Over the past five years, there has been an upsurge of interest in impact assessment in mine action. This has contributed greatly to our basic understanding of the impact of landmines and ERW, as well as the impact of mine action, and it has strengthened planning and prioritization considerably. Nevertheless, quantifiable evidence on the economic impact of mine action remains rare, and two studies from 2001 remain the main references – a World Bank/UNDP study of the Afghan programme and a GICHD/UNDP study that includes CBA analysis from Laos and Mozambique. The Afghanistan CBA gives very positive results for demining, with a rate of return of 28% – twice the average for a range of sectors assessed by the World Bank in the

period 1982–93. The Laos study, focusing on agricultural land, does not yield a positive rate of return, but it is concluded that this will change once major initial capital investments are in place and costs are brought down. The Mozambique study, also focusing on agricultural production, yields a negative result from the CBA analysis. This is partly related to the fact that agricultural land is not a scarce resource in most of the country, but the study also illustrates excessive positive results for targeted clearance – for example, of water access points. In general, however, the findings from the CBA studies are positive, and they make the case that mine action may often be justified on economic grounds alone.

Importantly, CBA studies do not capture all significant development impacts of mine action, and this chapter has illustrated possible impacts at the macro-economic level (in countries where mine action is a sizable sector in its own right) and at the community and household levels. Gross measures of effects on economic growth also need to be complemented by analysis of distribution effects, particularly given the evidence of a strong relationship between landmines and poverty. In addition to saving lives and limbs, mine action needs to be guided by its development impact in general, and by its impact on the economy in particular. However, development objectives need to be complemented by other types of concerns, including the saving of lives and limbs and the potential peacebuilding impact of mine action. The objective that is prioritized will vary from one context to another. Giving precedence to one type of impact – for example, the saving of lives and limbs, as is common in an emergency phase – does not mean that a programme cannot realize development objectives at the same time. In relation to impact assessment more generally, this carries considerable promise for the more recent turn towards multi-criteria approaches, including CBA as one element of analysis.

Experience from a number of countries demonstrates that the developmental impact of mine action is considerable, though the sector still has an uneven record in building development expertise. Similarly, and despite the sector's significant contribution towards development outcomes, traditional development actors often lack an adequate understanding of the mine action sector. While our knowledge of the impact of mine action still remains piecemeal and the need for more solid studies is evident, existing studies make a strong case for the developmental impact of mine action.

MAINSTREAMING THE INTERNATIONAL SUPPORT SYSTEM

THIS CHAPTER CONSIDERS the present international system of institutions, policymaking, funding and resource allocation in relation to mine action, and proposes measures for more effective mainstreaming. Some aspects of the influence and activities of the international community at the national (i.e. recipient country) and operational levels are also addressed in Chapters 4 and 5.

In general, this report argues that the *national* level is pivotal to the mainstreaming challenge. In principle, therefore, policy, planning and funding by donors and the international community should be informed by and support the priorities set by recipient countries. Since the size and shape of bilateral ODA is broadly formed by domestic political processes in the donor countries, the legal and administrative frameworks of donors tend to override those of the recipients in most cases. To make the mainstreaming of mine action in development a meaningful exercise for affected countries, it is necessary for the international mine action community to continue to strengthen the emphasis on policy ownership by the less developed partners, in line with general development practice.

The international actors in mine action play largely the same role as international development actors in terms of policymaking, planning and funding. Mine action, however, is special in three main respects. *First*, bilateral donors finance a higher share in mine action than they do in other sectors of international development. *Second*, the UN plays a more important role – not only in channelling resources, but also in supporting and coordinating operations (UNDP; UNMAS), and in direct implementation (UNDP; UNICEF; UNOPS). *Third*, international NGOs play a more prominent role than in other sectors. NGOs have played a seminal role in advocacy for mine action and in bringing the problem to the attention of the world community. Besides conducting field operations, NGOs also provide funding for mine action, often acting as a conduit for funding from bilateral donors. Fundamentally, mine action is also special in the sense that the Mine Ban Treaty places an obligation on

member-states to assist mine-affected countries, and there are multiple sector-specific meeting places that are instrumental for coordination and policy formulation.¹

The World Bank Group and the regional development banks are also involved in mine action, mainly by contributing loan funding for demining linked to lending for infrastructure and social and productive sectors. The regional banks are also partly funded by bilateral donors.²

The United Nations

The UN plays a central coordinating and advisory role in mine action, including policy development. In addition, the UN plays a central role as a conduit for funds through a variety of contracting arrangements with states and other implementing entities. As a result of its role in coordination, policy development and funding, the UN has a key role to play in ensuring the mainstreaming of mine action. Over the past two years, statements on mine action by the UN General Assembly and the UN Security Council have been extremely supportive of mainstreaming.

In February 2004, for example, the General Assembly passed its annual Resolution on Assistance in Mine Action, bringing to the foreground the development dimension of mine action and explicitly recognizing the role of UNDP. The 2004 resolution builds on earlier resolutions, but also contrasts earlier ones that focused mainly on the humanitarian aspects of the response to landmines and ERW. The content of the latest General Assembly resolution is also in line with recent statements by the President of the Security Council (see Box 3.1 for the most relevant excerpts from these documents).

At present, the UN is in the process of revising its overall mine action policy, replacing the previous policy that dates from 1998.³ The new policy is likely to restate and strengthen the formulations pertaining to the role of mine action in relation to development – introducing a more explicit mainstreaming agenda – and to reaffirm the importance of local and national ownership.

The UN is well placed to further and organize the mainstreaming of mine action. For such an objective to be achieved, however, it is important that the entire UN system in mine-affected countries be drawn into a mainstreaming framework. Currently, although mine action is a cross-cutting sector, it is not mainstreamed and worked into routines, processes and programming across the entire UN system. Together with

¹ This includes the Mine Ban Treaty meetings, the Mine Action Support Group meetings (see http://www.eda.admin.ch/newyork_miss/e/home/masg.html, accessed 27 September 2004), and the Steering Committee on Mine Action (which is chaired by UNMAS, but includes a wide range of actors).

² The African Development Fund is managed by the African Development Bank (AfDB), and the Asian Development Fund is managed by the Asian Development Bank (ADB).

³ United Nations, 1998. 'Mine Action and Effective Coordination: The United Nations Policy'; available at <http://www.mineaction.org/pdf%20file/UNMAS%20Policy.doc> (accessed 15 October 2004).

other actors within the mine action community, the UN system shares the responsibility to ensure that the mainstreaming of mine action becomes a reality. To this end, the UN and other stakeholders see it as essential that mainstreaming emerge as a main conclusion from the 2004 Review Conference of the Mine Ban Treaty in Nairobi.

Box. 3.1. The UN General Assembly and the UN Security Council on support to mine action

From UN General Assembly Resolution on Assistance in Mine Action, 17 February 2004 (A/RES/58/127):

Recognizes that mine action is an important component of UN development activities (Preamble)

Reaffirms deep concern about the serious and lasting social and economic consequences for the populations of mine-affected countries (Preamble)

Calls for the establishment and development of national mine-action capacities (Paragraph 2)

Stresses the importance that mine action assistance should be integrated into broader socio-economic strategies and included in humanitarian, rehabilitation, reconstruction and development assistance plans and programmes (Paragraphs 8 and 9)

Emphasizes the importance of national and local ownership, sustainability and capacity-building (Paragraph 9)

Emphasizes the need for impact assessments and the establishment of clear priorities and national economic and development plans of action (Paragraph 17)

Recognizes the importance of building national capacities for and ownership of mine-action programmes, encouraging the further establishment of national mine-action centres, including those supported by UNDP (Paragraph 19)

From ‘Comments by the President of the UN Security Council on the Importance of Mine Action for Peacekeeping Operations’, New York, 19 November 2003, (S/PRST/2003/22):

Recognizes the long-term consequences of landmines for durable peace, security and development (Paragraph 2)

Welcomes the role of UNDP in addressing the problem from a development perspective, and providing technical, management and resource mobilization assistance to Governments of mine-affected States (Paragraph 3)

Encourages Governments to include a mine action impact assessment in all development planning and to incorporate a strategic plan for mine action in the national development plan and poverty reduction strategies (Paragraph 6).

Bilateral Donors

According to the *Landmine Monitor*, there were 22 countries that donated more than USD 500,000 each to mine action in 2002. Of these, ten countries donated some 80% of the total global funding to mine action. Table 3.1 compares features of general aid

management, policy responsibility for mine action, and funding channels for mine action in these ten countries.⁴

The table is based on documents outlining policies and management structures for mine action, utilizing information from the responses of mine action donors to a UNDP questionnaire.⁵ Our examination of this information makes it clear that several bilateral donors are implementing or considering changes to their overall aid management and mine action systems. Whereas these changes are largely conducive to better mainstreaming of mine action, some donors still work with systems that imply difficulties for further mainstreaming.

The relation between mine action management and overall development assistance management is in many cases tenuous. The responsibility for mine action often lies with departments that are not fully integrated parts of the system that manages development aid. For those countries in which all aid, including mine action, is managed within an integrated ministry of foreign affairs or by a strong autonomous aid agency, the barriers to mainstreaming should be low. It will be easier to integrate management and establish a regular flow of information between development and mine action when these are located within the same organizational system.

In a number of countries, the responsibility for mine action at the headquarters level lies with one or more separate relief portfolios, partly or wholly outside the general aid management structure. Among others, this is true for the USA, Germany and Switzerland, as well as for the European Commission. Such a setup is likely to create obstacles to the coordination of mine action and development at the headquarters level. During interviews conducted as part of this study, donor representatives indicated either that such obstacles were not always conceived to be major or that there were other concerns militating against a system that would be more conducive to mainstreaming (for example, that earmarking of funds for mine action helped bypass the administrative complications associated with development funding). In some cases, funding arrangements would not seem particularly amenable to mainstreaming. In the USA, the major share of funding goes via the State Department. In Germany, funding is split between different components of mine action, with demining and mine risk education being categorized as 'relief' while victim assistance is classified as 'development'. The German Ministry of Foreign Affairs, for example, holds the view that one cannot define demining as part of development cooperation. For the European Commission, the main source of funding for mine action (budget line B7-661) was until recently managed largely from Brussels, which was hardly conducive to mainstreaming at the national level. More recently, however, the European

⁴ For further explanation of the different types of aid administration used in the second column of the table, see Chang, H.; A. M. Fell & M. Laird, 1999. 'A Comparison of Management Systems for Development Co-Operation, in OECD/DAC Members', DCD 99(6), Paris: Organization for Economic Cooperation and Development.

⁵ The questionnaire was distributed to all major donors in March 2004 as part of UNDP's preparation for a meeting between the Resource Mobilization Task Force and the World Bank. Ten countries responded. The study team had access to the original questionnaires.

Commission has been placing much more emphasis on management at the country delegation level ('de-concentrating'), though the impression from the field visits for this study was that the practical impact of the changes differed considerably between countries.⁶ In general, there is both a need and scope for greater coordination within and between departments in individual donor countries.

In the case of Canada, the heavy reliance on one dedicated source of funding (the Canadian Landmine Fund) would at first sight seem to be an obstacle to mainstreaming. However, Canadian policy is very focused on mainstreaming, and the unit that manages mine action also has an advocacy role within the Canadian International Development Agency (CIDA) bureaucracy vis-à-vis the managers of development projects. Resources from the mine fund have been used to 'leverage' funds for mine action from the development allocation. In addition to using the earmarked mine action source to 'leverage' funds from the development envelope, the mine action teams at CIDA and the Ministry of Foreign Affairs also work actively to provide information about landmine impact and response opportunities to development aid managers. Canadian mine action is therefore in the process of being mainstreamed at the headquarters level, using earmarked funds to ease this transition.

Other donors are also in the process of modifying their practices. Norway, for example, has in recent years allocated a significant share of its mine action funding from bilateral lines in the development budget, while maintaining its level of funding by complementing this from the humanitarian funds. In the UK, DFID emphasizes mainstreaming in its 2004 Review of Mine Action, and opens up for bilateral funding of mine action when it forms an integral part of the agency's country-assistance plans.⁷

In addition to the management characteristics shown in Table 3.1, there are a number of other factors that may further or hinder mainstreaming. A donor that emphasizes predictability for recipients and uses budget support as a dominant mode of aid delivery gives the recipient considerable latitude over the use of the funds. Such circumstances are conducive to integration between sectors.

Interviews with government representatives make it clear that there is little mine action expertise in development departments, and *vice versa* a lack of development expertise within mine action management. On each side, integration and mainstreaming will require a thorough understanding of decisions and considerations in 'the other camp'. This will have to be based on an integration of concepts, knowledge and experience.

⁶ The 'de-concentrated' system did not appear to work in Mozambique, but was working well in Afghanistan. However, this might be just a matter of when the changes were introduced. For example, changes in Afghanistan were implemented before the field visit, whereas they had not yet been introduced in Mozambique.

⁷ DFID, 2004. 'Review of DFID Humanitarian Mine Action', London: Department for International Development.

Table 3.1. Characteristics of Bilateral Mine Action Aid Management

Country	Aid management structure ⁸	Responsibility for mine action support	Funding channel(s)
Canada	Autonomous aid agency: Canadian International Development Agency (CIDA).	Policy leadership: Foreign Affairs Canada (FAC). Within CIDA, Mine Action Unit is the lead, working closely with country desks and multilateral programmes.	Main channel: Canadian Landmine Fund. Governed by FAC, CIDA, the Department of National Defence and Industry Canada. Significant funding mobilized through bilateral desks.
Denmark	Integrated ministry of foreign affairs.	Policy leadership: Coordination role for Department of Humanitarian Affairs. Other departments of the Ministry of Foreign Affairs (MFA) involved. (Recent evaluation has recommended better coordination.)	Main channels within MFA: Humanitarian grant, programme country frameworks and the Environment Peace and Stability Budget.
European Commission	Multiple ministries and separate implementing agencies (DG VIII, DG IB, DG 1A, and Common Services).	Policy leadership: External Relations Directorate-General responsible for the policy formulation and programming, coordinates EU effort and chairs the Mine Action Coordination Group. Other departments also involved (in particular, Development Directorate-General dealing with African, Caribbean and Pacific development also has responsibility for policy formulation and programming).	Budget line B7-661 in support of projects against mines (managed by Europe Aid Co-operation Office's, unit F/4) is EC's main source of mine action funding. In addition: European Community budget and European Development Fund. The financial instruments also include geographic budget lines (CARDS, ALA, MEDA, TACIS).
Germany	Policy ministry (BMZ), with two main implementing agencies (KfW and GTZ).	Policy leadership for demining and MRE: Federal Foreign Office. Policy leadership for victim assistance: German Ministry for Economic Cooperation and Development (BMZ).	Demining and MRE from mine action fund under Federal Foreign Office (FFO). Victim assistance funded by FFO Humanitarian Aid Budget and BMZ.
Japan	Multiple ministries, separate implementing agencies. Coordinated network of separate ODA administrations. MFA now plays a core role within the ODA organizational hierarchy.	Policy leadership: Multilateral Cooperation Department in charge of humanitarian assistance, and international organizations.	Humanitarian assistance funding. Also funding from geographic bureaux.

⁸ This column used the following five categories of aid management systems: (1) integrated ministry of foreign affairs; (2) development cooperation directorate within the ministry of foreign affairs; (3) policy ministry with separate implementing agency; (4) autonomous aid agency; (5) multiple ministries with separate implementing agencies. See Chang, H.; A. M. Fell & M. Laird, 1999. 'A Comparison of Management Systems for Development Co-Operation, in OECD/DAC Members', DCD 99(6), Paris: Organization for Economic Cooperation and Development.

Country	Aid management structure ⁸	Responsibility for mine action support	Funding channel(s)
Netherlands	Integrated ministry of foreign affairs. Embassies have strong management role.	Policy leadership: Ministry of Foreign Affairs (MFA).	Humanitarian assistance budget under MFA now integrated into the 'Stability Fund' for post-conflict, which aims to integrate political and development objectives in post-conflict situations.
Norway	Integrated ministry of foreign Affairs (recent change).	Ministry of Foreign Affairs, Section for Humanitarian Affairs.	Humanitarian (not development) budget under Section for Humanitarian Affairs. Complementary funding through bilateral desks.
Switzerland	Development Co-operation Directorate (SDC) within Federal Dept of Foreign Affairs.	Policy leadership: Federal Ministry of Foreign Affairs, Dept for Peace Policy and Human Security.	Through budget of Federal Dept of Foreign Affairs.
UK	Autonomous aid agency: Department for International Development (DFID) under cabinet-level secretary of state.	Policy leadership: DFID, Conflict and Humanitarian Affairs Department (CHAD).	DFID/CHAD budget. Commitment to spend £10 million annually. Recent (May 2004) policy changes make DFID regional desks/offices involved in mine action in DFID country-assistance plans and creates an additional potential source of funding for mine action.
USA	Autonomous aid agency: United States Agency for International Development (USAID).	Policy leadership by Policy Coordination Committee on Mine Action (Lead agency: State Dept, Bureau of Political–Military Affairs, Office of Weapons Removal and Abatement; other members: CIA, Dept of Defense and USAID).	Through State Dept (more than 50%), as well as Dept of Defense and various humanitarian funds.

A related issue of importance is the divergence between development projects and mine action projects in terms of criteria for the selection of projects and procedures for project planning and appraisal. Although it is difficult to find such differences in manuals and handbooks (which are often internal to the institutions managing aid), interviews with bilateral donors indicate that the criteria applied for mine action, which most commonly comes under the heading of 'relief', are quite different from those applied to interventions defined as 'development'.

The mine action sector has developed mechanisms and methods for analysis and management. Data showing the extent and character of mine impact are now available for a number of mine-affected countries, but are not generally utilized by donors for the planning and programming of development interventions. Further, while mine action has placed increasing emphasis on various quality-assurance mechanisms, more comprehensive project and sector review routines applied to development projects in sectors like health and education are not as routinely applied in mine action.

International Financial Institutions

Of the two Bretton Woods institutions, the World Bank is the one that is primarily exposed to the field of mine action through its lending to major social and economic infrastructure programmes in mine-affected countries.⁹

Few loans or grants have been given by the Bank specifically for mine action projects. Most of its funding has been in the form of loans for development projects that include a mine action component necessary for their implementation. Funding sources are either the International Development Association window, which provides soft loans to less developed countries (of which a large part of the mine action funding has gone to Ethiopia) or the regular International Bank for Reconstruction and Development loan funds, which have mainly gone to Croatia. In addition, a small amount (1–2%, or just over USD 1 million) has been given as grants from the so-called Post Conflict Fund.

The Bank's policy – within its larger 'Conflict Agenda' – is to support and finance landmine clearance necessary to make available land and infrastructure for development activities agreed with a borrower. Specific guidelines are laid down in the 1997 Operational Guidelines for Financing Landmine Clearance. These guidelines stipulate that:

- Landmine clearance should be an integral part of a development project/programme.
- The Bank's focus is not on landmine clearance per se, but on the support of development activities.
- The financing of landmine clearance should be justified on economic grounds and 'take into consideration the availability of resources'.
- Implementation must be carried out under the control of civilian institutions.
- The country or borrower must promise not to lay new landmines that would undermine the execution or development objectives of the project for which clearance is undertaken.
- The World Bank will not take on any professional responsibility in relation to demining, for example in selecting methods for clearance. The Bank believes that it neither has the capacity for such a role nor should enter into or discuss professional demining issues.

The points that emerge from these guidelines are, first, that mine action, in the context of the Bank's lending operations, is limited to *demining*. Victim assistance,

⁹ The description of World Bank policy and operational guidelines in this section is based on Bure, J. & P. Pont, 2003. 'Landmine Clearance Projects: Task Manager's Guide', Social Development Papers, Unit for Conflict Prevention and Reconstruction, World Bank, Washington, DC. The basic operational policy, as set out in the World Bank Operational Guidelines for Financing Landmine Clearance (issued on 7 February 1997), is annexed to the pamphlet.

mine risk education and stockpile destruction are not considered for lending other than indirectly, through ordinary assistance to the education and health sectors. Second, projects will have to be justified on economic grounds, indicating that neither the full scope of social and economic effects of landmines and ERW nor their effects on peacebuilding are considered. Interviews with Washington-based staff of the World Bank made it clear that these guidelines are closely adhered to in practice.

By mid-2004, the Bank signalled a reorientation in its approach to mine action. On 22 July, in an important meeting between the World Bank and the Resource Mobilization Task Force (RMTF),¹⁰ it was concluded that the existing policies of the Bank permitted a more comprehensive engagement within mine action, in recognition of the principal importance of mine action for development, though some concern was expressed that experienced mine action donors might reduce their support in response to an expanded engagement by the World Bank.¹¹ The July meeting is seen as the first step in a continuing process, and will be followed up by high-level meetings involving World Bank President James Wolfensohn and Minister of Foreign Affairs of Thailand and President of the Fifth Meeting of States Parties to the Mine Ban Treaty Surakiart Sathirathai.

So far, the Bank's approach to financing mine action has not been a major concern, as funding from other sources has increased considerably year by year. However, with a possible onset of donor fatigue for mine action and with programmes in the most affected countries growing into maturity, the World Bank's assistance will undoubtedly be important. Mine-affected countries will need a lender and adviser to the public sector as mine action is transformed from today's reliance on the UN, NGOs and bilateral donors to a public sector task. Ultimately, a reorientation of the policies of the Bank must be rooted in a realization that in a number of countries affected by mines and ERW, development fundamentally rests on the progress of mine action.

Regional Development Banks

Regional banks like the African Development Bank (AfDB), the Asian Development Bank (ADB), the Inter-American Development Bank (IADB) and the European Bank for Reconstruction and Development (EBRD) are involved in lending operations in some of the most mine-affected countries in their respective regions. An examination of the project portfolios of some of those countries indicates that these important

¹⁰ The Resource Mobilization Contact Group (RMCG) was established in 2002 at the initiative of Norway, with the dual aims of scrutinizing cost-efficiency in mine action and working to secure sustainable long-term funding. The RMTF is a small group mandated by the RMCG to engage in dialogue with the World Bank.

¹¹ UNDP Mine Action Team, 2004, 'Report on Proceedings: Meeting Between Representatives of the Mine Action Community and the World Bank', 22 July 2004; 'Joint Press Statement between H.E. Dr. Surakiart Sathirathai, Minister of Foreign Affairs of Thailand and President of the SMSP, and Mr. James Wolfensohn, President of the World Bank', 20 September 2004.

investment banks have limited concern for the mine problem and mine action. However, within these institutions, too, there has been movement towards an integration of mine action and development funding. In Afghanistan, anecdotal evidence from the field mission indicated that the ADB had integrated mine action within its lending – after considerable exhortation from development partners.

For the regional development banks, there is still some distance between the present situation and what one might call full mainstreaming. For example, project preparation manuals and other information accessible to the research team indicated little or no awareness of the mine problem. Checklists that contained reference to other cross-cutting issues made no reference to the problems of landmines and ERW, nor to mine action.

The OECD/DAC

The Development Assistance Committee (DAC) is the principal body through which the OECD deals with issues related to cooperation with developing countries. The DAC collates and analyses records collected from the major donors on various aspects of aid, considers best practices, and issues guidelines in various fields.

The DAC donor statistics system does not conform to the concepts used in the mine action sector. Within the DAC system, military expenditure is coded as ODA when it is made in connection with UN peacekeeping operations. The DAC's 'CRS Purpose Codes' list part of the expenditure on mine action under Item 15061, 'Post Conflict Peacebuilding (UN)', together with all other expenditure under this item. In addition, Item 15066 lists other 'Landmine Clearance' – that is, landmine clearance not carried out in connection with peacebuilding activities. The individual components of mine action are not distinguishable. It must be possible to change the DAC system codes to bring them into line with what the mine action community defines as humanitarian mine action. This would ensure proper inclusion in ODA statistics of the expenditure data now collected, and would in itself be a contribution to mainstreaming.

The DAC has not established separate practices and advice for mine action, but a 1999 study does include recommendations on mine action.¹² Among other things, it argues that donors should take an interest in supporting:

- the creation of an indigenous capacity for mine clearance, as rapidly as possible;
- efforts by affected governments in making institutional arrangements for the long term, integrating information and verification systems, mine-awareness activities, minefield marking and mine clearance operations;

¹² OECD, 1999. 'Helping Prevent Violent Conflict', Paris: Organization for Economic Cooperation and Development.

- implementation of the demining strategies of affected governments, including policy regimes designed to ensure that these are consistent with national plans for social and economic development, as well as with the humanitarian intent; and
- the efforts of nongovernmental organizations in caring for the victims of landmines, including post-trauma rehabilitation and training for productive occupations.

More broadly, a 1997 OECD/DAC-sponsored case study on southern Africa concluded that:

governments need to pay greater attention to harmonising the policies of their different departments. In particular, there appears to be little donor coordination over military and security matters. Moreover, individual countries' military attachés and donor organisations rarely develop co-ordinated policy responses. This would appear to be common sense where a country is recovering from war and attempting to assert civilian control over military organisations.¹³

A similar OECD/DAC study on Ethiopia concluded that, in short, there is an inextricable linkage between greater security, peace and conflict resolution, and positive development outcomes.¹⁴ This has clear implications for mine action, which is still sometimes seen through a security lens despite its encompassing role in relation to development.

Nongovernmental Organizations

Throughout the short history of mine action, NGOs have played a prominent role. NGOs were instrumental in placing the landmines issue on the global political agenda in the early 1990s, and the ICBL reports a membership of some 1,300 organizations. The ICBL has played an important role not only in promoting a ban on landmines, but also in stimulating support for mine action generally, and it has contributed to policy development through its various working groups. Today, the ICBL remains a key actor, but with several other entities strengthening their capacity, its role in developing policies for field-based mine action has grown less central.

Under the banner 'NGO Perspective on the Debris of War', five international mine action NGOs have joined hands to promote a reform agenda in the run-up to the 2004

¹³ OECD/DAC/Government of Canada, 1997a. 'Military Spending Trends and Developments in Southern Africa: Angola, Zimbabwe, Mozambique and South Africa', Paris: OECD/DAC/Government of Canada.

¹⁴ OECD/DAC/Government of Canada, 1997b. 'Military Spending Trends and Developments in Ethiopia and Eritrea', Paris: OECD/DAC/Government of Canada.

Nairobi Conference.¹⁵ Critical of the increasingly dominant role of the UN and its coordination arrangements, which they perceive as overly rigid, the agenda is a plea for both local adaptation and a focus on mine action at the field level. The joint agenda also makes reference to the need for all stakeholders to take part in the development of national mine action plans, indicating that NGOs may aim at playing a larger role in the preparation of national development strategies and plans, including their relationship to mine action.

While the primacy of NGOs on the international mine action agenda is less evident today than in the recent past, NGOs continue to be central actors, combining active field projects with international engagement – in some cases also with privileged access to particular donors. This gives mine action NGOs a high degree of credibility and offers opportunities to root policy propositions in lessons learned from the field (assuming, of course, that the NGOs are engaged in innovative projects and can document them adequately). Drawing on their comparative advantages, NGOs can extract lessons learned and best practices in relation to the integration of mine action and development at the local and national levels, feeding those into the international policy debates. However, to ensure effectiveness and impact, it is important that NGOs facilitate and support coordination efforts, in particular those by national authorities.

Conclusions

In general, the international system for support to mine action is not yet fully conducive to the mainstreaming of mine action in development. In addition, the advances towards mainstreaming made by the mine action community have not always been embraced by the development community. While UNDP has taken a lead in promoting mainstreaming and several bilateral donors have integrated it within their policies and funding practices, significant challenges remain.

In important aspects, the UN system is well structured to safeguard its own move towards mainstreaming through its interagency coordination mechanisms, with UNDP serving as a ‘lead agency’ in the mainstreaming of mine action in development. In practical programming, however, there remains considerable room for improvement to ensure the development orientation of mine action generally, as opposed to its being linked to a specific projects and programmes.

Many bilateral donors have made considerable progress in terms of mainstreaming mine action. However, it is still likely that the structure of aid management systems in some donor countries contains obstacles to better management. Mine action often remains located within departmental entities, with tenuous links to overall aid

¹⁵ NGO Perspective on the Debris of War, 2004. ‘Cost-Effectiveness in Humanitarian Mine Action’, Geneva: NGO Perspective on the Debris of War; available at <http://www.dca.dk/usr/noedhjaelp/DCAweb.nsf/UNIDPrintInfo/555046DC275A908DC1256E3F003D02E6> (accessed 30 July 2004).

management structures. Many donors handle their mine action portfolio separate from other assistance sectors, conceptualizing it in terms of its technical requirements.

In terms of funding, mine action is often supported from separate resource envelopes handled by distinct institutions. Several of the most significant donors continue to fund mine action primarily or exclusively from relief budget lines and express a desire to continue doing so – not only because this practice means a solid earmarking of funds for mine action, but also because it bypasses the administrative complications of development funding. The developmental requirements for mine action, however, mean that earmarked funding needs to be complemented – rather than replaced – by developmental funding.

While mine action in general has become fairly advanced in terms of quality assurance and evaluation, it is less advanced when it comes to the use of a range of methods and checklists for the appraisal and evaluation of developmental impact, not unlike the situation for the general relief sector. Development and mine action are also normally managed by different categories of professional staff. Specialized mine action personnel, often with military backgrounds, are in charge of the mine action portfolio, while the development portfolio is often run by individuals with backgrounds in the social sciences. The latter seldom use or are aware of all of the information that is available on the development impact of mines. The mutual exchange of skills and data in the planning of development interventions has not yet become completely accepted or standard practice.

World Bank lending is limited to demining, and the Bank does not yet regard other facets of mine action (mine risk education, victim assistance, stockpile destruction) as eligible for lending. World Bank lending mostly takes place when demining is needed as part of a social or economic infrastructure project. The Bank may potentially act as a lender and plays a key role in ensuring the incorporation of mine action in Poverty Reduction Strategy Papers (PRSPs) and national development plans where necessary.

Regional development banks, despite the fact that they are operating in some of the most mine-affected countries in the world, appear to have limited concern for mine action. Project documents or procedural and programming manuals do not appear to indicate that mine action is fully integrated within their lending operations.

OECD/DAC, the principal body through which the OECD deals with issues related to cooperation with developing countries, has long drawn attention to the lack of intra-donor country coordination between development, on the one hand, and emergency aid or peacebuilding, on the other. The question of mainstreaming mine action, including donor reporting, would seem an issue suitable for scrutiny by the OECD, as would improvements in statistical recording on mine action expenditure.

International NGOs have played a seminal role in advocacy for mine action and indeed brought the problem to the attention of the world community. Many NGOs are involved in both mine action and development and could potentially act as bridge-builders and advocates for mainstreaming.

Recommendations

- *The UN and other major development actors should work in partnership to develop policies and guidelines at the global level and to demonstrate leadership on the mainstreaming of mine action in development. This may require a focused periodic meeting of all relevant parties to review existing practice, share lessons learned and develop approaches for the future.*
- *The various actors within the mine action community share a responsibility to ensure that mainstreaming emerges as a main conclusion from the 2004 Review Conference of the Mine Ban Treaty in Nairobi.*
- *Donor governments and funding agencies should work to ensure that their mine action policies are fully integrated with development policies, and that mine action considerations inform bilateral and multilateral development programming in countries affected by landmines and ERW.*
- *Donor governments ought to establish consultative organs in which decision-makers within various agencies – including staff relating to different budget lines (i.e. relief, development) – meet regularly to jointly assess all ongoing and new mine action engagements.*
- *Donor governments should develop a strategy for using humanitarian mine action budget lines in a way that maximizes the development impact both in the short term (through integration with development interventions) and in the long term (through building general awareness, expertise and organizational capacities).*
- *Donor governments, funding agencies and international NGOs should ensure that all staff in charge of mine action funding and programmes have solid development knowledge, enabling them to assess whether mine action interventions are conducive to development aims and facilitating their communication with development staff.*
- *All international development actors should include mine action in handbooks and manuals for planning and programming development interventions in order to safeguard against neglect of landmine and ERW impact in development planning; mine action actors should include key concepts of development programming in their handbooks and manuals.*
- *Donor governments and funding agencies should actively encourage and fund the systematic collection of landmine impact data, including surveys to map the impact of completed projects.*
- *Donor governments and funding agencies should ensure that plans and project documents are solidly grounded in landmine impact data and that the development impact of mine action is systematically assessed as part of regular project review routines.*

- *The international financial institutions and the regional development banks should improve dialogue with mine-affected states, UN agencies and major donors, aiming to integrate concern for landmines and ERW into their development programming and funding schemes.*
- *In all mine-affected states, country representations of the international financial institutions and the regional development banks should advocate for development planning processes to be sensitive to the potential need for mine action, and for methods to be developed and tested for addressing mine action in an integrated manner.*
- *The OECD/DAC should include the internationally agreed-upon concept of mine action in its reporting system to ensure precise data on donations for mine action and its subcomponents.*
- *International NGOs have an important role to play in documenting and advocating the development impact of mine action. NGOs engaged in mine action combine field access with global outreach; development NGOs engaged in mine action are uniquely placed to conceptualize the interface between development and mine action.*

MAINSTREAMING AT THE NATIONAL LEVEL

MOST MINE ACTION PROGRAMMES are conducted in settings characterized by dramatic change. In an early post-conflict situation, activities take place under war-like, turbulent conditions, where any government institutions that do exist are partly dysfunctional. The situation may gradually move towards one where institutions are in place and where the state administration begins to function – what may be called a ‘normal’ development situation. The character of that process, what the changes are, and how and when they appear is uncertain. There will always be backlashes – and potentially also a return to conflict.

In the early stages, government functions either will not be performed at all or will be financed and supported or, at least partly, run by the international community. A national government taking over responsibility in such a situation will have gained its administrative experience under a system run by the international community and characterized by numerous provisional arrangements.

As a war-torn society moves closer to the development stage, public sector management becomes more complex, requiring properly functioning democratic institutions and proper coordination, as well as active input from the local level. Good governance, including public sector management, is necessary for enhancing national *ownership* – which is an integral part of the development concept.¹ Ideally, national representative bodies set policies, draw up plans and implement measures of their own volition.

The character of mine action makes it one of the prime victims of a syndrome of post-conflict public administration. Managed and financed by the international community, in a situation that is turbulent and where other public sector service activities (e.g. education, transport, health) are largely absent, mine action easily takes on, and tends to maintain, a profile that is technocratic and poorly coordinated with other public sector activities. *Mainstreaming* the sector to ensure an integral dimension of design, implementation, monitoring and evaluation of policies and programmes is therefore not likely to be successful without concerted action at several levels, including the national.

¹ The international community places public sector capacity and quality of governance high on the priorities for the achievement of the Millennium Development Goals. See, for example, Joint Ministerial Committee of the Boards of Governors of the Bank and the Fund on the Transfer of Real Resources to Developing Countries, 2004. ‘Development Committee Communiqué, April 25, 2004’, Washington, DC: World Bank/IMF.

In the following sections, we will examine the state of mainstreaming at the various policy and planning levels and in various organizations, drawing on information gathered during country visits to Afghanistan, Croatia and Mozambique, as well as available documentation from other countries. As is clear from the above, the question is not merely one of the coordination of mine action with other development activities; there is also the question of *ownership* by mine-affected countries – in relation to policymaking, planning, programming and implementation.

The movement towards mainstreaming will depend heavily on what happens at the national level, in particular with regard to the role of Mine Action Centres (MACs). Below, we consider first ownership and governance of the centres themselves, and then focus on the important roles of donors, after which we move on to national planning and budgeting processes at central and local levels. Finally, we look at how monitoring and evaluation aspects are mainstreamed into the statistical institutions in mine-affected countries.

National Coordination

By early 2003, almost half of the mine-affected countries in the world (37 out of 82) had established some form of coordination and planning body for mine action.² The accelerating pace of institutionalization may indicate increasing attention to mine action planning, but it is not necessarily driven by a desire on the part of the mine action community to forge links with development planning. The increasing tendency for international donors to regard development impact as an important criterion for funding decisions implies a need for technical institutions that can undertake the monitoring and collection of necessary statistics.

Central functions of a typical Mine Action Centre (MAC) comprise:

- surveys, assessments and data management;
- coordination, priority-setting and tasking;
- development of a national strategic plan for dealing with the mine threat;
- the setting of standards;
- monitoring, quality assurance and, at times, financial control;
- accreditation of implementing agencies, such as NGOs and commercial companies;
- accident and incident investigation related to landmines and mine action;
- capacity development, resource mobilization and logistical support for implementing agencies.

² International Campaign to Ban Landmines, 2003b. *Landmine Monitor Report 2003: Toward a Mine-Free World*, Washington, DC: Human Rights Watch.

MACs are not normally engaged in demining, but function as planning and administrative bodies. However, there are exceptions where MACs include operational platoons as part of their organizations – for example, in the former operation of the Cambodian Mine Action Centre (CMAC) in Cambodia and the UXO LAO.³

The mainstreaming issue arises in relation to the central functions of all of the MACs: To what extent do surveys and assessments take socio-economic aspects of mine action into account? How are national strategies and plans integrated with other sectors, and how are the planning levels (central to local) linked? Are standards set in a manner that is conducive to development? Do monitoring, quality assurance and accreditation of operational units take into account socio-economic issues? How these questions are handled depends *first* on the MAC itself, and *second* on its organizational links to the rest of the state apparatus, particularly the public administration.

The mine action staff members that play leading roles in the MACs tend to be drawn from military and technical professions. The organizational view of mine action, therefore, often emphasizes technical and organizational features rather than socio-economic aspects. A number of observers have noted this and suggest a broadening of the vision of MACs through the inclusion of staff with backgrounds in development or social science.⁴

One would expect a MAC to be better mainstreamed when it is formally part of the public administration of the country in which it operates. If thoroughly integrated, it should receive clearer and stronger directions from the higher levels of national policy and planning, and the horizontal links to other sectors should also be better. Looking at the present situation, as summarized in Table 4.1, however, we find that the degree of integration and national governance varies considerably and is sometimes quite tenuous.⁵

In addition to coordination and planning bodies like the MACs, some countries have separate regulatory authorities that deal with standards and authorization of the various operational parts of the demining industry. An example is the National Regulatory Authority (NRA) to be established in Laos.

In the majority of cases, the formal link of MACs to central government runs through a ‘parent’ ministry. For the MACs shown in Table 4.1, this varies from ministries of internal affairs to ministries of defence and foreign affairs. Some MACs

³ In Cambodia, CMAC is no longer the MAC in a de facto sense – the Cambodian Mine Action Authority (CMAA) is responsible for most MAC-type functions, and CMAC is now simply an operator.

⁴ See, for example, Grayson, J., 2003. ‘Mine Action and Development: Merging Strategies’, *Disarmament Forum* 3: 15–24.

⁵ In a listing of the eleven countries with the largest mine action programmes in 2002, the national authority is clear in nine (Eritrea and Iraq remain unclear). Among those nine, only Afghanistan presently has a UN-based organization. Elsewhere, as in Mozambique, there is a tenuous link between the MAC and its master ministry. The MACs in Cambodia, Laos and Croatia appear to be well integrated into the public administration, yet with a great deal of professional autonomy.

Table 4.1. Mine Action Centres and National Authority

Country	Origin	MAC governance	Coordinating mechanisms
Afghanistan	United Nations Mine Action Centre for Afghanistan (UNMACA). Predecessor established by UN in 1989.	UN organization (UNMAS). Consultative group on mine action under the Office of the President, chaired by the Ministry of Foreign Affairs.	Afghanistan Transitional Authority (ATA) established Mine Action Consultative Group (MACG) to coordinate mine action policy. MACG is chaired by Ministry of Foreign Affairs and comprises ministries and donors. Mine action part of Public Investment Programme.
Croatia	Croatian Mine Action Centre (CROMAC) set up 1998. Successor to UN MAC set up 1996.	Autonomous agency with Government appointed board under Ministry of Internal Affairs.	CROMAC integrated in national planning and budget process similar to ministry. Running costs and part of mine action programme covered by government.
Iraq	National Mine Action Authority (NMAA) established 2003, incorporating the responsibilities of the Iraq Mine Action Center (IMAC).	NMAA has the status of a department, with its own Director General, under the Ministry of Planning and Development Cooperation.	Inter-ministerial committee within the Interim Government coordinates mine action with reference to the National Development Strategy.
Cambodia	Cambodian Mine Action Centre (CMAC) set up 1993 with UN assistance. Cambodian Mine Action Authority (CMAA) set up 2000. CMAC converted to national operator.	CMAA is an inter-ministerial regulatory authority chaired by the Prime Minister.	CMAA is the nexus of donor-government coordination, within the framework of the National Mine Action Strategy and rolling five-year Mine Action Plans, in accordance with five year Socio-Economic Development Plan (SEDP II) and the National Poverty Reduction Strategy (NPRS).
Angola	Commission for De-mining and Humanitarian Assistance (CNIDAH) set up 2003 with support from UNDP. Former National Institute for the Removal of Explosive Devices (INAROEE) transformed into operational entity named Institute for Demining (INAD).	CNIDAH reports to the Angolan Council of Ministers.	The Plenary is the highest consultative organ for CNIDAH and includes representatives from line ministries, vice-governors, national institutes and accredited operators and partners. In the process of province-level planning, vice-governors represent CNIDAH and set priorities in consultation with relevant stakeholders.
Bosnia & Herzegovina	Bosnia and Herzegovina Mine Action Centre (BHMIC) set up 1998 after two years with UNMAC.	Under Ministry of Civil affairs and BH demining commission.	Responsibility and authority placed within the Council of Ministers of Bosnia and Herzegovina; will, through Demining Commission and BHMIC, implement the demining strategy under the Demining Law.
Vietnam	The Technology Centre for Bomb and Mine Disposal (BOMICO); not a full-fledged MAC.	Under Ministry of Defence, as a department of the Engineering Command of the Ministry.	A national strategy on mine action has not yet been developed.

Country	Origin	MAC governance	Coordinating mechanisms
Mozambique	National Demining Institute (IND), established 1999; successor to National Mine Clearance Commission (NMCC) established in 1995. UN-supported.	A public institution and body corporate under the Ministry of Foreign Affairs and Cooperation; director appointed by minister.	Annual plans developed with reference to five-year National Strategic Plan (2002–06), included in overall government annual plan and budget which covers the IND administration only. Programme financed by donors, with little scope for direction. Mine action to be integrated in the PRSP and the Strategic Document for the Reduction of Poverty and the Promotion of Economic Growth (PARPA) from 2004.
Eritrea	Eritrean Mine Action Programme (EMAP) 2001; UNMAS established the Mine Action Coordination Centre (MACC) in 2000.	Inter-ministerial group for policy supervision to be established, to report to the Office of the President.	Coordination through inter-ministerial group.
Ethiopia	Ethiopian Mine Action Office (EMAO) established in February 2001. UN-supported.	EMAO: civilian entity under the Office of the Prime Minister.	EMAO to develop a national mine action strategy addressing socio-economic impact on mine-affected communities and integrate with government's Strategy for Sustainable Development and Poverty Reduction.
Laos	UXO LAO established by Prime Minister's decree in 1996. Coordination transferred to National Regulatory Authority (NRA) established 2004; UXO LAO transformed into operator.	National Regulatory Authority (NRA) established 2004 with overseer role for mine action. NRA is an inter-ministerial body, reporting to the Prime Minister.	Mine action planning conducted within a comprehensive system with village committees, through district and provincial levels, to the State Planning Committee at the central level.

report to the office of the prime minister. In a number of cases, including Croatia and Mozambique, ministerial links are formal and have little to do with the substance of mine action. Substantive issues and overall priorities may be dealt with by an inter-ministerial group (often called a mine action authority), sometimes in the form of a governing council for the MAC or another consultative structure. In several countries, NGOs and donors participate in such organizations, contributing to vertical integration within mine action. In principle, inter-ministerial bodies should be the best means of ensuring thorough integration of mine action concerns across all sectors, in addition to providing an avenue towards fostering genuine national ownership and authority in mine action.

It might be of some importance which part of the executive it is that shoulders the responsibility for mine action. Whereas ministries of public works would be professionally more likely to deal with a MAC, they do not normally have a coordinating role like ministries of finance or planning. Ministries of the interior or defence have their own drawbacks as coordination ministries. In the end, the choice

will have to take into account details of the individual case, including the relative political strengths of ministries and ministers. In Afghanistan, one option that was discussed was to make the office of the president responsible for mine action, because it was feared that otherwise funding for mine action might simply be absorbed by the line ministries and allocated to other purposes.

Although, in principle, each state has the primary responsibility for initiating, organizing, coordinating and implementing humanitarian and development assistance within its own borders, the typical MAC setup involves the UN playing a prominent role.⁶ This is because some states are unable or unwilling to assume these types of responsibilities in post-conflict situations. The international community, primarily in the form of the UN, will then have to act. As Table 4.1 illustrates, the majority of national mine action coordination institutions have received initial funding and expertise from one or more UN agencies.

Box 4.1. Transition of MACs in Croatia and Afghanistan

From UN to government in Afghanistan

In Afghanistan, a transition of the United Nations Mine Action Centre for Afghanistan (UNMACA) is planned within the next two years, if possible earlier. A committee, set up under the consultative group for mine action (CG) and headed by the deputy minister for foreign affairs, will establish criteria for the various steps of the transition. The CG has broad representation from ministries, donors, partners and NGOs alike. Studies are under way to consider an appropriate supervising authority and the character of links to other sectors.⁷

From UN-supported to fully nationalized programme in Croatia

In Croatia, the last UN Technical Adviser left the Croatian Mine Action Center (CROMAC) at the end of 2003. The institution is now set up as an autonomous agency under the ministry of the interior, with an autonomous governing council. CROMAC has been given the sole responsibility for all certification of clearance and quality control. CROMAC running costs and mine action projects are financed out of the national budget. In accordance with policies issued by central government and in close cooperation with individual counties, CROMAC will allocate financial resources for county mine action plans that are prepared in parallel with general development plans. Here, 80% of mine action is domestically financed – half by the government, half by private and public corporations.

Contexts vary a great deal from one country to another, and there are limits on how far we can generalize. Assessment of the transition of a UN-run MAC must take into account the political and social realities in which the centre is embedded. Still,

⁶ United Nations General Assembly Resolution 46/182.

⁷ A possible alternative, of course, would have been to transfer the mine action programme to the new Afghan administration soon after it took office in late 2002. See, for example, Suhrke, A. et al., 2002. *Peace-Building Lessons for Afghanistan?*, Bergen: Chr. Michelsen Institute, pp. 49–51; available at <http://www.cmi.no/publications/2002/rep/r2002-9.pdf> (accessed 15 October 2004).

observance of a few general rules would help make the process easier. Two different transition processes are illustrated in Box 4.1. In Afghanistan, the transition from a UN-led programme to one led by the government is in progress, while in Croatia a national programme with UN support has recently taken the step of full nationalization.

The mainstreaming of mine action with other activities in a developmental administration must build on a foundation of information. In a number of mine-affected countries, IMSMA databases for decisionmaking and analysis of mine action needs are either in place or in the process of being established.⁸ The amount of socio-economic information included in IMSMA varies between countries, but an increasing number of IMSMA implementations now include LIS results. From literature study and field visits, it appears that while the systems are good in terms of techniques and data, there is a lack of emphasis on integration of the information in decisionmaking across ministries and sectors. With certain exceptions, the MACs still tend to monopolize interpretation and use of the information.⁹ With increasingly better interfaces, it should become less difficult and less costly to train key planners in the various development agencies both inside and outside government to such an extent that the information becomes part of the planning and programming systems.

The funding of MACs is normally heavily dependent on donors. Croatia is probably the only country where mine action is significant and both local staff and operational expenditure are financed through the national budget. Despite the positive aspects of international funding, MACs and governments do note that the allocation of funds is subject to the wishes and regulations of donors, which have to be taken into consideration and may affect national priorities.

The Role of Donors

The governments of low-income countries will need to conduct policy dialogues with a large number of different donors. Whereas a typical OECD country normally has a national planning and budget process involving its ministry of finance and line ministries, developing countries will have a number of other participants involved in the planning process. Although all developing countries declare their appreciation of the donors' participation, there are also costs associated with processes that involve multiple donors. Two problems are apparent. First, ownership of policies may be negatively affected, as donor priorities sometimes seem to win the day. Second, the priority of funding allocations for different purposes is subject to negotiation with a

⁸ IMSMA systems are operational in Afghanistan, Albania, Azerbaijan, Cambodia, Chad, Cyprus, Ecuador, Eritrea, Estonia, Ethiopia, Kosovo, Lebanon, Macedonia, Mozambique, Nicaragua, Peru, Rwanda, Sierra Leone, Somalia, Thailand and Yemen.

⁹ The Afghan MAC feeds its IMSMA results into the national information management facility (AIMS).

number of external powers, and the outcome will not necessarily be consistent with national priorities.

Funding channels and modalities will affect the use of funds. Donor funding for mine action is usually not fully convertible, which may prevent it being used for other development projects even if such a move would be more in line with national priorities. In certain situations, this leads to an emphasis on finding suitable donor projects so as not to lose funding, which also means that local priorities might be set aside and that certain types of projects are privileged at the expense of others.¹⁰ A number of MACs and governments have handled this elegantly, and mine action remains relatively generously funded. However, the problem remains that scarce human resources are diverted to conduct funding campaigns and to handle several different funding modalities.¹¹

A number of observers have also speculated about why there is a disparity between levels of commitment by international donors and those of mine-affected countries, as reflected in allocations of national funding. One prominent reason may be that international mine action funding is most often earmarked, and while mine-affected governments may not always be fully cognizant of the landmine problem, it is also a problem for mine-affected developing countries to make donors understand and accept a possibly different priority scale. Complementing earmarked mine action funding with access to developmental funds for mine action seems to be the most appropriate response to both of these concerns.

National Policymaking and Planning

Public administrations in post-conflict countries are likely to have a number of special traits. A recent UNDP seminar dealing with governance in post-conflict situations pointed to characteristics like centralized decisionmaking and orientation towards specific (non-developmental) aims, as well as poor monitoring and aid coordination. A notable tendency is for strong dividing lines between sectors, including a tendency for individual sectors to relate more to the apex of government than to each other.¹² None of these characteristics seem particularly supportive of the multi-sectoral character of development planning. In the emergency-type situation that often prevails in the wake of a conflict, mine action tends to be undertaken as a matter of great haste. Given its particular characteristics, it would seem to be difficult to mainstream such a sector.

To try *forcing* mainstreaming in an unfavourable situation is unlikely to be helpful, and may even endanger the technical quality of execution. The way forward would rather be to consider how MACs and surrounding organizations could be set up to

¹⁰ It is also alleged that mine-affected countries use the 'victim image' as a way of maintaining funds, since this is a convenient way of continuing to access funding that is then leveraged into supporting development goals as opposed to humanitarian ones.

¹¹ The UNMACA in Afghanistan, for example, has its own external liaison department.

¹² UNDP & CMI, 2004. 'Governance in Post-Conflict Situations', Bergen: UNDP & CMI.

enable a start of the mainstreaming process at the earliest possible time. First, socio-economic expertise should be inserted into the MAC at the earliest possible time, so that it might engage in and promote the use of socio-economic analysis. Second, a clear expectation of future mainstreaming and integration within the national administrative system might be built into the organizational setup. Generally, the strategy should focus on preparing the MAC to relate to other parts of the public administration when the latter takes on a more organized and less provisional character.

Successful mainstreaming, however, is also a matter of how the MAC is placed within the public sector and how the planning and policymaking system functions. Most national MACs are created as agencies under the same type of administrative and legal provisions as other autonomous government agencies. By early 2003, only 36 of the 134 state parties to the Mine Ban Treaty had passed domestic laws to implement Article 9 of the Treaty – relating to national implementation measures – and a number of countries still do not see this as necessary for achieving the Treaty's aims.

National mine action plans have been prepared in 25–30 of the most mine-affected countries, and several others have plans under preparation.¹³ An important issue for mainstreaming is how these plans relate to, or are integrated with, medium-term national plans. For most countries, the latter are important parts of mechanisms for the allocation of scarce national resources to social and economic ends. At the centre of the plan, there is often a form of public investment budget variously known as the Development Budget, the Public Investment Plan (PIP) or Sector Investment Programmes (SIPs). Developing countries that have programmes with the World Bank and the International Monetary Fund will usually prepare what is called a Poverty Reduction Strategy Paper (PRSP), which is a three-year rolling programme that works either as an alternative to the national development plan or as a complement to it. Six of the eleven mine-affected countries listed in Table 4.2 have produced PRSPs.

For three countries – Iraq, Angola and Eritrea – no PRSP or equivalent plan exists, since they are in an immediate transition period. The same is the case for Croatia, which is not a developing country.¹⁴ Three countries – Vietnam, Mozambique and Ethiopia – have PRSPs that make no mention of mine action. For the other four countries, the PRSPs or relevant plans do include the problem of landmines and UXO, as well as mine action, though to varying degrees:

- The Bosnia and Herzegovina PRSP appears to treat mine action as a single sector problem, with little mainstreaming or coordination with other sectors.
- The recent Afghanistan plan sets out mines as one of six key issues for improving national security. Mine action appears largely to be treated under the security heading, though it is briefly mentioned under the agricultural sector.

¹³ International Campaign to Ban Landmines, 2003b. *Landmine Monitor Report 2003: Toward a Mine-Free World*, Washington, DC: Human Rights Watch.

¹⁴ After the recent change of government, a regular plan has not been prepared.

Table 4.2. Mine Action in PRSPs and Medium-Term Plans

Country	
Afghanistan	In 'Securing Afghanistan's Future', mine action is dealt with under 'Security'. ¹⁵ Demining is identified as one of six key issues for improving national security, but as such not addressed within other sectors and general development policy. The problem is briefly mentioned within agriculture. Notably, there is no mention of mine action in the Executive Summary.
Croatia	No Regular Plan has been produced. A short policy note on 'Development Priorities of the Republic of Croatia', which was obtained by the study mission, makes no mention of mines or mine action. A recent Public Expenditure Review undertaken in conjunction with the World Bank does not mention the mine problem in the context of public expenditure. ¹⁶
Iraq	The country is in a war situation. Mine action coordination mechanisms both at national and governorate levels are being developed. No overall plan or PRSP exists.
Cambodia	In the PRSP, ¹⁷ mine action is dealt with in the chapter on 'Priority Poverty Reduction Actions'. The landmine/ERW problem is presented in the chapter on 'Dimensions of Poverty' and mentioned under most key concerns. Mine action is included in the National Poverty Reduction Strategy (NPRS) Action Plan budget. The CMAA's Five-Year Plan from 2003 states that mine action issues are directly linked to the policy of poverty, development and social-economic issues. ¹⁸ It is stressed that the mine action sector has to be strictly coordinated by the government in order to implement national priorities and to comply with international conventions – indicating a considerable degree of mainstreaming.
Angola	No recent plan. As of May 2004, the government of Angola is in the process of preparing an Interim PRSP (I-PRSP).
Bosnia and Herzegovina	Mine action is mentioned in the Executive Summary of the PRSP, but there appears to be a problem of coordination with other sectors. ¹⁹ Landmines are said to be a concern in public health, agriculture/land management, and the environment. Generally, the issue of mine action is dealt with in isolation rather than mainstreamed. The Strategy Plan from the Bosnia and Herzegovina Mine Action Centre (BHMAC) makes little mention of cooperation with other institutions.
Vietnam	Neither mine action, demining nor ERW is mentioned in the PRSP of November 2003 (CPRGS). ²⁰

¹⁵ Government of Afghanistan et al., 2004. 'Securing Afghanistan's Future: Accomplishments and the Strategic Path Forward', Kabul: Government of Afghanistan/Asian Development Bank/United Nations Assistance Mission to Afghanistan/United Nations Development Programme/World Bank; see particularly pp. 90–92.

¹⁶ World Bank, 2001. 'Regaining Fiscal Sustainability and Enhancing Effectiveness: A Public Expenditure and Institutional Review', World Bank Country Study on Croatia, Report No. 22155-HR, Washington, DC: World Bank.

¹⁷ Government of Cambodia, 2002. 'National Poverty Reduction Strategy 2003–2005', Phnom Penh: Government of Cambodia.

¹⁸ CMAC, 2002. 'CMAC Five-Year Strategic Plan (2003–2007)', Phnom Penh: Cambodia Mine Action Centre.

¹⁹ Bosnia PRSP (March 2004), p. 243.

²⁰ Socialist Republic of Vietnam, 2002. 'The Comprehensive Poverty Reduction and Growth Strategy (CPRGS)', Hanoi: Government of Vietnam.

Country	
Mozambique	Mine action is not referred to in the PRSP, ²¹ approved by the Council of Ministers in April 2001, nor in the document on Annual Progress 2003. Mine action is likely to be integrated in the new PRSP that is supposed to be produced following the Joint Review undertaken in March–April 2004.
Eritrea	No PRSP or plan of equivalent status.
Ethiopia	Mine action is neither mentioned in the PRSP of July 2002 ²² nor in the annual progress report of December 2003. ²³
Laos	The problem of ERW/UXO is mentioned in the Laos I-PRSP as one determinant of poverty. ²⁴ The government's strategic framework for poverty alleviation includes 'support strategies' that address major national priorities, such as 'UXO decontamination'. It is also mentioned that good 'coordination is crucial in order to ensure that the UXO threat is taken into account in development plans when necessary, and that the use of resources is optimal'.

- The I-PRSP for Laos identifies ERW as one of the determinants of poverty and stresses ERW decontamination as a major support strategy for poverty alleviation. Coordination and optimal use of resources are considered important.
- Cambodia's PRSP is the one that comes closest to having mainstreamed mine action.²⁵ The link between landmines and ERW, on the one hand, and policy development and socio-economic issues, on the other, is clear and persistent. There is reference to the importance of collecting and sharing information with other sectors. At the planning level, landmines and ERW are seen to have a clear negative influence on poverty, and the ERW problem is mentioned under most key concerns and also included in the National Poverty Reduction Strategy Action Plan budget.

A similar exercise was undertaken for another 11 countries that have prepared a PRSP and to which the *Landmine Monitor* reported a donor inflow for mine action of

²¹ Republic of Mozambique, 2001. 'Action Plan for the Reduction of Absolute Poverty (2001–2005)', Final Version Approved by the Council of Ministers, April 2001, Maputo: Mozambique.

²² Ministry of Finance and Economic Development (MOFED), 2002. 'Ethiopia: Sustainable Development and Poverty Reduction Program', Addis Ababa: Federal Democratic Republic of Ethiopia.

²³ Ministry of Finance and Economic Development (MOFED), 2003. 'Ethiopia: Sustainable Development and Poverty Reduction Program (SDPRP): Annual Progress Report 2002/03', Addis Ababa: Federal Democratic Republic of Ethiopia

²⁴ People's Democratic Republic of Laos, 2001. 'Peace Independence Democracy Unity Prosperity, Interim Poverty Reduction Strategy Paper', government paper prepared for the Executive Boards of the International Monetary Fund and the World Bank, Vientiane: Government of Laos.

²⁵ An assessment of the PRSP process by NGOs is available at http://www.ngoforum.org.kh/Development/Docs/PRSP/Appendix_I_People_Consulted_and_References.htm (accessed 7 November 2004).

more than USD 500,000 in 2002.²⁶ In their PRSPs, seven of the countries made no mention of mines or mine action; three mentioned it in passing; and only one, Chad, discussed the issue in detail in a section of its PRSP.

The results illustrate *first* the limitations of attempts at mainstreaming at the level of national plans in very turbulent situations – countries such as Iraq and Angola not having built a formal national resource allocation framework. *Second*, it is clear that, whether in a post-conflict situation or not, the majority of countries have not considered mine action as a sector that has a place in national development plans. Still, there is reason to ask why mainstreaming is fairly pronounced in countries like Cambodia or Chad when the entire sector seems to be forgotten about in other countries with considerable mine contamination. *Third*, it is not clear that which parent ministry the MAC is linked to plays any role for mainstreaming in PRSPs or other plans. Both Laos and Cambodia, where mine action is integrated, have relatively autonomous organizations with links to several ministries through a governing council or the like.

Judging the planning process solely on the basis of the PRSP document, of course, is somewhat limited. Whether or not mainstreaming occurs could be the result of a number of circumstantial factors – for instance, the focus of the World Bank or its consultants, which are often heavily involved in the process. Nonetheless, inclusion in the PRSP does give an interesting indication of the prominence given to mine action by central actors in development planning and is one strategic target for advocates of mainstreaming.

An ideal-type national plan process and framework – and one advocated by the World Bank – is the Medium Term Expenditure Framework (MTEF). According to the Bank, the MTEF is a ‘whole-of-Government strategic policy and expenditure framework within which ministers and line ministries are provided with greater responsibility for resource allocation decisions and resource use’.²⁷ Institutional mechanisms must assist and require relevant decisionmakers to balance what is affordable in aggregate against the policy priorities of the country. An important aspect of a true MTEF is that all donor resources are ‘on budget’.

While there are some variations between individual countries, a typical MTEF process might run like this: The sector (budget item) ‘mine action’ would be defined as ‘cross-cutting’, like environment or gender. All other ‘development’ sectors would be required to report to the MAC or the parent ministry, declaring their needs for demining for the three-year planning period. The ministry of education, for example, would perhaps deal with mine risk education, liaising with the MAC. The estimate of budgetary resources needed would be presented to the ministry of finance by the parent ministry and the ministry of education, with a request for allocation of necessary resources. The final allocation would be decided through one or more

²⁶ The relevant countries are Armenia, Azerbaijan, Chad, Georgia, Rwanda, Yemen, Zambia, Nicaragua, Albania, Guinea and Sri Lanka.

²⁷ World Bank, 1998. *Public Expenditure Management Handbook*, Washington, DC: World Bank.

budget discussions, in which government policies would be pitted against the overall resource framework.

In many countries, however, the reality is quite different. First, changes in economic fortunes have a major impact on what may be available in the medium term. Second, a number of donors will prefer not to commit money to a specific purpose over several years, relinquishing influence. Third, few countries have managed to set up a process that significantly resembles that of an ideal MTEF process. Fourth, in many countries there are very weak links from strategic planning to multi-year and annual budgeting, as well as from budgeting to actual expenditure, which leads to a major gap between planning and the *ex post* resource allocation.

The proper mainstreaming of mine action at this level, however important, depends to a large extent on the progress countries make in public finance management and economic governance in general. To achieve mainstreaming for mine action in the longer run, both in terms of coordination with other sectors and in terms of ownership, it is important that both mine-affected countries and donors support capacity-building in public finance management.

Budgeting

A budget should ideally be the public finance expression of the national plan, but in many cases there will be considerable differences between the public expenditure pattern set out by a plan and the one implemented by a budget. Budgets are a step nearer to actual expenditure than plans, and in a number of countries serious medium-term plans do not exist.

Mainstreaming at the national budget level, much in the same way as planning, is complicated by the fact that most resources for mine action come from donors and in many cases are not channelled through the national budgets of recipients. This means that most of the public sector expenditure on mine action escapes the normal scrutiny of the legislature. It also means that the mine action sector may be somewhat isolated from the national prioritization process, which is a central aspect of national budgeting. As long as the donor interest for mine action is strong, this may have several advantages seen from an isolated mine action point of view. It may entail easier access to foreign exchange, greater stability of the resource flow in the medium term, and support in terms of expertise and human resources. Often it also implies a strong (donor) partner in the national budget battle when the mine action sector attempts to pry domestic resource counterpart funding from a constrained national budget. Handled carefully by the public sector and mine action stakeholders, this may lead to a resource flow to the sector in excess of what the government would have allocated if money had been fully fungible.

In the longer run, as the mine situation becomes less of an immediate threat to national development and security, donors start withdrawing from the sector, and a number of drawbacks involved with a ‘sheltered’ mine action sector may become apparent. First, donors have a tendency to move rapidly. Therefore, cuts in support

may be much more dramatic than warranted and are also affected by changes in policies and allocations in the donor capitals. In addition, the often-observed ‘bellwether effect’ is likely to strike. In Mozambique, there are currently indications that donors are withdrawing from the sector either because it is not considered an ‘in’ sector or because they believe that human and financial resources are better utilized in other sectors.

Care should be taken to ensure that mine action funding is cut in sync with a diminishing need for mine action. In general, the resources used for solving a problem should disappear in parallel with the declining size of the problem. Seen from an overall public finance point of view, this means that the additional funding that mine action once attracted will disappear. If funding for mine action had not been earmarked in the first place but instead included in a medium-term financial framework, the funds cut from the mine action sector could be allocated to other development sectors through the normal national budget and planning process.

Superficially, the obvious recommendation would be that donors should, as soon as possible, merge the special envelopes that exist for mine action funding with the envelopes used for general development purposes. However, as far as donors are concerned, there are a number of problems with this. First, funds that have already been allocated for a specific purpose may not be quickly transferred. Second, donors fear that if these funds are made fungible, this will lead to an immediate decline in spending on mine action, which is not in line with their priorities. This problem is linked to the differences in perception and priorities mentioned above. A more realistic approach, therefore, is to complement earmarked mine action funding with access to general development funding, ensuring that the use of earmarked funding is rooted in a broad view of the developmental impacts of mine action.

Local Communities and Local Government

In most developing countries, local governments are severely constrained by a lack of financial and human resources, and this is likely to be even worse in post-conflict situations. Local populations are those who bear the brunt of the mine problem. For people working and living in a mine-affected community, the rationale for mainstreaming will tend to be ‘common sense’. Why are roads being cleared but not the agricultural land and settlement areas that would enable returnees to sustain a living? Why do the people clearing a gravel road not also repair the road? Why is a lot of research undertaken on our problems when we know them ourselves? Why is there a lot of central government activity in the neighbouring village but not in ours?

This is again an area where it is difficult for mainstreaming to proceed beyond what community leaders and local government have the capacity to handle. In the longer term, the contemporary emphasis on decentralization and local-government capacity-building will help. In some countries, one has already come to the point where donors have sufficient confidence in the strength and accountability of national governments

to make general budget support grants and expect money to find its way to local societies, reflecting their own priorities.

Mine action, with its highly centralized style, does not lend itself easily to local management. Taken together with weaknesses in management and financial control at the local-government level, this has led to an extensive use of research to set priorities. While this may be warranted, it indicates that there is little trust in the abilities of local communities to diagnose their own problems correctly and express them accurately. Attempts should be made to enable local governments to decide on their mine action priorities and on the amount of total community expenditure to be allocated to mine action efforts.

Among the countries most affected by mines, only two – Croatia and Laos – appear to have reached a stage where there is systematic and serious emphasis on local decisionmaking and planning. Both have chosen to localize the planning input, leaving final decisions and operations to major national organizations with considerable expertise in the field. In Croatia, mine clearance requests from each of the 23 counties are submitted to CROMAC on an annual basis. These requests are linked to the general development plans prepared by the counties. Central government, as part of the budget process, sets overall policies and negotiates a total budgetary allocation for public sector demining with CROMAC, which in turn allocates the scarce resources to counties. When cuts are made in the mine action resources applied for, CROMAC will contact the relevant counties and explain the reasons for the cuts. Other countries are taking steps in the same direction. In Afghanistan, the Area Mine Action Centres are opening up for a larger degree of local influence on mine action priorities. Angola is in the process of establishing provincial-level planning and coordination capacities, and the Cambodian example with multi-stakeholder involvement at the province level is also interesting.

Table 4.3 outlines how the UXO LAO work plan is developed from the community level. The comprehensive national planning structure in Laos PDR spans all sectors, from committees in each village, through district and provincial levels, to the State Planning Committee at the central level. Where appropriate, UXO LAO has integrated its planning process into this wider structure, to ensure that it does not work in isolation and that activities are in accord with priorities set by villages, districts and provinces.

For mine action programmes to be development-sensitive, local influence on planning and decisionmaking is critical. One challenge is that local-government representation is often weak in war-affected countries, and building it takes time. Another challenge is that local involvement needs to form part of a national planning process, as in the example of Laos.

Table 4.3 Work Planning Cycle UXO LAO

	1. UXO LAO Year-round data-gathering and surveying of contamination
August	2. Provincial departments, UXO LAO and implementing partner planning workshop
	3. District planning workshop
	4. Community requests
	5. District Committee: Determine priorities and endorse
	6. UXO LAO Provincial Office and implementing partner: Review for priority and viability
	7. Provincial Development Committee and UXO LAO Provincial Office: Consolidate, then jointly endorse provincial plan
	8. UXO LAO National Office: Review provincial plans and resource planning, and make financial allocations Endorse provincial plans and consolidate to national plan
December	9. UXO LAO National Steering Committee: Approve National Plan
Following January	10. UXO LAO: Work plan implementation Ongoing data-gathering, analysis and reporting August of each year: start planning cycle for following year

Source: <http://www.uxo.apdip.net/clearance.htm>

Monitoring, Analysis and Evaluation

Viewed as a public service and in comparison with other public services in mine-affected countries, mine action is probably the most advanced in terms of mapping and analyzing the extent and character of the problems on which it focuses. The necessity of using military and other records to spatially map the extent of landmines and ERW, and, more recently, the perceived necessity of linking mine contamination with socio-

economic phenomena have inspired the development of computer-based data-management tools such as IMSMA.

However, as shown in Chapter 2, there has been a lack of similar investments in analysing the results of mine action. Recommendations for more – and more focused – use of socio-economic analysis have been made above. It is important that the sector measures the socio-economic effects of its activities, and that those results are fed back to planners and policymakers to ensure that scarce resources are used to their best effect – not only in the mine action sector, but across all development sectors.

While the mine action sector is in many ways a pioneer in its systematic collection and application of specialized data, there is also a case for mainstreaming in the collection, storing and analysing of data and statistics relevant to the monitoring and evaluation of mine action. This case lies mainly with the fact that the impact of mine action is spread over a large number of sectors, including agriculture, public services, trade and transport. All of these sectors have their own systems for measuring progress and the impacts of resource use. We need to insert an awareness of mine action in the data and information systems of other sectors, as well as in the general data system run by the statistical bureaus of mine-affected countries.

Questions about the impact of landmines and ERW could be included in agricultural, industrial and transport surveys (which are carried out regularly) as well as in population censuses and, perhaps most importantly, household budget surveys, which are the most extensive examples of socio-economic data-collection in a majority of countries. The insertion in all of these surveys of questions aimed at identifying how mines or mine action affect people would provide a basis for much more extensive analysis of mine action effects across sectors. While such an approach is not generally in use, it would improve analysis and possibly make data-collection more efficient. The only case found where questions related to mine problems were included in a household budget survey was in a recently concluded study of rural households in Afghanistan.²⁸

Conclusions

The national level (central government ministries and resident offices) is the level at which mine-affected governments plan and execute development action, supported by international donors, NGOs, UN organizations and international financial institutions. It is at this level that national priorities are set and planning and supervision of local governments takes place. The national level is in many ways the level where all things come together.

This analysis is based on the premise that mine action should be seen as a public sector service. It should be supervised and coordinated by the public sector – working together with the UN system, donors, international financial institutions, NGOs, and

²⁸ MRRD, 2004. 'National Risk and Vulnerability Assessment', Kabul: Ministry of Rural Rehabilitation and Development

other external and domestic stakeholders – and draw funding from a variety of sources within government. A key aspect of mainstreaming will therefore be to combine – or closely coordinate – mine action with other public service sectors, in order to create the best overall utilization of available resources, with due regard to the peculiarities of the sector and the different circumstances under which it works. An important underlying argument is that the degree of mainstreaming and coordination with other public services is dependent on the capacity of the public sector in general, and thus is dependent on overall development efforts in public finance management and governance. The degree to which development actors access and analyse information on the developmental impact of mine action is therefore critical.

In countries in a post-conflict phase, mine action will be one of the first public activities to be started and may therefore come to be better organized than other development activities. Although mainstreaming may often have to be delayed for lack of anything to mainstream with, it is important to insert social science expertise within MACs from the very start and to stress in their setup elements that underline the developmental character of mine action operations. Similarly, the transition of the organization of mine action from a UN or NGO sphere to the public sector should be planned and arranged from the start, and criteria for transfer decided upon at that stage.

Information is a crucial element of mine action. It is argued that although data are gathered and organized well – for example, in IMSMA systems – the translation of data to relevant and useable information lags behind and is not effectively worked into planning and programming systems.

The international community, donors and NGOs play a key role in advocating and financing mine action. However, in many countries they are dominant in decision-making for the entire public sector and may have a negative effect on policy ownership and prioritization. In mine action, a particular problem appears to be that donors stress the importance of the sector much more than national governments, which may have other priorities or be unaware of analyses that demonstrate the benefits of mine action. With integrated planning, however, generous funding for mine action may benefit other national priorities.

Post-conflict governments tend to suffer from characteristics that are unfavourable to mainstreaming or sectoral and hierarchical integration. At a later and less turbulent stage, when normal development enters the agenda fully, it is important that the mine action sector is properly integrated within planning systems. Our brief survey of the integration of mine action in PRSPs and national plans leads to the conclusion that few mine-affected countries have thoroughly included the mine problem in their PRSPs.

The public budget should in principle be the financial expression of a government's policies and plans. Mainstreaming at this level depends on the inclusion of mine action as a budget item under one or more ministries with an interest and professional capacity in the sector. Donors' isolation or sheltering of the vote for mine action gives short-term gains for the sector, but may in the long run serve as an obstacle to proper mainstreaming if the sector acquires a vested interest in privileging mine action, as

indicated in some countries. More constructively, however, donors and mine-affected governments may use earmarked funding to leverage development funding, over time enhancing the mainstreaming of mine action while ensuring that the response to landmines and ERW can be sustained within a national setup.

Although nearly all local communities and local governments in the developing world are plagued by a lack of financial and human resources, it is local populations that bear the brunt of the mine problem. It stands to reason that they know more about their problems than anybody else. Too little trust seems to be placed on the abilities of local communities to diagnose their own problems and articulate them. The examples of Croatia and Laos PDR illustrate that systems of real local-level participation in decisionmaking on mine action and other public services may work.

Central statistical bureaus and other public data-gathering organizations are not linked with the mine problem and often miss out on collecting data on various facets of people's difficulties with mines, for example in household budget surveys. There is scope for integration of different data bodies that may strengthen the socio-economic analysis of mine action.

Recommendations

- *Governments of mine-affected countries should continue to establish and strengthen inter-ministerial bodies with broad and active participation from all relevant ministries. These should act as authorities for placing mine action and development within a common development framework. Some countries have already done this with good results.*
- *Governments in mine-affected countries should continue to develop multi-year mine action plans that are rooted in available landmine impact data and reflect established development objectives to serve as principle management and coordination tools.*
- *The UN – and UNDP in particular – should advocate the implementation of existing policies and guidelines in the respective countries, with a special responsibility falling on Resident Representatives. Country initiatives for the mainstreaming of mine action in development must respond to the needs of the country in question, be sustainable, represent a consensus among key actors and contribute to the building of the necessary expertise.*
- *Development planners and decisionmakers in mine-affected countries must consider mine action in their plans and programmes, taking into consideration budget, time and other resource constraints. Mine-affected countries should also be prepared to commit national resources to mine action.*
- *The national mine action administration (i.e. the MAC, or Mine Action Centre) must comprise solid expertise in development planning, even in the*

conflict or early post-conflict stages, when the civilian administration may be rudimentary and the scope for socio-economic analysis limited.

- *The MAC, with a mandate from the respective government, must engage in a continuous dialogue with key development personnel outside the mine action sector, including donor representatives, government officials and NGO staff.*
- *MACs should implement post-clearance surveys to determine whether areas cleared are being used for development purposes, facilitate additional interventions where necessary, and use lessons learned to improve practice.*
- *Governments of mine-affected states need to monitor progress in the mine action sector and to work towards the development of national capacities that are tailored to the problems at hand (in terms of both type and scope).*
- *National statistical institutions (as well as specialized organizations working in other sectors of development) in mine-affected countries should include questions about mines as barriers to government services and productive activities in sector-related and general surveys and censuses.*
- *Donors and recipient governments should ensure that they have strong platforms for mutual discussion on development priorities and plans, including the link between mine action and development (such as the Consultative Group structure in Afghanistan).*
- *All parties involved must ensure that development budgets, plans and strategies (including PRSPs, or Poverty Reduction Strategy Papers) are rooted in the best possible impact assessments of landmines and ERW and cater for resources required to undertake mine action.*
- *Donors (to mine action and development) should accept the priorities of recipient governments when those governments are considered legitimate and have thoroughly assessed the role of mine action in relation to other sectors of development, given that the emergency impact of landmines is adequately addressed.*
- *Local communities have an important role to play in the prioritization of mine action, including the trade-offs between mine action and other development interventions. Data-collection and planning procedures must be sensitive to community perspectives.*
- *Those in charge of priority-setting should not regard the benefits from mine action exclusively in terms of economic growth, but should consider social criteria, income distribution and poverty, as well as various political aspects, such as peacebuilding.*

MAINSTREAMING AT THE OPERATIONAL LEVEL

IT IS AT THE FIELD LEVEL, where mine action projects are being implemented, that the effects of deficient mainstreaming will be most visible as inefficient use of resources, as the use of scarce resources to deal with the wrong tasks, or in project practices that fail to fully realize development potentials. The field level represents the ultimate test for mainstreaming strategies: Have changes in policies, institutional structures, planning and resource allocations led to significant improvements for people affected by landmines? The challenge goes to organizations engaged in mine action, as well as to general development actors.

Types of Actors in Mine Action

There is an immense variety of actors engaged in operational mine action, including NGOs, government bodies (of affected states) and commercial companies, as well as the UN and international military forces. The various actors have differing starting points for contributing to the mainstreaming of mine action into development, and they operate within widely different contexts, yet there is considerable convergence around a small set of problem issues.

NGOs – and particularly international NGOs – are the most prominent implementers and are represented in all 11 major mine-affected states. Over the past 15 years, NGOs have been instrumental in the success of the overall landmine campaign, as well as in the development of mine action as a civilian activity rooted in humanitarian considerations. In comparison to other types of implementing bodies, NGOs have a record of flexibility and innovativeness, and many of them have been at the forefront in the debate on mine action and development.¹ More specifically, NGOs have spearheaded the focus on impact assessment. National NGOs constitute the major implementation capacity in Afghanistan and are seen as key to the success of the Afghan programme, but this approach has not been emulated elsewhere (with the possible exception of Iraq).

¹ An influential initiative in this regard was the German Initiative to Ban Landmines, 1997. ‘Guidelines for Mine Action Programmes from a Development-Oriented Point of View (“The Bad Honnef Framework”)', Frankfurt: Medico International, 1997; available at <http://www.minesactioncanada.com/techdocuments/bh2-e.html> (accessed 13 July 2004).

International NGOs, however, do not have a particularly good track record in building local sustainable organizations that can survive their departure. A recent Danida evaluation report includes a brief comparison of two Danish NGOs involved in mine action – one a specialized mine action agency, the other a larger humanitarian organization – finding only small differences in developmental orientation.²

The Landmine Convention prescribes national responsibility for mine action, as do the imperatives of a broader developmental orientation. This could be seen as implying that implementation capacities are national. In most countries, though, governmental bodies have not played a prominent role at the implementation level. One reason for this is that in post-conflict countries, the military – which tends to be seen as the most relevant entity for mine action – regularly struggles with legitimacy (both domestically and internationally). Within the 11 largest programme countries, the army has played a major implementing role only in Cambodia and Vietnam, while in Laos the implementing capacity is located under the Ministry of Labour and Social Welfare. A number of mine-affected countries in Latin America constitute an exception to this trend. In that region, mine action programmes have been coordinated by the Organization of American States, with the military serving as the principal operational capacity. Other exceptions include Yemen, Tajikistan, Thailand, Mauritania and Chad. In broader terms, there is concern about the ability of the military to be developmental in its conduct and to coordinate with relevant civilian bodies. Importantly, however, rooting mine action in an existing government institution is a good basis for sustainability, and should perhaps be the aim for any mine action programme in countries where a long-term commitment will be required.³

Commercial companies have been part of mine action since the clearance of Kuwait in the early 1990s, and at the end of that decade it was believed that new standards and certification procedures would prepare the ground for a major expansion of the role of such organizations in implementation.⁴ In practice, there has only been a moderate expansion in the role of commercial companies over the past five years, most importantly in the Balkans. In relation to development mainstreaming, commercial companies – with their heavy reliance on military competence and their focus on narrowly defined output indicators, rather than more diffuse developmental impacts – may be placed at a disadvantage. In line with the general direction of international mine action, however, commercials are increasingly emphasizing socio-economic impacts and the building of local competence.⁵


² Danida, 2003. 'Danish Support to Mine Action', Copenhagen: Danida.

³ For a discussion on military organizations – international and national – in mine action, see GICHD, 2003. *The Role of the Military in Mine Action*, Geneva: Geneva International Centre for Humanitarian Demining.

⁴ Horwood, C., 2000. 'Humanitarian Mine Action: The First Decade of a New Sector in Humanitarian Aid', London: Overseas Development Institute.

⁵ For example, Mechem, a South African company operating in many countries worldwide, has a section on 'Local Capacity Building' in its product and service portfolio; see www.MechemDemining.com (accessed 14 May 2003).

Table 5.1. Mine Action Operators, 2003.⁶

	Mine action operators							
	NGOs		National government		Commercial companies		UN	International military (bilateral)
	National	International	Army	Other	National	International		
Afghanistan	major	cons.				minor		minor
Croatia		minor	minor			cons.	cons.	
Iraq	major	cons.					minor	minor
Cambodia		cons.	major	cons.				
Angola		major	minor	minor				
Bosnia and Herzegovina		cons.	cons.	cons.	cons.			
Vietnam		minor	major					
Mozambique		major	minor			cons.	minor	
Eritrea		cons.*					minor	minor
 ia	minor	minor					minor	
Laos		minor		major				

Note: cons. = considerable

* Several international NGOs expelled by government in July 2002; HALO ceased operations in May 2003.

The various types of implementing organizations largely rely on the same competence in advisory and leadership positions – former military personnel – and are therefore less different in orientation than their basic mandates might suggest. While national armies are the most common government body in terms of engagement in mine action, both NGOs and commercial companies seek military competence when recruiting internationally. The developmental turn in mine action has triggered debate about whether a military background is the most suitable for managing mine action, but it remains rare for non-military personnel to be in charge of field programmes focusing on demining, surveying, marking or the like. As the institutional complexity of mine action has grown, however, non-military staff are filling more and more positions at higher levels, where the focus is on policy development, coordination and oversight. At the field level, there are often serious communication problems between mine action staff with a military background and their counterparts in development agencies, as neither side is cognizant of the language, objectives and organizational culture of the other. Similar tensions also arise between different levels within mine action, and may serve as a constraint on ensuring that new policies for mainstreaming the sector into development are effective.

⁶ International Campaign to Ban Landmines, 2003b. *Landmine Monitor Report 2003: Toward a Mine-Free World*, Washington, DC: Human Rights Watch.

Development Actors

Paralleling the range of mine action actors, there is also a wide range of local development actors, although state entities (such as municipal administrations) or locally driven initiatives (e.g. community-based organizations) tend to play a more prominent role in development programming than they do in mine action.

Development NGOs, many of which have been strong supporters of the international landmines campaign, have often been less sensitive to landmine and ERW problems within their field operations.⁷ One facet of the problem is lack of awareness of the landmine/ERW threat and failure to take into account the potential threat when assessing new projects. A second facet is the failure to convey relevant information – such as data relating to victims or suspected mined areas – to the relevant mine action body. A third facet is poor integration of planning, where development actors work in close concert with mine action actors to maximize the impact of the activities of both. Variations are great, but the overall trend has been one of solid progress on the first facet, considerable progress on the second, but limited progress on the last.

The level of involvement from local development authorities varies even more. In Croatia, for example, the priorities of municipal authorities are decisive for how mine action decisions are used. In Cambodia, a system of Land Use Planning Units (LUPUs) has been established in four provinces, serving as a focus for integrated mine action planning within the established administrative structure.⁸ In other countries, such as Afghanistan, where the development capacity of local administrations remains minimal, there may be a considerable amount of communication with mine action, yet development impacts are not on the agenda.

Commercial companies in mine-affected countries have primarily sought the services of commercial mine action operators, in part because humanitarian agencies (with some exceptions) have been hesitant to take on commercial contracts. The integration of development and mine action is left to the market principle. It may work well in countries where there is a commercial mine action sector (i.e. Croatia, Mozambique), but may become a serious impediment to business when there is none (i.e. Afghanistan, Vietnam).

Mine action, however, is not exclusively about development, and even maximizing development impact is a challenge that goes beyond entities that have development as their primary mandate. The peacebuilding role of mine action is often important in conflict and post-conflict situations – for example, in contributing to a sense of security, to demobilization of soldiers or to confidence-building.⁹ There is no

⁷ An early attempt to respond to this was a book by mine action pioneer Rae McGrath, published by Oxfam: McGrath, R., 1994. *Landmines – Legacy of Conflict: A Manual for Development Workers*, Oxford: Oxfam.

⁸ See Bolton, M. F. et al., 2003. 'LUPU Project Evaluation', Paris: Ministry of Foreign Affairs.

⁹ Harpviken, K. B. & B. A. Skåra, 2003. 'Humanitarian Mine Action and Peacebuilding', *Third World Quarterly* 24(5): 809–822.

contradiction between prioritizing the peacebuilding objective and paying attention to developmental impacts: in most mine-affected countries, there is a need to do both.

Synergy Effects

A particular coordination problem occurs in cases where demining is planned and implemented for infrastructural development projects, such as roads. The country visits carried out for this report uncovered a number of illustrations. One example is when a local community has a major demining team right on its doorstep and requests the help of the team to solve a minor but well-defined problem, only to receive a negative response. This type of situation will fuel disappointment and probably reduce the level of cooperation from the local community. Unfortunately, such a situation is fairly common. In some cases, this might involve a commercial demining company, which might regard demining some small fields near the village as being outside the terms of its contract and an operation that would erode its profits. In other cases, tight coordination arrangements do not allow for such improvisation. There are good reasons for clear contracts as well as distinct tasking and reporting procedures, yet a small degree of flexibility may go a long way in terms of increasing impact, without violating the broader framework.

A different example of potential synergy came up in the context of clearing canals for irrigation in Afghanistan. While it is the policy of the financing institution, the World Bank, to focus strictly on infrastructure, local communities see it as illogical to demine the canals if the agricultural land they irrigate is not demined at the same time. A persistent attitude among planners and funders that mine action must focus on people and livelihoods would prevent such situations. Technically, use of proper LIS information included in the IMSMA should provide a basis for extending such a project to include productive land.

People at the operational level are often aware of the potential for enhancing the development effects of their demining operations without incurring major additional costs. However, there is no general agreement on whether this should be included as a regular feature of demining. On the one hand, it is argued that extending operational objectives to include socio-economic development will blur the goals and make it more difficult to focus on efficiency and low cost. On the other hand, ideas for ‘attaching’ development to mine action definitely exist, and opportunities have been illustrated. In Kosovo, for example, demining teams assisted villagers in ploughing agricultural fields. In Afghanistan, villagers’ confidence in the quality of clearance is built through the arranging of football matches on demined fields, yet ploughing the land would also trigger local production.

Furthermore, mine action may be looked upon as an economic sector in its own right. In countries where the resources invested in mine action are considerable, positive economic effects have started to show up and could be strengthened further, either in the market for mine action services or through a broader application of the competencies developed in the sector. Croatia has made progress in mechanical

demining technology and has developed competence in quality assurance: it is currently an exporter of both. In Afghanistan, the local NGOs involved in mine action have also served as centres for training in management, which is now a scarce resource in the country. They are interested in expanding these activities vis-à-vis both the government and the private sector – a significant contribution to entrepreneurial growth. Additionally, the national NGOs in the Afghan mine action programme have over several years been a source of mine action competence for programmes elsewhere, including Yemen and Iraq. Similarly, the mine action sector has built skills in Information Technology and Geographic Information Systems, which are in high demand outside the sector.

Impact Assessment and Communication

At the heart of developmental mine action is the description of the problem at hand – the so-called impact assessment.¹⁰ While survey methods have generally become more sensitive to social and economic impact – the LIS being a case in point – it has become increasingly common that survey results do not reach implementers.¹¹ This reduces the implementing level to a mere technical producer, one with little or no understanding of where it is working or for what purpose. A common understanding of the situation is a precondition for communication. Even more importantly, if those doing the work on the ground do not have access to the premises for undertaking a particular task, this weakens the basis for learning through feedback. For the same reason, post-completion surveys ought to be made obligatory.

While governments and MACs may be unwilling or unable to equip operators with databases and help them build competence to use the data provided, this is only part of the problem.¹² A recent evaluation of the global LIS initiative has revisited the use of survey results by operators: ‘Here the findings are ... disturbing, as most of the local MA actors seem by and large to ignore the LIS outputs.’¹³ The report makes reference to country visits to Mozambique and Cambodia, where local actors ‘have shown little interest or even hostility’ towards the survey. Given that LIS data are the standard reference for priority-setting, there is a need to address this situation, which will require both a change in attitudes and a fostering of new competence among operators.

Some NGO operators have played a major role in developing impact-assessment tools at the field level. In Afghanistan, the Mines Clearance Planning Agency (MCPA)

¹⁰ For a review, see Harpviken, K. B. et al., 2003. ‘Measures for Mines: Approaches to Impact Assessment in Humanitarian Mine Action’, *Third World Quarterly* 24(5): 889–908.

¹¹ Demex & Scanteam, 2004. ‘Evaluation of the Global Landmine Survey Process’, Final Report, Oslo, February 2004.

¹² Sharing of the IMSMA database is restricted by US sanctions on the mapping software that forms an integral part of the database, a major constraint that will hopefully be rectified in the new version of the database that is currently under development.

¹³ Demex & Scanteam, 2004. ‘Evaluation of the Global Landmine Survey Process’, Final Report, Oslo, February 2004, p. 36.

has had consultations with local communities as an integral part of its ‘technical surveys’ for a long time.¹⁴ Similarly, Norwegian People’s Aid works to incorporate so-called Task Impact Assessment (TIA) in all its programmes. TIA engages local communities in working out the potential impact of a given project, including the extent to which demining will be followed up with other activities by a competent actor.¹⁵ The Mines Advisory Group (MAG) applies a ‘community liaison’ function in its programmes, which combines information exchange with the community, impact monitoring and mine awareness, also rooted in participatory thinking in development.¹⁶ MAG emphasizes its role in networking with agencies in other sectors, as well as the importance of responding quickly to, for example, needs for mine awareness or explosive ordnance disposal (EOD), also in order to instil confidence in the liaison function. The MCPA’s ‘technical surveys’, the TIA and the ‘community liaison’ function illustrate the important role of NGOs in spearheading mainstreaming at the operational level. None of these approaches, however, has been thoroughly documented and made available to the mine action community in general.

The freedom of manoeuvre for mine action operators varies greatly from one context to another, ranging from their being almost a sovereign body to their being subject to distinct orders and quality assurance from a coordinating entity. This may be less of a problem for military entities or commercial companies, but more of a problem for NGOs engaged in mine action, whose mandate may be different from the priorities of a MAC or government authorities. Matching organizational mandates to needs on the ground will require considerable freedom to be selective about tasks.¹⁷ Ultimately, however, such matching will depend upon mutual understanding and a willingness to be flexible on the part of all parties involved, in order to get the best out of available resources. The challenge is to ensure well-coordinated and impact-based operations, while maintaining a good degree of adaptability.

Expertise

Converting the ideals expressed in new policies into new practices on the ground will require a sustained training effort. Within most implementing mine action agencies, knowledge of development is minimal. Such knowledge needs to be strengthened at all levels, ranging from country management staff to personnel working on the ground in demining, mine risk education and victim assistance. Part of the response is to integrate a component on development into the curricula of all existing training

¹⁴ Harpviken, K. B., 2002. ‘Breaking New Ground: Afghanistan’s Response to Landmines and Unexploded Ordnance’, *Third World Quarterly* 23(5): 931–943.

¹⁵ Goslin, B., 2003. ‘Making Analytical Tools Operational: Task Impact Assessment’, *Third World Quarterly* 24(5): 923–938.

¹⁶ Carstairs, T., 2002. ‘Community Liaison in Mine Action: Partnerships for Growth’, *Journal of Mine Action* 6(2): 29–32.

¹⁷ Sekkenes, S., 2003. ‘Determining Disarmament and Development Priorities: The Case of Mine Action’, *Disarmament Forum* 3: 25–33.

programmes. More important, however, is a new effort to train management comprehensively at all levels on development mainstreaming, including its implications for analysis and priority-setting, for interaction with local government and other actors operating in the same area, and for dialogue with host populations. Such competence will lay the foundation for doing a better job, both directly and indirectly providing the basis for communication with other development practitioners. Importantly, recruitment criteria also need to be scrutinized to ensure that relevant staff have development expertise.

At the same time, development actors operating in mine-affected countries need to strengthen their expertise in mine action. Improved communication depends on mutual understanding of objectives, modes of organization and working methods. The question is not merely about ensuring a basic understanding of what landmine and ERW contamination leads to, but about finding ways in which development and mine action efforts can interface to strengthen the overall impact of interventions. Integrating a mine action element into basic briefings and training courses will do part of the job, but it will have to be complemented by on-the-job training in the shape of sustained and effective collaboration forums.

Conclusions

It is at the operational level that the effects of deficient mainstreaming will show up as wasteful use of resources, lack of efficiency and, in some cases, exposure of local populations to an increased mine threat. It was at this level that concern for the development impact was first expressed in the mid-1990s. Almost a decade later, mine action operators still have a long way to go before they can be said to be aligned with broader development practices and policies.¹⁸

Among both development and mine action organizations, there are problems related to expertise and mutual understanding. Among development actors, understanding of how mine action works, and what it can contribute to development, remains limited. In mine action agencies, particularly those engaged in demining and related activities, lack of knowledge of development planning is a chief constraint. Development knowledge does not figure prominently in employment decisions, training curricula or daily work. Often, when development knowledge is built, it is through add-on advisory functions (sometimes temporary) rather than with key decisionmakers.

It is in the field of impact assessment that the reorientation of mine action towards development has been most visible. The ongoing Landmine Impact Survey, new applications of cost-benefit analysis (including by UNDP) and other initiatives have long signalled a quiet revolution in mine action. At the operational level, however, such data are hardly used. Access may be restricted, but many operators also see their role as a purely technical one. Expertise may also be lacking – both for interpreting the data and for using existing data-management tools. Retrospective surveys of

¹⁸ See, for example, Danida, 2003. 'Danish Support to Mine Action', Copenhagen: Danida.

completed projects, an efficient way of learning from past practices, are conducted systematically only in a few cases (e.g. Afghanistan).

Being development-oriented also means being sensitive to local concerns. For mine action projects, safety requirements and the capital-intensive character of the interventions are significant constraints on the ability to be responsive. Yet, experience shows that even a minimal degree of responsiveness can play a large role in building local confidence and enhancing the impact of interventions. Current arrangements, together with the insistence of operators on focusing exclusively on their predefined tasks, often preclude even small measures of flexibility.

The quality of coordination with other relevant actors at the local level is often strong when national structures for mine action coordination are weak, but more variable when such structures are strong. In some cases, operators work constructively within national structures to ensure coordination is also effective at the local level. In other cases, we see mine action operators joining consortia or engaging other branches of their own organizations (a department in a development NGO, for example) to launch multi-faceted community initiatives in which mine action is one element.

The operational level remains dominated by international NGOs, while national NGOs, commercial companies and national institutions (most often the army) play important roles only in some countries. International operators have had limited success in building local organizational capacity. Yet, local capacities have great potential for increasing cost-efficiency and are particularly important for ensuring a flexible capacity to tackle landmines and ERW in the longer term.

Recommendations

- *Operators should maximize the local development impact of their interventions through coordination with all relevant actors, contributing to mainstreaming by sharing information and by being active in coordination.*
- *All mine action projects ought to be vested in basic socio-economic assessments used as a baseline both for planning and for monitoring and post-project assessment.*
- *Operators should actively relate to available impact-assessment data (e.g. LIS data), apply commonly used data-management systems (e.g. IMSMA) in their daily work and contribute to an updated national database.*
- *Operators should ensure surveying, monitoring and evaluation of all projects, including impact evaluations (even though they may not be the main body conducting some or all of these functions).*
- *In cooperation with national coordination authorities, all projects should be followed up with retrospective studies (e.g. post-clearance surveys), serving to check whether mine action interventions are followed by development (and*

if not, to consider complementary initiatives) and to use lessons learned for improving practice.

- *Operators must enhance their development expertise by providing training to all staff, including training on impact assessment, planning and reporting, and communication strategies.*
- *Key managers should undergo comprehensive development training, both to enhance the development impact of their own interventions and to build their capacity to engage in general processes of development planning.*
- *Development expertise should be regarded as an indispensable qualification for senior decisionmaking staff, as opposed to placing such expertise in add-on advisory functions.*
- *Development knowledge should be assessed when employing staff, both internationally (when relevant) and nationally.*
- *Operators should apply tools and techniques that give added value (e.g. quality assuring cleared land by ploughing, simultaneously preparing it for cultivation).*
- *Operators should ensure solid communication with local communities and their representatives in every project, and should be responsive to local needs and concerns, such as requests for addressing minor landmine and ERW problems that have a significant impact (within existing contracting arrangements as well as parameters set by national mine action authorities, and with clear procedures for tasking and reporting).*
- *Operators should contribute to the enhancement of capacity in established and newly set-up local organizations and institutions. While the military may be the best option in some contexts, there is a need to look beyond the military and to explore alternatives (e.g. police force, fire service, rescue services, existing NGOs or commercial companies).*
- *Whenever engaging in countries where the mine problem is of considerable scope, operators must have as a main objective the building of local mine action organizations, which may be independent or linked to the government, depending on the context.*
- *Mine action operators and development NGOs should develop pilot projects that can maximize the synergies between mine action and a broader development engagement. Such 'pilot projects' should aim at establishing best practice, to be used in future training as well as for advocacy purposes.*
- *Local development actors should train all their staff on mine action – not just mine awareness but all pillars of the sector – and in particular on the*

development dimension of mine action, including information management and coordination processes.

- *Development operators should share information on mine contamination and incidents with the relevant local authorities to contribute to an accurate and updated national tracking system.*
- *Development programmes, in particular area-based development programmes, and post-conflict programmes focusing on IDP and refugee return ought to ensure that both development obstacles linked to landmine contamination and the potential impact of mine action are factored into assessments of an area's development potential.*
- *Actors engaged in peacebuilding and transition initiatives – such as reconciliation projects or disarmament, demobilization and reintegration (DDR) programmes – should actively engage with the mine action sector, using the symbolic value and the confidence-building potential of mine action to enhance peace processes.*

CONCLUDING REMARKS

THIS STUDY HAS EXAMINED the current state of affairs with respect to the mainstreaming of mine action in development. The main objective has been to put forward a set of recommendations for future action. These are presented at the ends of Chapters 3, 4 and 5. Here, we will offer a few general remarks on current trends, revisiting the three categories of tools that were outlined in Chapter 1 with regard to mainstreaming: policy formulation, institutional restructuring and resource allocation.

Within the mine action sector, policy formulation has come a long way in establishing the foundations for mainstreaming. The discussion was initiated in the mid-1990s, primarily by NGOs. The realization that mine action needs to be guided by its developmental impact is now thoroughly reflected in the policy of mine action entities at all levels of the sector – from the operational to the international – as evidenced by the International Mine Action Standards (IMAS). Outside mine action, however, the picture is more mixed. Among the 11 countries that have the world's largest mine action programmes, we found that only four countries had national development strategies in which mine action formed a part (three countries lacked a national strategy document). The implication is that the mainstreaming of mine action, even at the policy level, is not thoroughly reflected in development planning by national authorities and international agencies.

Mine action is a sector with strong institutions at all levels, ranging from the local to the international, and a high level of integration among these various institutions and levels. While this is an advantage in converting policies into practice within the sector, it may easily become a disadvantage for communication with actors in other relevant sectors. In addition, mine action has often relied on military competence, particularly at the field level, although developmental staff seem to be growing increasingly influential. Developmental mine action at the field level hinges in particular on access to information for all relevant actors, particularly the socio-economic data that underlies priorities, and on building the competence needed to apply such information to daily activities. At the national level, mainstreaming can be enhanced by making mine action subject to the supervision of inter-ministerial bodies, which may be opened up to both operators and donor representatives. At the international level, donors likewise need to coordinate across sectors, but – even more importantly – to be supporting institutional integration at the national and local levels, which is key to both the relevance and the sustainability of responses.

Modalities for allocating resources play a key role in any redirection of the sector. Mine action has a relatively small share of host state funding, and while increasing this share is an objective in its own right, the sector is likely to be heavily reliant on international funding also for the years to come. The strong donor involvement in mine action places great responsibility on international donors for the success of mainstreaming. Complementary to strengthening the contributions of mine-affected states, steps need to be taken to ensure those states have a larger degree of influence on how mine action funds are used, including whether mine action is conducted in support of other development priorities. Such a responsibility on the part of host states not only relies on legitimate and competent governments, but also depends on access to information on the mine problem in a format that is compatible with planning data in general. To complement the current setup, in which the bulk of mine action funding is earmarked, action must now be taken to mainstream mine action into general development portfolios, to ensure that the mine action needs of the development community are met and that mine action is funded in a sustainable manner. Without such a transition, the risk is that mine action will become increasingly marginalized, as declining political interest converts into a decline in earmarked funding, with severe effects for mine-affected communities across the world.

We may recall that the first ever civilian mine clearance project – in Paktia Province, Afghanistan, in early 1988 – was motivated by a need to rehabilitate roads and irrigation systems, a clear development objective. Existing studies indicate that landmines and ERW constitute a major obstacle to development in many countries, and that investments in mine action may be as profitable as investments in other sectors. Furthermore, it seems that landmines have the gravest effect on the poor, so that a mainstreaming of mine action into development should form an integral part of the global effort to realize the Millennium Development Goals.

ACRONYMS

ADB	Asian Development Bank
ADP	Accelerated Demining Programme
AfDB	African Development Bank
AHP	Analytical Hierarchy Process
AIMS	Afghan Information Management System
AMAC	Assistance to Mine-Affected Communities project
ARTF	Afghanistan Reconstruction Trust Fund
ATA	Afghanistan Transitional Authority
ATC	Afghan Technical Consultants
BHMAC	Bosnia and Herzegovina Mine Action Center
BOMICO	Technology Center for Bomb and Mine Disposal
CERF	Central Emergency Revolving Fund
CIDA	Canadian International Development Agency
CMAA	Cambodian Mine Action Authority
CMAC	Cambodian Mine Action Centre
CMI	Chr. Michelsen Institute
CROMAC	Croatian Mine Action Center
DAC	OECD Development Assistance Committee
DFID	Department for International Development (UK)
EBRD	European Bank for Reconstruction and Development
ERW	explosive remnants of war
FAO	Food and Agriculture Organization
GDP	gross domestic product
GICHD	Geneva International Centre for Humanitarian Demining
GIS	geographic information systems
HI	Handicap International
IADB	Inter-American Development Bank
ICBL	International Campaign to Ban Landmines
IDA	International Development Association
IDP	internally displaced person
IMAS	UN International Mine Action Standards
IMSMA	Information Management System for Mine Action
IND	<i>see</i> NDI
JMU	James Madison University (United States)

LIS	Landmine Impact Survey
MAC	Mine Action Centre
MACA	Mine Action Centre for Afghanistan
MACG	Mine Action Consultative Group
MAG	Mine Advisory Group
MAIC	Mine Action Information Center (at JMU)
MCPA	Mine Clearance Planning Agency
MDC	Mine Detection Dog Centre
META	Monitoring Evaluation and Training Agency
MRE	mine risk education
MRRD	Ministry of Rural Reconstruction and Development (Afghanistan)
MTEF	Medium Term Expenditure Framework
NDI	National Demining Institute (Mozambique) (Instituto Nacional de Desminagem; IND)
NGO	nongovernmental organization
NMAA	National Mine Action Authority
NPA	Norwegian People's Aid
NPRS	National Poverty Reduction Strategy
OAS	Organization of American States
OCHA	Office for the Coordination of Humanitarian Affairs
OMAR	Organisation for Mine Clearance and Afghan Rehabilitation
PIP	Public Investment Plan
PRIO	International Peace Research Institute, Oslo
PRSP	Poverty Reduction Strategy Paper
RMTF	Resource Mobilization Task Force
RMWG	Resource Mobilization Working Group
SAC	Survey Action Centre
SIP	Sector Investment Programmes
TIA	Task Impact Assessment
UNDP	United Nations Development Programme
UNICEF	United Nations Children's Fund
UNMACA	United Nations Mine Action Centre for Afghanistan
UNMAS	United Nations Mine Action Service
UNOPS	United Nations Office for Project Services
USAID	United States Agency for International Development
UXO	unexploded ordnance

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TERMS OF REFERENCE

Research and Policy Recommendations on the Mainstreaming of Mine Action in Development Planning

Introduction

The landmine problem has both a humanitarian as well as a development dimension. UNDP helps address the landmine problem from a long-term development perspective, complementary to humanitarian emergency mine action programmes. The Organisation focuses in particular on promoting smooth transitions from ad-hoc planning and funding arrangements to longer-term development through the establishment of national capacities for comprehensive mine action programmes. UNDP also promotes conditions for the resumption of reconstruction and prosperous economic activity.

While the development dimension of mine action has been widely recognized, there has been little focused policy development on the subject. To address this status quo, UNDP's Bureau for Crisis Prevention and Recovery intends to commission a study on the mainstreaming of mine action in development planning.

Information on the UNDP Office Commissioning the Study

The Mine Action Team at UNDP Headquarters provides an in-house capacity to respond to the rapidly growing demand from mine-affected countries for assistance in the field of mine action. The Team is a unit of UNDP's Bureau for Crisis Prevention and Recovery, which, together with its network of field-based staff, provides support to countries emerging from crises and conflicts and requiring development assistance. The Mine Action Team currently supports mine action programmes in 24 countries and manages several global partnership projects, including a recently-concluded study on socio-economic impact of landmines.

Objectives of the Study

The proposed study on mainstreaming mine action is intended to:

- Demonstrate the socio-economic development impact of landmines as well as of mine action operations;

- Assess to what extent mine action is mainstreamed in development policies and programmes of major donors and of mine-affected countries; and
- Recommend guidelines and follow-up action by all relevant actors to facilitate the mainstreaming of mine action in development planning.

Scope of the Study

The study is expected to provide:

- An analysis of available data and previous studies on the socio-economic dimension of mine action (desk study);
- Field research yielding new information and providing an analysis of select case studies, covering at least three mine-affected countries (field missions);
- Assessment of the extent to which mine action is mainstreamed in donors' development planning (desk study and interviews); and
- A set of concrete recommendations for implementation by donors, mine-affected countries, UN agencies, and NGOs respectively to enhance the mainstreaming of mine action in development planning (policy development).

An expert reading group will be established to provide feedback on the first draft of the study. Representatives of the research group undertaking the study may be requested to travel to New York for a consultation on the first draft.

Products Expected from the Study

The outputs of the study will be:

- Succinct brief for policy makers including a set of concrete recommendations for implementation (approximately 10 pages);
- Comprehensive report on the data collected and analysis conducted.

Intended Use

The results of the study will be published for wide dissemination in order to:

- Advocate and set standards for an enhanced mainstreaming of mine action in development planning (mine-affected countries, donor governments, international organizations);
- Facilitate the mainstreaming of mine action in development planning (mine-affected countries, international organizations, bilateral organizations, NGOs); and
- Provide resource material for the training of mine action and development practitioners (all stakeholders).

Proposals for joint publication with the contracted research institute will be considered.

METHODOLOGY

The methodological foundations for the present study are only implicitly dealt with in the main text of the report. Here, the main methodological principles for the study are outlined, with a focus on the study team, the approach taken, the data collected and mechanisms for quality assurance.

Team

The two-person study team consisted of a sociologist with extensive experience of research and evaluation of the mine action sector (Kristian Berg Harpviken, Senior Researcher, PRIO) and an economist with broad experience within development research, including economic analysis and institutional assessment (Jan Isaksen, Senior Researcher, CMI). The members of the team were chosen both to ensure an interdisciplinary approach to the subject matter and to combine extensive knowledge of mine action with the fresh perspectives offered by a newcomer to the sector. The study team also drew on the expertise of other individuals – for example, in its analysis of the socio-economic impact of landmines in Cambodia in Chapter 2 (Taylor Owen, human geographer and researcher, PRIO & Knut Nygard, economist/researcher, CMI).

Approach

The primary objective of the study has been to set out the current state of affairs with regard to the mainstreaming of mine action in development, with a view to developing practicable recommendations that could be generally applicable for actors in both mine action and development (see, in particular, Chapters 3–5).

A secondary objective has been to review existing knowledge on the developmental impact of landmines and ERW, as well as the developmental impact of mine action (see, in particular, Chapter 2).

The strategy has been to focus on the ten main donor countries and the eleven main mine-affected countries, measured in terms of reported expenditure on mine action.¹ As discussed in Chapter 2, these countries cover a large part of the ground as far as

¹ For the mine-affected countries, there was considerable uncertainty regarding available figures for the size of programmes in 2002 in both Laos (country no. 10) and Ethiopia (country no. 11). Hence, both were included.

mine action is concerned, at least in financial terms. Lessons from other countries, however, are also drawn upon where relevant.

As part of the study, field visits were made to three countries: Afghanistan, Croatia and Mozambique. All three have significant mine action programmes, though there are considerable differences both between the various programmes and in terms of the landmine problem each country faces.

Data

The study team has extensively reviewed existing research, including evaluation and assessment reports of relevance to the study's subject matter. Former research conducted by the Assistance to Mine-Affected Communities (AMAC) project at PRIO has formed an important foundation and has been drawn upon in the report.

In addition, key documents from donor countries and mine-affected states have been reviewed, along with key documentation from multilateral institutions, NGOs and other significant actors. The study team has contacted key stakeholders in all relevant countries and organizations to secure access to all relevant documentation.

Finally, the study team has conducted around one hundred interviews with key stakeholders from a variety of backgrounds (see Appendix III). These interviews have in part been conducted in the context of Intersessional Meetings related to the Mine Ban Treaty (most importantly in Geneva, February 2004) and in the context of the country visits.

Quality Assurance

The primary means of quality assurance for the study has been a reading group appointed by the UNDP mine action team, which provided comprehensive comments on two draft versions of the report. The reading group included people from a variety of backgrounds, including mine action experts at the operational, national and international levels, in addition to individuals within the broader development field.

Additionally, preliminary versions of the study have been presented to highly competent audiences on two different occasions: at a meeting of the Mine Action Support Group (MASG) in June 2004 and at a side-event hosted by UNDP during the Intersessional Meeting in Geneva in June 2004. The resulting plenary discussions, along with follow-up contact with individuals attending the presentations, have played an important role in rectifying mistakes and bringing in new ideas.

Appendix III

INTERVIEWEES

Name	Institution	Function
<i>Geneva</i>		
Janine Voigt	Ministry of Foreign Affairs, Switzerland	Diplomat
Per Olaf Saelen	UNDP, Eritrea	Technical Advisor
May-Elin Stener	Ministry of Foreign Affairs, Norway	Advisor
Martin Barber	United Nations Mine Action Services (UNMAS)	Director
Balbina Malheiros Dias Da Silva	National Commission of Demining, Angola	National Coordinator
Dr Flavio Del Ponte	Swiss Agency for Development and Cooperation	Chief Medical Advisor
Andy Willson	Department of International Development (DFID), UK	Programme Officer, Mine Action
Alastair Craib	Department of International Development (DFID), UK	Advisor
Josick Van Dromme	European Commission	Administrator, Mine Action
Antero Vahapassi	Asian Development Bank	Senior Labor and Vulnerable Groups Specialist
Johanneke de Hoogh	Netherlands Ministry of Foreign Affairs	Senior Policy Advisor, Humanitarian Aid Division
Sam Sotha	Cambodian Mine Action Authority	Secretary General
Ojulu Owar Ochalla	Permanent Mission of Ethiopia to the United Nations at Geneva	First Secretary
Earl Turcotte	Canadian International Development Agency (CIDA)	Chief, Mine Action Unit
Detlef Schroeder	Federal Foreign Office, Germany	Desk Officer, Humanitarian Mine Action
Jernej Cimperšek	International Trust Fund for Demining and Victims As- sistance	Director
Kenji Shinoda	Permanent Mission of Japan to the International Organizations in Geneva	Second Secretary
Professor Dijana Pleština	Ministry of Foreign Affairs, Croatia	Advisor
Dr Mohammed Haider Reza	Ministry of Foreign Affairs, Afghanistan	Deputy Foreign Minister
Takuto Kubo	UN Mine Action Center for Afghanistan (MACA)	External Relations Associate
Gamiliel Munguambe	National Demining Institute (NDI), Mozambique	National Director
Joao Antonio Xerinda	National Demining Institute (NDI), Mozambique	

Name	Institution	Function
William A. McDonough	Organization of American States (OAS)	Coordinator OAS Mine Action Programs
Steffen Kongstad	Ministry of Foreign Affairs, Norway	
Reuben McCarthy	UNICEF	Project Officer
Rosy Cave	Landmine Action	Policy and Advocacy Coordinator
Darko Vidović	Demining Commission, Bosnia and Herzegovina	Commission Member
Amira Arifović	Ministry of Foreign Affairs, Bosnia and Herzegovina	Counsellor
Stanislas Brabant	Handicap International Belgium	
Sam Christensen	DanChurchAid	
Hanne B. Elmelund Gam	Ministry of Foreign Affairs, Denmark	Head of Section, Department of Humanitarian Assistance
Sayed Aqa	UNDP Mine Action Team	
<i>Maputo</i>		
M. Spezzati	UNDP	Resident Representative
C. Mucapera	UNDP	Programme Analyst
G. Fofang	UNDP	Deputy Resident Representative
S. A. Madsen	UNDP	Deputy Resident Representative
V. Kakyomya	UNDP	Assistant Resident Representative
M. Gustava	Ministry of Foreign Affairs and Cooperation, Mozambique	Deputy Director, International Organisations and Conferences
Olaf Juergensen	UNDP/IND	Chief Technical Advisor
G Tembe	National Directorate for Rural Development	National Director
A. Hassan	Dept of Medical Assistance, Hospital Management, Ministry of Health	Doctor
F. Babtista	Dept of Physical Rehabilitation, Hospital Management, Ministry of Health	Doctor
A. N. M. Silva	CIDA	Programme Officer
A. Born	Delegation of the European Commission to Mozambique	Young Expert
J. A. P. D'Almeida	ADP	National Programme Director
P. Curry	ADP	Chief Technical Adviser
A. Forquilha	Swords into Ploughshares, Christian Council of Mozambique	National Coordinator
J. M. Mandra	National Director of Defence Equipment, Ministry of Defence	Colonel
A. Karlsen	Norwegian People's Aid	Regional Representative
E. Rioufol	Handicap International	Director
J. A. Munkebye	Royal Embassy of Norway	Minister Counsellor
T. Gaustadsæther	Royal Embassy of Norway	Ambassador

Name	Institution	Function
<i>Zagreb</i>		
C. Klein	UNDP	Resident Representative
M. Vahtaric	CROMAC	Deputy Director
O. Jungwirth	CROMAC	Director
D. Cetin	CROMAC	President
L. Calic-Zmiric	CROMAC	Mine Awareness and Mine Victims Assistance Adviser
D. Plestjina	Ministry of Foreign Affairs	Adviser
R. Dezelic	Department for Natural Heritage Conservation Department, Ministry of Culture	Head of Department
D. Snider	Embassy of Canada	Ambassador
W. Gressmann	Arbeiter Samariter Bund Deutschland e. V	Regional Director
V. Roseg	Croatian Red Cross	Program Manager
<i>Kabul</i>		
K. Jørgensen	UNDP	Deputy Resident Representative
P. Fruchet	MACA	External Relations Officer
Dr Mohammed Haider Reza	Ministry of Foreign Affairs	Deputy Minister of Foreign Affairs
A. Macdonald	Mine Survey Action Centre	Chief Technical Advisor
H. Wahdat	MCPA	Landmine Impact Survey (LIS) team leader
Eng. M. Akram	MCPA	LIS Operations Manager
Dr M. Ershad	MCPA	LIS Statistics Consultant
A. Ali	Ministry of Public Works	Minister of Public Works
N. R. Pandey	National Human Development Report Project	International Statistician UNDP
M. Vennerstrøm	MACA	Chief of Information
D. Kelly	MACA	Programme Manager
D. Gawdy	UNDP	Consultant (Transition of MACA to government)
K. Eblagh	Afghan Technical Consultants (ATC)	Founder Director
M. Shohab Hakimi	Mine Detection Dog Centre (MDC)	Director
K. M. Sharif	Monitoring Evaluation and Training Agency (META)	Director
K. Asem	Mine Clearance Planning Agency (MCPA)	Project Coordinator
Z. Payab	Organisation for Mine Clearance and Afghan Rehabilitation (OMAR)	Deputy Director
M. Alexander	European Commission Delegation	Project Officer, Security Sector Reform
N. Miyahara	Embassy of Japan	Minister Counsellor
C. Kodama	Embassy of Japan	Second Secretary
P. Romand-Heuyer	World Bank Office of the Resident Representative	Team Leader, Afghanistan Reconstruc- tion Trust Fund (ARTF)

Name	Institution	Function
M. Sarlin	World Bank Office of the Resident Representative	Consultant, Afghanistan Reconstruction Trust Fund (ARTF)
T. Kubo	MACA	External Relations Associate
A. Pinney	Ministry of Rural Reconstruction and Development (MRRD)	Advisor, National Risk and Vulnerability Analysis
J. Crowley	AIMS	Director
N. Banerjee	Embassy of Canada	Counsellor Development/Head of Aid
S. Gani	Ministry of Finance	Head of Budget Section
<i>Washington</i>		
Ian Bannon	Conflict Prevention and Reconstruction Unit, Social Development Department, World Bank	Manager
Richard G. Kidd IV	Office of Weapons Removal and Abatement Bureau of Political Military Affairs Department of State	
<i>Oslo</i>		
Per Nergaard	Norwegian People's Aid	Head, Mine Action Unit

Appendix IV

EXAMPLE OF LIS IMPACT SUMMATION SHEET

LOCALITY IDENTIFIER:

DISTRICT:

COMMUNITY:

Indicators		Weights	Points to add	Score
<i>The community reported that:</i>				
there were mines	If so, give	2	points	_____
there was unexploded ordnance	If so, give	1	point	_____
Subtotal for explosives realm:				_____
<i>The community reported that:</i>				
access to some irrigated crop land was blocked	If so, give		points	_____
access to some rain-fed crop land was blocked	If so, give		points	_____
access to some fixed pasture was blocked	If so, give		points	_____
access to some migratory pasture was blocked	If so, give		points	_____
access to some drinking water points was blocked	If so, give		points	_____
access to some water points for other uses was blocked	If so, give		points	_____
access to some non-cultivated area was blocked	If so, give		points	_____
access to some housing area was blocked	If so, give		points	_____
some roads were blocked	If so, give		points	_____
access to some other infrastructure was blocked	If so, give		points	_____
<i>Total number of points (sum of weights) to be equal to</i>		10	points.	
Subtotal for socio-economic realm:				_____
There were ___ mine victims in the last 24 months.	Multiply by	2		_____
Points for victims:				_____
TOTAL MINE IMPACT SCORE:				_____
<i>If the impact score is 0, rank the community as having "no known mine problem".</i>				
<i>If the score is between 1 and 5, the impact is considered to be "low".</i>				
<i>If the score is between 5 and 10, the impact is considered to be "medium".</i>				
<i>If the score is higher than 10, the impact is considered "high".</i>				

Source: Adapted from Benini, A., 2000. 'The Global Landmine Level-1 Impact Survey and Socio-Economic Indicators', Washington, DC: Survey Action Center, p 12; GICHD, 2001a. *A Study of Socio-Economic Approaches to Planning and Evaluating Mine Action*, Geneva: GICHD, p 32.

INFORMATION MANAGEMENT SYSTEM FOR MINE ACTION (IMSMA)¹

IMSMA (Information Management System for Mine Action) is a software based data management tool for use at Mine Action Centre (MAC) level. It combines a relational database with a geographic information system (GIS). It is able to provide the Mine Action managers and practitioners with up-to-date information management capabilities to facilitate decision making in the framework of mine action.

The system is currently in use in more than 80% of mine action programs around the world. Based on the input of field users, the system has been continuously revised and upgraded since its initial release in the summer of 1999.

IMSMA Highlights

IMSMA is an information management tool designed for mine action activities which can be used to:

- plan, manage, report and map demining related activities;
- plan, manage, report and map MRE activities;
- record, report on, and map victim information; and
- record, report on, and map socio-economic information.

IMSMA has a capability to:

- track the progress of mine action activities;
- assist in the analysis of mine action activities to enable more effective, efficient and reliable mine action endeavors.

The system is:

- Based on standard computer technology.
- Easily customizable in the field.

¹ Source: GICHD, 2004. 'International Management System for Mine Action, Geneva International Centre for Humanitarian Demining'; available at <http://www.gichd.ch/imsma/index.htm> (accessed 11 May 2004).

IMSMA Distribution Policy

IMSMA is a licensed and copyrighted product of the GICHD and is not freeware or shareware. All distributions of the system are covered by license agreements designed to ensure that we are able to properly maintain and support the systems deployed and that the data collected is properly preserved and protected for the benefit of the people in the countries where it is used.

IMSMA is provided free of charge by the Geneva Centre to mine affected countries and to the governments of countries actively involved in peace keeping and mine action support operations. The use of IMSMA in the pursuit of any commercial enterprise is strictly prohibited. IMSMA is in part based on commercially available technology of US origin. Its distribution is subject to any export restrictions that may exist with regard to these technologies. Governments requesting the use of IMSMA will be required to demonstrate compliance with the existing export controls prior to deployment of the system. The system is not distributed for use outside of these categories at this time. Copies of the system not obtained through the Center's distribution programme will not be supported by the GICHD and are a violation of international copyright.