Spontaneous Demining Iniatives

final study report

BELGIUM HANDICAP INTERNATIONAL

mine clearance by villagers in rural cambodia

January 2001

Spontaneous Demining Initiatives

Mine Clearance by Villagers in Rural Cambodia

Final Study Report

by

Ruth Bottomley

Handicap International - Belgium

January 2001

The Spontaneous Demining Initiatives research study was funded by ECHO

This report was authored, compiled and edited by Ruth Bottomley (HI-B Research Coordinator for the Spontaneous Demining Initiatives Study). The research was planned and implemented and the findings analysed by Ruth Bottomley, Lath Poch, Pres Ra and Sou Bunnath.

All photographs by Ruth Bottomley and Pres Ra with the exception of those on pages 43 and 47, which were provided to the research team by village deminers in Pailin, and those on page 49 which were taken by Philippe Houliat, a French mine clearance and EOD expert working for the United Nations in Cambodia from 1992-3.

Front cover illustration: Village deminer in Sampou Loun district, Battambang province, demonstrating how he dismantles a Type 72 A mine.

The SDI research was funded by ECHO (the European Community Office for Humanitarian Assistance). The opinions, findings, conclusions and recommendations contained in this report are, however, those of the author and research team, and do not necessarily reflect those of ECHO.

Table of Contents

Foreword

Handicap International is involved in humanitarian mine action programmes as a preventative means of tackling one of the main causes of disability in countries affected by civil war. In Cambodia HI Belgium (HI-B) has been directly involved in humanitarian mine action programmes since 1992, initially supporting teams of Cambodian deminers working under the supervision of the United Nations Transitional Authority in Cambodia (UNTAC). From 1995 to 2000, HI-B has principally provided support to the Cambodian Mine Action Centre (CMAC) and worked in collaboration with the Cambodian Red Cross to develop the Mine Incident Database Project (MIDP)[1], which provides data of the landmine casualty situation in Cambodia. In addition HI-B has been involved in the development of a land use planning process for demined land, and is about to embark on the development of an integrated and sustainable mine risk reduction programme in partnership with CMAC.

An issue that has been of particular interest to HI-B since the early 1990s, has been the occurrence of mine clearance activities by villagers in Cambodia. The subject has been the topic of considerable debate among mine action organisations in terms of how the issue should be addressed, but little in the way of actual research into the activity has taken place to inform the debate. In order to address this, in 2000 HI-B instigated a six-month research project to investigate the occurrence of mine clearance activities by villagers, or "Spontaneous Demining Initiatives." The aim of the research was to provide reliable and accurate information on the subject of village mine clearance with the intention that this information could help to inform and expand the debate and perhaps suggest some viable solutions.

The research was based very much on qualitative methodology, which is a relatively new approach in the field of mine action in Cambodia. Rather than giving the "aerial view", or broader picture, of the situation as is achieved through most quantitative studies and surveys, the methodology allowed the researchers to gather a more detailed, in-depth "street view" of the villages affected by mines and UXO. This qualitative data was supported by a more general questionnaire that provided for quantitative data and broader coverage.

The findings and conclusions of the research are presented in this report. It is hoped that this report will provide an accurate portrait of mine affected villages and the coping strategies used by some sections of the village community to deal with these problems. The information should, at the very least, have some relevant implications for the work of all those agencies working with mine affected communities.

Handicap International Belgium
Cambodia
January 2001

[1] MIDP has recently undergone a name change to the Cambodian Mine Victim Information System (CMVIS)

Acknowledgements

The study and the resulting report would not have been possible without the inspiration, expertise and support of many people.

- The team responsible for designing and implementing the research, and for analysing the resulting data and findings, was composed of the following members: Mr. Lath Poch and Mr Sou Bunnath, socio-economic researchers; Mr. Pres Ra, CMAC Site Manager seconded to HI for the duration of the research; and Ms. Ruth Bottomley, research coordinator. Equally important team members were Mr. Nou Samoeun and Mr. Khun Pich, HI drivers who accompanied the team during the fieldwork. Mr. Yem Sam Oeun worked with the project during the initial stages and participated in the fieldwork in Banteay Meanchey
- The inspiration and drive that set the research project in motion was the combined work of Mr. Bernard Hacourt, Mine/UXO Operational Advisor of Handicap International in Brussels, and of Mr. Eric Debert, Coordinator of the HI-B Cambodia Mine Programme. Thanks are also due to Thearith and Reuben McCarthy of the HI-B Cambodia Mine Programme for their help and support during project implementation
- The Cambodian Red Cross Mine Incident Database Project (now the CMVIS) provided invaluable assistance in the implementation and analysis of the quantitative research data. Particular thanks to Mr. Chivv Lim, Mr. Cheng Lo, Mr. Ly Sovanna, Mrs. Sakhan Marnet, and to the twenty-three data gatherers who did the legwork for us with the questionnaire
- Sincere thanks to the many organisations and individuals who gave up their time to talk to us and to share their ideas (see appendices for list of people consulted). Special thanks are due to the following people and organisations for their hospitality and assistance in the provinces
  - Privan Limpanboon and the NPA staff in Banteay Meanchey
  - Thierry David and the CARE staff of the Planning Unit in Battambang
  - Andy Leigh and Chreng Darren of World Vision in Battambang
- Thanks to CMAC for their cooperation with the project and for the secondment of Mr. Pres Ra to the research team
- Throughout the six months of the research many colleagues and friends in HI-B/ANS Cambodia provided help, support, and encouragement to the research team. Thank you all
- For the financial support to the project thanks are given to the European Commissions Humanitarian Office (ECHO)
- Thanks to Sarah Burgess and Conny van den Berg for their comments on the final draft

The research, and this resulting report, would not have been possible without the help, co-operation and patience of all the villagers and local authorities interviewed by the research team. Thank you to all of you who gave up your time to talk to us, and thank you for being so open. This work would have no meaning without your contribution. I sincerely hope that the information presented here will provoke and inspire, and result in positive actions that will reduce the risk in your life. This, after all, is what it is all about.

List of Abbreviations

APM	Anti-Personnel Mine
CIDA	Canadian International Development Agency
CMAC	Cambodian Mine Action Centre
CMVIS	Cambodia Mine Victim Information System (formerly the MIDP)
CPP	Cambodian People's Party
CRC	Cambodian Red Cross
DK	Democratic Kampuchea: The official term for the Khmer Rouge state, 1975-78
ECHO	European Commissions Humanitarian Office
EOD	Explosive Ordnance Disposal
FUNCINPEC	United National Front for an Independent, Peaceful and Cooperative Cambodia: The Royalist party of Prince Ranariddh
HALO	Hazardous Area Life Support Organisation (Halo Trust)
HI-B	Handicap International Belgium
IDP	Internally Displaced Person/s
IED	Improvised Explosive Device
KPNLF	Khmer Peoples' National Liberation Front: One of the anti-Vietnamese, anti-PRK factions of the 1980s based on the Thai-Cambodian border
KR	Khmer Rouge (*Khmers Rouges*)
K5	*Kor Pram* – extensive defensive barrier of mines, anti-tank ditches and bamboo fencing constructed in the north-west by the PRK government with conscripted Cambodian labour.
LMAP	Land Mine Awareness Programme – programme that operated for two years on the Thai-Cambodian border
MAG	Mines Advisory Group
MATT	Mine Awareness Training Teams
MIDP	Mine Incident Database Project (now the CMVIS)
Mine	Landmines - anti-personnel and anti-tank and sometimes including UXO
NGO	Non-Governmental Organisation
NPA	Norwegian People's Aid
PRK	Peoples' Republic of Kampuchea: The Vietnamese-backed government 1979 - 1989
RCAF	Royal Cambodian Armed Forces
RGC	Royal Government of Cambodia

SDI	Spontaneous Demining Initiatives
SOP	Standing Operating Procedures
SSI	Semi-Structured Interviews
TNT	Trinitrotoluene (explosive content of mines and UXO)
UN	United Nations
UNICEF	United Nations Children Fund
UNTAC	United Nations Transitional Authority in Cambodia
UXO	Unexploded Ordnance

Glossary

Khmer Terms

Chamkar:	Khmer word for garden farming. In lowland Cambodia the term refers to the cultivation of land other than paddy rice. It may also refer to plantations. In upland areas of Cambodia it more specifically refers to swidden cultivation, whereby fields are cultivated in a rotational fashion and a variety of vegetables and upland rice is grown
Khum:	Commune
Krong:	Town or city. The municipality of Pailin is referred to in Khmer as *Krong Pailin*
Kru:	Traditional healer
Phum:	Village
Rai:	Thai land measurement used in the north-west of Cambodia. There are 6 *rai* to one hectare. Generally Cambodians use an "*are*" to measure land. One *are* is 100m², and 100 *are* equals one hectare
Riel:	Unit of Cambodian currency. There is an exchange rate of 3,915 Riel to one US dollar, January 2001. 100 Riel is the unofficial exchange rate for one Thai Baht in the north-west of Cambodia
Sen:	Traditional ceremony to spirits, often involving a small sacrifice
Srok:	District
Teuk:	Unit of measurement. One *teuk* is measured from the tips of one's fingers to the middle of the palm. It is the equivalent to 10cm
Thanang Dai:	Unit of measurement, approximately the length from the tip of a finger until the first joint, about 2-3cm
Wat:	Buddhist temple
Wataram:	The area of land surrounding a Buddhist temple

General

Baht:	Unit of Thai currency. There is an exchange rate of Thai Baht 42.50 to one US dollar, January 2001. One Thai Baht is the unofficial exchange rate for 100 Riel in the north-west of Cambodia
Blast Mine:	See Pressure Mine

Bounding Mine: May combine blast and fragmentation explosion. Usually buried or concealed with only a small mechanism protruding above the ground. It is activated by a trip wire or by stepping on the mechanism. The mine body is projected upwards and the main charge detonates scattering fragments over a wide area.

Detonator: A sensitive explosive item used to initiate the main or booster charge

Disarm: Refers to the act of making a mine safe by removing the fuse or detonator

EO: Explosive Ordnance: Includes all munitions which are explosive in nature

Fragmentation Mine: Usually laid above ground, supported on a stake, and activated by a trip wire. Once detonated, the mine scatters fragments over a wide area

IED: Improvised Explosive Device. A device normally of local manufacture using locally available materials. The Khmer Rouge are known to have made many such devices

KR: Khmer Rouge. Communist forces led by Pol Pot. The Khmer Rouge were in power from 1975-78, and, after their overthrow, formed resistance to the government for many years

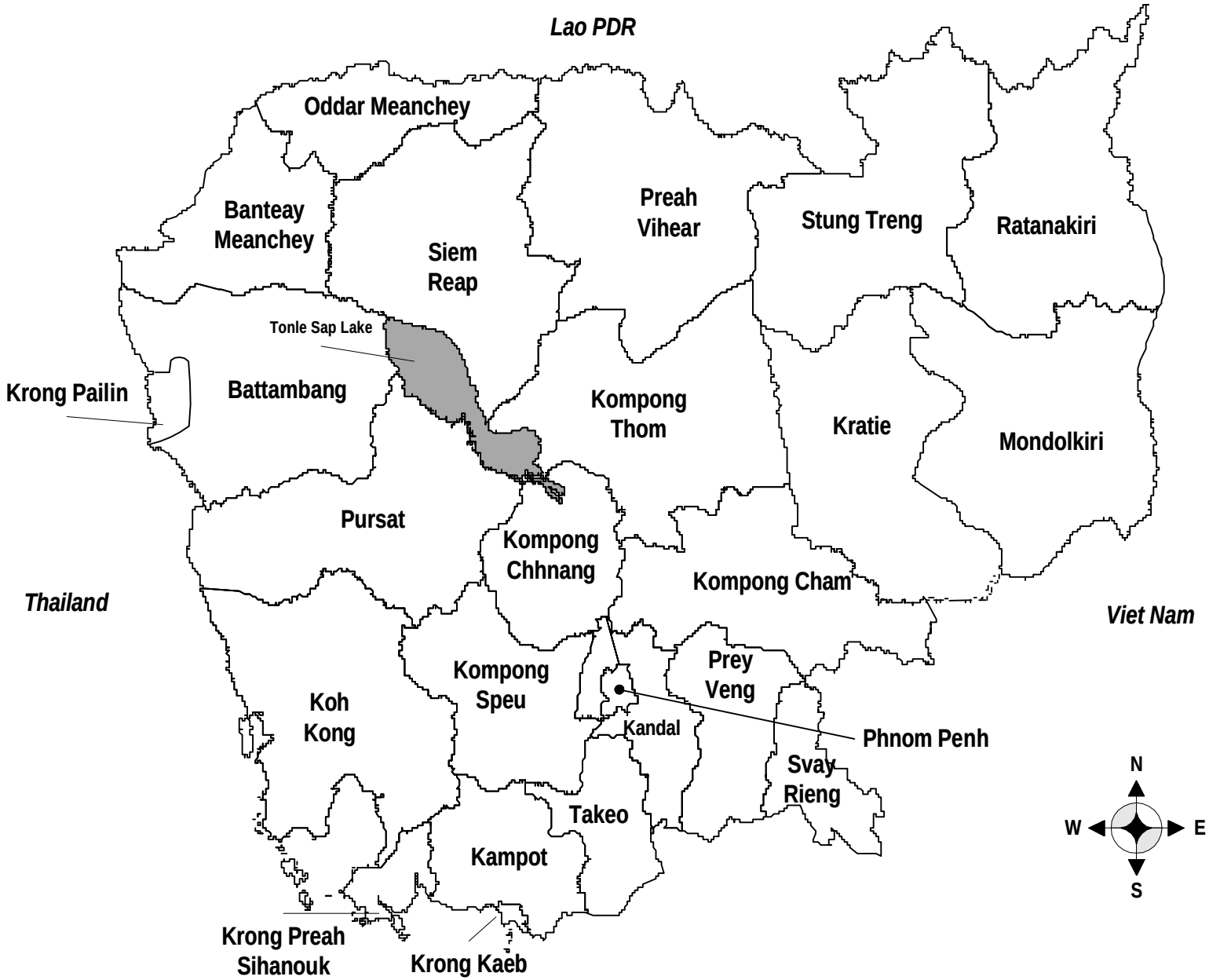
Neutralise: To place pins and rods into an explosive item to prevent the fuse or detonator from functioning. Removal of these devices would immediately make the item active again

Para: Resistance forces of the KPNLF, led by Son San in the north-west of Cambodia, opposed to the Vietnamese installed PRK government of the 1980s

Pressure Mine: Also known as a Blast Mine. Designed to activate when the victim steps directly on the top pressure point of the mine. They are usually laid directly on the ground, or buried just below the surface

UXO: Explosive ordnance that has been fired, dropped, laid, launched, and/or projected, but failed to detonate or function as intended. Included in this definition of UXO are stockpiles of explosive ordnance, which have not been prepared for action nor fired, laid, launched or projected, but which still pose a threat to non-combatant populations

Provincial Map of The Kingdom Of Cambodia



Executive Summary

Introduction

Following nearly three decades of war, Cambodia has been left with a legacy of landmines and unexploded ordnance. The military situation in Cambodia has now stabilised, but mines and UXO continue to impede the lives of many people living in the former conflict zones. The response of these communities has been to try and deal with the problem as best they can. One of the coping strategies used by some villagers has been to clear the mines by themselves, an activity that has been noted and documented to a certain extent since the early 1990s.

The general message of mine action organisations in Cambodia is that civilians should not touch mines or UXO. The fact that some villagers are known to be actively involved in clearing mines has therefore prompted some discussion amongst the mine action community in recent years as to how the issue should be addressed. However, there has been little available documentation about the activity to inform the discussion, and it was for this reason that Handicap International Belgium decided to implement a research study to further investigate villager mine clearance activities.

The Research

Funded by ECHO, the study was carried out over a six-month period from mid-July 2000 to mid-January 2001 in the heavily mine-affected areas of Battambang, Banteay Meanchey, and Krong Pailin in the north-west of Cambodia. The research was largely qualitative in approach, using in-depth, semi-structured interviews as the main research tool. A total of forty-five villages were visited during the course of the study by the research team. Ninety-four village deminers were interviewed, along with forty-two representatives of the village authorities, forty-two villagers, and twenty-two families of village deminers. In addition the CRC/HI Mine Incident Database Project was approached to request their assistance in gathering more qualitative data through a questionnaire. The coverage area of the twenty-three Red Cross data gatherers at the time of the research consisted of twelve provinces and Krong Pailin. A total of three hundred and twenty questionnaires were completed through the combined effort of the data gatherers and the research team.

A workshop was held in December 2000 to present the findings of the research to the key user groups including mine action agencies, community development organisations, and agencies dealing with disability and rehabilitation.

The Report

This report presents the findings and data from the research study. The report has been divided into eight chapters consisting of an overview of the study, the methodology, the findings, and the conclusions and recommendations. The findings are presented under the following subject areas:

- Village Deminer Profile
- Motivations
- Tools and Techniques
- Safety and Risk
- Attitudes

Main Findings

Village Deminer Profile

- "Village deminers" are defined in this report as those villagers who clear mines in a relatively technical and comprehensive way, often drawing on existing military knowledge. This differs from the villagers who simply move mines out of their way when they see them.

- The majority of village deminers are male. 96% of village deminers according to the questionnaire data were male, and 74% were farmers. A smaller number (23%) were soldiers or village militia. However, the majority of village deminers (71% as reported by the questionnaire) were previously in the military. They are frequently settling in areas where they were based as soldiers, and they often have local knowledge of mine deployment.

- 59% of village deminers reported by the questionnaire clear only mines. Fewer village deminers (21%) clear only UXO. The qualitative research found the most village deminers, when they come across a UXO would either lift it out of the way, burn it in situ using firewood, or simply leave it in place and continue to farm around it.

Motivations

- Village mine clearance is essentially demining to access land and resources. In particular, villagers tend to clear individual plots of land for farming, housing, and on pathways to access common property resources such as forest land or water sources. Factors that perpetuate village mine clearance activities include the lack of alternative livelihood options and the increasing demand for land.

- Villagers claim they often clear mines because they cannot wait for official mine clearance to happen. However, 73% of villages surveyed in the questionnaire had some form of official mine action AND village deminers. Village deminers will continue to clear mines despite mine awareness education or minefield marking if they still need to access land and resources. They will continue to clear mines if their own priorities or expectations are not met by professional mine clearance work.

- 67% of village deminers clear mines for their own land. Sometimes they will remove individual mines for other villagers when asked to do so. Conducting mine clearance as a form of income generation is not common. Responsibility and accountability are strong factors dissuading villagers from undertaking this type of activity.

- Today only a small number of village deminers are involved in demining for the purpose of obtaining scrap metal or explosives for sale or for use. 22% of village deminers still use explosives obtained from mines/UXO according to the questionnaire data, and only 8% use scrap metal

Tools and Techniques

- The equipment of the village deminer consists of locally available farm implements such as a knife, a hoe, and a shaped bamboo stick for prodding. They locate mines by eye and by drawing on local knowledge of accident spots and former military experience. They rarely check the whole area of land for mines.

- Village deminers tend to remove the mines from the ground, to disarm them through dismantling, and to destroy them through burning. 88% of village deminers according to the questionnaire data dispose of mines through burning. However, some villagers have altered their practices in recent years and keep mines for the mine clearance organisations to remove and destroy, rather than disposing of them themselves.

Safety and Risk

- Village deminers are involved in a high-risk activity because they enter mined areas, because they clear mines by eye and with basic equipment, and because they handle the mines. However, most village deminers do follow a number of precautions to help reduce the likelihood of injury to themselves and to others.

- Village deminers often said that they no longer believed in the power of protective devices such as tattoos. However, it is likely that such beliefs are still followed to a certain extent as reinforcement to safer practice.

- Village deminers rarely claim that the land they clear is 100% safe. They usually believe that there are still mines laid deep in the ground that they have not been able to remove. The only way for village deminers to test the safety of their land is by using it.

Attitudes

- Most village deminers would prefer to stop clearing mines and to have mine clearance organisations clear the land for them. However, because they cannot wait to access land or resources vital to livelihood needs, they feel that they have no choice but to clear mines by themselves. Mine awareness education, or the presence of mine clearance platoons in the village may lead to a cessation of village demining activities, but if village farmland is not cleared by an organisation, village clearance activities will often begin again.

- The majority of families of village deminers would prefer that the village deminer stop work as they worry for the safety of the village deminer. However, the need for land often overrides this fear in the short-term.

- Village authorities often reported that they do not support the activities of village deminers, and yet they feel that they are not in a position to stop them as the village deminers clear mines to support their livelihood. A few village chiefs believe that the solution to the problem would be to provide the village deminers with equipment so that they can then clear all the land in the village.

- Villagers generally believe that village deminers help to reduce the risk in the village as they will remove mines when people find them, but they acknowledge that the land cleared by village deminers is not totally safe.

Conclusions and Recommendations

- Village mine clearance activities will inevitably continue so long as villagers need to access land and resources in mined areas and they have the basic knowledge and courage to carry out the activity. The risks that are inevitably taken by village deminers could be lessened through the promotion of safer practice.

It is recommended that organisations working with communities in mined areas further investigate the possibility of promoting safer practice for village deminers. This could be achieved through mine awareness messages, training sessions, or through the provision of basic equipment or protective clothing.

- Village deminers have good knowledge of where the minefields are in the village, what lands they affect, and whose livelihoods are impeded. They could be valuable local resource people for mine action agencies.

It is recommended that mine action organisations investigate the possibility of using village deminers as resource persons within mine-affected villages.

- The assumption that village deminers are foolhardy, irresponsible people tends to be a common viewpoint underlying the approach of mine awareness education for high-risk groups. Messages that derive from such a viewpoint are perhaps misinformed and do little to gain the respect of village deminers. They are ultimately patronising and likely to be ignored.

It is recommended that mine awareness programmes targeting high-risk groups such as village deminers review their original assumptions concerning these people and develop a more receptive approach.

- The families of village deminers are perhaps better targets for mine awareness education than village deminers alone. Complete households could be targeted for education, which would allow for the promotion of discussion between family members as to the risks they are taking on a daily basis.

It is recommended that mine awareness programmes should consider targeting village deminers and their families as a form of household education programme promoting family discussion of high-risk behaviour.

- The messages presented through mine awareness education are often unrealistic in the face of the reality of village livelihoods as highlighted by the village deminers. Messages need to be reviewed and revised so that they are more appropriate to addressing existing knowledge and the reality of livelihood situations.

It is recommended that mine awareness programmes are revised and developed using a more participatory, community-based approach, so that the messages conveyed are more appropriate and realistic for the intended audience.

- There is a need for more collaborative work between mine awareness programmes and ongoing community development initiatives, for example through the provision of information regarding alternative livelihood options, safe areas for livelihood activities, or land security issues.

It is recommended that mine awareness programmes should attempt greater collaboration with ongoing community development initiatives to provide information that will help relieve the livelihood pressures that are the main motivations behind high-risk activities.

- The economic and livelihood pressures that force villagers into high-risk activities need to be better met, taking into account individual livelihoods and wealth differentiation within villages.

It is recommended that integrated development and demining initiatives ensure that all sections of the population benefit from the activities and that the projects attempt to address individual livelihoods in addition to community requirements.

- Community development NGOs are in the perfect position to provide advocacy for mine affected villages and to help facilitate communication between the villagers and the mine clearance organisations.

It is recommended that NGOs working with communities in mined areas should develop mediation and advocacy positions between the local communities and the mine action agencies so that systems for communication are improved and village level voices are heard.

- Different strategies for clearance should be investigated and piloted to help better meet the needs of the villagers and to compliment current clearance methods. For example, the possibilities of mechanical clearance, using low cost, industrial machinery, could be investigated, as could the possibilities of quick response, mobile clearance teams.

It is recommended that alternative clearance methods are investigated and piloted to help better meet the needs of rural Cambodian communities for land and resources.

- There is a need for greater collaboration and co-ordination between the mine action sectors with regard to the information that is being passed on at village level.

It is recommended that messages given to villagers by mine action sections should be consistent and realistic and backed up with clear procedures which are easy for villagers to follow and understand.

Chapter One

Introduction to the Study

1.1 Background

Aerial bombing by the United States in the early 1970s, and prolonged fighting over the last twenty years between Government and resistance forces, particularly the Khmer Rouge, has left Cambodia with a legacy of landmines and unexploded ordnance (UXO) contaminating large areas of land. The conflict in Cambodia is now over, but both mines and UXO remain and have had a long-term negative impact on Cambodia's population, particularly in rural areas where people's livelihoods revolve around and depend upon agriculture and local natural resources.

The heaviest concentration of mined land[2] is located in the north and north-western provinces where most of the fighting between resistance, Khmer Rouge and government forces occurred, and where the Vietnamese constructed the 600km K5 barrier[3] along the Thai-Cambodian border[4].

Since the 1993 elections mine clearance operations have been undertaken by United Nations organisations, the Cambodian Mine Action Centre (CMAC)[5], the military engineers of the Royal Cambodian Armed Forces, and Non-Government Organisations (NGOs). However, these organised demining operations in Cambodia have not been able to keep pace with the need for land (Roberts & Williams, 1995:144) due to geographical, political, financial and/or technical constraints, and relatively large sections of the population continue to live in areas affected by mines or UXO. The response of these communities has been to try and deal with the problem as best they can. One of the results of this has been the occurrence of mine clearance activities by villagers themselves, a phenomenon that has been noted and documented to a limited extent since the early 1990s[6].

The fact that villagers are known to be involved in mine clearance activities but that civilians are generally discouraged from touching mines and UXO, has led to considerable debate among the mine clearance practitioners in Cambodia as to how this issue should be addressed. Some argue that since this type of informal demining will occur regardless of the opinion of professional deminers, it would be better to give the village deminers training and equipment in order to minimise risk. Others believe that such programmes would sanction activities that would not only be a risk to the village deminers, but also to other villagers who attempt to use the unsystematically cleared land (Roberts & Williams, 1995:145). However, despite the intensity of

[2] "Mined land" and "Mine Clearance" in this report refers to contamination or clearance of both mines and UXO, although the research found that it was far more common for villagers to clear anti-personnel mines rather than UXO or anti-tank mines.
[3] Started in 1985, the K5 (*kor pram)* barrier was an extensive defence barrier of mines, anti-tank ditches and bamboo fencing, constructed in the north-west by the PRK government with conscripted Cambodian labour. It was intended to act as a barrier against the retreating Khmer Rouge forces.
[4] The majority of the landmines are found in the northwest and northern provinces. Battlefield UXO are found countrywide, and aerial delivered ordnance are found mainly in the eastern and central provinces (US Department of State, 1998:66)
[5] CMAC is the government demining agency for Cambodia which is funded by the Cambodian government, international governments, the United Nations, and NGOs who act as custodians for government funds.
[6] See bibliography for former studies and documentation on the subject.

the debate throughout the 1990s, there was little information available about the scope, impact and characteristics of village mine clearance activities.

In 1999 the *Landmine Monitor Report* provided astounding figures regarding mine clearance activities by villagers, drawn from the CMAC database. As of the 14th August 1998, out of the total of 88,710,000 square metres of land cleared by the different operators, local people were reported to have cleared approximately 78% of the total (Landmine Monitor Report, 1999:402)[7]. This, together with figures from the Mine Incident Database Project[8], which was recording high casualty figures resulting from tampering with mines and UXO, suggested that mine clearance by villagers was continuing on a relatively large scale throughout Cambodia.

It was at this juncture that Handicap International Belgium (HI-B) stepped in to instigate a six-month research project to investigate the occurrence of mine clearance activities by villagers, or "Spontaneous Demining Initiatives." HI-B felt that the study would help to better inform the earlier debate, and would allow the broader range of actors working within mine and UXO contaminated areas to better understand the village-level situation. The study could help to generate further discussion about the subject, and would perhaps lead towards an assessment of existing mine action activities and the development of practical solutions in the future. The research was conducted from mid-July 2000 to mid-January 2001, focusing on the heavily mine-affected provinces in the north-west of Cambodia.

1.2 Objectives

The objectives of the study as outlined in the original Terms of Reference (see appendices) were four-fold:

- To determine the scope of the practice in Cambodia
- To determine the social and economic factors that encourage villagers to engage in informal demining activities
- To determine the tools and techniques the villagers use for demining and the quality and risk of the work
- To provide recommendations about ways to deal with the different motivations that lead villagers to engage in informal demining activities, particularly in terms of mine clearance and mine risk assessment

[7] The Landmine Monitor Report 2000 also gives figures for the area cleared of mines from 1993-1999 based on information obtained from CMAC, MAG and Halo Trust, January 2000. Out of a total of 154, 737, 761 square metres of land cleared, villagers are estimated to have cleared 69,780,000 square metres, 45% of the total. Although a significant reduction from the figures given in 1999, the area of land believed to be cleared by villagers is still notably higher than the area cleared by other entities. CMAC is estimated to have cleared the second largest amount of land, 53.88 square kilometres, 34% of the total. (Landmine Monitor Report, 2000:389).

[8] The Mine Incident Database Project (MIDP) provides data of the landmine casualty situation in Cambodia. The database results from the close collaboration of Handicap International and the Cambodian Red Cross funded by the Ministry of Foreign Affairs of Finland, UNICEF, and the US Department of State. It has recently undergone a name change to the Cambodia Mine Victim Information System (CMVIS).

1.3 Anticipated Outcomes

In addition to providing information that would inform the earlier debate concerning the training of village deminers, it was anticipated that the information and data generated through the research could also provide for the following:

- Advocacy for mine/UXO contaminated villages in Cambodia

It was expected that the qualitative research would be able to provide accurate and detailed information on what is really happening at village level in mine and UXO contaminated areas. This would include information on the strategies used by villagers to cope with a mine/UXO contaminated environment, and the local attitudes and perceptions towards mine/UXO issues.

- Assessment of risk and safety to contribute to accident prevention

HI-B is involved in mine action primarily as a way to address one of the main causes of disability in countries affected by war. It was expected that the research would be able to inform this mandate by providing information on the risk involved in village mine clearance activities. This could include information on the prevalence of dangerous practices and an assessment of the safety of land cleared by village deminers.

- Assessment of mine clearance priorities, implementation practices and communication channels

Although the research was not focusing on professional mine action, it was expected that information might emerge that would highlight the correlation between official mine clearance activities and unofficial village demining. If village demining, for example, is occurring in areas where there is professional mine clearance, it could indicate that current practices of prioritisation or implementation are not fully meeting the needs of the villagers. The research could also provide for valuable information on the perceptions of the villagers as regards mine clearance, and for an assessment of the effectiveness of the channels of communication between agencies and villagers in terms of village needs and requests and mine action response.

- Assessment of mine awareness education activities and messages

The predominant mine awareness message is for civilians not to touch mines or UXO. By focusing on a group of villagers who appear to deliberately flout this message, it was expected that information gathered during the research would help to inform mine awareness, perhaps calling for a re-assessment of activities in terms of target group and/or the messages conveyed.

- Assessment of community development and resettlement activities in mined areas

There is increasing collaboration between mine clearance activities and development projects. It was expected that the research would also be able to provide information that will indicate the suitability of community development and resettlement activities in mined areas in terms of the needs of the villagers with regard to accident prevention and alleviation of poverty.

Village Deminers: A Case Study

Phoeun, Keap, Vanna and Von live in Stung Bot village in Poipet commune, Banteay Meanchey. The four men have been based in the northwest of Cambodia since the early 1980s when they came to join the resistance forces fighting against the Vietnamese installed government of the People's Republic of Kampuchea.

After they left the army the men and their families were unable to return to their homelands in the south of Cambodia as they had no land there. Instead they decided to stay in the north-west and came to live near Poipet town. Unfortunately, they were forced to move from the first place they were living by a powerful man who claimed he owned the land. Along with many other villagers, they then came to live in Stung Bot village in an area next to the railroad. An area contaminated with land mines.

The men are now village deminers. They learnt how to lay and to clear mines while serving in the army, and now they have to put these skills to use so that they can clear land for their housing and farming, and so that they can safely enter the forest to collect forest products. Sometimes they also clear mines for other villagers when they find them. They do not get paid for this, they just do it to help.

They prefer to clear mines in the dry season because the ground is hard and the grass is dry and burnt and so it is easier to see the mines on the surface. But in the rainy season the ground is soft and wet and there is too much undergrowth to be able to clear the mines safely. The tools they use for mine clearance are everyday farming tools. A hoe is used to prod for the mines and a shaped stick or knife is used to remove the soil from around the mine once it has been located. When they remove the mines they dismantle them so that they will not explode, and they keep them in a safe place until a mine clearance organisation passes the village and takes them away. They believe that the land that they clear is about 80 per cent safe, but that there are still mines deep in the ground that they cannot find with their basic tools.

They believe the advantage of being able to clear mines is that they now have land for their house and for some crops. But they realise the high risk involved in their clearance activities. Phoeun says "If we are killed or injured by clearing mines, our wives would become widows and our children would have no future. We are also afraid that the powerful people will come and take away the land that we have cleared for our families."

Chapter Two

Methodology

2.1 Introduction

The research used a qualitative approach as the dominant research methodology. This type of approach is relatively new to the mine action sector in Cambodia, which generally draws on quantitative survey techniques. The qualitative approach allowed for a more participatory and dialogue-based implementation, with the researcher engaging directly with community members. Despite the scale of the research being relatively small as a result, this type of approach allows for a much more comprehensive insight into the difficulties and problems faced by villagers living in mine affected areas, and the way in which the person providing the information views the world.

In terms of mine action, this type of research can help to increase dialogue, albeit indirectly, between those people living in mine/UXO contaminated areas and the planners and implementers. The needs and concerns of the communities themselves become the focus of discussion, and key constraints of existing outside interventions can be identified through the perception of these communities.

A questionnaire was also developed which helped to provide for the quantitative data. In addition meetings with actors from the mine action and development arena, a workshop, and a documentation review helped to place the qualitative data into context.

This chapter outlines the research process and the design and development of the research tools used by the team. The findings presented in the later chapters draw on both the qualitative and the quantitative data.

2.2 Time Frame

The time frame for the project was over a six-month period, from mid-July 2000 until mid-January 2001. The initial phase of the research project involved recruiting the research team, conducting a literature review, meeting with relevant organisations and individuals with an interest in the subject, and developing the research methodology. The fieldwork was conducted in blocks of three weeks during September, October and November. During December time was set aside for data analysis and for preparing and conducting a workshop to present the findings and to engender discussion among the main user groups on the issue.

2.3 Research Team

The research team for this study consisted of one expatriate research coordinator, two Cambodian socio-economic researchers, and a CMAC Site Manager seconded to Handicap International for the period of the research. The main task of the CMAC site manager was to contribute expertise and knowledge on mine/UXO prevalence and clearance techniques and

mine awareness information during the development of the research methodology and throughout the course of the study.

2.4 Documentation Review and Meetings

During the months of July and August, a documentation review was conducted to establish background information on the mine/UXO situation in Cambodia, and to gauge the extent of existing literature on the subject of informal village demining in Cambodia. Bibliographic references were consulted, along with existing village and provincial profiles, data from the CMAC database and from the Mine Incident Database Project (MIDP), and organisation reports and papers. (See appendices for bibliography and references consulted).

Meetings were held with different organisations in Phnom Penh to present the research objectives and to collect information on mine action activities in Cambodia, including informal village demining, and to gauge the perceptions of the different organisations towards the study subject. E-mails were also sent out to relevant organisations, which allowed the team to make initial contact with those organisations based in the provinces. The contacts were followed up once in the field. (See appendices for list of people consulted).

2.5 Selection of Study Sites

Areas for study coverage were selected on the basis of the degree of mine contamination, the number of mine casualties recorded as a result of tampering with mines/UXO[9], and direct information obtained from NGOs and organisations on the location of villages undertaking mine clearance activities. The extent of mine action by organisations was also checked so that a balance could be achieved between target villages that had mine action activities and those that did not. The geographic situation and accessibility of villages was also taken into consideration. This type of site selection may be referred to as 'Sentinel Site Surveillance', and although it does not allow for extrapolation of data to sites beyond those surveyed, it does give an accurate picture of the affected areas.

Battambang Province, Banteay Meanchey Province and Krong Pailin[10] (see map) were selected as the primary areas for the research as a result of the information obtained through consultation with NGOs and Mine Action Groups, data gained from the Mine Incident Database Project, and CMAC minefield location information. These areas, situated in the north-west of Cambodia, are considered to be the areas most heavily contaminated with land mines in the Kingdom. They have the highest incidence of mine/UXO casualties through tampering according to MIDP data. Bordering Thailand, they are heavily populated, a factor influencing land distribution and availability, and they are also affected to a great extent by resettlement and military demobilisation. Although it would have been interesting to compare a mine-contaminated province with a province affected by aerial delivered ordnance such as Kompong Cham, this was not possible due to the seasonal flooding which coincided with the field-work and left much of the south-eastern provinces under water.

[9] Information about casualties injured by tampering as recorded by the MIDP was sought in relevant villages as a way to assess the relationship between "tampering" and village mine clearance activities. This issue will be discussed further in Chapter Six, Safety and Risk

[10] Krong Pailin is a municipality consisting of two districts, Pailin and Sala Krau. It is situated to the west of Battambang province, on the border with Thailand.

The original Terms of Reference produced by Handicap International (see appendices) suggested a study sample of approximately ten villages in three provinces. However, during the field trip the research team kept a relatively flexible approach to the choice and number of target villages. In some cases it was impossible to reach selected villages due to the roads being impassable in the wet season. In other cases villagers were in the fields and unavailable for interviewing. In these situations priorities were readjusted and other villages on the short list were visited. Another complicating determinant was that some villages have been re-named and/or sub-divided into satellite villages. As a consequence of these different factors, the team actually visited more than ten villages in each province and nine villages in Krong Pailin[11].

2.6 Semi-Structured Interview Design and Implementation

The main tool used to gather qualitative data was semi-structured interviewing with key informants. Semi-structured interview (SSI) questions were developed in English and Khmer for four sets of key informants:

- Local authorities
- Village deminers
- Families of village deminers
- General villagers

The SSI questions were designed to serve as guidelines for in-depth interviews with the key informants. They were discussed extensively by the research team to ensure accuracy of translation and meaning, and to ensure that all relevant information would be covered. However, they were flexible enough to respond to situations encountered with different interviewees and they also allowed for revisions in the field and for the researchers to expand on particular subject areas with interviewees as appropriate. Unlike questionnaires, SSI allow for researchers to probe more deeply and to gain information that may, in the end, reflect more accurately the beliefs and perceptions of the interviewee. At the end of each interview, the researchers requested if the interviewee had any questions to ask. This not only helped to change the dynamics of the interview, but also allowed the interviewee to bring up their own concerns or ideas related to the subject. (See appendices for SSI question guidelines).

Above: A member of the research team interviews a village deminer in Poipet commune, Banteay Meanchey province

Format sheets were also developed by the research team to be used in conjunction with the SSI. These included:

- Daily Routine Sheets
- Time Line Sheets
- Wealth Ranking Guides
- Mine Identification Ranking Sheets

[11] 19 villages were visited in Banteay Meanchey province, 17 in Battambang province, and 9 in Krong Pailin.

The sheets were designed to assist in the data collection in the villages, plus ensuring a standardisation of recording during the research, which would ease the analysis. However, during the fieldwork it became apparent that some of the format sheets were more useful than others. Little information of significance was gathered with the Daily Routine Sheets, whereas the Time Line Sheets and Mine Identification Ranking Sheets were used frequently to trace the history of conflict in the target areas and to identify the mines most commonly cleared by villagers. (See appendices for examples of format sheets used).

In addition to interviews, the research team also used personal observation within the villages and during interviews to gauge the general village situation and the attitudes of respondents. Photographic records were also taken which are included in this report.

2.7 Selection of Key Informants and Approach in the Villages

Key informants were largely selected through a 'snowballing' technique in that with each person interviewed, information was sought on other people who may be good informants. This was combined with occasional random interviews with villagers who were at home, or who came to talk to the researchers out of curiosity.

In every commune visited contact was made first with the commune authorities to introduce the research project and to request permission to work in the area. In each village the first interviews to be conducted were with the village chief, again as a form of protocol to introduce the project and purpose, to gain permission, and to pin point key people to interview. Village chiefs were also able to provide information on the village history, the political and social organisation and the history of conflict in the area.

During the research the team visited a total of forty-five villages and interviewed a total of ninety-four village deminers. Forty-two representatives of the village authorities, forty-two villagers, and twenty-two families of village deminers[12] were also interviewed.

Although the semi-structured interviews provided detailed information from the selected villages, using only this method would have meant that it would have been impossible to measure the scope of informal village demining activities in Cambodia. For this reason the research team also devised a questionnaire, which could be sent out over a greater coverage area with assistance from the Cambodian Red Cross data gatherers.

2.8 Questionnaire Design and Implementation

In August the CRC/HI Mine Incident Database Project was approached to request their assistance in gathering data for the study. It was proposed that a questionnaire on village demining activities would be designed which would then be distributed to the 23 data gatherers based in their coverage area of twelve provinces and Krong Pailin[13]. This would assist in measuring the scope of the practice within Cambodia, and would provide a compliment and crosscheck to the more in-depth information that was being collected through the qualitative methodology.

[12] This figure is for families interviewed independently of the village deminers. Sometimes combined interviews were held with village deminers and their families.

[13] The CRC data gatherers work in Koh Kong, Pursat, Battambang, Banteay Meanchey, Oddar Meanchey, Siem Reap, Preah Vihear, Kompong Thom, Stung Treng, Kratie, Mondulkiri , Ratanakiri and Krong Pailin (see map).

The questionnaire was developed in English and translated into Khmer. Guidelines to accompany the questionnaire were also developed. The team piloted the questionnaire over two days in Kompong Speu province. The piloting was a good opportunity to see if the questions were clear, to discover if there were any misunderstandings, and to gauge the general reaction of the villagers and the authorities to the questions.

Fifteen questionnaires were distributed to each of the twenty-three data gatherers at the end of August 2000. The data gatherers were expected to complete at least ten questionnaires in ten different villages over a two-month period of September and October. At the beginning of November the completed questionnaires were returned and the data entered into a database for analysis. A total of three hundred and twenty questionnaires were completed through the combined effort of the data gatherers and the research team (see appendices for questionnaire and questionnaire guidelines).

2.9 Workshop

In December 2000 a workshop was held at which the main findings of the research were presented. The workshop participants (see appendices for list of participants) were invited to consider the implications of the findings on different areas of mine action, namely, clearance, education, and awareness, and integrated development and demining. The workshop provided a forum for discussion and feedback about the findings, and this dialogue itself has been considered as part of the research process and included within this report.

2.10 Validity and Reliability of Findings

The employment of these various research tools allowed for triangulation and continuous crosschecking of the data, helping to increase the validity and reliability of the findings. The questionnaire allowed for broader coverage of the occurrence of informal village demining throughout Cambodia, although it could not provide for more detailed information about motivations and techniques. This was provided through the qualitative research tools, and during the analysis of the data the team was able to compare the findings from both sets of data. In addition, the primary data collected through the fieldwork was compared with the existing secondary data collected during the initial stages of the research. However, despite this thoroughness, there were still weaknesses within the research process that need to be acknowledged, as follows:

Representativeness of Study Sites: The focus of the research was in the north-west of Cambodia, with the villages selected for the research being those known to have mine contamination. The majority of the villages were also situated on the Cambodian-Thai border. From this sample it is impossible to extrapolate much beyond what was found in the villages surveyed. Certainly the findings cannot be extrapolated to other provinces not visited by the research team. However, as the provinces and villages were selected on the criteria that they had mines/UXO and almost certainly village deminers, the research was able to produce good case studies from which overall trends can be detected, in addition to providing personal perspectives.

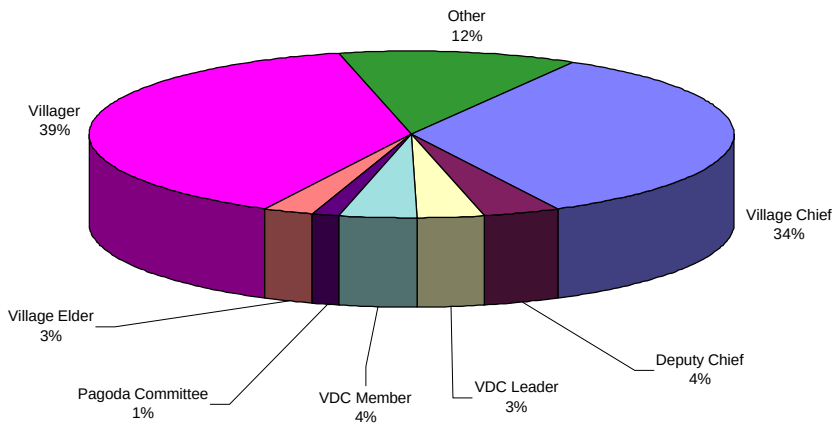
Scope of Questionnaire: The questionnaire was developed in an attempt to determine the scope of village mine clearance activities within Cambodia. Obviously, with the human resources available to the project and the short time frame, to gauge the extent of village demining countrywide was difficult. By way of compromise, the use of the CRC data gatherers to

certain approximation of the extent of mine clearance activities in the CRC coverage areas. Obviously greater coverage is afforded to those areas with heavy mine contamination, but it was also possible to see if village mine clearance activities were occurring in areas where there is known to be less contamination.[14]

Questionnaire Respondents: The largest groups of respondents for the questionnaire as implemented by the CRC data gatherers were ordinary villagers (39%) and village authorities (village chiefs and deputy chiefs - 38%. See Chart 1 below). It has to be remembered that the information provided by these informants is based on their own personal, subjective knowledge of mine clearance activities by villagers, and not on direct experience. It may also be the case that the given answers of the respondents, particularly of the authorities, are tempered by

CHART ONE

Function of Questionnaire Respondents



political considerations. During the qualitative research the team occasionally interviewed village authorities who denied that there were village deminers in their village, information that was subsequently disproved by meetings with villagers involved in mine clearance activities.

Gender considerations: The research team was largely male, with the only female being the expatriate research coordinator. This, to a certain extent, reflected the availability of Cambodian researchers at the time of the research, and also the subject matter of the research, which focuses on a largely male-dominated arena. However, great care was taken to ensure that the research was gender sensitive, soliciting opinions and information from both male and female respondents in the target areas.

[14] The CIDA funded National Level 1 Survey, currently being implemented by Geospatial International Inc. on behalf of CMAC, also contains a question on mine clearance activities by villagers, the results of which will better be able to determine the scope of the practice nation-wide.

2.11 Research Constraints

Generally the research team was extremely fortunate in the choice of target areas in terms of accessibility and cooperation of the interviewees. However, there were some minor problems of the type typical to fieldwork within a country like Cambodia.

In some areas visited by the research team villagers were busy harvesting their *chamkar,*[15] which presented some difficulty for the team in terms of finding adults to interview in the village. The team frequently found that village deminers were away from the village for several days, often because they had gone to the forests for hunting or the collection of forest products. Although this was inconvenient in terms of the ability to interview them, it illustrates nicely the dependence of certain sections of the rural population on resources such as forest products, a point that will be discussed in greater depth in the following chapters.

The research took place during the Cambodian rainy season, which was particularly prolonged in 2000. The provinces visited by the team were not greatly hampered by adverse weather conditions, although ingenuity and sheer will power was sometimes required to reach the intended villages. However, in some cases the villages that had been selected by the team were unreachable because of the condition of the roads and the lack of alternative forms of transport.

Left: The research team make use of local forms of transport, Samlot district, Battambang province

[15] *Chamkar* is the Cambodian word for garden farming. In lowland Cambodia it refers to mixed cultivation of permanent plots of land. In upland areas of Cambodia it more specifically refers to subsistence farming, or swidden agriculture, where fields are cultivated in a rotational fashion.

Chapter Three

Findings – Village Deminer Profile

"Even today, the majority of Cambodians who regularly engage in demining activities are not those employed by the demining NGOs or the Cambodian Mine Action Centre…Rather, they are the untrained, ill-equipped local deminers…trying to attempt to reclaim their land and forced to accept the consequences of their amateur initiatives."
(Davies, 1994:80)

3.1 Defining "Village Demining"

In order to be able to discuss the phenomenon of village mine clearance activities, it is necessary to define who is clearing the mines. The Research team quickly discovered that there are two categories of people within villages who "clear" mines. Firstly, there are those village deminers who "*doh min*", which translated literally means to clear mines. This term refers to those villagers who carry out a more technical, comprehensive type of clearance, involving the prodding of the ground and often the extraction and dismantling of the mines once they have been lifted from the ground. These are the people who consider themselves to be village deminers, and to whom the team would generally be directed to by the village authorities or other villagers. These are the village deminers who are referred to in this report.

Secondly, there are those villagers who may also clear mines or UXO simply by picking them up when they see them and moving them out of the way. Others do not touch mines they find, but place firewood around the mines and try to burn them in situ. Villagers often confessed to doing both of these things, although they did not consider themselves to be village deminers.

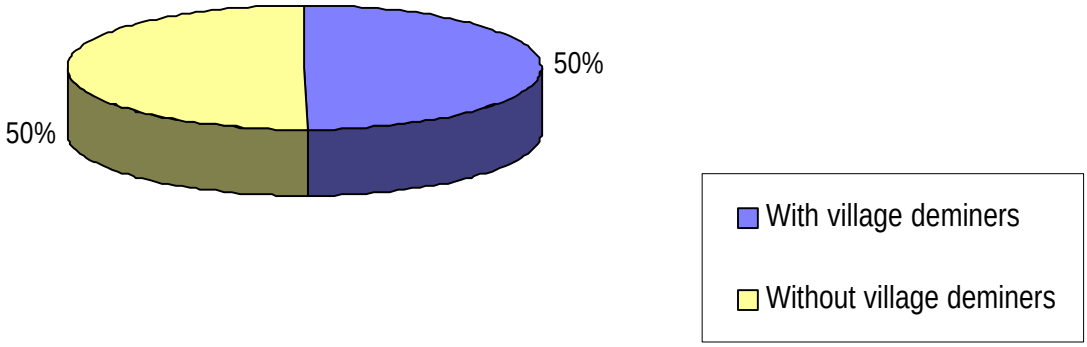
" I have never demined, but whenever I find a mine, or do farming in my chamkar with mines, I just collect them up and leave them in one place. If I found an unknown mine which I am not able to pick up, I ask for help from the village deminers, or sometimes I collect firewood and put it on the mine, and then burn it so as to destroy it."
Villager, Peam Ta village, Ta Taok commune, Samlot district, Battambang province

3.2 Where are the Village Deminers?

The extent of village demining throughout Cambodia was difficult to estimate given the limitations of this particular research project. However, the questionnaire data recorded that village deminers were present in each of the twelve provinces covered by the CRC data gatherers and in Krong Pailin. Within the survey sample covered by the questionnaire, village deminers were present in half of all the villages visited which have mine/UXO contamination (see Chart 2, p.27). As there is more coverage by the data gatherers in the north and north-western provinces it is difficult to extrapolate these figures with any accuracy beyond this. However, it is reasonable to assume that there are more village deminers present in the provinces where there is heavier mine and UXO contamination.

CHART TWO

Village Deminers in Villages Surveyed



Number of Village Deminers as part of the Total Village Population

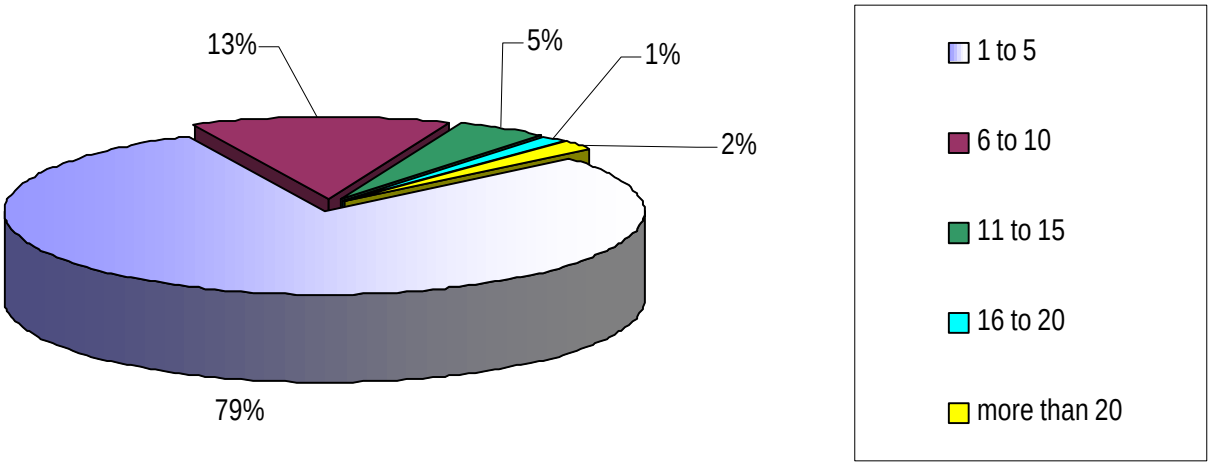
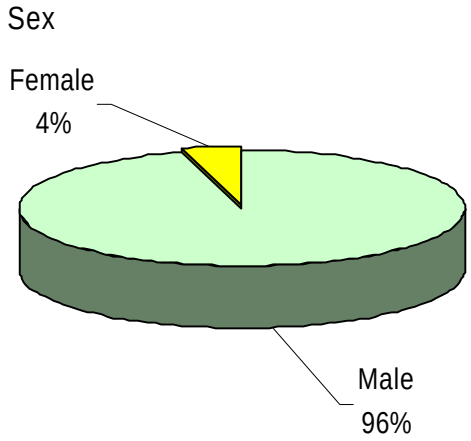
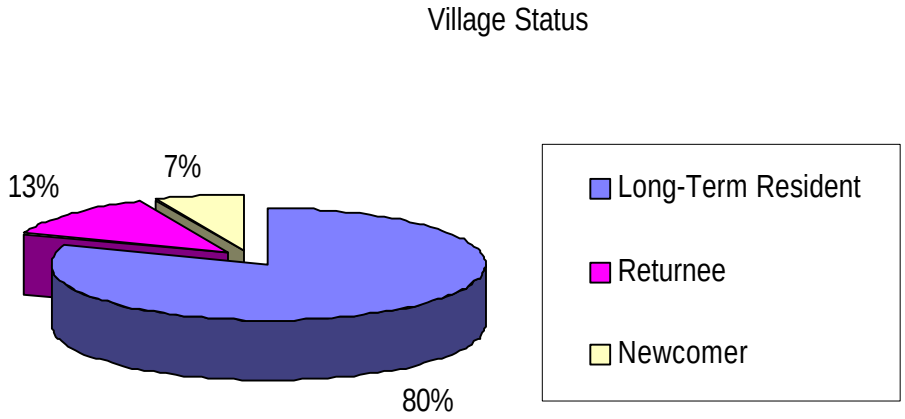
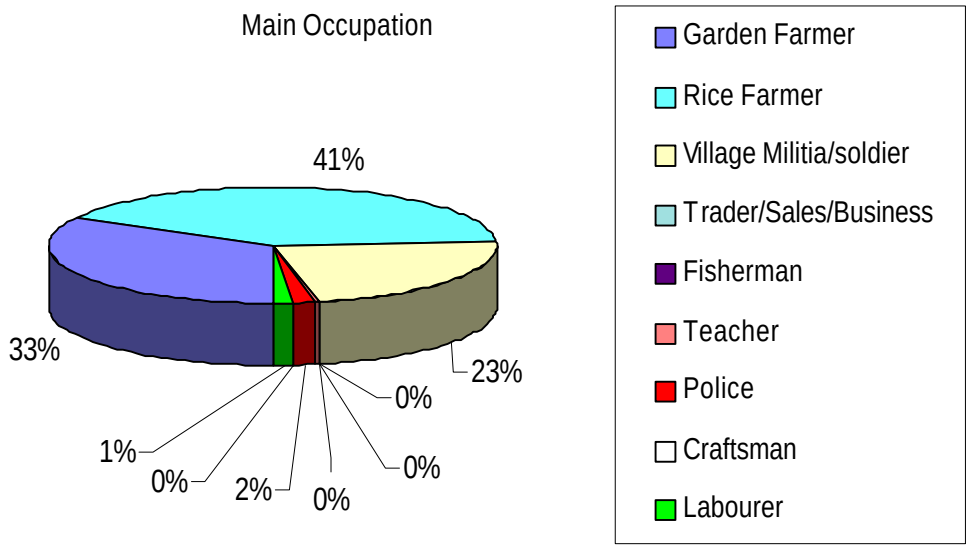


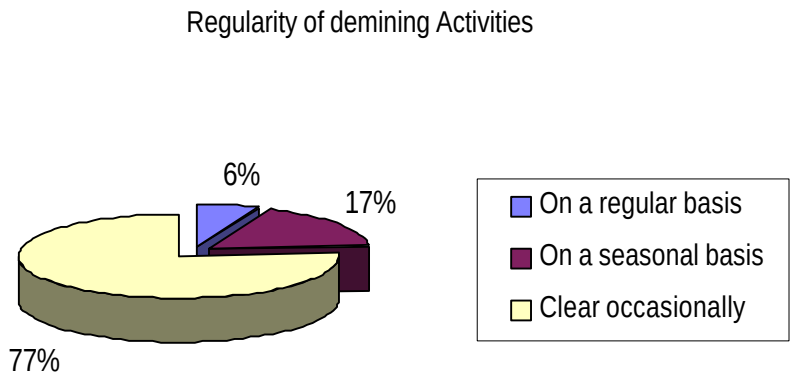
CHART THREE

Profile of a Village Deminer









Within the total village population the number of village deminers may vary, but on average it appears that they form a relatively small section of the village population. Again, this can be illustrated by the findings from the questionnaire, which shows that out of all the villages surveyed with village deminers, **79%** of these villages had five or less village deminers (see Chart 2, p.27). The number of village deminers in each village depends on a variety of factors such as the make-up of the village population, the availability of mine free land, and the presence of alternative mine clearance, factors that will be discussed throughout this report.

3.3 Who are the Village Deminers?

The majority of village deminers are male adults, on average aged from their mid-twenties up until their late forties. They are usually family men with a wife and children to support. The quantitative data supports this and **96%** of the village deminers reported by the survey are male (see Chart 3, p.28). However, the research team also met a few women who cleared mines, either currently or in the past. Two women who cleared mines actively in the past were both married to soldiers, although one is now widowed. They were both responsible for the family agriculture and had cleared mines to access their fields. In another case, a woman was actively involved in helping her husband to clear mines from the family housing plot and field. This was unusual, and generally the wives of village deminers are not involved in their husbands clearance work. The village deminers themselves often stated that they would not let any family members enter the farming land until they had finished clearing all the mines (see Chapter Six – Safety and Risk for more discussion on this point).

Mom Muth's story

Mom Muth, 51 years old, and her teenage son live in Beikchan Chak village in Svay Chek district, Banteay Meanchey province. Her husband was a military commander for the government forces, but he was killed by a landmine in 1985 when he was trying to remove the bodies of his dead comrades from a battlefield. She started to clear mines in 1998 when she returned from Site 2 camp. She cleared mines on her three hectares of farmland, and also on grazing lands where her cattle roamed because she was afraid her cows would step on the mines. She thinks she cleared more than 100 mines by herself. She claims that she learnt to clear mines by herself, and from watching other people. She wanted to be able to clear mines so that other people would not be able to cheat her or look down on her. Now she has stopped clearing mines because her health is not good, and she has cleared all her agricultural land, which her sister now farms.

Some village deminers are amputees, the majority of whom were injured by mines during their time in the military. Their village demining activities are perhaps influenced to a certain extent by the prevailing attitudes of discrimination towards handicapped people within rural Cambodian society. Village deminers with prior amputations often reported that they continued in these high risk activities because they felt they had less to lose than other, able bodied villagers, and also because they felt they could earn some respect and admiration from other villagers by carrying out mine clearance activities. Some said that having suffered mine related injuries themselves, they were motivated to clear the mines so that other people would not be injured.

"In fact, I dare to do this work because I have no legs. If I had legs like other people, I wouldn't do such work. I am rather careless with mine clearance."
Village deminer, double amputee, Samlot district, Battambang province

3.4 Occupations

The majority of village deminers are farmers, either cultivating paddy fields or *chamkar*. A smaller number are soldiers or village militia. The questionnaire data shows that a total of **74%** of village deminers reported are farmers, and 23% village militia or soldiers (see Chart 3, p.28). However, the majority of villagers who now carry out mine clearance activities in the village served as soldiers at one time.

"We have had over twenty years of war, and so everyone has been a soldier at some time or other"
(Village Chief, Stung Bot village, Poipet commune, O'Chrou district, Banteay Meanchey province)

The military populations who fought in the north and north-west were often comprised of peoples from all over Cambodia, who joined or were conscripted into the army. They have since remained in these northern provinces as, with returning stability in Cambodia, they are now looking to settle and to return to village life, but are unable or unwilling to return to their homelands, usually because they have no land there. This is sometimes because the land has since been redistributed to other villagers, or because they have been absent from their families too long to have any claim on their ancestral land. The same often applies to other sections of the population who have long been transitory due to ongoing conflict, for example returnees and internally displaced persons (IDPs). Over the last ten years these people have been returning to their homes in the north-west, often finding that their villages were mined in their absence. In addition to these civilian and military populations there are also relatively high numbers of economic migrants from other provinces in Cambodia who move to these areas in search of land in the former Khmer Rouge strongholds, or for trading opportunities along the Thai-Cambodia border.

The village deminers are frequently settling in the areas where they were deployed as soldiers, sometimes with whole villages of soldier families being settled on land provided by military commanders. Having been based in these areas as soldiers for, in some cases, almost thirty years, if not longer, many of these demobilised soldiers consider themselves to be long term residents of the area in which they are now settling (see Chart 3, p.28). Today their main livelihood activities consists of farming, either paddy rice or *chamkar* farming, supplemented by the collection of forest products such as fuel wood, grasses for thatch, or forest vegetables.

Generally village deminers do not consider mine clearance to be their full-time occupation. The majority clear mines on an occasional basis, when they see them, or when mines are acting as an impediment to their everyday livelihood activities. **77%** of village deminers, according to the questionnaire data, clear mines on an occasional basis, and only **6%** clear on a regular basis (see Chart 3, p.28). 17% are reported to clear mines on a seasonal basis, a practice that will be discussed in more detail in Chapter Five, Tools and Techniques.

"People are clearing land for farming because they have no land to farm. Most of the mine clearance in the village is done by villagers who used to be soldiers. Three people clear mines as an occupation – people can ask them to demine. But I am not the same. I only clear my own land and do not work for other people. There are seven people in the village who clear mines like this because they need land for farming and to support their life."
Village Deminer, O'Beijoun village, O'Beijoun commune, O'Chrou district, Banteay Meanchey province

3.5 Knowledge

"Many of today's farmers and forest workers have had some basic military training and some see themselves as experts with all types of weaponry. This confidence has resulted in many people sustaining injuries through mishandling mines while fishing, extracting scrap metal, or using a bomb as an anvil."
(Grant, Tim, BBC Mine-Victim Survey Report, January 1993:25, quoted in Aitkin, 1993:5)

The majority of village deminers are demobilised soldiers who learnt the rudiments of mine clearance and deployment, or breaching and defence tactics, during their military service. Such strategies played a prominent role in Cambodian warfare, and often village deminers learnt on the job, on an as-needed basis, by watching their fellow soldiers or by being taught informally. However, some village deminers also received specific military training in mine clearance and deployment techniques. This includes training at various military schools throughout Cambodia, training in the border camps[16], or training by Vietnamese, Thai, Chinese or Russian instructors.

The questionnaire data supports these findings, indicating that **71%** of village deminers learnt their skills in the military. 19% of village deminers are self-taught according to the questionnaire data, and 10% learnt by watching somebody else (see Chart 4, p.32). However, the qualitative research discovered that many deminers who professed to be self-taught had also served in the military and had learnt on the job. This also applies to the 10% who claim that they learnt by watching somebody else. More often than not, this was from watching a colleague in the army.

A woman deminer in Doung village, Ampil Pram Daem commune, Bavel district, Battambang, learnt how to clear mines in 1967 during the Sangkum period when she was part of the Women's Resistance troops stationed in Stung Treng. In 1987 she was working as a cook for a Vietnamese soldier, who also taught her how to clear mines.

Although village deminers are not trained in western techniques of mine clearance, and to the same safety standards or procedures of international operators, village deminers do possess a certain degree of localised knowledge about mines, mine deployment and mine clearance, derived from their experience as soldiers. Often they are familiar with certain types of mine and with the deployment tactics of the different factions during the war. They can frequently describe in detail how different types of mines were laid and the make-up of mine lines according to who had laid them. Different factions laid different types of mines, but because the military were involved in both laying and clearing mines, soldiers learnt about the mines used by the enemy forces as well as their own. The local knowledge of village deminers often derives from the fact that they were deployed in the military in the areas where they are now settling. It was not uncommon for the research team to meet village deminers who were clearing mines they had laid themselves during the war. Having been involved in the tactics of laying and clearing mines, they were well aware of types of terrain where mines are commonly laid.

[16] Several village deminers reported that they had learnt to clear mines in the border camps. It appears that basic demining skills such as prodding and feeling for tripwires was taught to camp residents to prepare them for their return to Cambodia. MATT (Mine Awareness Training Teams), funded by World Vision, derived from the Land Mine Awareness Programme (LMAP) which operated for two years on the Thai-Cambodian border with the support of the International Rescue Committee (IRC) and the UN Border Relief Operation (UNBRO). Both MATT and MAG, in the early 1990s taught prodding as part of their mines awareness campaigns, so that villagers would be able to rescue victims, or to find their way out of a minefield (see Aitkin, 1993: 12 & 27).

CHART FOUR

Where they Learnt to Clear Mines

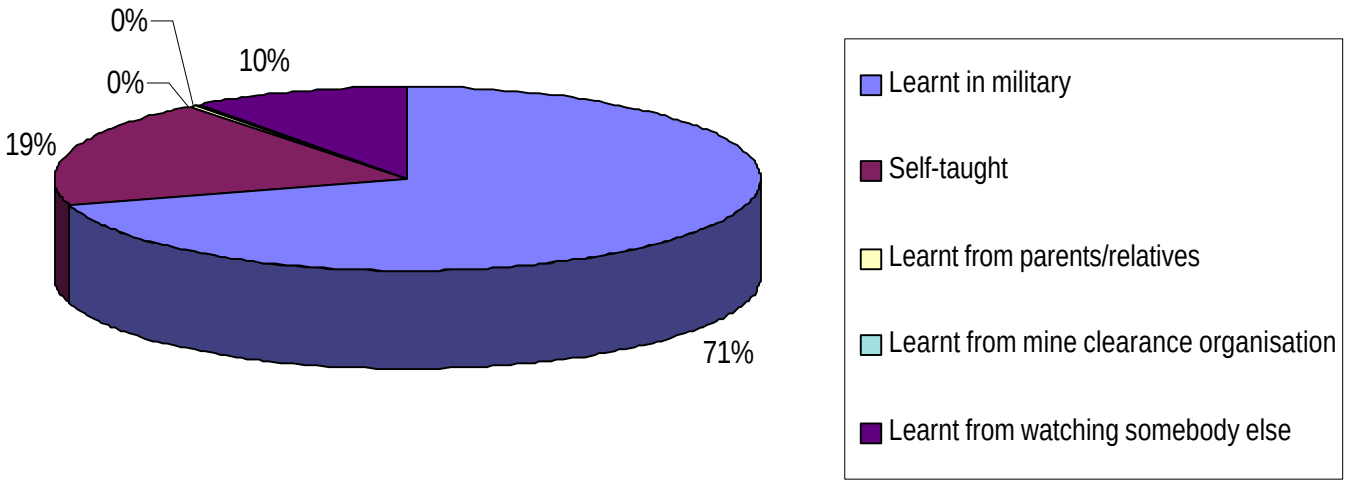
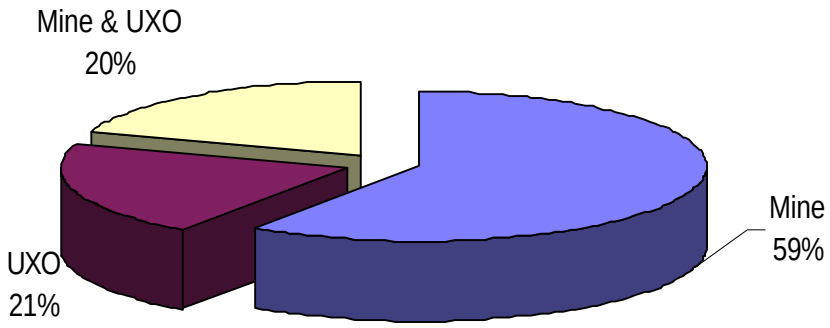


CHART FIVE

Type of Device Cleared



3.6 Devices Cleared

The greatest majority of village deminers, according to both the questionnaire data (see Chart 5, p.32) and the qualitative data, mainly clear mines rather than UXO. To clarify this further, village deminers tend to clear APM rather than anti-tank mines. This is because APM are often laid on or near to the surface of the ground, and they are easier to see by eye and to remove with the tools available. The most common types of mines that villagers removed were the PMN, PMN2, POMZ-2M, PMD-6, Type 72A and the Type 69.

The village deminers interviewed tended to differentiate between the different types of mines, and spoke of some as being easier to clear than others. These beliefs were surprisingly consistent. The POMZ-2M was often said to be "out of date", or at least was perceived to be less of a problem because it was laid on the surface, was easy to see, and had often been detonated already when land was burnt for cultivation. In addition, the tripwires and wooden stakes had usually decomposed in the humid climate, or been destroyed by fire. The wooden PMD-6 mine was also said to be relatively easy to clear because exposure to ground water and humidity had decreased its' effectiveness and decayed the box casing. The PMN-2 and Type 72A mines were commonly cleared by villagers and were said to be relatively easy to clear once found, as long as the deminer avoided touching the pressure plate at the top of the mine.

Above: A village deminer holding a PMN-2, a mine type commonly cleared by villagers. Bavel district, Battambang province

The improvised fish-can mines, largely laid by Vietnamese troops, were generally considered to be inactive because they had been exposed to weather and ground water. The improvised mines favoured by the Khmer Rouge and made from 60mm or 80mm shells, were also thought to be less of a problem to clear as the vines suspending them from trees had long since been broken or burnt.

Almost without exception, the village deminers interviewed felt that one of the most difficult mines to clear was the Type 69. With a large metal content it is prone to rusting through exposure to the elements, and the parts become unstable and difficult to move or dismantle. Unlike the POMZ-2M, the safety pin is often less secure and there is a lot of risk involved in neutralising or disarming the device. Most of the village deminers said that this was the hardest mine to clear, and that if it exploded it would cause severe injuries.

Anti-tank mines are problematic for village deminers to clear simply because they are often laid deep in the ground and are difficult, if not impossible, to detect by prodding. However, they were often seen as being less of a threat to livelihood activities as they tend to be found on roads rather than on farming land or in the forests. They are an obvious threat for villagers travelling in ox-carts or tractors, and there were several reports of villagers having been injured or killed by anti-tank mines in this way. If village deminers are able to find anti-tank mines, they are usually able to clear them with relative ease.

UXO did not appear to be such a widespread problem to the villagers interviewed in the study areas. This can be explained partly by the fact that, with particular reference to the research sites in the north-west, the deployment of UXO is less than that of mines, although there are still problems with large ammunition stores found dotted around the countryside. It may be true that in other areas of the country with heavier UXO contamination the situation would be different.

However, in the north-west it was apparent that there is less knowledge about UXO compared to mines, and village deminers believe that there is more risk involved in moving them because they perceive them to be more unstable. Most village deminers, when they come across an UXO, would either lift it out of the way, burn it in situ using firewood, or simply leave it in place and continue to farm around it[17]. In O'Chrou district, Banteay Meanchey province, the research team met with a village deminer who had found an UXO at the edge of his field. Although he had already cleared his land of mines, he would not touch the UXO, but had reported it to CMAC, which was stationed at a nearby village. The following day CMAC staff came to remove the UXO. It appears that many village deminers do leave UXO alone[18] and report them to the EOD teams for clearance. This appears to be a good system, although there were also reports that some villagers had had UXO in their field for years. The main problem here, however, appears to be one of not knowing that there is an organisation or a system in place for reporting such finds.

[17] Similar findings were reported in the HI-B national survey on UXO in Laos. Farmers were said to be generally very cautious when working near or moving unexploded ordnance (HI, 1997:33)

[18] Figures from the MIDP Bi-Annual report 1998-99 [2000:35] show that tampering incidents involved, almost exclusively, UXO, while incidents involving mines were more often associated with livelihood activities. In addition, children were more likely to be injured than were adults (MIDP, 2000:vii). In the north-west of Cambodia children recently injured by tampering with UXO explained that they liked to remove the powder inside the UXO and then to burn it because the colours during combustion were pretty (Andrea Crossland, personal communication).

Chapter Four

Findings - Motivations

"The existence of these individual deminers, most of whom risk their lives without any formal training and with no recourse to either the technical equipment or the back up systems deemed to be vital for proper mine clearance security, may be an indicator that the land mine problem in these areas is an immediate threat to the livelihood of local communities and individuals. Spontaneous local demining may in fact be demining for survival."
(Howell, 1996:1)

Despite the fact that village mine clearance activities were noted in the early 1990s, it is perhaps not surprising that they still continue today. Village mine clearance activities are essentially demining for purposes of survival. There are several factors at play that contribute to the pervasiveness of mine clearance activities by villagers.

4.1 Accessing Resources

Villagers in rural Cambodia depend on agriculture for their livelihoods, supplemented by activities such as fishing or the collection of forest products like bamboo, grasses for thatch, vines and vegetables. In areas contaminated by landmines, it is often the access to these vital resources that is affected. There are a number of strategies that families can, and do, adopt to overcome serious income and consumption shortfalls. However, the presence of landmines in any area that offers potential income generating or livelihood support, increases the risk for these families and complicates the strategic decisions and planning necessary to survive. The vulnerability of people living in the north-west of Cambodia is increased because of the effects of the long term insecurity of the recent past. A large proportion of the population has been transitory due to the ongoing conflict, and few, if any, have existing resources or support systems to draw upon. Village structures have been disrupted by survival-driven relocation and many communities are no longer able to rely on the deeply rooted relationships between neighbours and family that once provided security and support.

Most people who are involved in demining activities in the north-west are relatively poor. They often have no land, or very small pieces of land, and demining is a necessary activity for them in order to be able to support their families, usually through clearing, or extending small plots of farming land.

"Today my family earns a living by doing farming. As far as risk is concerned, I think it is very dangerous for a man to work as a deminer. But if my husband does not clear mines, my family will have no ricefields and we will have no way to make money to support the family."
(Wife of Village Deminer, Ta Taok village, Ta Taok commune, Samlot district, Battambang province)

In some of the upland areas of the north-west, for example in Samlot district in Battambang province, some villagers practice upland *chamkar* farming whereby they farm several different plots of land in a rotational fashion, allowing the land to lie fallow between cultivation. This means that many of these villagers have to clear mines on each of their plots of land, although

the practice of burning the fields before cultivation to clear the undergrowth perhaps helps to detonate some of the mines.

Village deminers often clear mines on the paths to common property resources such as forests, grazing lands and water resources, as these resources are vital for subsistence livelihoods, particularly during the lean periods in the dry season when rice supplies are at their lowest. During this time, many rural families are involved in the collection of forest products such as bamboo, bamboo shoots, vines, fuelwood or grasses for thatching as a supplement to their livelihoods. In Pailin villagers also reported clearing mines from paths so that they could access areas to dig for precious stones.

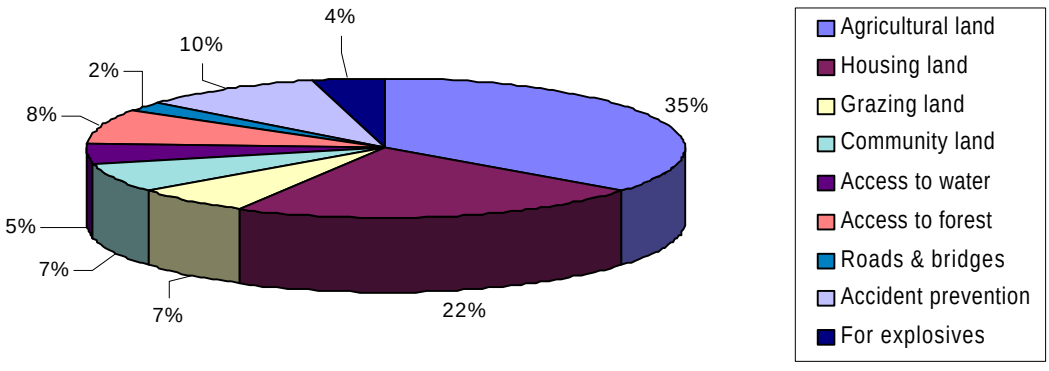
Left: Access to forest areas is vital to many families who rely on the collection of fuel wood and the making of charcoal for their livelihood. O'Chrou district, Banteay Meanchey province.

"Mines are the enemy of human beings, but I still go to work in the minefield as I need to support my life especially through cutting wood – if I don't go I have nothing to eat. It is a high risk activity but I have no choice."
(Village Deminer, Kdop T'mor village, Kok Romiet commune, Thma Pouk district, Banteay Meanchey)

According to the questionnaire data, **35%** of village deminers clear mines for agricultural land, and **22%** clear for housing land. 8% clear mines to access forest areas, and a further 7% reportedly clear for community land (see Chart 6 below)**.** The findings of the qualitative data suggests that clearing for communities usually consists of clearing public paths and tracks to common property resources such as forest areas and water sources, or to farming land, rather than clearing areas for community infrastructure such as schools, Wats or wells. This perhaps has some bearing on the perception of villagers as regards the priorities of integrated demining and development projects, as will be discussed later in this report.

CHART SIX

Reasons for Clearance



4.2 Lack of Alternatives

Lack of nearby exploitable resources can mean, among other things, cyclic off-season migration to cities to seek work. Such alternative income generation activities may help to reduce the reliance of communities on mine-affected resources, but may also, in the longer term, lead to increased vulnerability. Villagers living in some areas close to the Thai-Cambodia border have been drawn to this area for the very reason that alternative income generation activities are possible, and many have been able to work as itinerant labourers in Thailand. However, such work is notoriously high risk and insecure. Some have spent spells in Thai prisons, and at other times the border crossings are closed, cutting people off from this additional source of income and forcing them to turn to collection and foraging activities in mined areas.

Border Problems

Prei Chan village is located in O'Chrou district close to the Cambodian-Thai border in Banteay Meanchey province. The village has long been a location of intense fighting, and is now heavily mined with very limited land for housing and no agricultural land. For several years now the majority of the villagers have worked as itinerant farm labourers in Thailand.

Early in 2000 the Cambodian and the Thai Governments decided to close the border crossings in O'Chrou district due to the increase in robberies committed by armed gangs operating on both sides of the border, and simmering border tensions. Unable to work in Thailand, the villagers have been left with little choice but to eke out a livelihood from the surrounding natural resources, the majority of which are affected by mines. Villagers have been clearing mines on the pathways to the forest and to the areas where they collect thatch. In nearby O'Beijoun village, villagers have returned to farming, and many have been forced to clear their agricultural land of mines.

4.3 The Demand for Land

In the north-west of Cambodia, where the contamination of landmines is the heaviest, the demand for land is intense, particularly along the border. In some areas the villagers have been demining since the early 1990s, and some of these villages have no active demining now because the villagers have already cleared enough land for housing and agriculture. However, in some of these older settlements the villagers continue to clear mines in order to extend their agricultural holdings. In other areas, demobilized soldiers, returnees, IDPs and newcomers are in the process of settling in areas contaminated by landmines, and the demand for mine-free land appears to be on the increase. This is perhaps accentuated by the fact that the farming land in the north-west of Cambodia is considered to be particularly fertile, a factor that still draws people to the region despite the presence of mines[19].

The availability of mine-free land is not only hampered by the increase in population in the area, but also by the fact that despite the promise of peace and stability that came with the Paris Peace Agreements in 1991, fighting between the different Cambodian factions continued sporadically up until 1998. The Royal Cambodian Armed Forces waged seasonal campaigns against the Khmer Rouge up until 1997. This involved new mines being laid as the lines of defence shifted. During 1997-8 factional fighting erupted between the FUNCINPEC and CPP parties, and in certain districts in Battambang province, villagers reported that mines were laid again, and so they had to re-clear the farming land that they had cleared previously.

[19] In the 1960s Battambang was at the centre of the country's commercial agricultural success.

Land grabbing by powerful people is increasingly playing a large part in the perpetuation of landlessness and as a result forcing people to live in or near mined land, thus encouraging some villagers into mine clearance activities. In Poipet commune, Banteay Meanchey province, there are numerous examples of people being evicted from land in the centre of Poipet and moved onto land suspected of being mine contaminated[20]**.** This illustrates the lack of security and ownership that villagers have over land, even if it is mined. Sometimes villagers feel "safer" if they settle on mined areas as they believe other people will be less inclined to seize their land. One of the concerns of village deminers is the fear that once they have cleared their land of mines it will be taken away from them by powerful people, or, in some cases, by the original landowner.

Land Insecurity

Kabal Laan in Bavel district, Battambang is an area of bamboo thickets where thirteen families have been living for eight months. The families make their living by cutting the bamboo to sell, and they have made clearings within the thickets and built houses from the bamboo. Cut bamboo is stacked at the roadside awaiting transportation to market. However, the whole area is literally littered with PMN-2 mines. The villagers have cleared the mines from their housing plots and from the paths to reach the bamboo. However, they only clear the mines that directly impede their livelihood activity. As one village deminer explained, "Although I know there are mines all over the land, I do not demine in other places because this land is not ours. If I clear all this land I will be told to leave, as the owner of the land is only afraid to live on the land when there are mines here."

4.4 Clearance Capacities and Priorities

Mine clearance activities by villagers in the north-west is ultimately a strategic response to these above environmental and economic conditions by a section of the population who have the ability to draw on existing knowledge and skills. Professional mine clearance by NGOs and agencies has helped to reduce the severity of the situation, and land has been cleared for roads, resettlement, and agriculture in many areas. However, village deminers frequently claimed that they had to clear mines because they could not wait for the mine clearance organisations to clear the land for them.

Left: A plot of land cleared by villagers for cultivation before professional mine clearance, O'Chrou district, Banteay Meanchey province

The resources and capacity of organised mine clearance activities in Cambodia means that it has been impossible for mine clearance to respond to all the needs of rural villagers living in mined areas. Villagers may have to resort to clearing mines because they need immediate access to the land and resources in order to support their families. As already discussed, when there is a lack of alternative livelihood options, this is a decision over which they feel they have little choice. In terms of access to resources, families who have a household member capable of carrying out demining activities are perhaps at an advantage to those families who do not have this ability.

[20] See Care Cambodia Report Poipet Eviction Update 3rd August 2000

In numerous areas visited by the research team villagers were living in areas that were marked as mined areas. Often they had cleared the mines themselves.[21] In some areas the villagers reported that there had been areas marked as mined, but the signs had been put up so long ago they had since rotted or fallen down, or the villagers themselves had used the signs for fans and the posts for firewood. In some cases village deminers complained that when the organisations did finally come to clear land in the village, they had simply re-cleared the same land as the village deminers had cleared sometime earlier. This was usually land within the village for housing plots, or paths to access community resources such as water.

Linked to the fact that village deminers feel they cannot wait for mine clearance organisations to clear the land for them is the fear of accidents. Ten per cent of village deminers were reported to clear mines for the primary reason of preventing accidents, according to the questionnaire data (see Chart 6, p.36). However, the qualitative research found that this was usually an underlying motivation of all village demining. The fear that family members will step on mines on their farming land is an important motivation for many village deminers. Although they realise they put themselves at risk by demining, they feel there is a greater chance that their family, or other villagers, will be injured by stepping on mines accidentally.

Village demining may also take place in villages where professional mine clearance is, or has been, operating. The questionnaire data revealed that village deminers were present in exactly half of all the villages surveyed, and that among the villages with village deminers, **73%** had also had mine action at some point in time (see Chart 7, p.40). A good proportion of this mine action was admittedly survey and mine field marking, but 18% consisted of mine clearance.

Even where mine clearance is operating in a village, village demining may still occur during or after these operations because the clearance does not match the priorities, or expectations, of the villagers. The prioritisation of mine clearance organisations is often guided by the aim of conducting clearance in areas with the greatest humanitarian return. Village land that is cleared by mine clearance organisations is frequently neutral community land such as roads, school fields, wataramS[22], or land around pump wells. Such clearance strategies also assist the government and NGOs to perform activities linked to rehabilitation and development. Although these areas are perceived useful as a whole to the villagers, and serve to reduce risk, they do not always respond to the individual livelihood requirements of the villagers. Marginal land towards the edge of villages where the most vulnerable are likely to be found may be overlooked, and zones vital for potential income generating activities such as forest land, are notoriously difficult to access by demining teams and are considered lower priority in terms of cost effectiveness.

The most frequent request for clearance amongst the villagers interviewed was for rice fields and *chamkar* land. In one village visited by the research team land was being cleared, apparently for a school and in collaboration with an NGO, but not even the village chief could tell us who the NGO was and who had organised the work. He, himself, was in the process of writing a request for the village farming land to be cleared.

"We certify that there are a lot of mines in our village and so we all wish to get the chair of the district development office to deal with this problem. The 111 families living in this village have rice fields and chamkar on land with mines."

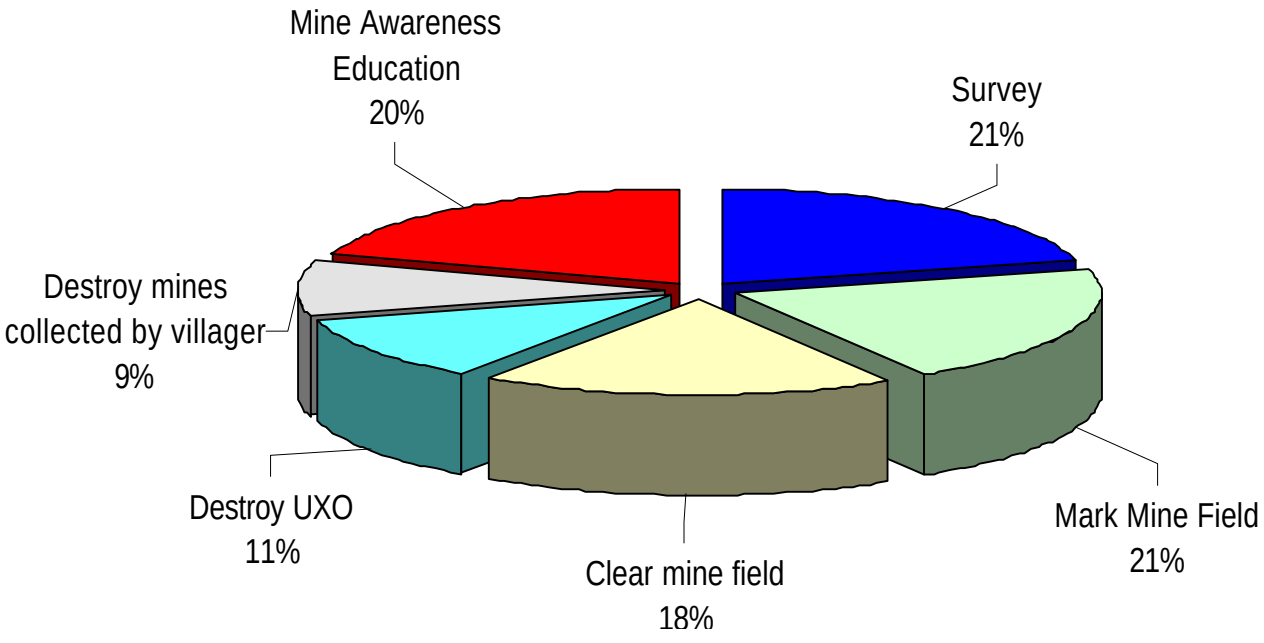
[21] Horwood & Crossland also discovered similar situations during their evaluation work. They write, "it does question whether resources used for marking (without clearance) would not be better used for small task clearance (with subsequent) marking" (2000:8)

[22] Land belonging to a Wat or Pagoda

CHART SEVEN

Village Deminers and Mine Action

Type of mine action in villages with village deminers



Some village deminers also reported that they cleared mines on their land because they were afraid that if their land was cleared by an official mine clearance organisation it would be handed over to the authorities and redistributed to other villagers, particularly newcomers. This was a relatively common statement in areas where newcomers were being resettled alongside families who had settled by themselves and cleared their own land of mines. Many of these families felt that if their land was re-cleared by an organisation they would lose their land, or their land would be divided among others, leaving them with only a small piece. The fact that land cleared for resettlement is often distributed through a lottery system to the beneficiaries was also a worry to these families as it meant there would be no guarantee that they would receive good quality land if this were to happen.

Halo Spade's Story

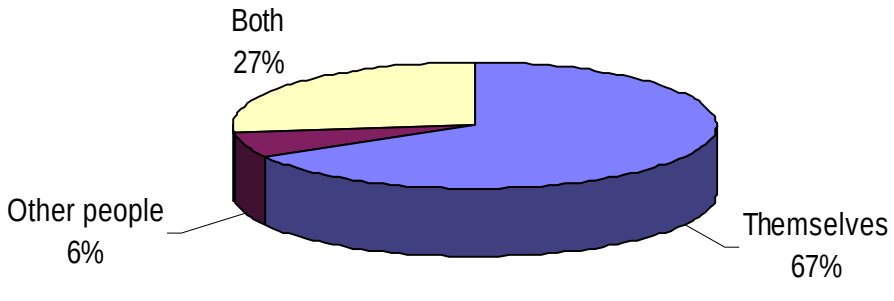
"Halo Spade" is a village deminer. He has lived in Boeung Trakoun village, Thma Pouk district, Banteay Meanchey, for three years, although he has been based in the area as a soldier since 1979. Together with nine other families, he has cleared mines from land for housing and agriculture in an area next to the Thai-Cambodia border. However, the local authorities have now asked these families to move from the land as they say it is an "anarchic" area. Nearby in the village mine clearance is happening for resettlement plots. The families don't want to move as they feel that they have invested time and effort in clearing the land, and they have established crops and fruit trees. The land they have cleared is larger than the resettlement plots, and most of these plots have already been allocated owners already, so they do not know where they would go if they were moved. They would like to continue clearing mines from their land, but now they have stopped. They do not want to put time into clearing mines from land that they may lose in the near future.

4.5 Working for Others

Despite the overwhelming need for mine-free land, villagers involved in mine clearance activities rarely clear mines from the land of other people as a means of income generation. According to the findings of the research, villagers generally clear mines because of personal livelihood needs rather than as a means for alternative income generation. **67%** of village deminers reported in the questionnaire clear mines for their own purposes. 27% clear both for themselves and other people, and a mere 6% clear solely for other people (see Chart 8 below).

CHART EIGHT

Who they clear for



The most usual scenario is for village deminers to help remove mines when other villagers find them but are unable to remove them by themselves. This is generally done in the spirit of helping each other, and the village deminers rarely receive any sort of payment for this. In the same way, village deminers often clear mines from public paths to common property resources such as forest or water resources, although these actions, despite benefiting the wider village population, derive from personal need and do not appear to result in payment. In a few cases villagers had cleared mines from the land of other people in return for being able to farm that land for a set number of years, usually two or three.

"Those men used to be soldiers and so they know how to clear mines. They clear mines on land for chamkar, for planting corn and rice. They clear mines for their own use. Sometimes, when other people find mines and cannot remove them, they must call the village deminers to clear for them."
(Village Chief, O'Chrap village, Samlot district, Battambang province)

Village deminers sometimes sell their services for money. The research team came across ten instances of village deminers working for others for payment. Prices for renting vary, and village deminers may be paid by area of land cleared, by days worked, or by the number of mines/UXO removed. Among the sample of ten, prices paid for mine clearance ranged from:

- 25,000 riel (US $6) to 50,000 riel (US $12) per hectare
- 1,000 riel per mine (25 cents) to 5,000 riel (US $1.20) per mine
- 10,000 riel (US $2.50) to 150,000 riel (US $38) per day. This latter sum was paid to a village deminer clearing land in Thailand and using a metal detector.

Generally, clearing mines for money seems to be a sporadic activity, and not one that brings in a regular income for the majority of village deminers. There are several, often related, reasons why village deminers commonly do not clear mines or UXO for other people. The major reason appears to be the uncertainty involved in mine clearance. Many village deminers expressed the concern that if they cleared land for somebody else they would be accused if an accident later occurred on the "cleared" land. This also relates to the worry that if they are injured themselves while clearing mines for others, it would be difficult to claim compensation or financial assistance.

"The reason why I don't clear mines for other people is that although I am willing to die on my own land, if I lose my life clearing mines on someone else's land I will be accused of being proud."
(Woman deminer, Doung village, Ampil Pram Daem commune, Bavel district, Battambang province)

These grey areas in terms of responsibility and accountability are strong factors in dissuading villagers from clearing mines for others. It also has to be remembered that the majority of village deminers are farmers, and thus have a workload, which in reality leaves them little time for clearing mines for other people. They will clear mines during the course of their daily livelihood activities, but the majority will not stop these activities to work full-time as deminers, perhaps because of the insecurity of the work. A final point is that although there is a demand for mine free land within villages, few villagers are able to afford to pay for the services of village deminers to clear their land. The majority of village deminers who were being paid for clearance work were working for landowners living outside of the village.

Organised Village Demining in Krong Pailin

In Pailin an unusual case was found at Psa Prum Dein village in Sala Krau district. Here the villagers are living on lands from which they will be evicted in the near future. To resolve the situation, the Deputy Village chief has organised a 76 member team of village deminers to clear land for a new village settlement. The demining started on 24th October 2000. So far the teams have cleared road access to the new village area. They will then clear housing plots (20x100m) for more than 300 families. The team has only one machine to cut the small trees on the road. They do not have any metal detectors but use hoes, spades, prodders and knives to clear the mines. Each village deminer is provided with 100 baht – 120 baht (10,000 riel – 12,000 riel) a day according to experience, and each family who will live in the new village provided 500 baht (50,000 riel) towards the demining costs. As one of the village deminers involved in the initiative explained, "I clear mines for money to feed my family. I also clear mines on the paths to allow the local authorities to access land for the new village as people are being moved off the land where they now live." Through his mine clearance activities he has earned some money to support his daily living, and he will receive a housing plot. But he thinks that if he is injured or killed during mine clearance activities his family will face many problems in their daily life. When the team visited the deminers in November 2000, one of the village deminers had been injured when he stepped on a mine.

Below: A group of the village deminers in Sala Krau district, Krong Pailin, who are clearing land for the resettlement of evicted villagers.

4.6 Secondary Benefits

"Mines are also being used by civilian population (sic), as well as by soldiers, for security, for fishing, and for excavation and other non-military purposes such as the sale of the scrap metal they contain."
(Aitkin, 1993:5)

As a by-product of clearing mines or UXO, village deminers may also make a supplementary income through the sale or use of mine or UXO parts, such as the metal casing or TNT. However, the research findings demonstrate that this cannot be considered a main motivation behind village demining activities today. People clear primarily for access to resources, and are then able to derive additional benefits from the activity if they so wish.

Many villagers, in particular the former soldiers, used TNT or mines in the past for fishing. Some villagers used actual mines, while others constructed improvised mines out of fish cans and TNT. This appears to be less common today. **78%** of village deminers do not use TNT according to the questionnaire (see Chart 9, p.45), although the 22% who still do use explosives extracted from mines and UXO use them mainly for fishing. However, many villagers said they have now

stopped fishing with mines and TNT, either because they have heard that it is against the law, or because they have stopped clearing mines. It seems that the local authorities have been quite effective in influencing the cessation of this activity in many places. In other cases villagers had stopped fishing in this way because friends had been killed or injured in the past. However, in some villages people are still fishing using mines or TNT. Some village deminers were able to describe in detail how they dismantled mines to extract the TNT and constructed improvised mines for fishing. TNT is sometimes extracted from mines for other purposes. In one case a village deminer said that he used TNT as a fire lighter, and another said it was used as a remedy for skin infections. In one village in Banteay Meanchey, TNT was, until quite recently, used to fill in the blemishes in wood that was being sold to Thailand.

The selling of mine or UXO casing for scrap metal is not common now (see Chart 9, p.45), and certainly appears to have always been a relatively minor activity in the north-west. **92%** of village deminers do not make use of scrap metal from mines or UXO according to the questionnaire data. Villagers often described the selling of mines for scrap metal as an activity carried out by children, who were then able to buy candy with the money. The prices for the sale of metal are relatively low, for example the casing from a POMZ-2M or a Type 69 would typically fetch 100 or 200 riel per mine, although brass content would raise the price. The selling of mine casing for scrap metal appears to have been a more common activity several years ago, presumably because there were more of these types of mines around. It was rarely mentioned that UXO were sold for scrap, and occasionally empty UXO shells could be seen lying around villages. Anti-tank mines could be sold for 5000 riel as scrap metal, and in a couple of cases complete anti-tank mines were sold to people from stone quarries for 10,000 riel per mine.

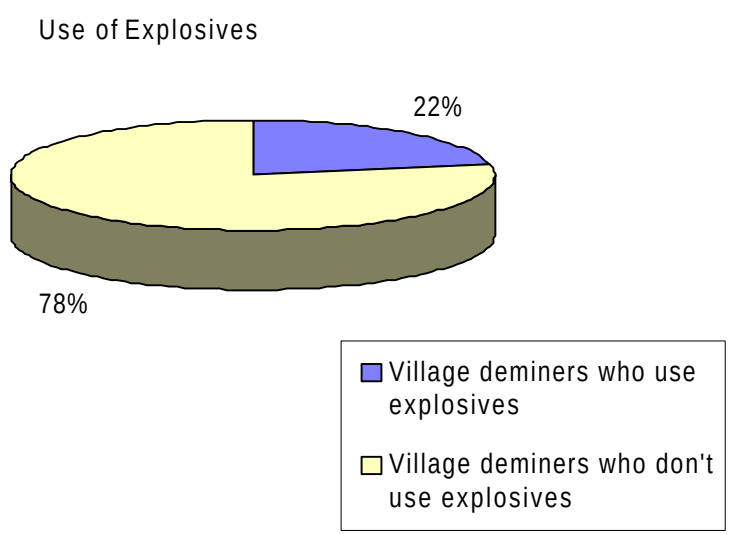
Cambodian villagers tend to make good use of any materials at hand, often re-using items for different purposes than they were originally intended. The minority of villagers who do re-use scrap metal use it for a variety of purposes, including making tools or selling it on (see Chart 9, p.45), although again it is likely that the extent of these activities has decreased significantly in more recent years. One village deminer in Boeung Trakoun village in Banteay Meanchey, kept the casing from Type 69 mines to repair piston rings on motorbikes. One woman deminer used to dismantle mines and decorate cow chains with brass pieces from detonators. Casings from anti-tank mines were occasionally observed in villages, serving as feeding bowls for animals.

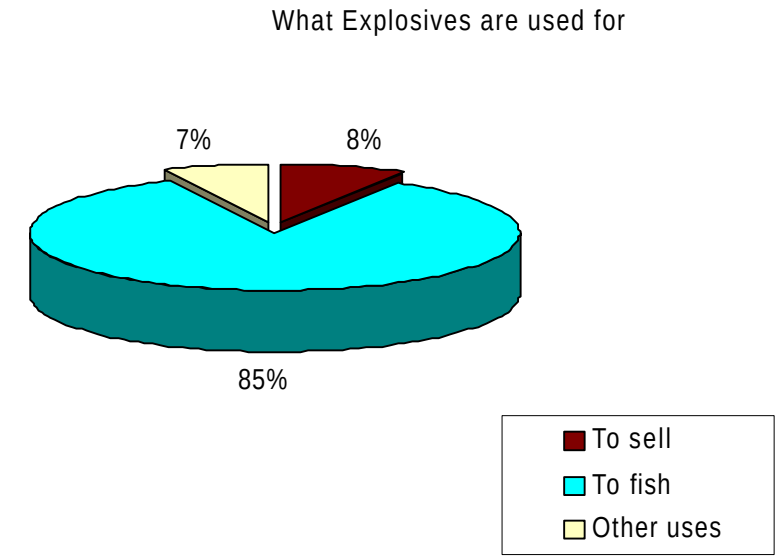
In two cases village deminers reported that they were keeping mines because they had heard that mine clearance organisations would give them money in return for the mines. This perhaps indicates certain confusion about the messages being given by professional mine clearance organisations. In Santepheap village, Malai district, a village deminer had two anti-tank mines at his home as he believed that the organisation would give him $30 for each mine. In O'Neang village, Poipet commune, Banteay Meanchey a village deminer said that a mine clearance organisation had promised they would buy fish can mines at 25 baht (2,500 riel) per mine, but that he had never received the money.

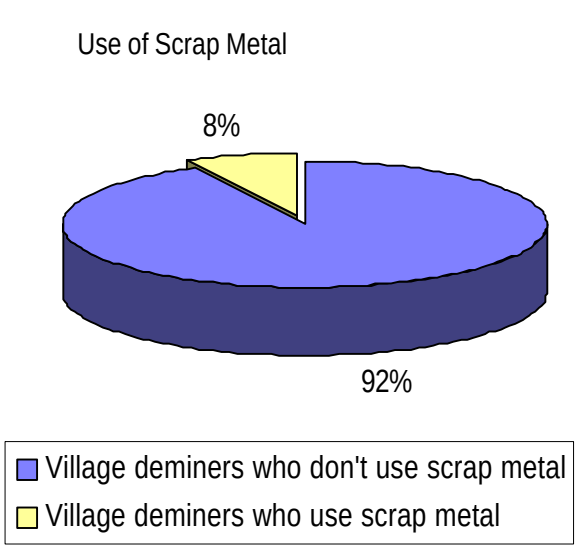
Left: Village deminer with two anti-tank mines he is storing at his house until he can give them to a mine clearance organisation. Santepheap village, Malai district, Banteay Meanchey province

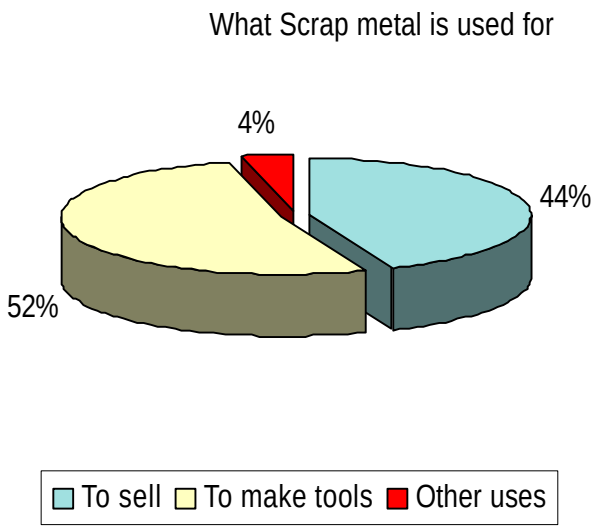
CHART NINE

Use of Explosives & Scrap Metal









Chapter Five

Findings – Tools and Techniques

In terms of western standards of humanitarian mine clearance, village mine clearance is a hazardous, high risk and inadequate practice. Village mine clearance practices differ from professional demining practices in several pronounced ways. The most obvious difference is in terms of experience, training and equipment. Although village deminers may have years of military experience and local knowledge as regards the deployment of mines in the locality, most village deminers lack mine clearance equipment and professional training. This is reflected in their clearance methods, which, without doubt, place the village deminer in situations of much higher risk than their professional counterparts would ever experience[23].

5.1 Equipment

Village demining is, like much humanitarian mine clearance operations, a manual, time consuming process. The villagers have no recourse to sophisticated equipment, nor to any formal system of logistical support or medical backup. They have no protective clothing. Village deminers use everyday farming tools to clear mines, equipment which lacks much of the sensitivity of professional mine clearance tools. The usual equipment of a village deminer consists of a hoe, a prodder (a metal rod or a bamboo stick scooped into a point at the end) and a knife. Vines or thin strips of bamboo may be used for feeling for tripwires.

A very small number of village deminers use, or have used, metal detectors. These may be borrowed or rented from military units, although in one case the research team met a village deminer who had actually purchased a detector with the view to making mine clearance a more profitable income generating activity. Although the detector allowed him to clear larger areas of land more quickly, the machine was perhaps of dubious quality, and he had had numerous problems with its' maintenance and repair. Detectors are also expensive in terms of initial purchase and running cost in comparison to the money the village deminers are able to earn by renting themselves out.

The Cost of Metal Detectors

A village deminer in Santepheap village, Malai district, Banteay Meanchey bought a metal detector in Vietnam. It cost him 5000 baht (500,000 riel) including transport and accommodation. The detector was second hand and he bought it with his own money. He was able to buy 12 batteries in Thailand for 1,700 baht (170,000 riel), and he would use 4 batteries in 2 days. However, the metal detector was affected by water. He was unable to repair it and so he dismantled it and sold it for scrap metal. Now he has no money to buy a new one.

In some cases the use of metal detectors appears to have increased land disparities within villages. Village authorities or local military commanders have been able to rent metal

[23] Professional mine clearance works to Standing Operating Procedures (SOPs), which detail the manner in which specific mine clearance operations are conducted in line with internationally set standards. The intention of this research was not to provide a technical comparison between Cambodia's SOPs and the methods of the village deminers. Such an exercise would be largely futile as village deminers lack the resources and capacities of demining platoons. However, knowledge of SOPs as being formulated for Cambodia did help the researchers to assess certain aspects of the safety and risk of village demining activities.

detectors and have thus been able to clear a lot of land for their own agricultural purposes. Ordinary villagers often don't have the access or financial capabilities to rent detectors, and so continue to clear mines with farming tools from smaller areas of land.

There were also a few reports of villagers hiring bulldozers to clear land for village settlement and agriculture. This seems to have been a particularly common practice in the former Khmer Rouge areas of north-west Battambang and in Krong Pailin. It was reported by villagers in these areas that the practice provided more farming land for them and reduced the need for them to clear mines by themselves. In Krong Pailin the common motivation behind using bulldozers to "clear" land of mines was to gain access to gem rich areas.

5.2 Approach

Unlike mine clearance platoons, who will check the full extent of a suspect area, village deminers generally clear only those parts of the land where they believe the mines are laid, resulting in a "patch-work" type of clearance. This is based on their ability to see mines and their knowledge of where mines are laid in the village, knowledge that is often gained from military experience or from simply observing accidents. Whereas professional, humanitarian mine clearance measures activity in terms of area cleared with as close to 100 per cent safety as possible, the work of the village deminer is guided by this type of targeted approach with a higher mines to area ratio. Access to resources is the priority over complete safety of land, and thus relatively large areas of land will go unchecked by the village deminer. This targeted method of clearance makes it difficult to estimate the total area cleared by village deminers. Only the village deminers who have had access to metal detectors check the whole area of land for mines.

Above: Village deminers in Sala Krau district, Pailin, examining Type 69 mines they have removed from a pathway in the forest.

There is no cyclic pattern or regularity to village mine clearance activities, and villagers reported that they would remove mines whenever they came across them and it was necessary for them to do so. However, there seems to be a preference for clearing mines in the dry season, mainly as a result of practical considerations. The dry season is the time when farmers are clearing their land for farming, and thus it is a logical time for them to clear mines from their land. In contrast to the rainy season, there is less vegetation making it easier to see surface mines, plus the ground is harder, which, it is believed, makes it less likely for mines to explode if stepped on. Conversely, hard ground also makes it difficult for the deminers to prod with the required sensitivity and caution.

In some areas, for example in Pailin and in Samlot district in Battambang, farmers burn their land at the end of the dry season, which not only clears the way for cultivation, but may also set some of the mines off. Once the ground has been burnt, the deminers report that they have a clearer view of any mines lying close to, or on the surface.

"The reason I know where the mines are in the forest is because I see them by eye. But I cannot assume that the land I clear is safe – mines are deep in the ground too. Some mines are on the surface and may be destroyed by fire. But those that are deeper in the ground still work, so I have to pay attention."
(Village deminer, Kdop T'mor village, Kok Romiet commune, Thma Pouk district, Banteay Meanchey)

The dry season is also the time of year when villagers tend to go to the forest to collect forest products to compensate for dwindling rice supplies. Mines are often cleared on the pathways to access these resources at this time. Some village deminers do, however, prefer to clear in the wet season because the ground is soft and it is easier to prod for mines and then to dig them out of the soil.

5.3 Clearance of Pressure Mines

With the basic equipment that they have, village deminers generally clear mines that are on the surface or near to the surface, but not the mines that are deep in the ground. For pressure mines that are laid on or close to the surface, village deminers generally remove, disarm[24] and then destroy the mines through burning. Once the ground has been burnt the suspect areas are gently prodded with hoes or bamboo sticks to reveal the position of the mine. Occasionally villager deminers tap the ground softly with a stick, believing that a different sound can be heard when a mine is present. Mines may also be located by eye.

On average, village deminers prod to a depth of one or two *thanang dai* (3-5cm) to initially locate a mine. Once a mine has been located the surface soil is removed and the village deminer digs around the mine, often to a depth of one or two *teuk* (10-20cm), to check for mines that may be laid underneath the first mine. If a second mine is found, the deminer will check for connecting wires, which, if found, will be cut. The knowledge of deployment strategies gained during military experience allows many village deminers to prod strategically for other mines that may be laid in a line.

Left: A village deminer demonstrates how he prods for mines using a hoe. Rattanak Mondul district, Battambang

Once the deminer has checked satisfactorily for other mines, soil is removed from around the mine using a knife. The mine will be lifted out of the soil, usually by hand, and holding the mine at the sides and away from the pressure points. In a few cases village deminers had been taught to pick up the mine using a long-handled hoe, a technique which keeps the mine at a reasonable distance from the deminer, but which gives less control over the procedure and increases the likelihood of the mine being dropped. This was a method that was also used occasionally by other villagers who wanted to move mines out of their way.

[24] Disarm refers to the act of making a mine safe by removing the fuse or detonator. Neutralisation refers to the act of replacing safety devices such as pins or rods, into an explosive item to prevent the fuse or detonator from functioning. Removal of these devices would immediately make the item active again.

Above: A village deminer gently uncovers a PMN–2 mine using a knife and his finger tips. Photograph by Philippe Houliat, 1993

Above: A village deminer lights a grass fuse to burn a PMN-2 mine. Photograph by Philippe Houliat, 1993

Pressure mines are normally dismantled by unscrewing the bottom of the mine using a knife, and then unscrewing the whole of the mine into two parts and removing the drum and the firing pin. Some village deminers strike the mine hard on the top to break the detonator.

5.4 Clearance of Fragmentation and/or Bounding Mines

For fragmentation and/or bounding mines such as the POMZ-2M and the Type 69, the mine is again found through visual observation or superficial prodding, often after land has been burnt. This not only helps to detonate some of the mines, but also destroys the tripwires. Once the mine has been located the village deminer will examine the mine and the position of the safety pin. If the pin is rusty or almost pulled out, the village deminer will usually leave the mine in place, or collect firewood and burn it in situ rather than trying to remove it. If the pin is still secure, the village deminer pushes it firmly in place, while unscrewing the detonator. The body of the mine is then separated from the detonator and ground post, or in the case of the Type 69, the mine body is removed from the ground and the detonator removed. Once the mine has been neutralised in this way, the deminer may burn the mine parts, or extract the parts needed for further use.

"If the mines are hard to demine I will not clear them. I will just leave them in the place and collect wood, grass and small trees and make a fire to destroy them. If I am not able to destroy the mines immediately, I have to mark the area with danger signs, and then inform the other villagers not to approach the area." (Village Deminer, Sung I village, Sung commune, Samlot district, Battambang province)

5.5 Methods of Disposal

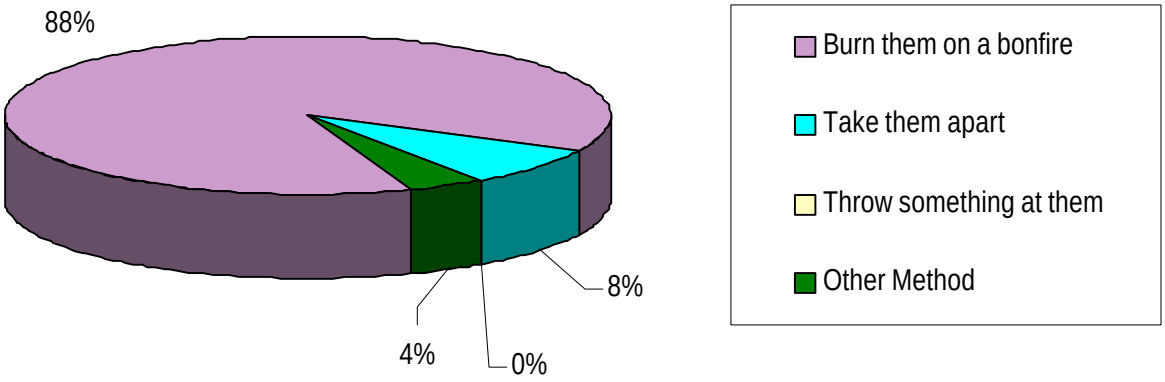
Usually village deminers dismantle the mines once they have removed them from the soil in the place where they find them (see Chart 10, p.51). The reason for this is that they later burn them, and by dismantling them they believe that the impact of the explosion is reduced, in addition to it being safer to handle the mines once they have been dismantled. In this way the village deminers are able to collect several mines together and then burn them at one time, a method which can make the demining process faster than if each mine is destroyed separately in situ. When the village deminer collects the mines together awaiting burning, they are placed in what are considered safe places, such as on the top of tree stumps or small hillocks. Some village deminers reported placing mines together and then surrounding them with thorn bushes or wooden stakes to prevent other villagers from touching them.

Burning is the most common method used to dispose of mines among village deminers (see Chart 10, p.51)**.** Mines are burnt in the fields or *chamkar* where they are found, and they are often burnt in the evening, when other villagers have returned to their homes. Firewood is placed beneath and around the mines, and dried grasses are placed over the top. Usually the fire is lit by using a fuse made of dried grass, which allows the deminer to light the fire and then leave the area before the fire takes hold. Generally village deminers do not use sandbags or ditches to contain the explosion while the mines are being burnt.

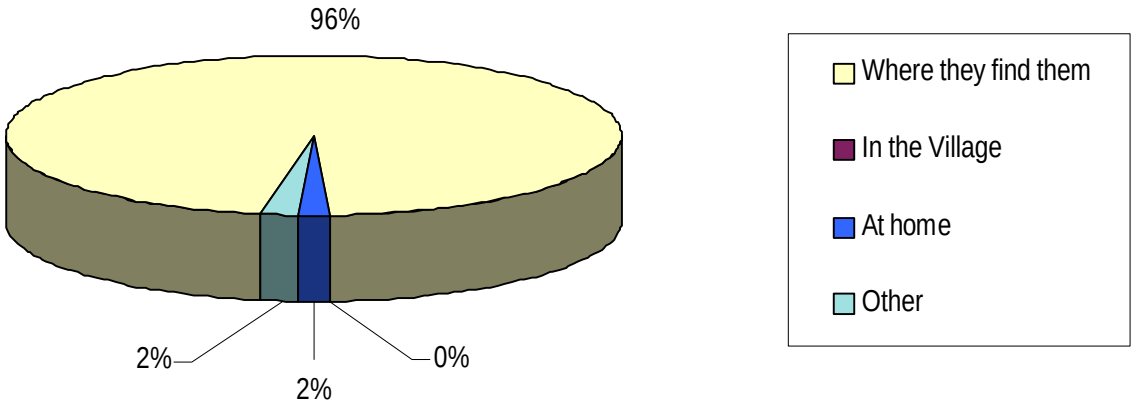
During the early 1990s it was documented that village deminers sometimes destroyed mines en masse, often by placing them in the middle of a large stack of wood which would then be burnt (Houliat, 1993c). Although mines are still burnt it appears that today they are not burnt in such great quantities, perhaps an indication in the decrease in the numbers of mines now found by villagers, and the sheer numbers of mines contaminating certain areas in the early 1990s.

CHART TEN

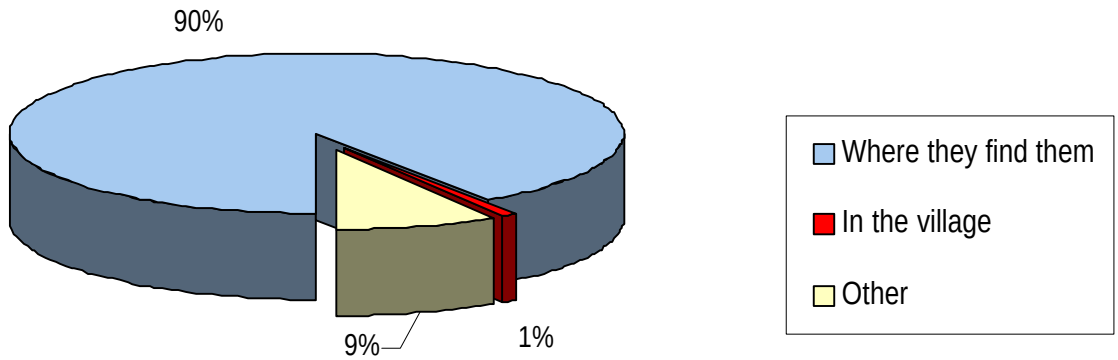
Destruction of mines/UXO



Where they dismantle them



Where they destroy them



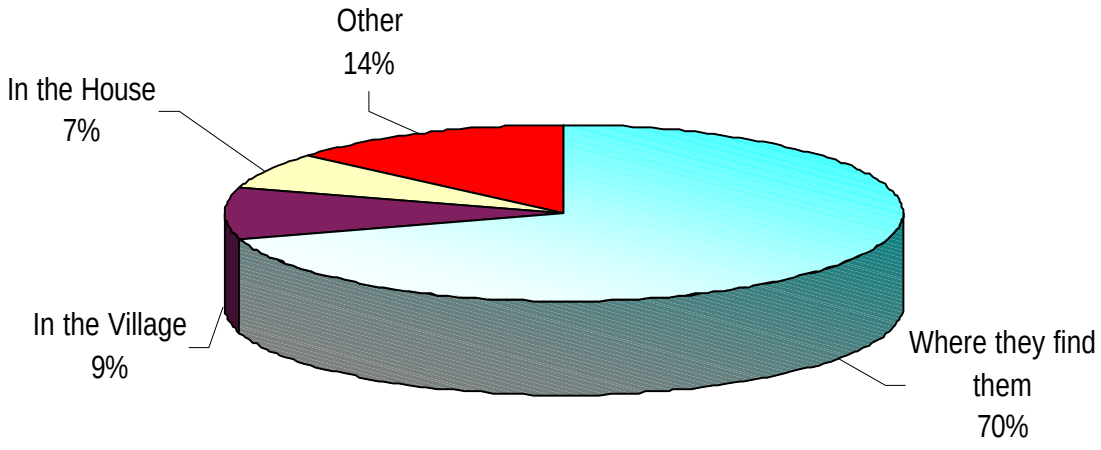
If villagers are unable to dismantle the mines, usually the case if they don't know the mine, or the mine appears to be unstable or rusty, they will then burn them whole, and often in situ. If village deminers are clearing mines along forest paths it seems to be a more common practice for the deminers to merely disarm the mine by dismantling, and then by throwing the parts away into the forest areas. This can have high-risk consequences, and there were a couple of reports of children playing with detonators that they had found in the forest.

In recent years some village deminers have altered their practices, generally in an attempt to adopt safer behaviour and as a result of increasing contact with mine action organisations. Some deminers reported that they used to burn mines by themselves, but now they only remove them from the ground and then keep them for mine clearance organisations to remove and destroy. In some cases the village deminers store the mines where they find them, usually in their fields, putting them in visible, "safe" places until they can be collected by an organisation (see Chart 11 below). However, some village deminers reported taking the mines back to their homes in the village and keeping them there until they are collected by an organisation, a practice which is obviously increasing risk both to the deminer and to other villagers.

Village deminers may also take the mines back to their house because they want to show the mine organisations or the authorities that they have cleared the mines, often as a way of drawing attention to their problem. If village deminers dismantle mines in order to use the TNT for fishing, they often take the parts of the mine back to their homes. Although they may keep the parts separately, this practice can be risky and bring other family members into contact with the mines, an issue that will be discussed further in the following chapter.

CHART ELEVEN

Where they store Mines



Chapter Six

Findings – Safety and Risk

"With regard to bravery, there were clearly two sorts of "brave people". The first group comprises the foolish brave, including one young man who had never seen a mine but who said that if he found one, he would defuse it and then destroy it by shooting it with a rifle. On the other hand, there are also mature, thinking people, who are genuinely courageous, and who, for the sake of their communities, have taken calculated risks."
(Biddulph, R [July 1993] CMAC-UNESCO Battambang Mine-Awareness Survey Report quoted in Aitkin, 1993:58)

6.1 Personal Safety

The risk undertaken by village deminers is substantial. Village deminers put themselves at risk because they enter minefields, because they clear mines by eye and with basic equipment, and because they handle the mines. Common injuries suffered by village deminers while carrying out mine clearance include scarring to the chest and arms, and eye injuries caused by the penetration of metal fragments, dirt or grit. However, among the village deminers encountered during the qualitative research, the incidence of accidents while demining appeared to be relatively low. Furthermore, incidents of tampering as recorded by the MIDP throughout 1998-99 involved, almost exclusively, UXO, and children were more likely to be involved than adults (MIDP, 2000:vii). The fact that village deminers are largely adult men, and that they clear mines rather than UXO, suggests, therefore, that village deminers are not the main casualties of the tampering incidents as recorded by the MIDP. However, village deminers live and work in mined areas. The fact that they are more likely than other villagers to enter these suspect areas in order to conduct demining activities for livelihood purposes means that they are still a high-risk group.

However, despite conducting a high-risk activity, the majority of village deminers do attempt to practice a certain degree of self-regulation to reduce the likelihood of injury to both themselves and to others. Although these practices are very much limited by the circumstances in which the village deminer is operating, they are indicative of an awareness of risk and a desire to increase the safety margin, an important factor when considering how to address the activity.

Village deminers are careful within the limits of their situation. They frequently said that they would not clear mines if they were drunk, or felt ill, and that they would only clear mines that they recognise and that they know they can dismantle and burn. If village deminers are unable to move and dismantle mines, either because they are unfamiliar devices or the parts are rusty or unstable, they would often attempt to burn them in situ or, failing this, they would place locally recognisable signs to warn other people about the mine. In addition to this, the majority of village deminers only clear mines when there is pressing need. Thus it is a more rational and considered, rather than a spontaneous, activity.

Village deminers often prefer to work alone to reduce the risk of injury to other people and to prevent distractions. The downside of this practice is that the chances of surviving a mine accident are greatly reduced if the victim is alone, and village deminers realise that this practice

puts them at greater risk, especially if they are working far from the village. Many expressed the hope, however, that the sound of the explosion if there was an accident would bring assistance, and in a few cases village deminers asked their friends to stand-by while they were demining for the very reason that they could assist in case of an accident.

"I have never had an accident with my work. To avoid accidents we have to work carefully. No one watches me when I clear mines because it is very dangerous. If I had an accident I would die alone. The mine victims are usually those people who step on mines and not the village deminers."
(Village deminer, Ta Taok village, Ta Taok commune, Samlot district, Battambang province)

Combined with these precautions, village deminers usually have years of practical military experience in laying or clearing mines, providing them with good local knowledge of mine types and deployment. This knowledge can perhaps give the village deminers a false sense of confidence or superiority over other villagers, which could lead to carelessness in clearance activities, a trait that was observed on a few occasions.

"I feel confident in clearing mines as I used to lay and dismantle mines by myself when I was a Para. I know where the minefields are in this area. I think people are more likely to be injured if they step on a mine accidentally, or if they dismantle a mine they don't know, or if they throw mines."
(Village deminer, Stung Bot village, Poipet commune, O'Chrou district, Banteay Meanchey province)

Some village deminers have noticeably altered their behaviour in recent years to reduce the risk, particularly as a result of the appearance of mine action in the local vicinity. Several village deminers reported that once they have cleared mines they keep them for mine clearance organisations to destroy rather than dismantling and burning them themselves.

6.2 Cultural Beliefs and Protective Devices

Cultural beliefs or popular myths often influence behaviour (Powell et al, 2000), and there are often strong associations made between village deminers and various magic "devices" which are believed to protect the owner from harm. Village deminers often do have tattoos, or keep protective charms such as Pali inscriptions or forest pig teeth, usually obtained during their military days. However, the majority of village deminers interviewed during the qualitative research said that they no longer had any confidence in these protective objects, and that they can only be protected by their own knowledge. This indicates that some of them at least don't place undue faith in the protective powers of magic. Many of the village deminers are demobilised soldiers and they are now leading a more sedentary life with their wives and children. There appears to be a fairly widespread belief that the magic of these protective devices stops working around women and children, or if the recipient stops following the teachings of their *Kru*.

"I had the tattoos on my feet done after I left the army as my friend told me I was going to an area with a lot of landmines and so I needed a tattoo to protect myself. But I don't believe in the tattoo so much. I no longer follow the teachings or burn incense. I only have confidence in my own skill."
(Village deminer, Neang Lem village, Sdau commune, Rattanak Mondul district, Battambang province)

Left: A village deminer shows the tattoos on his feet, which are supposed to protect him from injury by landmines. Unusually, he had the tattoos done after he had left the army because he was moving to an area known to be contaminated by landmines.

However, this is not to say that these beliefs are still not adhered to, perhaps as an additional reinforcement to careful clearance practice. Occasionally village deminers mentioned these beliefs, for example, one village deminer in O'Beijoun village in Banteay Meanchey said that after clearing mines from the land he would give a *Sen*, a small sacrifice of a pig's head to the spirits of the land who had kept him safe. Accidents with mines were also sometimes related to the lack of such totems or protective charms. For example, a village deminer, also in Banteay Meanchey, had been injured when he stepped on a mine while hunting in the forest, losing both his legs. He related that the year before his accident his house had burnt down, destroying all his good luck charms from his military days. Thus the association between these beliefs and the ability to stay unharmed may persist, alongside the realisation that safety is also linked to safe practice, care and attention.

6.3 Safety of Others

Village deminers are often credited by other villagers with helping to make the village a safer place because they remove mines from public pathways, in addition to clearing their own land. They are also praised for their willingness to remove mines for other villagers when they found them. However, both villagers and the deminers themselves know that the clearance of mines by manual techniques is an imprecise art, and that safety cannot be guaranteed. This is one of the main reasons why village deminers frequently do not clear land for other people.

The main reason village deminers give for working alone while clearing mines is to prevent accidents affecting other people. The majority of village deminers clear and dismantle mines away from the village and destroy them in the evening, so as not to put other villagers or their families at risk. However, in some cases it is noticeable that family members have a good knowledge of the mine clearance activities of the deminer. They are aware of the different types of mines cleared, how they are cleared, and where they are cleared. It appears that this knowledge is gained through family discussions, but also combined with information heard through mines awareness campaigns, either conducted in the village or on the radio. Often this knowledge does not mean that the families are present when the deminers are working, and many of the family members stressed that they are afraid of mines and that they do not go near to the minefields when their father/husband is clearing mines. However, despite the good intentions of village deminers to protect their families, the fact that the children are growing up in mine contaminated areas with family members conducting mine clearance activities means that it is very easy for them to become accustomed to being around mines, thus lessening their sense

of danger. In one village a village deminer laid out the casing of two POMZ-2M mines to show the research team. Within minutes his children were playing with the mines, inserting a stick into the casing and attaching a string in imitation of a tripwire.

The majority of village deminers claim that they rarely teach other people to demine because of the high risk involved and because of worry about accusations of blame if there is an accident. However, some villagers who can demine, and frequently those who served in the military together, often work together to help each other clear their fields at the same time.

"I never train other people how to demine as there is no theory to teach. When you teach them they don't follow your advice and then they could be killed or injured."
(Village deminer, Khvau Lech village, Svay Chek commune, Svay Chek district, Banteay Meanchey)

Village deminers are often key people in the village when it comes to informing other villagers about suspect areas. When asked about placing warning signs around mines, village deminers often said that they did not do this simply because they either removed the mine, or they found the mines on their own land and so there was no need to put up signs. Village deminers do not mark areas that they have cleared, nor do they mark suspect areas. However, it appears that village deminers will put up local warning signs such as tied grass or thorn bushes if they cannot remove a mine or an UXO, or if they do not have time to clear it (see Chart 12, p.57). If they are keeping mines to burn at a later date, they often store them in a visible place, such as on tree stumps or hillocks, and they place stakes around the mines to prevent other people from entering. However, obviously these signs are relatively temporary, and can be moved by others, or deteriorate due to the weather. There is often a lack of knowledge among village deminers about who they should pass the information about the mines on to.

6.4 Safety of Land

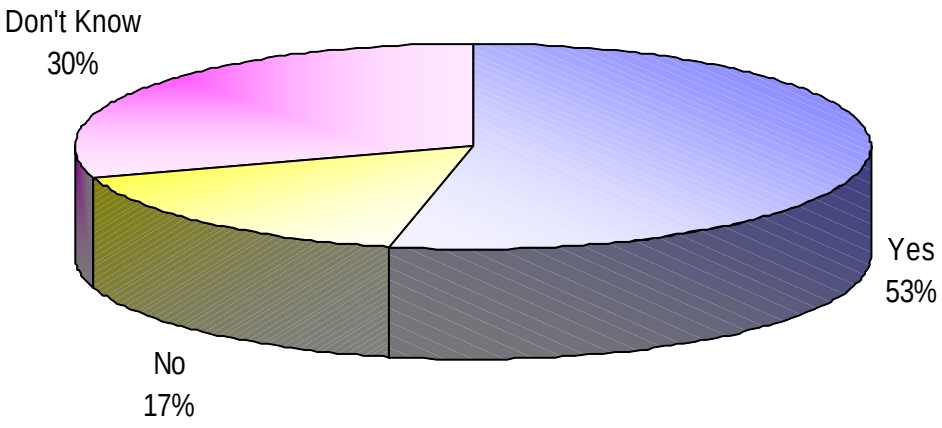
Village deminers rarely claim that the land they clear is 100% safe. Obviously some have greater confidence in their work than others, but on average they say the land is about 60-70% clear of mines and that it may still contain mines that are deep in the ground. Village deminers often believe that their land is not safe because they do not have metal detectors to check the land completely. This is a viewpoint that tends to be articulated to a greater extent when mine clearance or mine awareness education has already been operating in a village. Seeing the mine clearance equipment of the professional organisations often acts as a strong deterrent to village deminers and their manual methods. The messages of mine awareness also make quite a strong impression and villagers often stress that a solution to the high risk and danger of their current activities would be the provision of metal detectors to help them to clear the land.

"I will not clear the rest of the mines on my chamkar as I am afraid of having an accident. CMAC told us that our eyes are not automatic. We cannot clear as well as a metal detector."
(Village deminer, Neang Lem village, Sdau commune, Rattanak Mondul district, Battambang province)

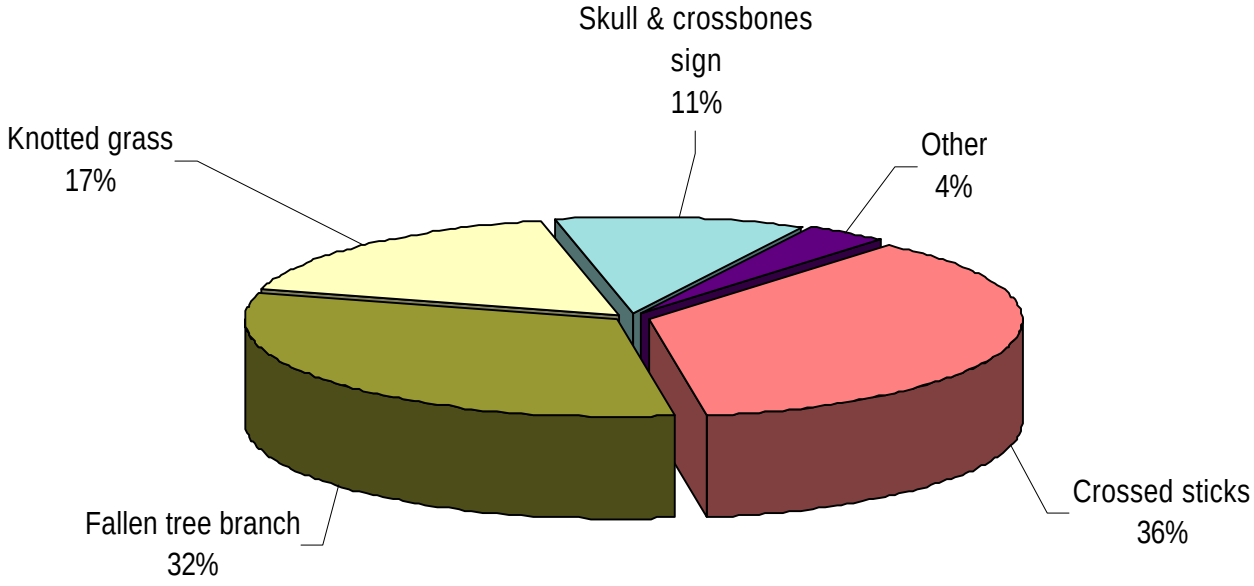
As a result, most village deminers are under no illusion that the land they clear is 100 per cent safe. Both they and other villagers realise that by using the eye or a hoe to detect mines, there are still going to be mines in the ground. This realisation is perhaps an important one in terms of accident reduction. People are still wary on land that has been demined by villagers.

CHART TWELVE

Marking of Mines/UXO by Village Deminers



Common Signs Used



"I hope that the land I clear is 90% safe. But Min tonne (anti-tank mines) may exist on my land because I can't find them deep in the ground. But I think that the min tonne were laid only on the main roads for the trucks and tanks, and not in the chamkar or ricefields. But I am still afraid about my land."
(Village deminer, Kompong Makak village, Khleang Meas commune, Bavel district, Battambang)

The only way for villagers to test for the safety of their land is to use it. Generally villagers will initially cultivate their field with a spade after clearance as it allows for more careful work, plus they don't want to risk their animals, or the animals they rent, being injured or killed. If no mines are found in consequent years, the villagers will begin to use cattle, or even a tractor to cultivate their land if these means are available to them. Villagers who cleared land two or three years ago and have ploughed it several times say they believe it to be almost 100% safe, although it is rare for them to say this with complete conviction.

"I am 100% sure of the safety of the land that I have demined because I have farmed on that land for a few years now and I have not had any problems. I have not found any more mines or UXO. That is why I and say the land is 100% safe. I started to farm the land in 1992. Mines were laid again in 1997 and so I cleared the land again. Now I think that the land is 100% safe."
(Village deminer, Chhork Roka village, Samlot commune, Samlot district, Battambang province)

Chapter Seven

Findings – Attitudes

7.1 Attitudes of Village Deminers to Mine Clearance Activities

Mine clearance is ultimately a coping strategy, but due to the high risk involved, most village deminers would prefer to stop clearing mines by themselves, and to have mine clearance organisations clear the land for them. However, as already discussed, many village deminers feel unable to give up demining activities until they have enough land for agriculture, or they are able to access the resources they rely on for their livelihood. The only other circumstances which seem to persuade village deminers to give up mine clearance activities is sickness or old age, where failing eyesight and trembling hands increases the danger of the activity.

Most village deminers admit that they are afraid of mines and scared of being injured during the course of their work, although the majority feel that they are more likely to be injured by accidentally stepping on a mine rather than through their demining activities. The irony of this, of course, is that in order to demine village deminers have to enter into high-risk areas, thus increasing the likelihood that they will actually step on a mine.

The pressure of poverty and vulnerability is frequently the driving force behind demining activities, and the current need appears to be greater than the fear of what might happen in the future. The ability of the village deminer to consider, or express in words, what may happen to the family situation if there was an accident during clearance activities is limited. This may be partly due to the sheer poverty of the village family, which prevents them from planning for the future much beyond where the next meal is coming from. It may also be influenced by the belief that by talking about mines and similar danger, the likelihood that it will happen will increase (Powell et al, 2000). The financial burden of paying medical fees was a consequence that tended to be mentioned only by those village deminers who had already suffered injuries of some sort. Often their families had accrued a large debt to pay for these expenses. Otherwise village deminers tended to perceive the consequences of injury or death in more general terms of family hardship and suffering.

"If I was still demining I might have an accident at any time. If this happens my family situation would change very much. As the head of the family I make money to support my family. If a mine took my life my wife would become a widow. My wife and children would live a hard life."
(Village deminer, Ta Taok village, Ta Taok commune, Samlot district, Battambang province)

However, some village deminers are more confident about their work, have a somewhat more casual attitude towards mine clearance, and appear to be less afraid of the potential risks. It is probable, however, that some of this bravado masks an awareness of the risks and is indicative of an unwillingness to voice the possibility of a future accident.

"I think that I will not be injured by demining activities because I am familiar with this work. I think my life will not change because I am sure that I will not be injured. If I have an accident, I will take it into consideration when it happens."
(Village deminer, Chambok village, Chrey Sema commune, Sampou Loun district, Battambang)

Generally it was found that village deminers do not display reckless behaviour. A few village deminers admitted to being "addicted" to clearing mines, which was, after much discussion amongst the research team with these villagers, defined as being an enjoyment of the adrenaline provided through participating in a dangerous activity. However, usually the motivation behind clearance activities was due to the feeling that they had no choice[25]. Despite the resignation and sense of entrapment implied in this statement, there was often the sense that village deminers felt relatively pro-active within their situation. Despite having few options available, they are able to draw on their few existing skills to improve their family situation. This positivism was reflected in the way many of the village deminers were open and informative when talking to the researchers about their mine clearance activities and how, in some cases, they were keen to show the results of their work in terms of cultivated land.

7.2 Attitudes of Village Deminers to Mine Action

The percentage of adult men receiving mine awareness education or training is, according to mine action information, relatively low. For example, MIDP records that only 11% of adult male casualties in 1998-99 had received awareness (2000:67). A MAG paper, outlining the organisations' new mine awareness approach in 2000 also states that their earlier mine awareness activities "did not reach the majority of the male population who, based on statistics, are most at risk" (MAG, 2000:1). Approximately half of the village deminers interviewed during the qualitative research said that they had attended mine awareness education at least once. Predictably others had not attended because they were too busy doing chamkar, farming or collecting forest products, work that frequently takes male villagers out of the village for several days at a time. A few said that they did not attend mine awareness because they knew about mines and UXO already. In some cases village deminers said that they would like to attend mine awareness if they had the opportunity because they would like to learn more about clearing mines, and identifying mines that they do not know.

"I have never gone to Mine Education as nobody called me to attend. But if there was training I would attend as I want to know about the mines I cannot clear yet."
(Village deminer, Peam Ta village, Ta Taok commune, Samlot district, Battambang province)

Many village deminers reported that they felt scared of mines after receiving mine awareness education. The most usual descriptions of the awareness activities were an airing of a video, and the distribution of posters and leaflets. The graphic portrayal of mine accidents appears to make quite a lasting impression on villagers, although as former soldiers many of the village deminers would have long been around mines and UXO and have probably seen, or experienced, the damage that such devices can do. The feeling of being afraid after mine awareness education does not, however, prevent village deminers from continuing their activities. The main motivation to stop clearing mines is the fact that they have cleared enough land for agriculture already.

"I participated in mine awareness education conducted by the organisation – this has made me scared of digging the land and hitting mines accidentally. I also don't know where the mines are deep in the ground. However, I have no choice but to demine the land – if I don't do it I will have nothing to do."
(Village deminer, O'Beijoun village, O'Beijoun commune, O'Chrou district, Banteay Meanchey)

[25] In several areas visited by the research team in both Banteay Meanchey and Battambang province, the idea of no choice was expressed by the villagers with the phrase "chal chamnam", literally meaning to be facing a wall (see also Powell et al: 2000).

Left: The house of a village deminer who was recently blinded through mine clearance activities. The posters on the wall of the house are from mine awareness education. Underneath the house are stored bundles of grasses to make roofing thatch, the main livelihood occupation of the family. To collect the thatch the family have to enter mine contaminated areas.

In terms of mine clearance, village deminers, like other villagers, often have high expectations of what land will be cleared. The main hope is that the organisations will clear agricultural and *chamkar* land. It appears that village demining activities often pause when mine clearance is happening in the village. This is often due to the belief that their land will be cleared by the organisation and so there is no need for them to clear it by themselves. There is widespread acknowledgement that mine clearance agencies can clear the land more thoroughly than villagers because the agency staff have specific training and, more importantly, metal detectors to help them search for the mines deep in the ground. The observation of the more sophisticated equipment and safety clothing of the professional deminers often acts as an additional deterrent to village deminers from continuing their activities, at least while the organisations remain in the village. However, the cessation of activities is rarely permanent. If village farmland is not cleared by the organisation, it is usual for village mine clearance activities to begin again once the organisations have left the village.

"I think that in the future I will get injured or killed and so now I stop demining and leave this work for the Organisation. If I continue I cannot escape from injury. If I only use a hoe I will get injured. Anyway, now I have enough land to provide for my family. The Organisation has also warned us to stop demining and to wait for them to clear. If a mine agency provided demining tools I would continue to do demining and I would help the agency to clear these mines."
(Village Deminer, Khvau Lech village, Svay Chek commune, Svay Chek district, Banteay Meanchey)

The messages that are provided by mine clearance teams and mine awareness teams sometimes appear to be contradictory and do little to persuade village deminers to give up their mine clearance activities. There appears to be a basic contradiction between the fact that villagers are told not to touch mines, but at the same time the assistance that can be provided to them in terms of mine clearance is ultimately limited and inadequate. Thus the educational messages fail to address the reality of the village situation and do little to help to address the socio-economic motivations that drive people to clear mines in the first place.

"I have attended mines awareness education many times. They explained a lot – that we must not touch mines and that we should report any mines we find to the organisation. But when I found mines and reported them to the organisation, they didn't come and clear them. They said the mines were out of their target location and so they couldn't clear them. This is different from what we were taught. I had to clear the mines myself."
(Village deminer, Chi Saang village, Traeng commune, Rattanak Mondul district, Battambang)

There often appears to be contradictions, or perhaps misunderstandings about reporting mines to clearance organisations. In some cases, village deminers appear to believe that the mine clearance organisations have asked them to collect mines together and then to hand them over to the organisations for destruction. Obviously, to do this, the villagers are taking the risk to clear the mines from their fields and then to store them until the organisation comes to collect them. The mines are very often brought to the village to await the clearance organisations because they pass by on the road, and to collect the mines from the fields where they have been found would take too long. This practice thus increases the risk for both village deminers and other villagers.

7.3 Attitudes of Families to Village Deminers

The wives of village deminers are, without exception, worried about the risks being taken by their husbands when they demine. The majority want their husbands to stop clearing mines, and realise that the benefits gained from clearing mines cannot outweigh the consequences of an accident. Several wives said that they had requested many times for their husband to stop their demining activities, but that they did not listen to their advice. The husbands sometimes said that they did not tell their wives when they were going to demine because they did not want them to worry.

Despite the worry of the danger of the activity, there was always the acknowledgement that by having a family member who was able to clear mines they had been able to improve, or at the very least support, their livelihood.

"I warn my husband not to cut wood in the minefield, but if I stop him he cannot do anything to support his family, so I just advise him to pay more attention."
(Wife of Village deminer, Kdop T'mor village, Kok Romiet commune, Thma Pouk, Banteay Meanchey)

The ability to improve the living standard of the family through mine clearance activities is always balanced by the fear of what would happen if there was an accident. It was generally acknowledged that the family condition would deteriorate drastically if the village deminer was injured or killed, usually because it was normally the husband and the "head" of the family who was involved.

There appears to be little transfer of mine clearance skills from father to son, although if both father and son had served in the military they would often work together to clear the family land of mines. The lack of skill transfer was again related to the perceived danger of the activity. However, in one case a father proudly talked of his ten-year-old son, whom he had nicknamed "informal CMAC." Apparently the boy had learnt how to clear mines by watching his father at work, and had started to help him to demine, including dismantling the mine to extract the TNT which he knew his father kept for fishing.

7.4 Attitudes of Village Authorities to Village Deminers

The long wait of some villages for mine clearance means that villagers continue to clear mines, and although the authorities do not support their activities, they also feel that they are not in a position to stop them. Some village authorities were in possession of forms to request mine clearance, but the majority did not know how to go about requesting this. Others had requested several times, but without success. Even if mine clearance has happened in a village, the village authorities often said that village demining continued because the organisations had not cleared agricultural land for the people.

"So far the district authorities have prohibited people from clearing mines, and have told the people to report to the organisations when they find mines. But the people still clear mines by themselves and they have the skills to do so. If they wait for the organisation they will wait for a long time, and so they have to clear the mines by themselves for land, and to take risks in order to get chamkar."
(District Chief, Samlot district, Battambang province)

Generally the village authorities acknowledge that village deminers assist in reducing the risk for other villagers because they can help to remove mines that villagers find, and because they often clear along paths to common property resources. A few of the village authorities believe that the solution to the problem would be to provide the villagers who are able to demine with demining equipment, and then to employ them to clear all the land in the village.

"I would like to see villagers continuing demining if NGOs and the government could support them with five or more mine detectors. I would set up a group of villagers to clear all the land, and I would collect money from the other villagers to support these deminers. The villagers work faster than the organisations, and they have more incentive as it is their own land."
(Village Chief, Santepheap village, Toul Pongro commune, Malai district, Banteay Meanchey)

"If we clear our own land we would not need payment, just the equipment and training. If we had machines we could set up a group of villagers to clear the mines, and if there was an accident the group would be responsible by themselves to support the injured. They would not accuse anyone. Mine clearance agencies have a small team, and they need to clear mines in many parts of the country."
(Village Chief, Kdop T'mor village, Kok Romiet commune, Thma Pouk district, Banteay Meanchey)

7.5 Attitudes of Villagers to Village Deminers

In terms of village solidarity, the presence of mines and UXO seems to create greater village solidarity. None of the villagers interviewed reported conflicts between villagers due to mine-affected land. On the contrary the general opinion was that villagers tended to help each other out more, and that the village deminers helped to reduce the mine risk in the villages.

"Mines do not cause conflict in the village, but instead they create solidarity because when we see mines we have to help each other to collect and destroy them. In particular, we can tell other villagers about where the mines are, or ask experienced people to remove them."
(Villager, Santepheap village, Toul Pongro commune, Malai district, Banteay Meanchey province)

However, the villagers also expressed doubt that the land cleared by the village deminers is safe, and most of them said that they would prefer for mine clearance organisations to clear the village land. Villagers know that the mine clearance organisations can clear the land well because they

have proper equipment. In particular the use of metal detectors to find mines was stated as the main difference between the clearance work of the villagers and of professional agencies.

"The best way to protect people from accidents is that the organisations should clear the mines for the villagers. If the villagers are allowed to keep clearing the land, they would have an accident one day because they have no materials or skills."
(Villager, Ta Taok village, Ta Taok commune, Samlot district, Battambang province)

Chapter Eight

Conclusions & Recommendations

8.1 Looking for Solutions

The original Terms of Reference for the Study (see appendices) required that in the final study report recommendations would be developed that would help to address the different motivations that lead villagers to undertake mine clearance activities. Obviously there are no template answers or simple solutions to the problem of village mine clearance. Perhaps one of the main lessons learnt from the research is that the different motivations are linked primarily to access to land and resources, thus the motivations can only be addressed if those needs are met. Village mine clearance activities will inevitably continue so long as villagers need to access land and resources in mined areas, and they have the basic knowledge and courage to carry out the activity.

However, the research was able to provide for a more comprehensive insight into the difficulties and problems faced by villagers living and working in mine affected areas, and into the nature of village mine clearance activities. The study was not an evaluation of mine action, but the findings did uncover certain issues and dilemmas, which have implications for mine action in Cambodia. The information presented on village deminers may also encourage a review of existing assumptions and instigate renewed consideration of the subject and ways to address it. What is certain is that the study has helped to move the problematic beyond the original debate focusing solely on whether professional mine action organisations should be involved in training village deminers. It will be these issues that are investigated in this final chapter.

8.2 From Debate to Action

Humanitarian mine clearance operators in Cambodia admit that current clearance is unable to respond to the needs of all the people living in mine contaminated areas.[26] It would seem reasonable therefore to argue that village deminers fill an essential role in village life by being able to clear their own land, by clearing mines along public paths and tracks, and by assisting other villagers by removing mines when requested to do so. Villagers and village authorities often commented that they felt the village deminers did help to make the village a safer place because they removed mines from the ground, which, by implication, reduced the risk of accidents for other villagers. The question is how can the mine action community respond to this situation in the best possible way?

The earlier debate focused largely on the issue of training village deminers. The proposal that was developed in the early 1990s for a village demining training course was finally rejected by CMAC in February 1996. The reasons given were that CMAC would not be liable for casualties, could not support the project logistically, and would not justify a differential safety standard for village deminers vis-à-vis professional deminers. What this research has shown is that village deminers have continued to clear mines despite the fact the original debate was shelved.

[26] Comments by a CMAC Technical Advisor during the Handicap International Workshop on Spontaneous Demining Initiatives, 18th December 2000

However, based on the information collected by the research, is it deemed suitable, or feasible, for villagers to be trained in mine clearance by organisations?

Most village deminers clear for their own individual purposes which suggests that even within the village structure there are problems in terms of liability and safety if they clear for others. The development of a training programme for villagers would still come up with many of the same problems encountered in the mid-1990s. It would be difficult to organise logistically, it would be difficult in terms of liability and responsibility, it would be difficult to monitor and supervise. It would also be an expensive and long-term investment that would take time to yield positive results, both for the implementing organisation and for the villagers themselves. Basically the same arguments still stand and therefore it is wise to look at other solutions which perhaps are smaller and less ambitious in scale, but will have a more immediate impact for the villagers living in mined areas.

8.3 Promotion of Safer Practice

The fact is that village deminers will continue to clear land until they have enough for individual use. The risks that are inevitably taken by village deminers could be lessened through the promotion of safer practice. The findings have shown that villagers will attempt to adopt safer practice where possible, and so it is likely that they would be responsive if these ideas were promoted further. The dangers they face by working in mined areas is, in the majority of cases, apparent and well understood. What can be improved on are topics such as safe drills to extract themselves and others from a mined area, the promotion of safer practice during actual mine clearance, and instruction in first aid practices. Such topics could be covered in existing mine awareness education campaigns. The provision of basic protective equipment may also help to reduce the number of casualties significantly.

The argument that counters this proposal, is that by educating villagers on safer practice, it may encourage them to undertake demining activities when they would not otherwise have done so. However, judging by the research findings, it does not appear that this is a likely scenario. Village mine clearance is driven by the need to access resources, and villagers who do not consider themselves to be village deminers also remove mines when they impede their livelihood activities. The promotion of safer practice in terms of techniques of clearance and disposal, and victim assistance, will not encourage an increase in the numbers of village deminers, but will help to make the existing coping strategies of the villagers safer.

It is recommended that organisations working with communities in mined areas further investigate the possibility of promoting safer practice for village deminers. This could be achieved through mine awareness messages, training sessions, or through the provision of basic equipment or protective clothing.

8.4 Village Deminers as Resource People

Within the village, village deminers are one group with perhaps the best knowledge of where the minefields are located in and around the village, what lands they affect, and whose livelihoods are impeded. This is good local knowledge that could be tapped by mine action agencies working, or intending to work, in the area. Often the main contact point in the village is with centralised sources, such as the village chief who, as a government appointee, may not have a good knowledge of the problem, or is influenced by political considerations and protocol rather than pure livelihood considerations. Village deminers could assist with the identification of

suspect areas, prioritisation in terms of which areas most hamper village livelihoods, and other general mine related information. If they are demobilised soldiers who were previously based in the area they can provide additional information such as the location of military bases, the types of ordnance present, and the known patterns of deployment. In terms of mine risk awareness, they may also be able to provide information on people practicing dangerous behaviour within villages. This would not only make the most of existing local expertise and knowledge, but would be a step towards a more collaborative and participatory approach between mine action organisations and the villages within which they work.

It is recommended that mine action organisations investigate the possibility of using village deminers as resource persons within mine-affected villages.

8.5 Challenging Assumptions

The term "spontaneous demining" perhaps gives the idea of the "foolish brave" and suggests impromptu, unplanned mine clearance activities which can be seen in contrast to the methodical and planned work of professional mine clearance. Village mine clearance can be described as "spontaneous" in that the villagers work autonomously of the government or organised mine clearance, and because they clear when they find mines, and with locally available equipment. However, it is not spontaneous in that the activities are driven by livelihood needs, the clearance is carried out carefully and with an awareness of the risk and their limitations, and because prior experience and knowledge is drawn on. As one mine action practitioner suggested, "I'm sure villagers' decision to demine is not at all spontaneous but well-considered (as far as their limited range of villager choices permit). Ironically the only real situation of spontaneous demining is when someone walks on a mine" (Horwood, 2000).

However, the assumption that village deminers are foolhardy, irresponsible people tends to be a relatively common viewpoint underlying the approach of mine awareness education for high-risk groups. Messages that derive from such a viewpoint are perhaps misinformed and do little to gain the respect of village deminers. They are ultimately patronising, and are therefore likely to be ignored.

It is recommended that mine awareness programmes targeting high-risk groups such as village deminers review their original assumptions concerning these people and develop a more receptive approach.

8.6 Considering Target Groups

As we have seen (see Chart 2, p.27), village deminers are often a relatively small group within the total village population. They also have a good awareness of the danger of mines, and usually a knowledge of where the mines are in the surrounding locality. This begs the question as to whether the village deminers are the most appropriate people to target for mine awareness education. It is possible that, despite the precautions taken by village deminers, their families are the real people in need of awareness training and assistance. Village deminers are clearing mines because they need to access land and resources. Families are thus also in danger of entering these high-risk areas, particularly once the land has been cleared by the village deminer but without the certainty of complete clearance. The children are more likely to be growing up in a situation where mines are familiar, thus reducing the sense of danger. Wives may also be inadvertently increasing their own risk by working on land that has been cleared by their

husband. Rather than targeting only the village deminers, complete households could be targeted for education, which would allow for the promotion of discussion between family members as to the risks they are taking.

It is recommended that mine awareness programmes should consider targeting village deminers and their families as a form of household education programme promoting family discussion of high-risk behaviour.

8.7 Appropriateness of Messages

The economic and livelihood pressures that push people like the village deminers into taking risks appear to be largely unacknowledged by mine awareness education, and the predominant message is still for civilians not to touch mines or UXO. This is obviously unrealistic in certain circumstances. The messages conveyed in mines awareness education perhaps need to be reviewed and revised so that they are more appropriate to addressing existing knowledge and the reality of livelihood situations. Again this could be done through the promotion of safer practice and alternative coping strategies, a message that could be combined with the traditional message that civilians should not touch mines.

It is recommended that mine awareness programmes are revised and developed using a more participatory, community-based approach, so that the messages conveyed are more appropriate and realistic for the intended audience.

8.8 Integration with Development

In recently settled areas, or in situations where people have been evicted, development NGOs have been involved in the provision of emergency needs for people settling on mined land in collaboration with mine clearance organisations. The provision of food, shelter and water on cleared plots of land provides for the immediate relief of families, but obviously for a relatively limited time span. Once the initial crisis is over the families quickly need access to agricultural land and to the means of making a living, a situation that obviously encourages villagers to take on mine clearance activities.

There are no easy solutions to this problem. However, land security through land titling is an important process that will obviously help rural families to gain more security over their land, and hopefully diminish the number of evictions of people to mined areas.

Another solution that could be implemented in the shorter term would be to increase the link between alternative income generation projects and communities living in heavily mined areas. However, this is often a relatively temporary solution, and the main need of the people for agricultural land is still not provided for. Most Cambodian villagers see themselves as farmers, and to train them in other skills is often not a viable or realistic situation.

However, in the shorter-term community development and mine action organisations can work together to help to reduce the risk for villagers living in mine contaminated areas in the following ways:

There is perhaps a need for more effective collaboration between mine awareness programmes and ongoing community development initiatives, for example through the provision of information regarding alternative livelihood options, safe areas for livelihood activities, or land security issues.

It is recommended that mine awareness programmes should attempt greater collaboration with ongoing community development initiatives to provide information that will help to relieve the livelihood pressures that are the main motivations behind high-risk activities.

Integrated development and demining programmes have the dual purpose of clearing the land of mines and thus reducing risk, while at the same time providing for village development. However, the economic and livelihood pressures that force villagers into high-risk activities perhaps need to be better met. Non-project areas are often left for later clearance, largely as a result of project timing and funding limitations. Villagers often reported that the land cleared by such projects was land around wells or for school yards, land that was deemed useful for the village as a whole, but which did not address the pressing livelihood needs of individual families. In villages where a school-yard had been cleared, for example, children were still accompanying their parents to suspect forest areas to collect forest products to support their livelihood.

It is recommended that integrated development and demining initiatives ensure that all sections of the village population benefit from the activities and that the projects attempt to address individual livelihoods in addition to community requirements.

Community development NGOs are in the perfect position to provide advocacy for mine affected villages, thus drawing attention to the needs of the people and perhaps redirecting clearance priorities to meet the requirements of the villagers. NGOs can also help to provide information to villages about the services provided by demining agencies and how to go about requesting mine clearance. They can help to facilitate communication between the clearance organisations and the villagers and to assist in problem solving when required, thus making the mine action process more community responsive and needs appropriate.

It is recommended that NGOs working with communities in mined areas should develop mediation and advocacy positions between the local communities and the mine action agencies so that systems for communication are improved and village level voices are heard.

8.9 Priorities and Clearance

The work of village deminers can perhaps be seen to be indicative of the wider community needs – the land that is being cleared by villagers includes individual farming land and access to vital resources such as forest areas. Professional mine clearance obviously helps to alleviate the mine problem in a village to a large extent, but it does not provide for the main livelihood needs of individual families, or to one-off requests for assistance.

How can prioritisation or response to village requests for mine clearance be improved so that villagers will not have to take on mine clearance activities to the same extent? Although this is a difficult question to answer, it is possible that various clearance strategies to better meet the needs of the villagers and to compliment current clearance methods could be further investigated and piloted.

It is recommended that alternative clearance methods are investigated and piloted to help better meet the needs of rural Cambodian communities for land and resources.

For example, at the SDI Workshop it was suggested by the mine clearance group that the utilisation of modified industrial machines such as bulldozers would allow for the quicker clearance of land for a greater number of people. It is a method that has been used by villagers themselves in some areas, and would perhaps be particularly beneficial for villages that are less well established. It would reduce the risk of those clearing the mines manually. However, the following factors would have to be taken into consideration:

- Some land types would perhaps not be conducive to the effective utilisation of machinery for clearance
- Many villagers have already settled on mined areas and begun to grow crops. Bulldozing their agricultural land is very likely not an option they would choose
- Land ownership patterns would need to be taken into consideration before clearance work, so that the more powerful people would not take undue advantage of the rapidity of the clearance process

The areas of land that village deminers are clearing are generally small, individual plots of land or access paths to resources which may be some distance from the village but vital to village livelihoods. There is a need for more quick response clearance teams who could respond directly to community and individual requests, perhaps as an extension of the more programmatic clearance currently being carried out by NGOs. Such "proximity clearance" teams could respond to village requests, doing limited clearance of small tasks in high-risk areas. This type of clearance can open up land for villagers to use, allowing for maintenance of livelihoods as well as reducing overall risk. Such teams could easily be part of regular demining platoons, but with the mandate to respond to emergency or unforseen requests during the day.

8.10 Contradictions

There is a need for greater collaboration and co-ordination between the mine action sectors with regard to the information that is being passed on at village level. If villagers are being told to hand mines over to mine clearance organisations, then there should be clear procedures as to how this should be done. The danger at the moment is that village deminers may be stockpiling mines in their homes so that they can pass them onto organisations for disposal, a situation that is probably much more dangerous than their traditional methods of disposal by burning. Similarly, if villagers are told by mine awareness education that they should not touch mines but that they should report them to mine clearance organisations to remove them, then there should be a clear system in place for this. Mine clearance teams should be able to respond quickly to emergency requests, which perhaps would just involve the removal of one or two mines.

It is recommended that messages given to villagers by mine action sections should be consistent and realistic and backed up with clear procedures which are easy for villagers to follow and understand.

Bibliography

Aitkin, S. (September 1993) Getting the Message about Mines: Towards a National Public Information Strategy and Program on Mines and Mine Safety: Volume 1 – Report Cambodia: UNESCO

Allen. A. (n.d.) Spontaneous Demining Initiatives in Rural Areas (unpublished paper)

The Arms Project (1993) Landmines: A Deadly Legacy USA: Human Rights Watch & Physicians for Human Rights

Birrault, JP (2000) Deminage: Propos d'un demineur – Cambodge 1994-2000 Unpublished paper

Bullpitt, I. (November 2000) Mine Action Within Cambodia Beyond 2000 Draft discussion paper, Phnom Penh: CMAC

CARE Cambodia (August 2000) Poipet Eviction Update Phnom Penh: CARE

Chagniot, G. (1995) Proposition d'une Etude sur le Déminage Villageois Angola: CMAO (unpublished paper)

CMAC/UNTAC (1992) Cambodian Mines Reference Manual Phnom Penh: CMAC

CMAC (23rd August 2000) National Mine/UXO Contamination, Demining and Mine Incident Statistics: Statistical Profiles Phnom Penh: CMAC Database Unit

CMAC Minefield Summary Sheets for selected areas, 2000

CMAC (2000) Summarised Revised Mine Action Work Plan 2000 Phnom Penh: CMAC Planning Branch

CMAC (November 20 1997) Standing Operating Procedures Draft document, Phnom Penh: CMAC

Croll, M. (1998) The History of Landmines Barnsley, UK: Leo Cooper

Curry. P.J. (November 1994) Village Self-Protection Against Mines Phnom Penh: CMAC

Davies, P. (1994) War of the Mines – Cambodia, Landmines and the Impoverishment of a Nation London: Pluto Press

Dumortier, S. (n.d.) Suggestions concernant l'étude sur le déminage villageois

Eaton, R., Horwood, C., Niland, N. (n.d.) Study Report: The Development of Indigenous Mine Action Capacities New York: UN Department of Humanitarian Affairs

Engelmann, P. & Kanyarushoki, C. (1997) Etude Sur Le Deminage Rural En Angola Handicap International

HALO Trust (n.d.) The Halo Trust Cambodia: Information Sheet Phnom Penh

HALO Trust (1999) Socio-Economic Land Use Report, Banteay Meanchey 1992-99 Phnom Penh

Handicap International (June 1993) Outline of a Programme to Assist Demining Villagers Phnom Penh

Handicap International (June 1994) Mine Clearance Assistance to Community Deminers and Mine Awareness in the Cambodia Provinces Contiguous to Roads NR 3 and NR 4

Handicap International (July 1995) Returning Life to the Field: A Global Approach to the Campaign Against Antipersonnel Landmines Brussels, Lyon, Paris: Handicap International

Handicap International (1997) Living with UXO: Final Report Vientiane: HI & UXO LAO

Horwood, C. & Crossland, A. (June/July 2000) External Evaluation of Unicef-Supported Activities to Prevent Mine Incidents Phnom Penh: UNICEF

Horwood, C. (July 2000) Village Demining Study: Brief Notes E-mail correspondence from Horwood, Unicef Consultant, to Eric Debert, Handicap International

Houliat, P. Adj (1993a) Training Session for Demining Villagers (unpublished paper)

Houliat, P. Adj (April 1993b) Processes Used by the Surveyed Demining Villagers to Remove and Neutralise Discovered Mines HI unpublished paper

Houliat, P. Adj (1993c) Les Initiatives Locales des Deminage au Cambodge Phnom Penh: HI (unpublished report)

Houliat, P. Adj (November 1995) Réflexions sur le Déminage Villageois

Howell, B. (December 1996) Survival Demining HI unpublished paper

International Campaign to Ban Landmines (1999) Landmine Monitor Report 1999 USA: Human Rights Watch

International Campaign to Ban Landmines (2000) Landmine Monitor Report 2000 USA: Human Rights Watch

MAG (July 1993) Letter to Lt. Col. Focsaneanu re Proposed Village Demining Training/Assistance

MAG (2000) Mine Awareness New Approach unpublished document, Phnom Penh: Cambodia Country Office

MIDP (1999 & 2000) Lists of Casualties by Tampering in Battambang, Banteay Meanchey, Siem Reap and Krong Pailin Phnom Penh: HI/CRC MIDP

MIDP (2000) Mine & UXO Casualties in Cambodia: Bi-annual Report 1998-1999 Phnom Penh: Handicap International and the Cambodian Red Cross

Mulliner, N. lt. Col (July 1993) Letter to Mr. B. Denise of HI re Assistance to Villagers – Demining/Mine Awareness

Physicians for Human Rights (March 2000) Measuring Landmine Incidents and Injuries and the Capacity to Provide Care USA: Physicians for Human Rights

Powell, B. et al (November 2000) Developing an Evaluation Framework for Landmine Awareness Programs in Cambodia Draft Report, Phnom Penh: Macfarlane Burnet Centre for Medical Research

Roberts, Shawn & Williams, Jody (1995) After the Guns Fall Silent: The Enduring Legacy of Landmines (Washington DC: Vietnam Veterans of America Foundation)

Stover, E. & McGrath, R. (1991) Landmines in Cambodia: The Coward's War USA: Asia Watch/Physicians for Human Rights

UNICEF (2000) Underage Soldiers in Cambodia: A Socio-Economic Profile Phnom Penh: UNICEF

UNHCR Cambodia (June 2000) Returnees and Land in North West Cambodia Battambang: UNHCR

US Department of State (1998) Hidden Killers 1998: The Global Landmine Crisis Washington DC: Office of Humanitarian Demining Programs

Appendices

A. Terms of Reference

B. List of People Consulted

C. Semi-Structured Interview Guidelines

D. Format Sheets

E. Questionnaire & Questionnaire Guidelines

F. List of Workshop Participants

Appendix A – Terms of Reference

12July 2000.

TERMS OF REFERENCE FOR A STUDY ON

The Phenomenon of Spontaneous Demining Initiatives (SDI) in rural areas of Cambodia.

Debert Eric, Mine coordinator, Handicap International, July 2000.

General context:

For the past several years the United Nations Organization and NGOs have been providing mine clearance expertise, training, supervision and other types of support, including mine awareness and education, to affected countries. However, even in countries where such assistance is available, there remain geographical, political, financial and/or technical constraints which limit the scope of mine clearance activities, forcing certain members of the local community to take on the task of mine clearance individually. It is what we call "spontaneous demining initiatives".

Handicap International is wishing to carry out a specific study on this topic.

1- What is Spontaneous Demining Initiatives:

"Spontaneous demining initiatives may take place sporadically on an "as needed" basis by persons for whom the presence of mines is a direct impediment to their activities. In other cases, clearance may be conducted on a more frequent and "routine" basis by persons who have identified this type of activity in itself as a means for income generation. The latter type of mine clearance intervention may be seen as a self-initiated "commercial" enterprise. In either case however, spontaneous demining initiatives is that which is undertaken - on their own personal initiative - by individuals who have little or no formal training and who have recourse only to basic means found at hand."
(source: Bill Howell, Handicap International, 18/12/96)

2- Previous studies on the subject:

There are number of documented examples of such spontaneous and essentially informal initiatives.

- For instance, in Cambodia, an inquiry into the techniques used by villagers for demining was conducted in the north-west by Adj.Philippe Houliat in 1993.

- In April 1994, Handicap International proposed a pilot project to evaluate the practicability of "Village Self-Protection against Mines". However, the concept was finally rejected by CMAC in February 1996 on the grounds that CMAC could not be liable for casualties, could not support such a project logistically, and could not justify a differential safety standard for village deminers vis-à-vis professional deminers.

- The February 1999 *Land Mine Monitor* Re*port* for Cambodia shows a picture of 78% of the total square meters cleared as of 14 august 1998 by the local people. Even thought this information has yet to be validated, it is important nevertheless to consider this practice as a particular problematic.

It is the policy of most mine clearance organisations, including UN supported programmes and NGOs, to discourage civilians from touching mines and unexploded munitions, but in spite of this spontaneous demining continues to take place. So far, most of studies have focused on the techniques used by villagers to demine or have made recommendations to answer to the following question:

"Should such initiatives be ignored, discouraged, or should they be acknowledged first and then backed with special instruction, support and funding?"

3-Why Handicap International is interested to carry out this study

Handicap International has been involved in mine action activities as a way to tackle the causes of the disability at an upstream level. We are concerned by a global approach to disability, which does not focus only on the consequences.

The mine department of Handicap International in Cambodia

Since 1992 Handicap International has been involved in humanitarian demining operations in Cambodia with a view to developing a National demining capacity.

- From 1993 to 1995, we provided logistic, administrative and financial assistance to the « Cambodian Mine Action Centre » through the placement of Technical Advisors in the field.

- In 1995, our support to CMAC was extended to development local capacity in terms of minefield marking and verification, again through the provision of Technical Advisors. The same year, we assisted in the development of the mapping database department of CMAC. These projects ended in mid-1997.

- From February 1996 to April 1999, we supported CMAC to set up a fourth demining unit in the provinces of Kompong Thom and Kompong Cham. Six Technical Advisors worked with this Demining Unit, which was composed of 16 platoons of 30 deminers, a mine marking team and EOD specialists (600 staff).

- From 1996 HI has been running, in collaboration with the Cambodian Red Cross, a Mine Incident Database project to gather information and statistics on landmine accidents. Such information can serve as a tool for planning and monitoring mine awareness and mine clearance operations.

- At the end of 1998, Handicap International in partnership with the socio-economic department of CMAC, initiated a project to increase the impact of humanitarian demining on the socio-economic development of Battambang province by optimising the selection, distribution, and development of mined land. Following this experience, in 1999 CMAC

requested HI support the implementation of a Land Use Planning Unit (LUPU) in four provinces in Cambodia.

Handicap International in the World :

- In collaboration with « UXO Lao », Handicap International carried out the first national survey on the socio-economic impact of UXO in Lao PDR in 1997. 15 provinces, 93 districts and 7.675 villages were surveyed and data was collected on more than 10.000 incidents. The data, maps and reports resulting from this survey have provided accurate information to be used by demining organisations as a planning tool.

- The methodology for this survey has been used for the establishment of standard procedures for the creation of the Survey Action Centre « SAC ».

The Belgium section of HI supports demining operations in Cambodia and Laos, and the French section of HI supports operations in Mozambique and Bosnia. HI also implements mine awareness activities and mine incident database projects, and provides institutional support and marking in Afghanistan, Ethiopia, Angola, Palestine and Sénégal.

Handicap International is cofounder of the International Campaign to Ban land mines, winner of the Nobel prize in 1997.

Concerning the Spontaneous Demining Initiatives:

Since 1993, Handicap International has been advocating to have more information in relation to this practise. Due to the past experience of HI in mine action activities in Cambodia and in other countries, it was felt that HI was a suitable organisation to implement this type of study.

At present, Handicap International is not carrying out any demining operations in Cambodia but is running a database project with the aim of providing accurate mine incident data to be used as a planning and monitoring tool by mine action agencies. Our involvement in this last project provides HI with access to very useful information for the implementation of this study.

4- Justification and objectives of the study:

4.1- Justification of the study:

The Mine/UXO threat is a serious problem faced by many Cambodians in the rural provinces. The number of accidents caused by tampering with mines or UXO remain high. The risks that are taken to remove mines and to live with mines remain a real concern, and one of the priorities of mine action work.

At this juncture, there is a need to better understand how villagers live with the mines and UXO in their local environment. There is a need to identify the scope of Spontaneous Demining Initiatives (SDI) in rural areas of Cambodia, to find out how strong the issue is for Cambodians, and to evaluate its importance in the context of mine clearance and mine risk

assessment. The results of this study could have a significant impact on how to prevent many mine/UXO incidents and how to account and consider villager clearance work.

4.2- Objectives:

In fact, little beyond occasional observation has been carried out to understand this practice from a socio-economic perspective. Without further investigation into the actual scope and impact of this type of activity it is difficult to carry forward the discussion on this issue.

The objective of the proposed study is not to provide recommendations on the type of activities that may be undertaken either to encourage or discourage this type of initiative. Recommendations will only be provided about ways to deal with each of the different motivations that lead villagers to undertake mine clearance activities.

The aim will be to provide, in a neutral way, a clearer picture of this particular phenomenon including the socio-economic aspects of the problematic.

The objectives of the study will be of four fold:

- **To determine the scope of this practice. (How strong is this issue in the lives of Cambodians, what is its importance in the context of mine clearance and mine risk assessment, how many villagers are engaged in this practise, what is the accident rate?).**

- **To determine the reasons why Cambodians engage in Spontaneous Demining Initiatives (What are the social factors that encourage spontaneous initiatives?)**

- **To provide recommendations about ways to deal with the different motivations that lead villagers to do mine clearance. This will be done particularly from the perspective of the production of mine awareness materials.**

- **To determine the quality and the techniques of village mine clearance activities. What, for example, are the conditions under which the deminers work – mine risk assessment).**

4.3- Type of data collected:

As suggested in 1995 by Mr. Anthony Allen, an independent mine clearance specialist, the research into spontaneous demining initiatives should consider all aspects of the circumstances and practices which leads to the activity. Among the technical and environmental/situational aspects, the following would be of particular interest:

4.3.1- Potentials reasons why Cambodians engage in spontaneous demining:

Examples of economic factors that lead to spontaneous demining initiatives:

- Availability of mine-free productive resources (e.g. availability of land for agriculture and housing)
- Availability of alternative income generation activities
- Availability of alternative mine clearance capacity

- Remoteness
- Impact of the mines on the local community economy

Social factors that encourage spontaneous initiatives:

- the attitudes of the local administration towards these initiatives
- the perceived utility of the services among neighbours and within the local community
- the comparative utility of the practice as a means of income generation (salary or income obtained from the selling of explosives or metal)
- the support of the wife and other family members for the practitioners continuation in the work
- the impact on the younger generation who watch their elders clear and manipulate landmines

4.3.2- Techniques used for demining:

- Tools and techniques used
- Degree of professionalism of practitioners
- Means and methods of final disposal
- Incidence of accidents among practitioners

Regarding this last aspect of the study, the study team will not have to follow the villages deminers during their operations but will get the information through discussions with the concerned people. This is to avoid placing the study team in high-risk situations.

4.3.3-Apart from these aspects, it will also be necessary to develop a questionnaire that will measure the number of village deminers in comparison to the total population of the village surveyed. Furthermore, the study will also provide some data regarding the number of accidents caused by this practise.

5-Tasks and methodology:

5.1. Tasks:

The main output under the terms of reference will be to produce a report in English providing information and recommendations on the objectives of the study. Under these terms of reference, the qualified consultant (service provider) will implement the following tasks.

- Collect existing information on the subject and consult with key informants in the field (NGOs, demining organisation, local authorities).
- Recruit and train a study team with at least one member with a technical background related to demining techniques. The constitution of the team will be discussed with the HI Mine Co-ordinator.
- Determine qualitative/quantitative indicators and develop a questionnaire form, as well as an interview guideline.
- Use triangulation to cross check information and improve accuracy, through the application of various participatory research methods (e.g., surveys, semi-structured interviews and informal focus groups)
- Select a study sample of approximately 10 villages per province.
- Carry out a preliminary test of the report form in the field.
- Conduct and organise the fieldwork in 3 provinces.

- Collect and analyse the information.
- Write a comprehensive study report on the phenomenon of spontaneous demining initiatives (scope and ways to deal with the motivations that lead to this practice)
- Organise a conference to present the results, to disseminate the findings, and to initiate debate on the topic of Spontaneous Demining Initiatives.

Throughout the study, the consultant should provide regular feedback to the HI Mine Co-ordinator in Phnom Penh.

5.2- Location of the study:

To begin with the consultant in charge of the study will have to meet the different NGOs (development organisations and/or demining agencies) working in areas with high mine contamination/mine incidents to gather information about the general location of village mine clearance activities. The HI Mine co-ordinator will help in the identification of the Key informants in relation to this.

Since 1996 Handicap International and the Cambodian Red Cross have been implementing a National Mine Incident Database Project. The Mine/UXO incident casualties due to tampering activities for 1999 and for the age group 10 years and older shows the following figure:

Distribution of Tampering Casualties by province (age 10 years +), 1999.

Provinces	Casualties tampering - MINE	Casualties tampering - UXO	TOTAL MINE/UXO	Percentage %
Banteay Meanchey	30	30	60	**21.7 %**
Battambang	6	34	40	**14.4 %**
Siem Reap	8	29	37	**13.4 %**
Kompong Cham	4	19	23	8.3 %
Kompong Thom	3	15	18	6.5 %
Pursat	1	16	17	6.4 %
Remaining provinces	11	70	81	29.3 %
TOTAL	63	213	276	100 %
	22.8 %	**77.2 %**	**100 %**	

Out of all the casualties injured by a mine or UXO, 47% were injured in the village. It is important to notice that in the provinces, tampering activities remain the leading cause of casualties.

This data could serve as an indicator to the presence of village mine clearance activities because there is a high probability that "village deminers" are among those who "tamper" with mines/UXO. In 1993, Adj Houliat advocated for the implementation of a further study in the same three provinces: Banteay Meanchey, Battambang and Siem Reap.
In each province, around 10 villages will be identified to cover the study.

5.3- Means to collect the data :

Two ways of information collection will be necessary to provide for a better picture of the problematic:

- The service provider will draw a profile of a village deminer with some open discussions with the village community. This mean will allow us to view the problem with a qualitative approach.

- A form with closed questions will be completed by the survey team to provide quantitative data about the practice and to evaluate the scope.

A team composed of the following persons will implement the study:
- One expatriate consultant with a background in socio-economic surveys.
- One Cambodian person in charge of the socio-economic investigation.
- One Cambodian person with a demining technical background
- One translator or one Cambodian researcher.
- One driver/mechanic

This team will meet demining organisations who operate in the target areas as well as with development agencies and local authorities.

5.5- Time frame for the study:

A maximum of 6 months are allocated for the study, including document reviews, interviews, site visits, and report writing.
A final report should be submitted on completion of the in-country study.

Activities to implement.	**MONTHS**					
	1	**2**	**3**	**4**	**5**	**6**
- Recruitment of staff and training	X					
- Meeting with organisations and local authorities	X					
- Selection of survey sites	X					
- Develop research methodology and tools	X					
- Implement study in province 1 (10 villages X 3 days)		X				
- Implement study in province 2 (10 villages X 3 days)			X			
- Implement study in province 3 (10 villages X 3 days)				X		
- Production of Study report. Presentation. Publication					X	X

Appendix B

List of People Consulted (e-mail & personal communication)

ANS

Ream Phally:	ANS Battambang

CARE

David, Thierry:	Planning Unit, CARE Battambang
Sothy:	IDD programme, Bavel, Battambang

CARERE

Chan Sothy:	Land Use Management Unit Advisor
Chheurn Ravan:	Infrastructure Chief, CARERE, Banteay Meanchey
Kong Sokuntho:	Provincial Program Manager, CARERE, Banteay Meanchey
Morrison, Joanne:	Regional Programme Manager, CARERE, Battambang
Robertson, Peter:	CARERE

CATHOLIC WORLD SERVICE

Jost, Howard:	Country Director

CENTRE FOR ADVANCED STUDY

Zweers, Judith:	Centre for Advanced Study

CMAC

Cheng Rady:	Manager, CMAC DU#3 Pailin
Chhin Bunran:	Mine/UXO Awareness Campaign Officer, CMAC
Heng Ratana:	Chief of Cabinet, CMAC
Kim Ly:	Database operator
Lam Sambo:	Chief of Operations, CMAC
Mam Neang:	Manager, Demining Unit #2, Battambang
Pan Bunroeun:	Community Liaison Specialist, CMAC, Banteay Meanchey
Prak Sokhon:	Head of Socio-Economic Research, CMAC
Sar Chanmoeung:	Operation Officer, CMAC, Banteay Meanchey
Srey Sangha:	Acting Chief of Verification Department, CMAC
Tang Sun Hao:	Chief of Mine/UXO Awareness, CMAC

CRC/MIDP

Chivv Lim:	MIDP Manager

DISABILITY ACTION COUNCIL

Pitt, Helen:	Disability Action Council

HALO TRUST

Longe, William:	Country Manager, Halo Trust
Ngau Sothy:	Location Manager, Halo Trust

LAND USE PLANNING UNIT

Kak Ravy:	Project Manager, LUPU Battambang
Morten, Kristen:	GIS Advisor, LUPU Battambang
Si Lim:	LUPU, Pailin

LAND USE MANAGEMENT UNIT

Ith Leur:	Director, PDRD, Banteay Meanchey

LUTHERAN WORLD SERVICE

Kim Leang:	Director, LWS Battambang

MAG

Chea Surin:	Director of Community Relations
Law, Archie:	Country Field Director, MAG

MBC

Powell, Bruce:	Macfarlane Burnett Research Project

NATIONAL LEVEL 1 SURVEY

Ridoutt, Ade:	Field Project Manager, National Level 1 Survey

NPA

Limpanboon, Privan:	Project Manager, Banteay Meanchey

OXFAM

Biddulph, Robin:	Oxfam Land Study Project
Williams, Shaun:	Oxfam Land Study Project

UNICEF

Crossland, Andrea:	UNICEF Mine Action Programme Evaluation Consultant
Horwood, Chris:	UNICEF Mine Action Programme Evaluation Consultant
Le Pechoux, Michel:	Project Officer, Children Affected by Armed Conflict

WORLD EDUCATION

Chum Thou:	Program Manager, Child Mine Risk Education

WORLD VISION

Chhouk Chantha:	Mine Program Coordinator
Chreng Darren:	Project Manager, Area Development Programme, Rattanak Mondul

Leigh, Andy:	Operations Manager, Battambang
Lim Sophal:	Deputy Chief, World Vision, Pailin
Vann Sam El:	Mines Awareness and Action Team (MAT) Project Manager
ZOA	
Chan Sambath:	Program Assistant, ZOA, Poipet
Fennema, Mike:	Field Coordinator, ZOA, Poipet
OTHERS	
HE Ieng Vuth:	First Deputy Governor, Pailin city
Pich Sambo:	Deputy Chief of PDRD, Pailin

Appendix C – SSI Guidelines

Interview Questions for Village Deminers

Information Required	Questions
Personal Information	1. Sex and age, Family – who and how many? 2. How long have you lived in the village? Was this your birthplace? If not where was your birthplace? 3. If a newcomer, where did you live before? Why did you come to this village? 4. If a returnee, when did you leave and when did you return and why? 5. How would you describe your status in the village – poor, middle, wealthy? 6. What is your main occupation/livelihood activity? 7. What resources (labour and land) do you have? What is the impact of the mines/UXO on your own livelihood & resources? 8. Why do you live in an area that is mined?
Background on demining activities	9. How long have you been demining? How and why did you begin this work? 10. How and when did you learn to demine? 11. Do you think that you will pass on your knowledge to other people? If yes, to whom and why? If not, why not? 12. Do you work alone or with others? 13. Are others involved in mine related work such as mapping, marking etc? 14. Is your family involved in the demining activities? What do they do? 15. Do you only demine in this village or do you travel to other villages to demine? If so, why? 16. Is clearing mines a full-time occupation for you? 17. Do you demine on a regular basis, a seasonal basis, or only occasionally? Please explain why
Motivations	18. What are the main reasons why you demine? 19. If clearing for land, what is the land used for? How do you decide what land to clear? 20. Who uses the land you clear – yourself, other villagers, other individuals (public use/individual use) 21. If for others, do you receive payment for this work? (please describe – monetary or in kind and how much) 22. What would you like to see the land used for that you demine? 23. If you clear land to get explosives, what do you use the explosives for – to sell, to fish etc? Where do you sell? 24. If you clear land to get scrap metal, what do you use it for – to sell, to make tools, etc? Where do you sell scrap metal? 25. If you re-use mines/UXO what purposes do you use them for (e.g. personal protection of property)?
Knowledge	26. Where are the minefields/UXO in the village? 27. What sort of land/terrain is affected by the minefields? 28. How do you know where the minefields are? Are there certain clues that tell you mines/UXO may be present? 29. Did you ever lay mines yourself? When? How has this helped / affected your work as a village deminer? 30. Which mines/UXO do you most frequently demine? 31. Are there any mines/UXO that you are unable to deal with – if yes, why? 32. Have you ever had mines awareness training? What did you think of this? Did it change the way you work with mines/UXO?

Appendix C – SSI Guidelines

Information Required	Questions
Tools and Techniques *Locating mines/UXO*	33. How do you find/locate the mines/UXO? (metal detectors/ prodding) 34. What tools do you use for finding the mines/UXO? 35. If you use a metal detector – where did you get it? How often do you change the batteries? 36. How deep do you dig to find the mines? 37. Are you able to demine mines in clusters or only single mines? 38. How do you get the mines out of the ground? 39. Do you know the different parts of a mine? 40. How many different types of mine do you recognise, work with?
Tools and Techniques *Disposal*	41. What do you do with the mines once you have got them out of the ground? 42. How do you dispose of the mines? – burning, detonation? 43. Do you destroy the mines/UXO? If yes, how and where? 44. Do you dismantle the mines/UXO? If yes, how and where? 45. Do you move and store mines/UXO? If yes, how and where? 46. How long do you take between finding the mines/UXO and destroying, dismantling or storing them?
Safety and Risk Assessment	47. What are the risks involved in your work as a deminer? 48. What do you do to try to avoid injury/accidents? How do you protect yourself from injury? 49. Do others watch you when you demine? Who and where? 50. How do you protect others from injury? 51. Do you mark mined areas or areas where there are UXO? 52. What do you use to mark them and what are the reasons for marking? 53. What do you think are the risks to your family because of your work as a village deminer? What are the benefits? 54. Have you ever had an accident with a mine/UXO you were trying to clear? 55. Do you know of other villagers that have had accidents with mine/UXO that they were trying to demine? 56. If you work with others, what do you do in the case of an accident? 57. How sure are you of the safety of the land that you demine? 58. Do other villagers think that the land you have demined is safe? How do you prove that it is safe? 59. Who do you inform about your demining activities? When do you inform these people – before you start work, or after you have finished? 60. Do you think the authorities support the demining work you do?
Attitudes	61. Why do you think that you are able to demine and other villagers are not? 62. What benefits does being a village deminer bring you? 63. What disadvantages does being a village deminer bring you? 64. What is your attitude towards mines/UXO? Can you explain why? 65. Do you think you could ever be injured/killed by a mine/UXO? 66. Do you think you would be more likely to be injured when demining or when doing other activities like farming? 67. How do you think your life would change if you were injured? 68. How would it change for your family if you were injured or killed? 69. Would you like to continue demining? If yes, why? If no, why not? 70. How do you think you could improve your work in demining? 71. Do you think professional demining organisations could help you in some way? In what ways? If not, why not?

Appendix C – SSI Guidelines

Interview Questions for Village Authorities

Information Required	Questions
Village background:	1. What is the name of the village? Is there a local name? 2. When was the village settled? 3. What is the history of conflict in the area?
Village Demography	4. What is the population of the village now? How many households? 5. Where have the people come from (IDPs, returnees, newcomers, long-term residents)? 6. Is there, or was there, an army base near the village? Where? Which army?
Socio-economic	7. What are the main sources of income/productive activity in the village? 8. What are the seasonal jobs of the people? Do people migrate to find work? 9. How many poor families in the village? (How is poor identified? – lack of land, lack of labour, etc) 10. How many richer and middle class families? (How are these identified?)
Geographic	11. Is the village near the commune/district/provincial centre? 12. Is the village near a market? 13. What is the road access? 14. Is there a school, health centre, Wat etc? 15. What are the natural resources around the village? Where are they?
Extent of mine/UXO problem	16. What is the extent of the mine/UXO problem in the village? 17. Where are the mines/UXO? Which lands do they affect? 18. What was the mined land used for before? 19. What will the land be used for once it is cleared? 20. What has been the impact of the mines on the village? 21. How many people have been injured or killed by mines? 22. If the areas are mined are the people still using it? If so what for and why? – how many families, how often?
Mine Clearance and Education	23. What do villagers do when they find mines? How do you report them? Who do you report them to? 24. Has there been any organised mine clearance in the village? If so, when and by who – army, MAG, CMAC etc? 25. What land areas did the organisations clear? Which areas were left uncleared? 26. Were people from the village involved in prioritising the mine clearance? If so, who and how? 27. Do villagers know that they can request mine clearance agencies to clear? If yes, what is the procedure? 28. Do any community development organisations work in collaboration with the mine clearance agencies? 29. What land areas did the army clear? For themselves or for villagers? 30. Has there been any mines awareness education in the village? 31. If so, who conducted it and when? What form did the education take? 32. What do you think are the priorities for mine clearance and education in the village? 33. How do you think community development NGOs help you to overcome the problems of mines/UXO?

Appendix C – SSI Guidelines

Information Required	Questions
Village Deminers	34. Are there any villagers doing demining activities in the village? 35. Who are the village deminers? How many people do this? What is their status in the village? Male/female? 36. What sort of land do the village deminers clear? Why do they clear it and who is it for? 37. What will the land be used for once it has been cleared? Private use or community use? 38. Do the village deminers work for other people? If so, what payment do the deminers receive? 39. What do they do with the mines/UXO that they find? 40. Do village deminers inform the authorities about the work they are doing?
Attitudes of the authorities towards villagers doing demining	41. Why do you think this village has village deminers? 42. What are the advantages for the village of having village deminers? 43. What are the disadvantages for the village of having village deminers? 44. Do they feel the village is a safer/more dangerous place because of the deminers? – Do people feel safe to use land that has been cleared by village deminers? 45. What is the relationship between the village deminers and the other villagers? 46. Do the village deminers mark the mines/UXO? – how and why? 47. Do the village/local authorities support the work being done by the village deminers? 48. Would you like to see the village deminers continuing their work? – if yes, in what way? If no, why not? 49. What alternatives do you see to village deminers? 50. What do you think can be done to reduce the risks village people face living in mined areas? 51. What can be done to help this situation at provincial, district and village levels?

Appendix C – SSI Guidelines

Interview Questions for Villagers

Information Required	Questions
Background	1. Age, sex, occupation, function 2. How long have you lived in this village? Are you a long-term resident, a returnee, a newcomer? 3. If newcomer, where did you come from and why? 4. If a returnee, why did you come to this area? 5. Do you know if there are mines/UXO in or around this village? If yes, what areas are affected? 6. Why do you remain in/come to an area that is mined?
Impact of mines and coping strategies	7. What is your main income activity? 8. What is your status in the village (Poor, middle, rich) 9. Do you have to travel/migrate for work? 10. How do the presence of mines/UXO affect your daily life/livelihood activities? What are the main problems that you encounter? 11. Do you think the presence of mines lead to social conflict in the village? (disputes over land / use of mines to resolve disputes) 12. Do you think the presence of mines lead to greater social cohesion within the village? (working together to clear mines etc.) 13. What strategies do you use to avoid or cope with the mines/UXO? 14. Have you ever had to clear mines/UXO yourself? 15. If yes, when, why and how? 16. What are your attitudes to mines/UXO? (e.g. Scared, casualness etc.)
Mine Clearance and Education	17. Are you aware that any mines/UXO have been cleared by any agencies, the army, villagers? 18. What areas did the organisations clear – land types? 19. Are the areas cleared by the organisations useful to you? 20. If yes, in what way? If no, why not? 21. What areas did the army clear – same questions? 22. What areas do the villagers clear – same questions? 23. Have you ever been given mines awareness training? 24. Did this help you in any way? What ways? 25. Has this altered the way you act in any way? What ways?
Knowledge and use of village deminers	26. Did you know that there are villagers who clear mines in the village? 27. How did you find this out? 28. What benefits do you think the village deminers bring to the village? What disadvantages? 29. Have these village deminers ever helped you to clear your land? If yes, what land? If no, why not? 30. Who do they clear for? What type of land do they clear? 31. Have the village deminers ever helped to clear community land? If yes, what land? If no, why not? 32. If you hire village deminers, how much do you have to pay for their services? (in kind, monetary) Can you afford to pay for these services? 33. If a village deminer is injured or killed clearing land for you, would you have to pay some sort of compensation? 34. Do you feel the land is well cleared by these village deminers? Do you feel safe to use the areas they have cleared?

Appendix C – SSI Guidelines

Information Required	Questions
Knowledge and use of village deminers	35. Do they mark the land so that it is clear for all villagers? 36. Do you know of any mine related accident that has happened on land cleared by village deminers? 37. Do you ever buy explosives or scrap metal from other villagers? 38. What do you pay for the explosives or scrap metal? 39. What do you use them for? 40. Would you like the village deminers to continue their work in the village? 41. What do you think are the best ways to resolve the mine/UXO problem in your village?

Appendix C – SSI Guidelines

Questions to Families of Village Deminers

Information Required	Questions
Background	1. Age, Sex, occupation, role / function in the family / number of family members and ages 2. How long has your family been in the village? Are you returnees, newcomers, long term residents? Why do you live here? 3. What is your status in the village? (rich, middle, poor) 4. What is the main livelihood activity in the family? How many family members provide for the family? Who does what? 5. How many family members do demining? 6. How long has your wife/husband/father/mother/son/daughter been doing demining? 7. Why do they do demining? What are the main reasons your family is involved in demining? 8. Did you encourage them to take up this occupation? If yes, why? If no, why not? 9. Are you involved in helping the village deminer? 10. If yes, what do you do? If no, why not? 11. Do you think the family will continue to demine? Will the skills be passed on in the family?
Income	12. How does this work affect your family in terms of income? Are you better or worse off than before? 13. Would you like the village deminer to continue in this profession for a long time? 14. If yes, why? If not, why not?
Safety and Risk	15. Are you concerned that this profession is high risk? 16. What do you see are the risks? 17. What are the benefits? 18. Are the rewards from this profession enough to outweigh the risks? How? 19. What do you think will happen to your family if there is an accident or a death?

éf T ---- Ex --------qa----------

eQaHPm ---------- X----------

Rsk---------- ext----------

eQaHGkplcely---------- Gay-------- ePT----------

mxgar---------- mxrbr----------

cNgeCgskmPaB ----------

ehtkarNenAkgPm ³ **(Time Line)**

1/ mnsmysgmraRsnym³ (Before Sihanouk regime)

---.

2/ smysgmraRsnym ³ ¬1954-1970¦ (Sihanouk regime: 1954-1970)

3/ smylnNl ³ ¬1970-1975¦ (Lon Nol regime : 1970-1975)

4/ smyExrRkhm ³ ¬1975-1979 ¦ (Khmer Rouge regime: 1975-79)

6/ smysaFarN³rdRbCamantkmCa ³ ¬1979-1987¦ (Republic of Kampuchea regime : 1979-1987)

Appendix D – Format Sheets

7/ smyrdkmCa ³ ¬1987-1990¦ (State of Cambodia :1987-1991)

8/ smyGntakre)aHeqatT1 ³ ¬1991-1993¦ (UNTAC or election period 1991-1993)

9/ raCrdaP)a lcrH ¬1993-1998 ¦ (co-Prime Ministers Hun Sen and Norodom Ranariddh : 1993-1998)

10/ RBHraCaNacRkkmCa ³ ¬1998-bcb¡n ¦ (Royal Government of Cambodia: 1998-Present)

---

eQaHGkplcely (Name of Interviewee)[3]----------

Gay (Age):-------- ePT (Sex):----------

mxgar (Function): ---------- mx(Occupation): ----------

(Address)Pm----------X----------

Rsk----------ext----------

taragskmPaBRbcaéf (Daily Routine)

emag (Time)	skmPaB (Activities)
%[3]00-^[3]00	----------
	----------
^[3]00-&[3]00	----------

&[3]00-*[3]00	----------
	----------
*[3]00-([3]00	----------

([3]00-!0[3]00	----------

!0[3]00-!! [3]00	----------

!![3]00-!@[3]00	----------

!@[3]00-! [3]00	----------

! [3]00-@ [3]00	----------

@ [3]00- #[3]00	----------

Appendix D – Format Sheets

emag (Time)	skmPaB (Activities)
#³00-$³00	tarag skmPaBRbcaéf (Daily Routine)
$³00-%³00	
%³00-^³00	
^³00-&³00	
&³00ybeT	

Appendix D – Format Sheets

(Date of Interview)éfT -----Ex---------qa ------

(Address)Pm----------X----------

Rsk----------ext----------

(No.Participants) cnnGkclrm-------cnnRs-----

cNatfakRBTüsm,t

(Wealth Ranking)

lkN³sKalGkman CvPaBFrFar (Rich families)	lkN³sKalGkmanCv PaBmFüm (Middle families)	lkN³sKalGkman CvPaBRkRk(Poor families)
-manpHFl -mankIagGsTaBaRKbRKan -manhbckRKbRKan -manmxrbrCjdr -manmeFüa)ayeFdeNrRKbRKan ¬mtr fyn¦ -mandERscabB 5htaeLgeTA -manR)aksrabcgkar -	-manpHsmlmRbksks,vrsgs -mankIagGsTaj CastBahn³ -mankarhbckRKbRKan -manmxrbrbnabbnS lkdrtctac -manmeFüa)ayeFdeNr ¬kgmt¦ -mandERstcCag5hta -	-manpHtcxm beNaHGasn -KankIagGsTajRKbRKan -hbckmnRKbRKan -KanmxrbrBtR)akd -xHdeFERsckar -CBakbNl -lkkIagBlkm -

Appendix E – Questionnaire & Guidelines

SPONTANEOUS DEMINING INITIATIVES

QUESTIONNAIRE FORM

(HI Office use only)

Interviewer Information

Name of Interviewer:_____ Date of interview: _____

Village Information

Name of village:_____ Commune:_____

District :_____ Province: _____

Introduction Statement

⇒ *Each time you conduct an interview, please tell the interviewee the following:*

Handicap International is conducting a research project on why and how villagers are clearing mines and UXO. This questionnaire is to find out if there are any villagers doing demining in your village. Other villages are also being asked the same questions so that we may have an idea of the number of villagers doing demining throughout Cambodia.

The results of the research will provide information for mine clearance agencies and community development NGOs so that they may be able to improve their assistance to villages that have a problem with mines and UXO. The information is not being collected to prevent or to criticise the villagers who are involved in clearing mines or UXO.

I would be grateful if you would take 30 minutes to answer these questions. I will ask you to sign your name at the end of the questionnaire, but your name will not be given to anybody else outside of Handicap International.

⇒ *If the interviewee is happy to answer the questions, please continue with the questionnaire.*

⇒ *If the interviewee does not want to answer the questions, please thank them for their time and find somebody else in the village to interview.*

Appendix E – Questionnaire & Guidelines

Section 1. Interviewee Information

⇒ *Put a cross in the appropriate box for each question.*

1.1 Sex of interviewee: **Male** **Female**

1.2 Age of interviewee:
15-25
26-35
36-45
46-55
56-65
66 +

1.3 Function:
Village Chief
Deputy Chief
VDC Leader
VDC Member
Pagoda Committee
Village Elder
Villager
Other **Please Describe:**_____

1.4 Occupation:
Rice Farmer
Garden Farmer
Village Militia/Soldier
Trader/Sales/Business
Fisherman
Teacher
Police
Craftsman
Labourer
Other **Please Describe:**_____

Section 2. Mine/UXO Clearance and Education

⇒ *Put a cross in the appropriate box for each question.*

2.1 Are there any mines in or nearby this village? **Yes** **No** **Don't know**

2.2 Are there any UXO in or nearby this village? **Yes** **No** **Don't know**

2.3 Have any Mine Action Organisations ever come to this village?
Yes **No** **Don't know**

⇒ *If the answer to question 2.3 is "No" or "Don't know", go onto Section 3.*
⇒ *If the answer to question 2.3 is "Yes", continue with question 2.4.*

2.4 Which Organisations and what year?

⇒ *Make sure you ask the interviewee if there has been more than one organisation. Cross the appropriate boxes. Write the year each organisation visited in the space provided.*

MAG		**MAG Year:** _____
CMAC		**CMAC Year:** _____
Halo Trust		**Halo Trust Year:**_____
UNTAC		**UNTAC Year:** _____
Army		**Army Year:** _____
Other	**Please Explain**:_____	**Year:** _____
Don't Know		

2.5 What activities did the organisations do?

⇒ *ask the interviewee what activities each organisation did. Put a cross in the appropriate box and write the name of the organisation that carried out that activity in the space provided next to the box.*

Survey	"	**Which organisation?**_____
Mark Mine Fields	"	**Which organisation?**_____
Clear mine fields	"	**Which organisation?**_____
Destroy UXO	"	**Which organisation?**_____
Destroy mines collected by villagers	"	**Which organisation?**_____
Mines Awareness Education	"	**Which organisation?**_____
Don't Know	"	
Other	"	**If "Other" please explain and give name of the organisation:** _____

Section 3. Clearance by villagers

⇒ *Put a cross in the appropriate box for each question.*

3.1 Do any villagers from this village clear mines or UXO? **Yes** **No** **Don't know**

⇒ *If the answer is "yes", continue with the questionnaire.*
⇒ *If the answer is "no" or "don't know", stop the questionnaire and thank the interviewee for his/her time.*

3.2 How many villagers do demining in this village now? **Number of Male Deminers**_____

Number of Female Deminers_____

3.3 What do they clear?

Mines (Anti-Personnel)
Mines (Anti-Tank)
Both types of mine
UXO
Both UXO and Mines

3.4 Where do they clear the mines/UXO?

In the village
Nearby the village (up to 1km)
Far from the village (over 1km)
In the forest
In other villages
Other **Please Explain:**_____

Section 4. Personal Information on Villagers doing Demining

⇒ *Put a cross in the appropriate box for each question. In some questions you are asked to write the number of people doing a particular thing. Write the number in the space provided next to the box.*

4.1 What are the usual occupations of the villagers who clear mines/UXO?

Rice Farmer	**Number**_____
Garden Farmer	**Number**_____
Village Militia/Soldier	**Number**_____
Trader/Sales/Business	**Number**_____
Fisherman	**Number**_____
Teacher	**Number**_____
Police	**Number**_____
Craftsman	**Number**_____
Labourer	**Number**_____
Other	**If "Other" please explain and give number:** _____

4.2 Are the villagers who clear mines/UXO long-term village residents, returnees or newcomers?

Long-Term Resident	**Number:**_____
Returnee	**Number:**_____
Newcomer	**Number:**_____

4.3 Do villagers who clear mines/UXO clear on a regular basis, a seasonal basis, or only clear occasionally?

On a regular basis	**Number:**_____ *(go to section 5)*
On a seasonal basis	**Number:**_____ *(go to next question)*
Clear occasionally	**Number:**_____ *(go to section 5)*

4.4 Do villagers clear mines/UXO in the dry season or the wet season?

Dry season
Wet season

Section 5. Motivations

⇒ *Put a cross in the appropriate box for each question.*

5.1 What are the main reasons why villagers in this village clear mines and UXO?

To clear land for agriculture
To clear land for housing
To clear land for animal grazing
To clear land for sale
To clear land for community use
To clear access to water
To clear access to forest
To clear roads/bridges
To prevent accidents
To get scrap metal
To get explosives
For Money
To re-use the mines/UXO
Other reasons **If "other reasons" please describe:**_____

5.2 Who do villagers clear mines/UXO for?

For themselves	*(go to question 5.6)*
For other people	*(go to next question)*
For both	*(go to next question)*

5.3 If they clear mines for other people, do they receive payment for this work?

Yes	*(go to next question)*
No	*(go to question 5.6)*
Don't know	*(go to question 5.6)*

5.4 What sort of payment? **Monetary**
Exchange Labour
Gifts **If for "gifts", please describe:** _____

5.5 If monetary, how much?

About:_____**Riels:**

Per day
Per week
Per month
Per mine
Per UXO
Per hectare
Per rai

5.6 Do villagers clear mines/UXO to get explosives?

Yes *(go to next question)*
No *(go to question 5.8)*
Don't know *(go to question 5.8)*

5.7 What are the explosives used for?

To sell
To fish
Other uses **If "Other uses" please describe:**_____

5.8 Do villagers clear mines/UXO to get scrap metal?

Yes *(go to next question)*
No *(go to section 6)*
Don't know *(go to section 6)*

5.9 What is the scrap metal used for?

To sell
To make tools
Other uses **If "Other uses" please describe:**_____

Section 6. Knowledge and Safety

⇒ *Put a cross in the appropriate box for each question.*

6.1 How did the villagers who clear mines/UXO learn how to clear mines/UXO?

Learnt in military
Self-taught
Learnt from parents/relatives
Learnt from mine clearance organisation
Learnt from watching somebody else
Other? **Please Explain:**

_____

6.2 When villagers clear mines/UXO, do they destroy them, dismantle them, or store them?

Destroy them *(go to next question)*
Dismantle them *(go to question 6.5)*
Store them *(go to question 6.6)*

6.3 How do villagers destroy the mines/UXO?

Burn them on a bonfire
Take them apart
Throw something at them
Other method **If "Other method", please describe:**_____

6.4 Where do they do this?

Where they find them
In the village
Other **If "Other", please describe:**_____
(go to question 6.7)

6.5 Where do villagers dismantle mines/UXO?

Where they find them
In the village
In their house
Other **If "Other", please describe:**_____
(go to question 6.7)

6.6 Where do villagers store mines/UXO?

Where they find them
In the village
In their house
Other **If "Other", please describe:**_____
(go to next question)

6.7 Have any villagers been injured or killed while clearing mines/UXO?

Yes **Number killed**_____ **Number injured**_____ *(go to next question)*
No *(go to question 6.9)*
Don't know *(go to question 6.9)*

6.8 Were any other people injured or killed when watching the villager clear mines/UXO?

Yes **Number killed**_____ **Number injured**_____ *(go to next question)*
No *(go to next question)*
Don't know *(go to next question)*

6.9 Do villagers who clear mines/UXO mark areas where the mines/UXO are located?

Yes *(go to next question)*
No *(go to question 6.11)*
Don't know *(go to question 6.11)*

6.10 What marks do they use?

Crossed sticks
Fallen tree branch
Knotted grass
Skull & crossbones sign
Other **If "Other", please describe:**_____

_____

6.11 Who do villagers who clear mines/UXO tell about their activities?

District authorities
Commune authorities
Village Leader
VDC
Friends
Family
NGOs
Mine Clearance Agencies
Nobody
Other **If "Other", please describe: _____**

⇒ *Thank the interviewee for their time and help in answering the questions and request that they sign their name in the space below. Remind them that their name will not be shown to anybody outside of Handicap International. Finally, sign and date the form yourself.*

Signature of Interviewee_____

Signature of Interviewer_____ Date:_____

Appendix E – Questionnaire & Guidelines

SPONTANEOUS DEMINING INITIATIVES QUESTIONNAIRE GUIDELINES

General Notes

Handicap International is conducting a study on 'spontaneous demining initiatives' in Cambodia. The research will focus on the reasons why villagers carry out mine and UXO clearance by themselves, and the methods they use.

The Role of the Data Gatherers

As Data Gatherers collecting information on mine incidents, Handicap International would also like you to collect some information on demining by villagers. You have been selected for this task because you are already collecting information on mine and UXO incidents for the Cambodian Red Cross and Handicap International, and it is possible that there is a link between high rates of incidents and villagers practicing demining activities. To make your task easier, we have designed a questionnaire form which contains all the questions we would like you to ask.

We would like **each of you** to visit **10 different villages** within your target area **over a two-month period** (September and October 2000). If possible, we would like you to select villages that are geographically scattered so that we may gain a better idea of the scope of the practice throughout Cambodia. If you find you are interested in the survey, you may want to visit more villages than 10. This would be of great assistance to our project.

These guidelines are intended to make the process easier and to answer any questions you may have about collecting information and the questionnaire.

Choosing the Interviewees

In each village we would like you to interview one or more people, using the questionnaire form provided.

- The interviewees may be anybody within the village who is available to spend some time answering questions. However, it may be useful to talk to people who have a good knowledge of what is happening in the village. For example:
  - The village chief
  - A member of the Village Development Committee
  - A Monk
  - A respected person

  If you know the village already, it will be easy for you to know who to talk to.

- If you find that there are villagers doing demining in the village, it would be very useful to talk to them directly, using the questionnaire.

- If there is time, it would be interesting to interview more than one person per village, as each person may know different things. This will help to cross-check the information.

- Ideally, the questionnaire should be used to interview one person at a time. However, there may be a situation where a group of villagers wish to talk to you. In this case, each question should be asked to the whole group, and, as the interviewer, you should wait for the group to reach agreement on the answer before filling in the form.

Appendix E – Questionnaire & Guidelines

Interview Techniques

- Before you begin the interview, it is a good idea to introduce yourself and explain the reason why you would like to ask questions about villagers who clear mines/UXO. Explain that:

  "Handicap International is conducting a research project on why and how villagers are clearing mines and UXO. This questionnaire is to find out if there are any villagers doing demining in your village. Other villages are also being asked the same questions so that we may have an idea of the number of villagers doing demining throughout Cambodia.

  The results of the research will provide information for mine clearance agencies and community development NGOs so that they may be able to improve their assistance to villages that have a problem with mines and UXO. The information is not being collected to prevent or to criticise villagers who are involved in clearing mines or UXO.

  I would be grateful if you would take 30 minutes to answer these questions. I will ask you to sign your name at the end of the questionnaire, but your name will not be given to anybody else outside of Handicap International."

- Please ask if the interviewee is happy to answer the questions, and also if they have the time to do so.

- If the interviewee is not happy to answer the questions you may ask him/her the reason why. Tell him/her not be worried about answering the questions as their name will not be given to anybody else outside of Handicap International.

- Once you have asked a question, allow the interviewee to think before replying. Try not to provide the answer before the interviewee has had time to speak.

- We have tried to make the questions as clear as possible. Make sure that you understand the questions yourself before asking them, so that you can be clear when you ask them.

- If the reply the interviewee gives is not clear, do not be embarrassed to ask them to explain again more clearly.

- If the interviewee does not know the answer to a question, write 'don't know' in the space provided. Do not leave any answers blank.

The Questionnaire

In some of the villages where there are no mines or UXO, or very few, the time taken to fill in the questionnaire may be very short. In other cases, where there is a high incidence of mines and UXO, and villagers are actively demining, the interview may take much longer (up to thirty or forty minutes). If people want to speak a lot because the topic is very important to them, take the time to listen and fill in the questionnaire with as much detail as possible.

- The questions on the form are presented in the order in which they should be asked.

- Most questions have a selection of possible answers listed next to them, and a box in which you place a cross to indicate the answer given by the interviewee. These questions usually require the interviewee to answer 'yes', 'no' or 'don't know'.

Appendix E – Questionnaire & Guidelines

- Some questions may have more than one answer. For example, villagers may be clearing land for both housing and farming. If this is the case, you must cross the boxes next to all the answers the interviewee gives.

- Some questions require you to write down the number of people doing a particular activity. Cross the box next to the activity, and write the number of people in the space provided next to the box.

- Some interviewees may give an answer that we have not included on the form. In this case you must write their answer in the space given for 'other' answers. Please try to write these responses clearly and accurately.

- In every village the interviewer should fill out all of Sections one and two. In Section three the first question asks if any villagers in the village clear mines or UXO. If the answer to this question is 'no' or 'don't know', stop the interview and thank the interviewee for his/her time. If the answer is 'don't know' you may want to find somebody else in the village who may know the answer and interview them. If the answer is 'yes', continue with the questionnaire.

Appendix F

Workshop Participants (in order of organisation)

Name	Organisation	Function
Seng Hong	AIT	Student
Hak Phy	ANS/HI	Management Controller
Peter Buckley	Asian Landmine Solutions	Country Manager
Andrea Crossland	CAM – I Consultant	Advisor
Scott Harding	CARE	Consultant
Hean Sokhon	Centre for Advanced Study	President
Neth Sophal	CMAA	Assistant General Director
Pascal Simon	CMAA	Technical Advisor
Tang San Hao	CMAC	Chief of Mine/UXO Awareness
Prak Sokhon	CMAC	Chief of Socio-Economic Department
Jean Gabriel Masson	CMAC/NPA	Chief Advisor - Operations
Marc Bonnet	CMAC/NPA	Technical Advisor, Planning
Kim Sangha	Disability Action Council	Disability Awareness Coordinator
Gerard Blondet	European Commission	Programme Officer
Olivier Gillet	HI (Afghanistan)	Mine Awareness Coordinator
Bernard Hacourt	HI (Brussels)	Mine/UXO Operational Advisor
Veronique Royen	HI (Brussels)	Mine Unit
Eric Debert	HI (Cambodia)	Mine Program Coordinator
Isabelle Plumat	HI (Cambodia)	Country Director
Reuben McCarthy	HI (Cambodia)	Project Advisor – MIDP
Ny Nhar	JRS	Land Mine Monitor

(continued)

Name	Organisation	Function
In Thaeu	LUPU Battambang	LUPU staff
Sam McLeod	MAG	Technical Advisor
Yem Sam Oeun	MBC Project	Consultant
Cheng Lo	MIDP/CRC	Supervisor MIDP/CRC
Soeung Songkou	PDRD Banteay Meanchey	LUMU staff
Duch Savin	PDRD Banteay Meanchey	Deputy LUMU
Chan Sothy	UNDP/CARERE Battambang	Technical Advisor to LUPU
Plong Chhaya	UNICEF, PNP	Project Assistant
Patrick Fayaud	World Education	Mine Risk Education for Children
Vann Sam El	World Vision Battambang	MAT Project Manager
Chhouk Chantha	World Vision Battambang	Mine Program Coordinator
Chreng Darren	World Vision Battambang	Project Manager

Handicap International

BELGIUM HANDICAP INTERNATIONAL

CAMBODIA
18 Street 400
Boeng Keng Kang 1
Chamcar Morn, Phnom Penh
Kingdom Of Cambodia
PO Box 838
ph. (855-23) 217 300/982 811
fax. (855-23) 216 270
email. hib.cambodia@bigpond.com.kh
web:// www.hicambodia.org.kh

BELGIUM
67 rue de spa
B-1000 Brussels
ph. (0032) 2-280 1601
fax. (0032) 2-230 6030
email. headoffice@handicap.be
web:// www.handicap-international.be