

# INTRODUCTION

By providing a legal framework for international cooperation on mine action, the 1997 Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Anti-Personnel Mines and On their Destruction (a.k.a. 1997 Mine Ban or Ottawa Treaty) represents a breakthrough in the struggle against landmines. In addition to its complete prohibition of antipersonnel mines, the Ban Treaty requires destruction of stockpiled antipersonnel landmines within four years and destruction of mines already in the ground within ten years. From a mine action perspective, implementation of the Treaty presents a real and challenging opportunity to bring the landmine crisis under control during the next decade -- a major step toward a mine-free world.

This Fact Sheet has been prepared to help inform discussion at the first meeting of the Standing Committee of Experts on Mine Clearance. It analyzes mine action data contained in the Landmine Monitor Report 1999: Toward A Mine-Free World, released by the International Campaign to Ban Landmines at the First Meeting of States Parties to the Mine Ban Treaty in Maputo in May 1999, and also includes data collected since that release. It examines the landmine problem in the world today, the status of comprehensive landmine impact surveys and assessments, mine clearance capacities and actors, mine awareness initiatives, mine action coordination and planning. It does not look at mine victim assistance nor does it examine research and development of demining technologies or mine action funding. While of direct interest to Landmine Monitor, these topics will be reviewed separately.

This Fact Sheet seeks to provide an overview of the mine action data collected by Landmine Monitor but for more detail, those interested should consult the Report itself, the relevant Landmine Monitor researcher or NPA as thematic coordinator. Comments and clarifications are most welcome.

## I. THE LANDMINE PROBLEM TODAY

According to Landmine Monitor, 87 countries in the world are affected by both landmines and unexploded ordnance (UXO). See Appendix I. Of these 87 countries, 27 are States Parties to the 1997 Mine Ban Treaty, 23 are signatories and 37 have not yet joined. In addition, Landmine Monitor has identified eight other areas with varying degrees of mine contamination (Abkhazia, Chechnya, Falklands/Malvinas, Iraqi Kurdistan, Palestine, Somaliland, Taiwan and Western Sahara).

Of the 48 countries in **Africa**, 26 are mine-affected, as well as Somaliland. Of these 26, eleven are States Parties to the 1997 Mine Ban Treaty (Chad, Djibouti, Malawi, Mozambique, Namibia, Niger, Senegal, South Africa, Swaziland, Uganda and Zimbabwe), ten are signatories (Angola, Burundi, Ethiopia, Guinea-Bissau, Kenya, Mauritania, Rwanda, Sudan, and Zambia) and five have not yet joined the Treaty (Congo (Brazzaville), D.R. Congo, Eritrea, Liberia and Somalia). Treaty signatories Angola, Guinea-Bissau and Senegal are believed to have used mines in 1998 after signing the Mine Ban Treaty; Senegal has denied such use. Additionally, there are unconfirmed allegations of use by non-signatories and/or rebels in D.R. Congo, Eritrea and Sudan.

In the **Americas**, 9 out of 35 countries are mine affected, as well as the Falklands/Malvinas. Six are Parties to the Treaty (Costa Rica, Guatemala, Honduras, Nicaragua, Peru, and Ecuador), two are signatories (Chile and Colombia). In Colombia, various non-state actors to the continued conflict are believed to use mines. Cuba stands outside the Mine Ban Treaty.

In the **Asia-Pacific** region, 16 out of 39 countries are mine-affected, as well as Taiwan. Three of these are State Parties (Cambodia, Malaysia and Thailand), two are signatories (Bangladesh and the Philippines) and eleven have not yet joined the Treaty (Afghanistan, Burma, China, India, Democratic People's Republic of Korea, Republic of Korea, Laos, Mongolia, Pakistan, Sri Lanka and Vietnam). Non treaty-signatories and/or rebels are believed to have used mines in 1998 including Burma and Sri Lanka in addition to media reports of recent use in 1999 by both India and Pakistan. In several countries, the landmine problem is generally restricted to the border areas (Bangladesh, China, India, Pakistan, Malaysia, Mongolia, and North and South Korea). Malaysia and the Philippines could be considered "mine free" but the status of suspected mined areas in these countries needs to be verified indicating a larger question of when and how can a country be defined as completely "mine free?"

Of 53 countries in **Europe and Central Asia**, 23 are mine-affected, as well as Abkhazia and Chechnya. Five of these are States Parties (Bosnia and Herzegovina, Bulgaria, Croatia, Denmark and Slovenia) and seven are signatories (Albania, Cyprus, Czech Republic, Greece, Lithuania, Moldova and the Ukraine). Eleven countries in the region have not yet joined

the Treaty (Armenia, Azerbaijan, Belarus, Estonia, Georgia, Kyrgyzstan, Latvia, Russia, Tajikistan, Turkey and Yugoslavia). Non-signatories and/or rebels in Russia, Turkey and Yugoslavia are believed to have used of mines since 1997. World War Two mines and UXO still need clearance in Belarus, Latvia, Lithuania, Ukraine and Russia. These countries are included here as mine-affected while those in Western Europe are not as they have a lesser problem with mines from W.W.II (for example, Belgium and France). In the Czech Republic and Moldova, mined areas mainly consist of old munition dumps left over from the Soviet Union while Estonia's mine problem is mainly restricted to unpopulated islands in the Finnish Gulf.

In the **Middle East and North Africa**, 13 out of 18 countries are mine-affected, as well as Iraqi Kurdistan, Western Sahara and Palestine. Three are Parties to the Treaty (Jordan, Tunisia and Yemen), one is a signatory (Algeria) and nine have not yet joined the treaty (Egypt, Iran, Iraq, Israel, Kuwait, Lebanon, Libya, Morocco and Syria). Non-signatory Israel is believed to have used mines since 1997.

The 87 countries identified by Landmine Monitor as both mine and UXO-affected is a higher figure than 60 to 70 countries cited by earlier sources such as the United Nations Demining Database and the U.S. State Department's 1993 and 1994 *Hidden Killers* reports. The 1998 *Hidden Killers* report listed 93 mine-affected countries but included Palestine, Jammu/Kashmir, Falklands/Malvinas and Western Sahara in its overall total. Landmine Monitor has separated these out from the total of 87. The 1998 *Hidden Killers* report also included Belgium and Germany as mine-affected, whereas Landmine Monitor describes Belgium, France, Germany and indeed most countries of Europe as not mine-affected but affected to some degree by unexploded ordnance dating back to World War Two and before. Similarly, Landmine Monitor counts the Federated States of Micronesia and other island nations of the Pacific which have a problem with UXO dating from World War Two as not both mine and UXO-affected. Countries of the former Soviet Bloc, such as Belarus, the Baltic states and Ukraine are considered by Landmine Monitor as being both mine and UXO-affected as eradication programs continue to deal with what is in some instances a very large problem. El Salvador and Panama are UXO but not both mine and UXO-affected. Countries that have a landmine problem along their border which is mainly due to mines laid on the other side (Bolivia in the case of Chile for example) are also not included. The mine-affected islands of the Falklands/Ias Malvinas is counted separately from United Kingdom and Argentina. Cuba's mine problem is limited to its minefield around Guantanamo Bay.

In isolation, one could question the need to know which countries are mine-affected and which are not. But a clear understanding of the degree and location of mine contamination gives the mine action community a better picture of the overall requirements for humanitarian assistance. Millions of people in these countries -- refugees and internally displaced, farmers, and ordinary men, women and children live daily with the threat of landmines and unexploded ordnance. Liberating mine-affected communities from this threat is the very real challenge faced by the international community. The methodology used to determine what is mine-affected and to measure the response is evolving, as the next section will show.

Mine action programs are faced with other challenges as well. When governments violate their Treaty obligations, or violate its spirit and intent, as is the case with Angola's ongoing use of landmines, the moral and legal impact of such violation must be assessed with regard to Article 6 (international co-operation and assistance). The international community must decide whether or not to provide mine action assistance in such cases. Continued provision of aid in effect sanctions the violation of the Treaty, while withholding Article 6 assistance from treaty violators penalizes the civilian population. Other options include funding NGOs involved in humanitarian mine action but not the offending government, or dropping funding to the minimum level necessary to retain for mine action capacity for once the conflict is over. This dilemma is of critical importance to the international community, including the ICBL.

There is the additional question of what to do with mine-affected non-signatories, some due to recent use (for example, the Democratic Republic of Congo). Another related challenge involves non-signatories that are unable to join the Ban Treaty due to their lack of international recognition, such as Iraqi Kurdistan where Iraq has not signed the Treaty, but which have long-established clearance program that are being denied funding. The ICBL has no policy prescription for these very real scenarios. However, the international community must address these challenges in a manner consistent with the overall rationale of the ban movement -- reducing the suffering of innocent civilians -- without undercutting the Treaty itself.

## **II. DETERMINING THE EXTENT OF THE PROBLEM: Surveys and Assessments**

Landmine Monitor researchers consulted a variety of sources in determining the extent of the landmine and UXO problem in each country. The 1993, 1994 and 1998 *Hidden Killers* reports by the U.S. State Department, the United Nations online

demining database, assessments by UN agencies including the UN Mine Action Service (UNMAS) and publicly-available reports and data were referenced in the course of the research. Different indicators were used to describe the nature and extent of the problem including the estimated number of mines believed to be in the ground, and area of land mined or suspected to be mined (both by percentage and by square mile or kilometer). In some cases, the number of districts and provinces with landmine problems were used, as well as numbers of landmine casualties.

Landmine Monitor's research underscored one of the major challenges facing the mine action community: how to measure both the degree of landmine contamination and the humanitarian response to it. Recent discussions, including those among the researchers for Landmine Monitor, have centered on the need to identify benchmarks for progress in mine action, in addition to the need to establish reliable indicators of the landmine and UXO problem. The impact of landmines on affected communities depends on factors such as their proximity to populated areas, the type and size of minefields, their location relative to economic infrastructure and the level of awareness of the problem. Large minefields in remote border areas may have very little impact on the population of a country. Conversely, small, randomly deployed minefields, booby-traps and UXOs in densely populated areas, potentially productive areas, or in areas identified for the resettlement of displaced and refugee populations may have a fundamental impact on economic and political development of a country.

To make sure that resources for mine clearance are prioritized for allocation to areas where the impact of landmines is greatest and the need for clearance most urgent, surveys to assess landmine impact are a necessity. For mine clearance programs to be truly efficient in a post-conflict development context, comprehensive impact surveys are of pivotal importance. The data produced by such surveys also provide the baseline against which to measure output, the effect of the clearance programs overall and the performance of individual mine clearance agencies.

According to Landmine Monitor, out of the 87 mine-affected countries in the world today, in-depth countrywide impact surveys have only been carried out in Afghanistan and Laos to date, and even these surveys were incomplete in terms of defining impact. Comprehensive impact surveys are currently underway or planned, however, in at least eight heavily mine-affected countries and there have been a number of recent assessments and preliminary surveys.

## **Global Landmine Survey**

In a unique cooperative effort, the NGO community, in collaboration with the United Nations Mine Action Service (UNMAS) and the Geneva International Centre for Humanitarian Demining (GICHD) has established the Survey Working Group. The Survey Working Group will facilitate the international coordination of resources and expert personnel for the completion of the Global Landmine Survey in the most mine-affected countries.

Within the next two years, the Global Landmine Survey will produce survey data on the socio-economic impact of landmines. This survey, conducted by visiting all the mine-affected communities within a country, will provide the foundation for a wide range of subsequent mine action activities. Executed to a common international standard and certified by the United Nations Mine Action Service, the survey will:

Allow donors to rationally allocate funds to places of greatest human need as defined by impact on communities;

- Permit national authorities to develop national plans focusing on regions and areas of greatest impact;
- Give implementers baseline impact data that will provide success indicators for mine action programs.

The Global Landmine Survey is currently active in Yemen, Mozambique, Chad, Somaliland, Lebanon, Thailand, and Western Sahara. UNMAS and the donor community have identified the following countries for possible Landmine Impact Surveys: Azerbaijan, Bosnia-Herzegovina, Cambodia, Ecuador, Eritrea, Ethiopia, Iran, Iraq, Peru, and Sri Lanka.

## **Capabilities**

The Survey Action Center (SAC), on behalf of the Survey Working Group, provides the following services to Landmine Impact Surveys.

- *DataBase*

- Using principals established by the Survey Working Group, the SAC and UNMAS have developed the field questionnaire and protocol. In cooperation with the Geneva International Centre, this data set has been integrated into the UN Information Management System for Mine Action (IMSMA). The field module is available for national surveys.

- *Technical Advisory Team*

- A specialized SAC team of internationally recognized experts in social science, survey, cartography and statistics is available to assist surveys in the field and to help with subsequent analysis.

- *Survey Information*

- The SAC information department will support national surveys with map data sets and related information.

- *WorldWideWeb Site*

- The Global Landmine Survey will maintain a web site allowing access to survey information referenced geographically.

Members of the Survey Working Group are the Associations to Aid Refugees - AAR (Japan), (Switzerland), Handicap International - HI (Belgium/ France), Landmine Survivors Network - LSN (USA), medico international - MI (Germany), Mines Advisory Group - MAG (United Kingdom), Mine Clearance Planning Agency - MCPA (Afghanistan), Norwegian Peoples Aid - NPA (Norway), the Vietnam Veterans of America Foundation - VVAF (USA), GICHD and UNMAS. The Survey Working Group has designated VVAF to manage and serve as fiscal agent for the Survey Action Center (SAC) in the implementation of the Global Landmine Survey program. The Global Landmine Survey process is funded through a variety of channels, among others: United Nations Foundation, U.S. State Department, Canada - CIDA, Rockefeller, MacArthur and Compton Foundations) VVAF and the World Bank. In addition the members of the Survey Working Group contribute human and administrative resources.

According to Landmine Monitor, in **Africa**, by far the worst affected continent, only a third of the 26 mine-affected countries have had some kind of survey of the landmine situation. Currently, in addition to Somaliland, comprehensive impact surveys are underway in Angola (by Norwegian People's Aid), Chad, and Mozambique. With the support of the Canadian government (CIDA), the Canadian International Demining Centre (CIDC) has begun a Landmine Impact Survey in Mozambique which will be conducted according to Survey Working Group standards. SAC will appoint a quality assurance monitor to work alongside the CIDC while the survey is under way. SAC and Handicap International have conducted an advance mission to Chad and produced a country survey plan. SAC and HALO have conducted an advance mission to northwestern Somaliland and a country plan is currently being developed.

United Nations agencies have carried out assessments in Burundi (by UNMAS in August 1998), Chad (by DHA in June 1995), Ethiopia (by UNMAS in June 1998), Guinea-Bissau (December 1998 and by UNDP in July 1998) and Sudan (by DHA in August 1997). Liberia, Rwanda, Somaliland and Zimbabwe have had recent assessments or surveys by different actors. No assessments or impact surveys have been carried out in Congo (Brazzaville), DR Congo, Djibouti, Eritrea, Kenya, Malawi, Mauritania, Namibia, Niger, Senegal, Sierra Leone, Somalia, Swaziland, Uganda, South Africa or Zambia. In some of these countries, for example South Africa and Swaziland, the landmine problem may not be serious enough to warrant a comprehensive impact survey. In others, such as DR Congo and Eritrea, the current security situation may be too difficult to allow for a comprehensive assessment or impact survey.

In the **Americas**, UNMAS has made an assessment of Nicaragua (December 1998) and the Survey Action Centre is considering sending an advance mission to Nicaragua to consider initiating an impact survey. The Assistance Program for Demining in Central America (PADCA) of the Organization of American States (OAS) provides the framework for mine clearance in the region, specifically in Nicaragua, Honduras, Costa Rica and Guatemala, including a regular and systematic collection of data on the problem. In some of the mine-affected countries, such as Chile, the mines are mostly in remote border areas and there may little need for in-depth impact surveys. Thus, the border minefields of Chile, Peru and Ecuador have not been subject to comprehensive impact surveys, but UNMAS is currently preparing an assessment for Ecuador and Peru. To date, there has not been an impartial and in-depth assessment or survey of the extent of Colombia's landmine problem.

In the **Asia-Pacific** region, comprehensive but partial surveys have been made in Afghanistan (by MCPA/MAPA) and Laos (by Handicap International in 1997). Suspected and confirmed minefields are registered in the CMAC Database in

Cambodia. SAC has conducted an advance mission and produced a country survey plan for Thailand and UNDP made an assessment in Sri Lanka in 1998. According to the SAC, impact surveys are planned for in Cambodia and Thailand. No in-depth assessments or impact survey has been carried out in Burma (Myanmar) or Vietnam, or along the mined border areas of Bangladesh, China, India, Pakistan, Malaysia, Mongolia, and North and South Korea.

Of 15 mine-affected countries in **Europe and Central Asia**, an impact survey is planned for Bosnia-Herzegovina this year (BHMAC) and information collected to date is recorded in the centralized Bosnia-Herzegovina Mine Action Center Database. In Kosovo, data collection on the mine situation follows impact survey requirements. In Croatia, minefield information has been collected both by national authorities and the UN missions. A survey for the Fizuli region in Azerbaijan was contracted to BACTEC International in 1998, while the Azerbaijan Campaign to Ban Landmines also has examined the mine-problem. The UN carried out assessment missions in Tajikistan in 1996 and 1997. There have been no in-depth assessments or impact surveys in the remaining countries (Albania, Armenia, Belarus, Bulgaria, Cyprus, Georgia, Lithuania, Turkey, Ukraine and the border area of Greece) nor in Abkhazia or Chechnya.

In the **Middle East and North Africa**, a Landmine Impact Survey begun in July 1999 is currently being conducted in Yemen by the Mine Clearance Planning Agency, contracted by the SAC. In Lebanon, an advance mission by HMD Response and SAC has produced a country survey plan. Information gathering in the other eleven mine-affected countries of the region has been unsystematic and usually restricted to registration of minefields and/or registration of mine victims. While no in-depth assessment or impact survey has been made of the mine problems in either Northern Iraq or Palestine but several non-governmental organizations have collected relevant data. Norwegian People's Aid and medico international have sent an exploratory mission to Western Sahara.

### III. MINE CLEARANCE EFFORTS

Humanitarian mine clearance may be a relatively new discipline, no more than 15 years old, but some aspects of its work are already well known through decades of experience in development and emergency work. Challenges to combat the global landmine crisis vary from technical questions of detecting and destroying various mines and munitions to managerial, developmental, social and financial aspects of implementing large programs in a broad variety of scenarios. It is crucial to acknowledge the complexity of the issue, rather than looking for a single, global solution.

Non-governmental organizations play an important role in humanitarian mine action worldwide. Between them, five mine action NGOs -- Handicap International - HI (France and Belgium), Halo Trust (UK), Mines Advisory Group - MAG (UK), Mines Clearance and Planning Agency - MCPA (Afghanistan) and Norwegian People's Aid - NPA (Norway) -- undertake various mine action projects in 18 of the most seriously affected countries and areas. These projects vary from large scale operations like NPA's Angola Program which includes a comprehensive impact survey, manual and mechanical mine clearance, and mine awareness to more limited projects like technical assistance to national clearance and mine awareness programs.

#### Mine Action NGO program areas:

Abkhazia, Nagorno-Karabakh & Chechnya:	HALO
Afghanistan:	MCPA, HALO
Algeria (Western Sahara):	NPA
Angola:	HI, NPA, MAG, and HALO
Bosnia and Herzegovina:	HI, NPA, HALO
Cambodia:	HI, MAG, NPA, HALO
Chad:	HI
Ethiopia:	HI
Kosovo, Yugoslavia:	NPA, HALO, MAG, and HI

Lao PDR:	HI, MAG, HALO, and NPA
Mozambique:	HI, NPA, HALO
Namibia:	MAG
Northern Iraq:	MAG, NPA
Palestine:	NPA
Senegal:	HI
Somaliland:	HALO
Sudan:	MAG, HALO
Vietnam:	MAG
Yemen:	MCPA

Landmine Monitor research shows that mine clearance programs or capacities exist in a majority of the 87 mine-affected countries in the world. But integrated humanitarian mine action programs, which are coordinated with other development, emergency aid or reconstruction and resettlement activities, are found in only a dozen of these countries (Afghanistan, Angola, Bosnia-Herzegovina, Cambodia, Croatia, Guatemala, Laos, Mozambique, Nicaragua, Yemen, Zimbabwe and Kosovo in Yugoslavia).

In most countries, programs are usually limited, are often undertaken by military units or commercial entrepreneurs, and with little or no recognized mechanism for quality assurance of the results. While both military and commercial actors are capable of carrying out mine clearance to humanitarian standards, without systems in place for securing adherence to such standards, there will always be the risk that factors other than safety are given priority. Mine clearance programs that are without civilian input to define priorities will most probably not address urgent civilian and humanitarian needs, but instead focus on military and commercial needs.

Humanitarian mine clearance must be carried out according to internationally recognized standards with regard to safety and training for personnel, clearance and explosive ordnance disposal methodology, procedures for medical preparedness and minefield information management. The only way to ensure this is full transparency from all mine clearance actors on operational procedures, performance, and accidents. Transparency measures and adherence to such standards must be a requirement for actors to obtain funding.

In **Africa**, some sort of mine clearance capacity is available in 21 out of the 26 mine-affected countries. In Angola, Mozambique and Zimbabwe a number of non-profit and commercial organizations have been engaged in mostly humanitarian mine clearance for a number of years. In the eighteen other countries, limited clearance is mainly undertaken by the army (Chad, Congo (Brazzaville), Dr Congo, Djibouti, Eritrea, Ethiopia, Guinea-Bissau, Liberia, Mauritania, Namibia, Rwanda, Senegal, Somalia, South Africa, Sudan, Swaziland, Uganda and Zambia). In Malawi, the national police remove mines and UXO on request. Disturbingly, there is little or no evidence of any mine clearance in the remaining countries (Burundi, Kenya, Niger and Sierra Leone). In Somaliland, limited demining of Bureao, the second-largest city, has been carried out by an UNDP-funded local civil organization.

In the **Americas**, mine clearance is undertaken mainly by national military services, either with special units, or as part of ordinary operational procedures. In Central America, the mine clearance effort has been mostly co-ordinated by Organization of American States through the Inter American Defense Board, which has provided military personnel from other American states for assistance in clearance and training. In conjunction with the commercial company RONCO Consulting, this program has undertaken mine clearance projects in Honduras, Guatemala, Costa Rica and Nicaragua since 1994. With exception of Guatemala, where the civilian Volunteer Fire-fighters Corps has been a key actor, the OAS program has been almost exclusively military, a fact that has drawn criticism from some NGOs in the region. Peru and Ecuador have started a joint mine clearance program along their border as part of the recent peace accord. In Colombia, one of the worst affected countries of the region, no humanitarian mine clearance is taking place, and the clearance that is done by the military is usually for combat purposes. Some effort had been made to clear the heavily affected Falkland/Malvinas islands of mines and UXO left over from the 1982 conflict.

In the three of the most mine-affected countries (Afghanistan, Cambodia and Laos) in the **Asia-Pacific** region,

comprehensive mine action programs are in place and coordinated by civilian structures. Afghanistan probably has the largest civilian mine clearance program (MAPA), co-ordinating almost 4,000 local deminers and a number of national agencies. In Sri Lanka, the army has done limited mine clearance but a humanitarian mine clearance program was initiated with the assistance of the UNDP in 1998. In Vietnam, mine clearance has been the responsibility of the army but in 1998 the Mines Advisory Group established a humanitarian mine and UXO clearance program in the heavily affected Quang Tri province. In the other mine-affected countries, mine clearance is usually the responsibility of the army, either with designated units or as part of ordinary operations, and in a few instances the police are also involved (Bangladesh, China, India, Republic of Korea, Malaysia, Mongolia, Pakistan and the Philippines). In Taiwan, the army is responsible for clearing mines on Kinmen Island. Landmine Monitor research has documented extreme examples of coercive mine clearance in Burma/Myanmar, in which civilians have been forcibly employed as human minesweepers, marching ahead of military forces in suspected mined areas. It is unknown how the Democratic People's Republic of Korea (North Korea) deals with landmines laid along its southern border.

Coordinated humanitarian mine clearance takes place in only three (Bosnia-Herzegovina, Croatia and Kosovo-Yugoslavia) of the 23 mine-affected countries in **Europe and Central-Asia**. There are nineteen organizations, both non-governmental and commercial, accredited by the B-H Mine Action Center to engage in mine clearance Bosnia-Herzegovina. In Croatia, the government-owned company "MUNGOS" was established for mine clearance but efforts have been hampered by a lack of funds. Between ten and twenty organizations and companies are active in mine clearance at present in Kosovo where KFOR military engineers are also engaged in emergency mine clearance.

Elsewhere in Europe and Central Asia, there are some instances of humanitarian mine clearance programs by NGOs but in the majority of countries, demining is the responsibility of the army, and sometimes the police, often with the input of other government agencies or departments (Albania, Belarus, Bulgaria, Denmark, Estonia, Georgia, Greece, Kyrgyzstan, Latvia, Lithuania, Moldova, Russia, Slovenia, Turkey, Ukraine and Yugoslavia - not including Kosovo). In Russia, mine clearance is the responsibility of military and civilian structures that undertake operations both within Russian borders and in the some countries of the former Soviet Union. In heavily affected Tajikistan there is currently no humanitarian mine clearance taking place. In Azerbaijan, clearance is the responsibility of the civilian National Agency for Demining (ANAD) while the actual clearance is done by the military, and personnel trained in humanitarian demining by British NGO HALO. Three organizations are assisting the Czech Army to clear old Soviet and domestic military bases of mines left in waste dumps. The current status of mine clearance in Cyprus is unknown as is the case of efforts in Armenia and the disputed region of Nagorno-Karabakh. HALO has undertaken limited mine clearance in Abkhazia since 1997, as well as in Chechnya

In the **Middle East and North Africa**, some form of organized mine clearance is reported in ten of the mine-affected areas and countries (Algeria, Egypt, Israel, Kuwait, Lebanon, Libya, Morocco, Syria, Tunisia, and Yemen) in addition to Iraqi Kurdistan (Northern Iraq). These clearance operations are, with the exception of Kuwait (commercial and local police on demand) and Iraqi Kurdistan (international NGOs and UN), undertaken by the national militaries, usually the army. In Iraq, heavily contaminated from wars over the two last decades, there are no reported mine clearance programs. In Iran, UNDP has initiated a mine action program in cooperation with the government. UN peacekeeping missions have assisted in clearance of paths, fields and roads in Syria and Lebanon as part of their routine operations. It is unknown how Oman deals with its limited landmine problem in its border areas. In Palestine, the Autonomy-authority may begin limited clearance and UXO disposal soon. While limited clearance took place last year in the Western Sahara through the MINURSO, there is no mine clearance currently being conducted.

#### **IV. MINE AWARENESS EFFORTS**

Mine awareness involves information programs to reduce the threat of landmines to affected communities. Through various educational mechanisms that focus on changing risk behavior, and creating knowledge of safety measures, mine awareness seeks to reduce the number of landmine victims. Mine awareness is needed in mine-affected areas, prior and parallel to demining programs. In heavily mined countries, demining can take years to complete. The local population must learn how to live their daily lives in mine and UXO infested areas until the threat is removed.

Landmine Monitor research shows that some sort of landmine and UXO-awareness programs exists in approximately 40 of the 87 mine affected countries.

In **Africa**, mine awareness programs have been undertaken or are underway in just half of the 26 mine-affected countries. Fourteen mine-affected countries that have not had any comprehensive mine awareness programs or initiatives to date

include Congo (Brazzaville), Dr Congo, Guinea-Bissau, Kenya, Liberia, Malawi, Mauritania, Niger, Sierra Leone, Somalia, South Africa, Swaziland, Zambia and Zimbabwe.

In the **Americas**, some sort of mine awareness program is underway in five of the nine mine-affected countries. Programs in Central America vary from broad, participatory campaigns in Guatemala, assisted by international organizations like the UN and Red Cross, to the mainly international IADB-programs, such as in Nicaragua and its limited efforts in Honduras. The use of U.S.-produced comics with superheroes in mine awareness programs in Central America has drawn criticism from local NGOs. In Colombia, UNICEF and Red Cross have cooperated on a mine awareness program. Local organizations in Peru have made efforts at mine awareness.

In the **Asia-Pacific** region some kind of mine awareness programs are underway or planned for in seven out of the 16 mine-affected countries. In the three worst affected (Afghanistan, Cambodia and Laos), these programs are extensive, involving local communities, and are anchored in local and national contexts. According to Landmine Monitor reports, some six million people have received mine/UXO-education in these countries up to 1998. In Sri Lanka a UNDP-sponsored program in the Jaffna-area was planned to be fully operational in 1998, but has been delayed by continued conflict. In Thailand, India and Vietnam some limited mine awareness programs have been undertaken.

In **Europe and Central Asia**, some mine awareness programs are reported in at least eight of the mine-affected countries in addition to Chechnya. The most extensive being in Bosnia-Herzegovina and Croatia, in addition to mine awareness programs for refugees from these countries in other European countries. In Yugoslavia, general mine awareness has been part of national educational curriculum, while international organizations organized mine awareness efforts among returning refugees to Kosovo. In Albania, Belarus, Georgia, Tajikistan, Russia as well as Abkhazia and Chechnya, limited mine awareness programs have been undertaken by national authorities, the UN, and local and national NGOs. Disturbingly, Landmine Monitor research indicates that mine awareness programs are particularly vulnerable to budgetary cuts in financially strained economies (Albania, Tajikistan, and Russia, as well as in Abkhazia and Chechnya)

In the **Middle East and North Africa**, mine awareness programs are reported in just five out of the 13 mine-affected countries (Jordan, Egypt, Lebanon, Morocco and Yemen). Mine awareness programs are well-established in Iraqi Kurdistan and Western Sahara, and are planned for Palestine, and in all three locations, the UN and both local and international NGOs have played an instrumental role. In Jordan, Lebanon and Yemen, mine awareness programs have been cooperative efforts involving government agencies, international organizations and bilateral assistance. Authorities in Egypt plan for a mine awareness program and in Morocco a limited program has been undertaken, with the International Red Cross having distributed general awareness material in the region.

## V. MINE ACTION COORDINATION

Landmine Monitor research identified mine action coordination in 22 of the 87 mine affected countries. There is likely more coordination of mine action within government departments and ministries occurring. What is identified by Landmine Monitor includes, for the most part, input from actors outside of government namely non-governmental and civil-society-based organizations.

In **Africa**, there are mine action coordination mechanisms in place in nine of the 26 mine affected countries: in Angola (by the Angolan National Institute for the Removal of Explosive Ordnance INAROE, and by the UN Demining Program Angola - UNDPA), Chad (by the Haut Commissariat National pour le Deminage - HCND), Djibouti (by a Mine Action Taskforce), Eritrea (by National Demining HQ), Ethiopia (by the Ministry of Defence-operated Ethiopian Demining Project), Mozambique (by the National Demining Commission - CND), Namibia (by the National Demining Liaison Committee), Rwanda (by the National Office On Demining), Sudan (HAC by the government and OSIL by SPLA/M side) Coordination is planned in Guinea-Bissau and South Africa. Zimbabwe's National Mine Clearance Committee ceased to operate in December 1985. In Somaliland, there is the government's National Demining Agency and the UNDP's Somali Mine Action Center. In the remaining fourteen countries there is no evidence of coordination of mine action (Burundi, Congo (Brazzaville), DR Congo, Kenya, Liberia, Malawi, Mauritania, Niger, Senegal, Sierra Leone, Somalia, Swaziland, Uganda, Zambia).

In the **Americas**, only two of the affected countries have national coordination bodies in place; Guatemala established its National Demining Coordination Commission in 1995, while Nicaragua established the National Demining Commission in 1998. In other mine affected Central American countries (Costa Rica and Honduras), mine action is mainly coordinated through the Inter-American Defense Board of the OAS. Peru and Ecuador coordinate their common clearance of the border areas under the instruments of the peace accords, MOMEPA. No coordination mechanisms are reported to be in place in the

other mine affected countries in the region (Colombia, Chile, and Cuba).

In the **Asia-Pacific** region, national mine action coordination centers are in place in four of the 16 mine affected countries; Afghanistan (by United Nations Mine Action Planning Agency - MAPA), Cambodia (by Cambodia Mine Action Center - CMAC), Laos (by the Laos UXO Program - UXO-Lao) and Thailand (by Thailand Mine Action Center - TMAC).

In **Europe and Central Asia**, two of the 23 affected countries have mine action centers in operation; Bosnia-Herzegovina (by the Bosnia-Herzegovina Mine Action Center - BHMAC), Croatia (CROMAC). A United Nations Mine Action Coordination Center has recently been established in Kosovo (Yugoslavia). In Azerbaijan the Azerbaijan National Commission coordinates demining and in Moldova it is the Tripartite Control Commission for the conflict zone in Transdniestier. In the other countries in the region, no coordination mechanism is reported.

In the **Middle East and North Africa**, only Yemen (through its National Demining Committee) is reported to have a mine action coordination body in place. In the other 12 mine affected countries no coordinating bodies are reported.

## **VI. PLANNING MINE ACTION FOR A MINE-FREE WORLD**

From a humanitarian and development perspective, it is imperative to ensure that cleared land is handed over to those who are entitled to it. In many areas, mine-cleared land is a scarce and valuable resource with many contending for its control. Vulnerable or marginalized groups, like refugees, may have difficulties claiming land that was originally theirs or allocated to them, in the face of influential military, political or commercial interests. This has happened on many occasions, most recently in Cambodia, where police or military are alleged to have taken over cleared land from resettling refugees. Through careful planning involving all relevant actors, both civilian and military, procedures and mechanisms can be established and priorities determined to try to mitigate such problems. This process must be initiated before the actual mine clearance operations start, and mechanisms to ensure that cleared land is handed over to those it was meant for should be integrated into the standard procedures for humanitarian mine clearance. Civilian input in planning is essential in the mine action decision-making processes outlined earlier through the mine action coordination mechanism.

Overall planning and regular evaluation not only gives the land back to those who most need it but it allows for better use of scarce resources. Most humanitarian mine clearance programs today are funded in a fragmented manner, on short-term basis, which leaves the implementing agencies with little predictability and short planning horizons. At the same time, many of the common characteristics of humanitarian mine clearance programs demand just the opposite. Identification and marking of land awaiting clearance, testing and procurement of equipment, recruiting and training of personnel and mine detection dogs, to name just a few examples, take time - usually longer than the ordinary project funding cycles. To be able to plan for and manage long-term sustainable mine clearance capacities in mine affected areas, NGOs have called for at least three year funding periods which would enhance effectiveness and productivity of the clearance projects.

In spite of an overall consensus among mine affected countries, donors and agencies on the importance of comprehensive and integrated plans for mine action efforts, Landmine Monitor research revealed a disappointingly low number of countries that could present such, beyond slogans and catch-phrases.

## **CONCLUSION**

This Fact Sheet does not intend offer recommendations or actions, rather it aims provides an overview of data collected by Landmine Monitors researchers. Landmine Monitors research has identified 87 mine-affected countries in addition to a number of mine-affected areas. In many of the most mine-affected countries and areas, comprehensive impact surveys are underway to produce survey data on the socio-economic impact of landmines. Comprehensive mine action programs involving all actors (governmental, non-governmental, international and commercial) also exist in some, but not all, of these heavily-affected countries. Continued support for humanitarian mine action is necessary as is to expansion into other mine-affected countries and areas. The landmine crisis can brought under control in a relatively short period of time - the mine clearance timeframe of ten years established by the Mine Ban Treaty is not an unrealistic target. Landmine Monitor will continue to document the progress and challenges faced by the mine action community as we move forward together to create a mine-free world.