Project RENEW™ - Department of Foreign Affairs - Department of Health of Quang Tri Province

A STUDY OF SITUATION OF VICTIMS OF LANDMINES/UNEXPLODED ORDNANCE AND KNOWLEDGE – ATTITUDES – PRACTICES – BELIEFS OF THE PEOPLE IN QUANG TRI PROVINCE, VIET NAM

Quang Tri, September 2006

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Presiding Board:

Hoang Dang Mai

Tran Kim Phung

Hoang Nam

Data analysis, report writing:

Duong Trong Hue

Le Viet

Data input and processing:

Phan Van Hung

Truong Huu Vy

Field study coordination:

Thai Huu Lieu

Mai Nam

Project RENEW™ is a cooperative effort between the Vietnam Veterans Memorial Fund and the Quang Tri Province People's Committee for "Restoring the Environment and Neutralizing the Effects of the War"

CONTENT

Abbreviation

CPFC	Committee of Population, Family and Children
KAPB	Knowledge - Attitudes - Practices - Beliefs
MRE	Mine Risk Education
NGO	Non-Governmental Organization
Project RENEW™	Project "Restoring the Environment and Neutralizing the Effects of the War"
PPC	Provincial People's Committee
TCF	Trauma Care Foundation
UNICEF	United Nations Children's Fund
USD	US Dollar
UXO	Unexploded Ordnance
VND	Vietnamese Dong
VVMF	Vietnam Veterans Memorial Fund

Forewords

More than thirty years after the war ended, Vietnamese citizens, especially in Quang Tri Province, are still threatened by the devastating aftermath of landmines and unexploded ordnance (UXO). Landmines/ UXO not only endanger the living and working conditions of the people, but they also hinder community development efforts. About 1.12% of the population of Quang Tri Province have been victims of landmine/UXO incidents and approximately half of all land in the province is still contaminated with landmines/UXO. In recent years, despite efforts by local government, the military, and international groups to solve the problem, landmine/UXO contamination in Quang Tri Province remains very serious and requires strategic and long-term interventions.

In order to improve the effectiveness of mine action programs, Project RENEW™ and the Department of Health of Quang Tri Province launched a study of landmine/UXO victims and the "Knowledge, Attitudes, Practices, and Beliefs" (KAPB) of the general population regarding the dangers of landmines/UXO in Quang Tri Province. This study provides the latest findings on circumstances faced by landmine/UXO victims over the 30 years since the war ended (1975-2005), and the KAPB of people toward the dangers of landmine/UXO. It also contains further analysis and updates of data gathered from the previous study in 2002.

The Project RENEW™ Coordination Office would like to express appreciation and special thanks to the relevant central governmental agencies, the People's Committee of Quang Tri Province, Quang Tri Provincial Department of Health, Quang Tri Provincial Department of Foreign Affairs, and other cooperating local agencies as well as the many local people who participated in and actively supported this study. Our gratitude also goes to the Vietnam Veterans Memorial Fund, UNICEF, and the Trauma Care Foundation for providing essential funding and expertise for this study.

We hope and expect that the results of this study will provide useful information to individuals and organizations which are working on humanitarian mine action programs, joining together to solve the landmine/UXO problem in Quang Tri Province, Viet Nam.

Executive Summary

This study of landmine/UXO victims and KAPB of people in Quang Tri Province was conducted by Project RENEW™ in collaboration with the Quang Tri Department of Foreign Affairs and Quang Tri Department of Health, in May 2006. This study is the continuation and extension of a similar study conducted in 2002. The study is divided into two parts. First, the cross-study examines the landmine/UXO victim situation based on re-analysis of previous surveys conducted in December 2002, and combined with new figures updated as of December 30, 2005. Second, this report contains the results of a KAPB study of local residents implemented using a random sampling survey model. The questionnaires were created by Project RENEW™ with design assistance from UNICEF. Project RENEW™ made adjustments to the questionnaires to fit local variables. Collected data were processed using Epi Info software. The findings from the study reflect clearly and scientifically the legacy of the war in Quang Tri Province as well as other lingering impacts of postwar landmine/UXO on the people in the province.

The number of postwar landmine/UXO casualties in Quang Tri Province is higher than in many other countries. Since the war ended (over the period 1975-2005), there have been 6,931 accident victims, comprising 1.12% of the provincial population, including 2,593 deaths and 4,338 injuries. Although the annual rate of new victims has decreased significantly in the past five years (2000-2005) to an average of 45 victims a year (a reduction of 187 victims a year compared to the 1975-2000 average), this number is still relatively high in comparison with other countries and territories. In 2003, for example, Quang Tri Province alone accounted for 49 landmine/UXO casualities, higher than the number of victims in Bosnia, Herzegovina, Chad, Azerbaijan, Eritrea, and Mozambique; twice the number in Albania, Thailand, Croatia; and three times more than in Kosovo, Lebanon and Tajikistan.(1)

Most victims are farmers (52%), and students (31%). Landmine/UXO accidents are more likely to happen when people are farming (38.6%).

Most families of victims are poor, with an average monthly income of less than 2 million VND. Most families want assistance in the form of capital loans (40.36%) or direct financial support (39.26%).

The concentration of landmines/UXO depends on locality. 38.3 % of interviewees said they encountered landmines/UXO in mountainous areas, and 31.7% said they came across landmines/UXO in a field.

Most landmine/UXO contaminated areas are not marked. 92% of incident sites were not marked with a landmine/UXO warning sign.

The proportion of landmine/UXO accidents occurring near people's homes continues to rise. A total of 27.7% of accidents occurred near victims' homes, which was the most frequently reported mine accident location in the period 2000-2005, compared to 15.7% during the period 1975-2005.

Encounters with landmines/UXO occur frequently. More than half the interviewees (50.4%) said they encounter landmines/UXO at least once a year. One in every seven interviewees said they encounter landmines/UXO monthly, one of every 13 people encounter landmines/UXO weekly, and one of every 16 people see landmines/UXO daily.

UXO cause a higher percentage of casualties than anti-personnel mines, and this trend is on the rise. In the past 30 years, anti-personnel mine accidents accounted for 10% of all casualties, while accidents involving UXO of various types have been responsible for the remaining 89.9%.

(1). ICBL, Landmine Monitor Report 2005, page 49

In the last five years, 4.24% of casualties came from landmine incidents and 95.76% were caused by UXO accidents. Cluster munitions were the most common type of weapon involved in UXO accidents, accounting for 44.4% of all accidents during the 1975-2005 period. That percentage dropped to 30.3% over the past five years. M-79 rifle grenades and landmines were the next most fatal categories of weapons during the same period, accounting for 13.82% and 10% of accidents, respectively. In the past five years, these proportions dropped to 7.27% for M-79 grenades and 4.24% for landmines.

People who have already received MRE information are less likely to fall victim to landmines/UXO accidents than those who have had no information. Most victims (90.12%) said that they had not been provided with any MRE information before their accident. Despite increased awareness of the dangers of scrap metal collecting, accidents related to this dangerous activity continued to increase significantly (an increase of 7.2% during the last five years compared to the figure for the entire 30-year period).

There have been positive changes in knowledge, attitudes, practices and beliefs of local people towards the danger of landmines/UXO. Data from the comparison of the two KAPB studies (2002 and 2005) show that thanks to MRE activities, there have been improvements in the levels of safe knowledge, attitudes, behaviors and practices demonstrated by community members toward landmines/UXO. The percentage of people who do not know about the impact of landmine/UXO has decreased from 1.27% in 2002 to 0.9% in 2005. The percentage who do not know where contaminated areas are located was reduced from 22% to 7.6%. The proportion of people who do not know how to prevent accidents has decreased remarkably from 5% to 1.9%, while the percentage of community residents aware of the dangers of extricating landmines/UXO has grown significantly, by 23%.

The vast majority of interviewees (93%) have received MRE information. Mass media is the most popular medium for disseminating MRE information, with 93.8% of interviewees indicating that they had received MRE messages from television. 26.6% said they have been exposed to MRE information through the schools in their communities.

The findings of this study show that the threats of postwar landmine/UXO continue to pose a serious problem, both directly and indirectly, to the lives of local people. Landmines/UXO, though having different impacts on different groups, have placed further obstacles on the path to socio-economic development of the province. Therefore, completely resolving the landmine/UXO problem is of critical importance to the future of Quang Tri Province. Some recommendations that can be offered based on the findings of this report include:

- Increasing the removal and safe destruction of landmine/UXO objects, especially employing mobile explosive ordnance clearance of inhabited areas.

- Continuing and intensifying MRE activities, focusing on the at-risk groups of children under 16, farmers, ethnic minorities, males, and the poor.
- Adjusting, both methodologically and technically, to the fact that UXO objects pose a greater danger to the lives of people in Quang Tri Province than anti-personnel mines.

This study also emphasizes the need to upgrade the capacity of local healthcare services (which provide immediate emergency medical care to victims) and to expand the access of all citizens to healthcare services in general. Also, local authorities need to coordinate more effectively mine action projects in selecting work area priorities, targeting beneficiaries, and standardizing methodologies. Cooperation among projects should be encouraged and monitored to better respond to the needs of the province. Poverty alleviation programs, vocational training projects and social economic activities support not only the programs' direct beneficiaries, but they also help reduce the number of landmine/UXO victims. Moreover, it is time that Quang Tri Province urgently seek to mobilize both national and international resources on a large-scale and long-term basis, in a concerted effort to permanently remove the threat of landmines and UXO, a threat which local citizens continue to face every day.

PART I

INTRODUCTION TO THE PROBLEM OF LANDMINES/UNEXPLODED ORDNANCE IN QUANG TRI PROVINCE

1. Brief Introduction of Quang Tri Province

Quang Tri Province is located along the 17th Parallel in Central Viet Nam. During the Vietnam War, between 1954 and 1975, the province was divided between the Democratic Republic of Vietnam (North Vietnam) and the Republic of Viet Nam (South Vietnam) at the Ben Hai River. Quang Tri Province is bordered by Quang Binh Province to the north, Thua Thien-Hue Province to the south, Laos PDR to the west, and the Eastern Sea to the east. The province has 10 administrative units or districts: Vinh Linh, Gio Linh, Cam Lo, Trieu Phong, Hai Lang, Huong Hoa and Dakrong Districts; Dong Ha and Quang Tri towns; and an island district named Con Co

The land area of Quang Tri Province is 460,000 hectares, of which about 80 percent is hilly and mountainous terrain. Apart from the continuing legacies of war, Quang Tri also suffers from frequent natural disasters, including seasonal floods and droughts that often cause loss of life and property, yet another obstacle for its underdeveloped economy to overcome.

The population of Quang Tri Province in 2004 was 632,840 people, of which the Kinh ethnic group (Vietnamese) accounted for 92 percent and the ethnic minority Van Kieu and Pa Co groups constituted 6.4 percent and 1.52 percent respectively. Approximately 24.53 percent of the population inhabits urban areas, and the remaining 75.47 percent live in rural areas. The average population density is 133 people/km^2, with most people living in urban, coastal and rural areas, and a smaller proportion of people scattered in western mountainous areas.(2)

Since the re-establishment of Quang Tri Province after the division of consolidated Binh-Tri-Thien Province in 1989, the provincial authorities and people have made strong efforts to implement socio-economic development policies and poverty alleviation programs. Despite some encouraging gains, poverty and underdevelopment remain challenges for provincial authorities and residents.

According to the World Bank report on poverty in Viet Nam in 2003, Quang Tri province is located in one of the three poorest areas in Viet Nam (the other two are the northwest and the Central Highlands) (3). The total provincial GDP in the period from 2000 to 2005 was approximately 8,820 billion VND (a yearly average of about $114 million USD).

The average income per capita of Quang Tri Province in 2005 was around $330 USD, while that of the entire country was $450 USD. Based on Viet Nam's poverty standard for 2005 – a minimum of 2.4 million VND per capita per year (about $150 USD) – 10% of the households in Quang Tri Province live in poverty.(4)

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(2). Quang Tri Statistic Office, *Annual Statistical Book 2003, 2003*
(3). IFPRI, IDS, *Labor & Social Publishing, Poverty and Inequality in Viet Nam*, 2003, Ha Noi, Page 23
(4). http://www.gso.gov.vn/default.aspx?tabid=230&ItemID=2893 and Report of Socio-Economy 2005, PPC of Quang Tri

2. A Snapshot of the Legacy of Landmine/UXO in Quang Tri Province

The war left behind lasting and tragic consequences to the land and the people in Vietnam. Landmine/UXO contamination has been one of the country's most severe problems, impeding socio-economic development, threatening people's lives and safety, and damaging the environment. According to figures from the Landmine Monitor Report of International Campaign to Ban Landmines, released in 2002, U.S. military forces deployed 15 million tons of bombs and landmines, shells and other weapons during the war in Viet Nam, three times the amount used in the Korean War.(5) The U.S. Department of Defense estimates that about 10 percent of this ordnance did not detonate as designed, meaning that there are hundreds of thousands of tons of UXO, landmines and other lethal weapons still scattered across Viet Nam.

Quang Tri Province witnessed some of the most severe fighting during the Viet Nam war (1954 – 1975), at such well-known sites as Khe Sanh, Lang Vay, Camp Carroll, Fairy Hill, Doc Mieu, the Rockpile, La Vang, Ai Tu, and the Quang Tri Citadel, to name a few. The best-known battle sites are Khe Sanh, where in 1968 "the U.S. Army launched more than 8,000 air strikes with 20,000 tons of bombs"(6), and the Quang Tri Citadel, where, in 1972, the amount of bombs and weapons used by the U.S. totaled the equivalent firepower of seven nuclear bombs of the type dropped on Hiroshima, Japan in World War II.(7)

After the war, the provincial army and local residents mobilized 2,838 people to conduct clearance operations over an area of 6,710.263m^2, removing and destroying 113,248 UXO and landmines of various types.(8) The army and local people continued to conduct small-scale landmine/UXO clearance operations until recently. Beginning in 1996, Quang Tri Province has been assisted by international organizations in implementing humanitarian landmine/UXO clearance. The primary operations conducted by international organizations have been landmine/UXO clearance, assistance for landmine/UXO victims, education on landmine/UXO awareness and injury prevention, after-clearance support to communities, and survey and assessment of landmine and UXO contamination. As a result of these operations, 62,656 items of UXO and landmines of various types were found and safely disposed of, an over 1,050 hectares of heavily contaminated land were cleared. International organizations set up five resettlement villages, improved the living conditions of a number of landmine/UXO victims and their communities, and built up the local capacity for solving UXO and landmines consequences. In addition, a large database of landmine/UXO information was collected, organized and analyzed, and made available for use by the local government, NGOs, and other interested parties.(9)

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(5). ICBL, Landmine Monitor Report, 2002, (www.icbl.org).

(6) Ronald B. Frankum & Stephen F. Maxner, The Vietnam War for Dummies, Wiley Publishing, Inc, 2002, page 114

*(7) **http://www.vietnamtourism.com/e_pages/country/province.asp?mt=8453&uid=1271***

(8) National Political Publish,The history of Quang Tri Province, book 3, Ha Noi 2005, page 21

(9) Report on NGO activities, Quang Tri Provincial Department of Foreign Affairs, 2005

PART II
RESEARCH METHODOLOGY

1. Rationale for conducting research

Quang Tri has suffered the serious consequences of landmine and UXO contamination for over three decades, even with the earnest endeavors of government authorities, the army, local people, and international organizations in carrying out humanitarian landmine/UXO activities. Until now only a small amount of correct, reliable, and verifiable information and data analysis has been conducted about the landmine/UXO situation and humanitarian operations in Quang Tri Province, in particular, and throughout Viet Nam in general.

This research aims to address the lack of information by updating and enhancing an earlier Knowledge-Attitudes-Practices (KAP) survey of post-war landmine/UXO accidents and threats in Quang Tri Province, Viet Nam. This original survey was conducted by Project RENEW™ and the Quang Tri Provincial Department of Health in December, 2002. It was designed to collect hard data to inform humanitarian efforts dealing with the consequences of landmines and UXO in Quang Tri Province. The results were also generally applicable to localities across Viet Nam also contaminated with landmines and UXO. The research findings are expected to provide policy-makers and those who directly implement humanitarian landmine/UXO operations with both a more comprehensive and a very detailed understanding of the nature of the problem today.

Findings from this research are hoped, and expected, to reflect the most comprehensive and reliable information about the effects of landmines and UXO in Quang Tri Province. In addition to the numbers, the report also reflects the grief of thousands of post-war landmine/UXO victims and the lingering effects on their families caused by landmines and UXO, in the area known as the DMZ – the "demilitarized zone" – during the Viet Nam War.

The research focuses on:

- The actual situation of the thousands of landmine/UXO victims in Quang Tri Province during the 30 years since the end of War (1975 to 2005).
- The status of knowledge, attitudes, behaviors and practices of residents of Quang Tri Province with respect to landmine/UXO issues at the time of this research, and the impact of the Project RENEW™'s and others' campaigns on landmine/UXO awareness and accident prevention over the past three years (2002-2005).

2. Research methodology

2.1 Research methodology applied to landmine/UXO affected victims

Research on landmine/UXO victims conducted by Project RENEW™, in collaboration with the Quang Tri Provincial Department of Health, has created a foundation for managing and expanding the existing database on post-war landmine/UXO victims in Quang Tri Province.
The subjects of the study are all victims of landmine/UXO incidents in Quang Tri Province from 1975 until December 31, 2005. The identification of landmine/UXO victims was carried out in each village, where the village Chief retains family records. A list of all deaths/injuries including landmine/UXO causualties was provided by village Chiefs to the study implementers along with all available details. Surveyors then correlated these lists with data from the local community healthcare center to verify the information. By contacting the victim's families and people in nearby communities, the surveyors checked further information to account for all potential

victims. Through this method, surveyors both had a tool to verify the victims who were not included in the list and a way to cross-check data with information provided by the victims or their families. With support from local guides, surveyors interviewed victims' families selected from the addresses provided with the completed questionnaires. When possible, surveyors conducted interviews directly with living victims in order to assess their actual injury state. In fatal cases, surveyors interviewed those who were also involved in the accident or the victim's family members. After the data of landmine/UXO victims in the villages were collected, surveyors arranged them by commune or administrative unit and then placd them in district order before submission to the Information Management Section at Project RENEW™, which then performed data input and analysis.

Open access to this system for all interested parties – government officials, NGOs and others – means that data on landmine/UXO victims is shared, and also frequently updated via a network of collaborators participating in Mine Risk Education (landmine/UXO awareness and injury prevention program) in the localities currently covered by Project RENEW™: Trieu Phong and Hai Lang Districts. At other localities in the province, information related to landmine/UXO victims is updated through mass media collaborators, a telephone hot-line set up by Project RENEW™, and exchange of information with the Clear Path International (CPI) project, which is concentrating on support for landmine/UXO victims. Updated information on landmine/UXO victims has been collected according to the data collection design used in the 2002 report. Researchers used "Epi Info" software to manage the database. Although Quang Tri Province has no landmine/UXO victim surveillance system, all information presented in this research regarding landmine/UXO victims is certified with the highest degree of confidence in the current context.

In addition to the general information on landmine/UXO victims from 1975 to 2005 included in this document, more specific data may be obtained by request to the Information Management Section of Project RENEW™.

2.2 Research method of the KAPB survey

Research design

The horizontally cut and descriptive research was conducted in nine rural and mountainous districts and towns of Quang Tri Province. The population and sample size for the research was selected using the method of accumulating population, iterated addition and division into 30 random groups. The research subjects were all family members seven years old or older who could answer the contents of a pre-defined questionnaire.

Sample size and selection method

Sample size

Sample size is calculated by this formula:

$$n = Z^2_{(1-\alpha/2)} P(1-P)/d^2$$

Of which:

n: sample size
α: statistical meaning, degree of confidence 95%, α=0.05, therefore Z= 1.96
d: expected preciseness (d= 0.014)
P = 0.5 (relevant to the biggest sample size)

Therefore, the projected sample size for the research was at least 4,900 subjects.
With the provisional alternative of plus 5% sample size, the increased sample size was estimated at 5,100 subjects.

Sample selection

At each district, the method of selecting the probability sample relevant to the population at random was used (Probability Proportion to Size). Following the method of accumulating population and iteration addition, 30 random groups were selected in the whole province, where each group was a commune/ward (see annexes). Therefore, each group had at least 170 research subjects.

Field Survey Method

- At the District level, 3 to 4 surveyors were selected.
- In each Commune surveyors interviewed 170 people.
  (170 X 30 communes = 5,100 people)
- A list of villages in each commune was made.
- Surveyors selected at random 1 village to survey.

The selection of households was covered a village from one end to the other. If there were not enough households in one village, the households in an adjacent village were selected, and the process continued until 170 samples were selected in one commune. (In mountainous areas where villages had fewer households, it was necessary to select adjacent villages, and not select villages of easier access for surveying).

Surveyors interviewed all family members age seven or older, who did not suffer from mental disease, who were not insane, and who volunteered for the interview. If they were not at home, they were passed over and not re-interviewed. If there were no family members available, the surveyors could move on to the next household. Interviews were conducted individually to avoid the exchange of information among family members.

Surveyors at the commune level frequently spoke by phone with each other and with the organizational board and supervisors to deal with problems as they arose. In each district one group leader was assigned to take responsibility for the survey.
After the completion of the survey, survey sheets were collected at communes in each district and the group leader submitted them to the Provincial Department of Health.

Research definitions

- A household is defined as a group of people living together, sharing meals and inhabiting the same house for at least three of the most recent 12 months.
- A family member refers to a person who lived with the family for at least three of the most recent 12 months.

Method of collecting information

Surveyors directly interviewed members of each family following the pre-defined questionnaire. To ensure the preciseness and uniformity of data, researchers were fully trained before conducting interviews at families' homes.

Personnel

Surveyor:
Qualified and experienced medical staff from provincial health care units, including those from district levels, were selected to take part in the field survey. Most of them also took part in the previous KAP survey in 2002.
Surveyors receieved training on the following topics:

- Presentation of content, purpose, meaning and methodology of the research.
- Introductions and guidelines for using the research questionnaire.
- Skills needed to interview and gather data.
- Skills to facilitate group discussion at community levels.
- Responsibilities of group leaders and members.
- Notes on landmines and UXO safety.

A training session for surveyors at the Provincial Department of Health
Photo: Thai Huu Lieu

Supervisors:

During field surveys, surveyors were supported and controlled by nine provincial supervisors. The supervisors' responsibilities were:

- To select households to survey; Supervisors arranged the collection of data from 30 communes, chosen at random, to form a random sample.
- To implement research activities at households: Guiding the surveyors and monitoring their collection of data at households by directly interviewing family members.
- To monitor and guide surveyors in order to determine if there were weaknesses in performance; Supervisors observed communication skills with other members, questioning skills, accurate reporting of information, and the checking of information provided by family members for quality assurance.
- To complete a random check of 5 percent of the samples to verify whether the surveyors had interviewed properly and filled in the questionnaire with correct information, since it was to form the basis for the survey assessment.

Constructing the database and analyzing research data

The data, after being reviewed, was fed into the Project RENEW™ computer system and was analyzed using Epi Info 2002 software. Parameters requiring analysis were determined by statistical algorithms run on the database.

For comparison, statistical figures were computed and assessed using tests of statistical comparison employing a Chi-square index, or a P-value with a statistical mean at a 95-percent confidence level.

Research schedule

Specific activities were caried out according to this schedule:

No	Activities	Schedule	
1	Discussion to plan the research	3 days	April 11 to 14, 2006
2	Workshop and basic training	1 day	April 20, 2006
3	Field survey	7 days	April 21 to 27, 2006
4	Data inputting and treatment	8 days	May 8 to15, 2006
5	Analysis, reporting	14 days	June 16 to 30, 2006

5. Limitations of the study

Every research design has its strengths and weaknesses. In this study, among the latter is the possibility that the respondents did not tell the truth by either exaggerating or simplifying the problems they encounter in their daily lives.

The issue of knowledge, attitudes, behaviors and practices between the two study periods could be better improved and could provide more accurate information if the two sampling areas were identical. Unfortunately this was not possible due to necessary, yet minor changes in the second field study. However, these issues did not have much of a negative impact on the results because they had been taken into account by the implementation team.

Aside from those issues, Quang Tri Province still has no provincial surveillance system of landmine/UXO victims, thus the data on landmine/UXO victims may not be as completely precise as expected.

Interviewing inhabitants in Dakrong District, Quang Tri
Photo: Thai Huu Lieu

PART III
STUDY RESULTS

I. SITUATION OF LANDMINE/UXO VICTIMS IN THE PERIOD OF 1975-2005

1. Overall description

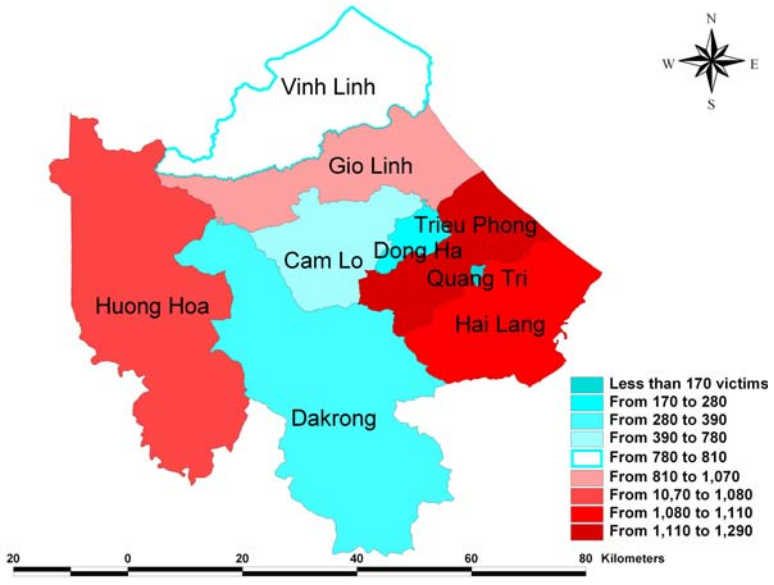
Thirty years since the war ended in Vietnam (1975-2005) Quang Tri Province has been the home of 6,931 victims of postwar landmine/UXO incidents, approximately 1.12% of the total provincial population. Out of these casualties, 2,593 people were killed and 4,338 were injured.

In the first five years after the war (1975-1979), landmine/UXO accidents caused 3,193 casualties, accounting for 46.10% of the total number of victims since 1975. The number of casualties reduced significantly in the next five years (1980-1984) to 983, accounting for 14.20% of the total figure. The number of victims rose considerably in the 1985-1989 period to 1,091 casualties, 15.70% of total figure. Since 1990, the number of annual landmine/UXO casualties has generally been on the decline.

In the ten years (1996-2005) since Quang Tri Province began cooperating with international NGOs in neutralizing landmines/UXO, the average number of annual victims is 53 people, a reduction of 76% in comparison with the average of the 1975-2005 period and down 67% from the average of the five previous years (1991-1996).

Since the expansion of MRE activities in 2002, the average annual number of landmine/UXO victims is 45, a drop of approximately 80% from the average of the 1975-2005 period and a decrease of 34% compared to the average of the five previous years (1997-2002).

- *Graph 2-6, annex 1 (page 60-62)*



Map of landmine/UXO casualties in Quang Tri Province 1975 - 2005

2. Major findings on landmine/UXO casualties

2.1 Inhabitant areas

The three districts with the highest number of landmine/UXO casualties are Trieu Phong (1,284 casualties), Hai Lang (1,104) and Huong Hoa (1,074) respectively. It should be noted that Trieu Phong and Hai Lang are the two most populous districts in Quang Tri Province, but also that Huong Hoa's district population ranks the sixth in the province (10.62% of the provincial population) while its proportion of landmine/UXO victims since 1975 ranks third at 15.5% of the total number of victims.

The majority of landmine/UXO victims live in rural areas. In the 1975-2005 period, over 90% of all victims come from rural sections of Quang Tri Province. Dong Ha Town and Quang Tri Town are the two areas with the lowest landmine/UXO casualties (274 and 166 victims, respectively). The population of Dong Ha makes up 12.96% of total population (ranked fourth out of all districts) while the total number of its victims only accounts for 3.95% out of the total provincial landmine/UXO casualties (ranked eighth out of all districts).

People living in mountainous areas have had a higher landmine/UXO accident rate than those living in flat areas. Cam Lo (1.61%) and Huong Hoa (1.60%) have the highest number of victims as a percentage of their population. In addition, mountainous Dakrong district ranks eighth in terms of population (5.4% of the provincial population) but fifth in terms of victims as a percentage of its population (1.13%).
(*Victims as a percentage of the population (by district): the total number of victims over the past 30 years in a district divided by its population at the end of 2005*).

- *Graph 1, annex 1 (page 60)*

2.2 Ethnicity

The study data show that members of ethnic minority groups are more likely to be involved in landmine/UXO accidents than the members of the Kinh ethnic majority. While the ethnic minority groups (Van Kieu and Paco) comprise only 7.92% of the total population, they account for 16.30% of total landmine/UXO casualties since 1975.

Most members of ethnic minority groups live in mountainous areas, especially in Huong Hoa and Dakrong districts, the site of fierce battles, military bases and heavy U.S. bombing of the Ho Chi Minh Trail.

- *Graph 11, annex 1 (page 65)*

2.3 Gender

Males comprise a much higher percentage of landmine/UXO victims in the last 30 years (82.90%) despite the fact that the population is quite balanced in terms of gender (female: 50.44%; male: 49.56%). The rate of male fatalities is also higher than that of female fatalities (89.30% male; 10.70% female).

- *Graph 8, annex 1 (page 63)*

2.4 Age

Landmine/UXO victims come from all age groups, but the vast majority are children, teenagers and middle-aged adults. Victims under 36 years old constitute 80.50% of the total figure of landmine/UXO victims while those under 26 account for 64.20% and those under 20 years old make up 46.50%. (It should be noted that the ages of 120 victims at the time of their accident could not be verified due to insufficient records. The majority of these cases involved ethnic minority people).

Children under 7 years old and elders over 55 years old are the smallest age groups (accounting for only 4.50% and 3.50% respectively). However, children in general (under 16 years old) still account for the highest figure (31.50% of all victims). It is striking that children between the ages of 7 and 15 make up the highest proportion of all other age-groups (27.00%).

2.5 Socio-economic situation

Landmine/UXO accidents directly impact the lives of the poor. 72% of victim's families earn less than 2 million VND in an average year (about $130 USD). 27.8% have an income of 2 to 5 million VND/year (about $196 USD) and 3.4% earn an income of 5 to 10 million VND/year (approximately $752 USD). Only 0.4% of the victim families have an average annual income of more than 10 million VND.

2.6 Education

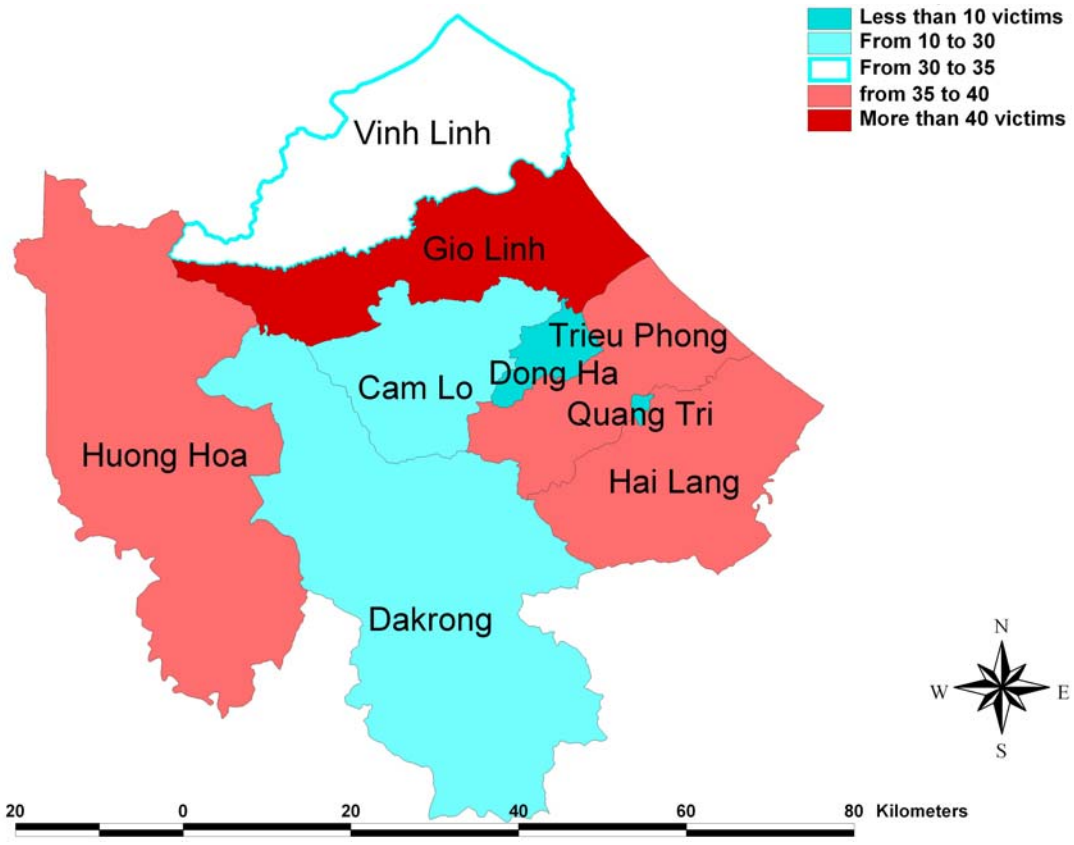
Study results show a negative association between the victim's level of educational attainment and the likelihood of being hurt in a landmine/UXO accident. Those with less education are more likely to be involved in a landmine/UXO incident. 11.3% of victims are illiterate (i.e. have the least education), which ranks third out of all education groups. The illiteracy rate among victims is much higher than that of the general population. Other people with low levels of educational attainment (i.e. primary and secondary school) account for the highest percentages of landmine/UXO victims in the1975-2005 period; 47.73% attended primary school and 33.04% went to secondary school. The number of victims with a high school or university education is negligible (0.04% and 0.13% respectively).

- *Graph 24, annex 1 (page 74)*

II. SITUATION OF LANDMINE/UXO VICTIMS IN THE PERIOD OF 2000-2005

1. Overall description

From 2000 to 2005, there were 267 casualties in Quang Tri Province; 89 fatalities and 178 injuries. 81 victims were under 16 years of age, accounting for 30.30% of the total number of victims in the last 5 years. On average, there were 45 victims per year, a reduction of 180 victims compared to the annual 1975-2005 average. Also, the average annual number of victims in the 2000-2005 period declined by more than 50% in comparison with the average of the previous five years.



Map of landmine/UXO casualties in Quang Tri Province, 2000 - 2005

2. Main findings

2.1 Inhabitant area

In the last 5 years, three districts with the highest number of landmine/UXO victims were Gio Linh (44 casualties), Huong Hoa (39) and Trieu Phong (39).

After comparing their percentage of total victims with their proportion of the province's total population, Huong Hoa and Dakrong districts have the highest relative percentage of landmine/UXO incidents in the province. Huong Hoa district contains 10.62% of the total provincial population but accounts for 14.60% of total victims in the province. The situation is similar in Dakrong district, which accounts for 5.40% of the province's total population and 11.60% of its landmine/UXO victims. In addition, Gio Linh district also has a similar situation with 12.31% of the population and 16.50% of all landmine/UXO victims.

The number of victims in urban areas has steadily declined in comparison with the figures from the total postwar period (1975-2005). The ratio of landmine/UXO victims in Dong Ha Town over its population is 3,4% (the ratio for 30 year is 3.95%). Quang Tri Town has been home to only 3 victims over the last 5 years (just 1.10% of the total), a 50% reduction from the 1975-2005 figures**.**

2.2 Ethnicity

Study results indicate that ethnic minority people (Van Kieu and Paco) are more likely to be involved in landmine/UXO incidents than members of the Kinh majority group in the last five years. Although the Van Kieu and Paco groups only comprise 7.92% of total population of Quang Tri Province, they accounted for 20.2% of the total number of victims during the last five years. This is a significant increase compared to the 1975-2005 total (16.3%). This disproportional percentage of victims proves the greater threat of landmine/UXO accidents faced by ethnic minority people who live in Huong Hoa and Dakrong districts.

2.3 Gender

The gender distribution of landmine/UXO victims in Quang Tri Province over the last 5 years has changed considerably in comparison with the breakdown of the 30-year period (1975-2005). In the recent 5 years, the percentage of males increased to 88%, while the percentage of females fell to 12%. The fatality rate for males was higher between 2000-2005 (93.3%) as compared to the 1975-2005 period.

2.4 Age

In the previous five years, victims under 16 years old made up a considerably high percentage (30.3%) of total victims. Yet, this figure actually declined from the 1975-2005 period in which 31.5% of all victims were under 16 years of age. The percentage of victims under 7 years old (3%) also reduced compared to the figure from the 1975-2005 period (4.5%). The proportion of victims between the ages of 16 and 19 fell from 15% (1975-2005) to 8.6% (2000-2005). The percentage of young and young adult victims (under 36 years old) also reduced in the past five years (1975-2005: 80.5%; 2000-2005: 75.3%).

There is a clear increase in the size of the 26-35 year old age group (1975-2005: 16.3% of victims; 2000-2005: 22.1%) and also the 36 to 45 year old age group (1975-2005: 10.2%; 2000-2005: 16.5%) in recent years. It is clear that people in their prime working years are also faced with the danger of landmine/UXO incidents.

The two districts with the highest number of victims under the age of 16 in the past five years include Gio Linh (26 casualties) and Cam Lo (12), followed by Trieu Phong (11). The number of child victims in Gio Linh is higher than any other district or town in the province.

Since 2003 (one year after the launching of Project RENEW™), the total number of victims under 16 years old in both Trieu Phong and Hai Lang districts is 5 casualties each, a significant reduction compared to the five preceding years (1998-2002). In the 1998-2002 period, each year there were 9 landmine/UXO victim under sixteen in Trieu Phong district and 10 in Hai Lang district.

No other notable trends with respect to victim's age between the two periods were observed.

2.5 Socio-economic situation

The socio-economic profile of victims has not changed much over the last five years. Once again it indicates the connection between landmine/UXO accidents and poverty. 88.8% of victim's families earn less than 5 million VND a year (about $326 USD). Meanwhile, 59.8% of families have a yearly average income of less than 3 million VND (about $196 USD) and 37.8% earn less than 2 million VND per year (about $130 USD). Only 11.2% of all families have an average yearly income of over 5 million VND.

- *Graph 23, annex 1 (page 73)*

2.6 Education

When compared to the 1975-2005 period, the linkage between education level and landmine/UXO accidents has slightly changed in the past five years. However, it still reflects the fact that landmine/UXO accidents predominantly affect the people with lowest levels of educational attainment. The number of landmine/UXO victims with a secondary school education makes up the highest percentage (39.10%), followed by victims with a primary education (32.71%) and then those who are illiterate (23.31%). Victims with a high school education constitute the lowest percentage (only 4.89%). There is no record of any landmine/UXO victim having more than a high school education in the past five years.

- *Graph 25, annex 1 (page 75)*

2.7 Impacts of landmine/UXO accidents on the continuing education of children

In the last five years, 85.2% of child landmine/UXO accident survivors have returned to school while the remaining 14.8% permanently dropped out.

Landmine/UXO victims who are ethnic minority children are more likely to drop out of school than children victims of the Kinh group. One-third of ethnic minority children who are landmine/UXO victims permanently left school, while only one-eighth of Kinh child victims discontinued their studies.

The number of children who are victims in families with yearly average income less than 3 millions is 3.5 times higher than the number of children who are landmine/UXO victims in families with yearly average income more than 3 million VND. 96.3% of child victims under 12 years old who were in primary school at the time of the landmine/UXO accident returned to school afterwards. 76.5% of children older than 12 years old continued their studies.

2.8 Landmine/UXO victims' needs

The high incidence of poverty amongst the victims' families has a considerable influence on their preferred type of aid. Over the 1975-2005 period, the majority of victims' families preferred assistance in the form of financial loans or credit (40.36%), and direct aid (39%).

Once again, in the 2000-2005 period, the most prized forms of assistance were direct aid (35.96%) and financial credit or loans (35.47%). 20.2% of families primarily sought educational scholarships for their children, followed by physical rehabilitations (wheels, artificial limps...) which were most attractive to 1.48% of families. The remaining 6.90% indicated one of a wide range of other needs.

➢ *Graph 26, annex 1 (page 76)*

A child UXO victim in Hai Lang District, Quang Tri Province.

Photo: Thai Huu Lieu

III. CAUSES OF LANDMINE/UXO ACCIDENTS IN THE LAST 30 YEARS

1. Activities at the time of accidents

Four main activities led to postwar landmine/UXO incidents in the 1975-2005 period: farming (38.6%); collecting scrap metal (11.2%); herding cattle (8.3%) and tampering with landmine/UXO devices (6.3%).

In the past five years (2000-2005), the main activities which led to landmine/UXO accidents remained unchanged from the total postwar period. However, the rank order of causes is slightly different: farming retained the top position (23.2%), followed by scrap metal collecting (18%), playing with landmine/UXO devices (15.7%) and herding cattle (7%).
Comparing the statistics of the two periods shows that although farming led to a lower percentage of landmine/UXO accidents in recent years, it is still the primary activity of the victim at the time the accident. Meanwhile, collecting scrap metal and playing with landmines/UXO have resulted in a greater proportion of accidents in recent years.

- *Graph 19, annex 1 (page 69)*

1.1 Inhabitant areas

The activities which caused landmine/UXO accidents in the last five years vary across the different districts and towns of Quang Tri Province and do not appear to correspond to the general patterns or concentrations of provincial victims.

While farming caused the most landmine/UXO accidents in Huong Hoa (51.3% of all accidents in the district), Dakrong (38.7%) and Trieu Phong (26.6%) districts, collecting scrap metal from war wastes caused the most casualties in Vinh Linh (37%), and Hai Lang (35%) districts, as well as in Quang Tri town (66.7%) and Dong Ha town (33.3%). In Gio Linh district, playing with landmines/UXO led to the most landmine/UXO accidents (38.6% of all accidents in the district) while herding cattle is the leading activity which caused landmine/UXO accidents in Cam Lo district (20%).

1.2 Ethnicity

In both the 1975-2005 and 2000-2005 periods, farming was the leading cause of landmine/UXO accidents for the Kinh ethnic group (19.2% of total victims). Though it accounts for a much smaller percentage of casualties in the 1975-2005 period (34.3%), scrap metal collecting (18.8%) also cause casualties in the Kinh group with approximate equivalent figure in the last five years and increase considerably if compare to the ratio of the total postwar period 1975-2005 (12%). The percentage of landmine/UXO incidents caused by playing with landmine/UXO (16.9%) increased noticeably in the Kinh group over the last five years in comparison to the 1975-2005 proportion (6.9%).

As in the Kinh group, farming was the leading cause of landmine/UXO incidents involving ethnic minority people over the last five years (38.9%). The proportion of accidents caused by collecting scrap metal more than doubled over the last five years in the ethnic minority communities (14.8%) compared to the figure from the total postwar period (6.4%). Playing with landmines/UXO ranks third on the list of activities responsible for landmine/UXO accidents in ethnic minority groups (11%), a three-fold increase over the total postwar period (3.4%).

In sum, in the 2000-2005 period, the farming activities of the Van Kieu and Paco groups have generated twice the percentage of landmine/UXO accidents than those of the Kinh group. In contrast, the Kinh people are more seriously threatened by landmine/UXO accidents from collecting scrap metal and playing with landmines/UXO than the Van Kieu and Paco people.

1.3 Gender

Since 2000, farming has been responsible for the most landmine/UXO accidents involving males (25.5%), followed by collecting scrap metal (18.3%), and playing with landmines/UXO (17%). When compared to the percentages of the total postwar period, this figure has considerably reduced. Meanwhile, study data shows that the proportion of accidents related to collecting scrap metal and playing with landmine/UXO have increased significantly. From 1975-2005, the leading causes of accidents for males were farming (35.2%) collecting scrap metal (12.9%) and playing with landmines/UXO (7.4%).

The main activities leading to landmine/UXO accidents for females in the last five years are collecting wood/water (15.6%), collecting scrap metal (15.6%) and herding cattle (12.5%). If compared to the figures from the total post war period 1975-2005, the percentage of farming accidents has reduced dramatically, from 54.8% in the total postwar period to 6.3% in the 2000-2005 period. Farming went from causing the majority of female accidents in the 1975-2005 period to eighth place in the past five years. Meanwhile, the percentages of casualties caused by both collecting scrap metal and herding cattle tripled, as they accounted for just 2.6% and 4.2% of accidents in the total postwar period, respectively.

Because of the overwhelming proportion of male victims, the comparison in terms of gender seems almost insignificant. The conclusion to be drawn from study data is that males are the main group affected by landmines/UXO because of their involvement in the activities of scrap metal collection and playing with landmines/UXO.

1.4 Age

During both the 1975-2005 period and in the last five years, most victims under 7 years old have been hurt while playing with landmines/UXO (50%) or recreational activities (25%). These percentages have increased dramatically in the last five years over the totals from the entire postwar period. The percentage of children harmed while playing with landmines/UXO has jumped from 19% to 50% and the proportion injured or killed during recreation has climbed from 17.5% to 25%.

In the 7 to 15 year-old age group, the main activities leading to landmine/UXO accidents in the period of 1975-2005 were playing with landmines/UXO (13.4%), herding cattle (20.5%) and farming (21.2%). In the five-year period 2000-2005 each percentage has reduced: playing with landmines/UXO (38.4%), herding cattle (20.5%) and collecting scrap metal (12.3%) were the most common activities.

In general, children under 16 have the highest risk of being involved in landmine/UXO incidents because they are most likely to play with landmines/UXO. Unfortunately, this tendency is on the rise in the recent years. As for children attending primary and secondary schools, the risk of landmine/UXO accidents is highest when they raise cattle.

For 16 to 19 year-old adolescents, the main activities causing landmine/UXO accidents in the 1975-2005 period were farming (38.4%), collecting scrap metal (13.2%) and herding cattle (8.6%). The rank-order figures for the recent five-year period are collecting scrap metal (21.7%), playing with landmine/UXO (17.4%) and farming (13%).

The data above show that children and teenagers are more likely to involved in landmine/UXO accidents when engaging in such activities as playing with landmine/UXO, collecting scrap metal and herding cattle.

As for the 20 – 25 year-old age group, the main activities that led to landmine/UXO accidents during the entire postwar period were farming (41.4%) and collecting scrap metal (16.9%). This trend has not varied in the 2000-2005 period as farming continued to be the main activity at the time of the accident (23.7%) followed by collecting scrap metal (18.4%). The rate of accidents while gathering scrap metal has significantly increased compared to the previous period.

The main activities leading to landmine/UXO accidents at the age group from 26 to 35 in the last five years include collecting scrap metal (27%) and farming (25.4%). Meanwhile, the figures of the entire postwar period are 17.6% and 41% respectively.

As for the age group of 36 and above, the main activities causing landmine/UXO accidents in the recent years continue to be farming, a trend which continued from the previous period.

1.5 Socio-economic situation

In the past five years, the main activities causing landmine/UXO accidents in families with a yearly average income of under 5 million VND include farming (25.2% of total victims), collecting scrap metal (20%) and playing with landmines/UXO (17.3%). The top three activities in the total post war period were farming (37.5%), collecting scrap metal (11.8%) and herding cattle (9.1%).

As for victims' families earning an average annual income of more than 5 million VND, the main activities leading to landmine/UXO accidents in the last five years include herding cattle (15%) and farming (15%) while the dominant activities of the 1975-2005 period were farming (42.3%) and collecting scrap metal (8.7%).

Study data clearly prove that members of low-income families are more likely to suffer landmine/UXO accidents because of their higher level of involvement in activities such as playing with landmine/UXO and collecting scrap metal than those from higher income families. In addition, the number of casualties as a result of these two activities has sharply increased among low-income families in recent years.

2. Areas where landmine/UXO accidents happened

One alarming detail discovered by this study is that the area where the most landmine/UXO accidents occurred in the last five years is near the victim's home (27.7% of total landmine/UXO incidents). Other highly risky areas include hilly areas (22.50%), cultivated farmland (19.9%), and forests (8.2%).

Home, sweet home? More than 1/5 of landmine/UXO accidents in the recent 5 years happened near victims' houses

Areas with the most landmine/UXO accidents over the1975-2005 period were cultivated farmland (26.8%), hilly areas (24.7%), near homes (15.7%), and on former military bases (6.2%).

In recent years, the proportion of landmine/UXO accidents occurring in cultivated fields, in the hills and on former military bases has reduced while accidents happening near victims homes have doubled compared to the percentages of the total postwar period.

➢ *Graph 20, annex 1 (page 70)*

UXO discovered near a household in Hai Lang District, Quang Tri Province
Photo: Phan Van Hung

3. Victims' recognition of the dangerous areas before their accidents

Since 2000, only 10.4% of all victims knew that the area in which their accident occurred was contaminated with landmines/UXO. Most of the victims who knew were collecting scrap metal or dismantling landmines/UXO at the time, and the rest provided no response to this question.

Only 8.8% of all victims from the 1975-2005 period reported knowing that their accident area was dangerous. The majority of these victims were involved in collecting scrap metal, farming and dismantling landmines/UXO at the time of their accident.

➢ *Graph 13, annex 1 (page 66)*

3.1 Ethnicity

In the past five years, the proportion of ethnic Kinh victims who knew the area of their accident was dangerous (12.3%) was 4 times higher than that of victims belonging to Van Kieu and Paco groups (3.7%). These figures are comparable to those of the total post war period: Kinh (10.3%), Van Kieu and Paco (2.8%).

3.2 Gender

From 2000 to 2005, the proportion of males who knew before their accident that the area was dangerous (11.2%) was much higher than that of their female counterparts (3.8%). The same relationship was observed in the entire postwar period (males: 9.5%, females: 5.3%).

3.3 Age

The percentage of middle-aged victims who knew about the danger of the area before their accidents is higher than the corresponding percentages of children and teenagers. In the past five years, no victim under 7 years old reported knowing that the area of their accidents was dangerous. 5.1% of 7 to 17 year-olds and 13.5% of all adults over 18 years of age knew of the danger beforehand.

Over the past thirty years, the percentage of victims who knew their landmine/UXO incident area was dangerous was 3.2% in under-7 age group, 6.5% in the 7 to 17 age group and 10.5% for the 18 and older age group.

3.4 Socio-economic situation

Even though the link between poverty and the awareness of dangerous areas has not been proven, data show that victims who knew about landmine/UXO contaminated areas prior to their accident tend to come from families with higher levels of income. In the past five years, only 8.9% of victims from families earning less than 5 million VND per year knew that the area of their accident was dangerous. In contrast, 20% of all victims from families earning more than 5 million VND per year knew of the dangers beforehand. Both of these figures are higher than their 1975-2005 counterparts, which were 8% and 16.9% respectively.

4. Reasons leading to dangerous activities of the landmine/UXO victims

In recent years, the main reason that motivated victims to consciously enter unsafe areas was the collection of scrap metal. This reason accounted for 80% of all incidents where the victim knew the area was dangerous. The main reasons for consciously entering landmine/UXO contaminated areas in Quang Tri Province from 1975 to 2005 were, in rank order, collecting scrap metal (33.4%), farming (15.7%), professional tasks (8.5%) and herding cattle (6%).

- *Graph 21, annex 1 (page 71)*

5. Landmine/UXO marking

Data show that 92.8% of landmine/UXO incidents happened in areas without proper landmine/UXO contamination warning signs.

- *Graph 16, annex 1 (page 67)*

6. Seeing landmine/UXO before the accidents

In the past five years, 33.5% of landmine/UXO victims have reported seeing the actual landmine/UXO device prior to their incident. Alarmingly, 88% of victims went ahead and touched the landmine/UXO object, triggering the explosion. Both figures changed slightly from their 1975-2005 counterparts, 26.5% and 84% respectively.

- *Graph 14, annex 1 (page 66)*

6.1 Ethnicity

Since 2000, the proportion of Kinh victims who saw the landmine/UXO device prior to their accident (39.7%) is much higher than that of Van Kieu and Paco victims (11%). The figures for the total postwar period 1975-2005 are 28.8% and 16.6% respectively.

From 2000 to 2005, the percentage of Kinh victims who deliberately touched the landmine/UXO object was 88.31%, while that of Van Kieu and Paco victims was 83.33%. The 1975-2005 figures were 82.57% for Kinh victims and 90.43% for Van Kieu and Paco victims. While the rate of deliberately touching the landmine/UXO object declined over the past five years for ethnic minority victims, the proportion of Kinh victims interfering with the explosive device increased.

6.2 Gender

In the past five years, the number of landmine/UXO incidents caused by deliberate and direct encounter with landmines/UXO was slightly, but not significantly higher for males (88%) than for females (83%). Both figures are higher than their 1975-2005 counterparts, 84% and 68% respectively. Although females generally exhibit less-risky behavior compared to males, the high rates of conscious female interference with dangerous landmine/UXO devices must be addressed.

7. Access of landmine/UXO victims to MRE information prior to their accidents

Since 2000, 39.8% of all landmine/UXO victims in Quang Tri Province have reported receiving MRE information prior to their accident. Thus, the majority of the victims (60.2%) had not received any type of MRE information. This figure for the total postwar period 1975-2005 is 4%. This discrepancy indicates that MRE information has been more thoroughly disseminated in the province in recent years.

Nevertheless, MRE does not always create the desired outcomes. Some people, despite having received MRE information, were still involved in landmine/UXO accidents. Many victims in the last five years who had received MRE information had their accidents while tittering the land (21.20%) or collecting scrap metal (15.20%). Unfortunately, playing with landmines/UXO also accounted for a considerable percentage of victims who had received MRE information in the last five years (11%). Most of these cases (63.6%) involved children from 9 to 11 years old.

➢ *Graph 15, annex 1 (page 67)*

7.1 Ethnicity

Over the past five years, the percentage of Kinh landmine/UXO victims with previous access to MRE information (47%) was three times higher than that of Van Kieu and Paco victims (13%).

A bomb with intact warhead in Linh Thuong, Gio Linh, Quang Tri, discovered by scrap metal searchers, is being transported for selling! (August 2005).

Photo: Hoang Nam

7.2 Age

From 2000 to 2005, older victims had a higher likelihood of having been exposed to MRE information. The percentage of victims possessing some MRE knowledge was 12.5% among those under 7 years old, 39.7% in the 7 to 17 year-old age group and 41% in the 8 years old and older age group.

7.3 Socio-economic situation

In the 2000-2005 period, the higher the income of the victims' family, the more likely it was that they had received MRE information. 35% of all families with an annual income of less than 5 million VND had been exposed to MRE information, compared to 68.6% of all families earning more than 5 million VND per year.

8. Type of landmine/UXO that caused accidents

During the past five years, for identified cases, landmines accounted for 4.24% of all casualties, while the proportion caused by UXO was 95.76%. The corresponding figures for the total postwar period were 10% and 89.9% respectively. Landmines cause a much smaller percentage of casualties in Quang Tri Province as compared to UXO, especially in recent years.

From 2000 to 2005, the types of landmine/UXO devices causing bodily harm in Quang Tri Province were, in rank order: Unidentified items (55.76% of all accidents), sub-munitions or bomblets (30.30%), M79 rifle grenades (7.27%), landmines (4.24%) and finally, mortars and other projectiles (2.42%). These figures for the total postwar period were sub-munitions or bomblets (44.39%), other types of UXO (26.47%), M79 rifle grenade (13.82%), landmines (10.60%), mortars (3%) and hand grenades (2.25%). The study results show that sub munitions and rifle grenades have caused the majority of the landmine/UXO incidents for the people in Quang Tri Province since the war ended in 1975.

➢ *Graph 18, annex 1 (page 68)*

Bomblets – the leading type of accident-causing ordnance in Quang Tri Province.

Photo: Phan Van Hung

8.1 Ethnicity

In the past five years, the proportion of casualties caused by landmines in Van Kieu and Paco groups (5.13%) was slightly higher than that of the Kinh group (3.97%). In contrast, the percentage of Kinh victims killed and injured by sub-munitions (30.95%) and rifle grenades (7.94%) was a little higher than that of the Van Kieu and Paco victims (28.21% in comparison with 5.13%).

Also in the 1975-2005 period, the percentage of casualties caused by landmines was roughly equal for both the Kinh group (9.1%) and ethnic minority groups (9.7%). However, the proportion of casualties caused by sub-munitions in the Kinh group (38.86%) was lower than that of the Van Kieu and Paco groups (49.24%) while rifle grenades caused a greater percentage of casualties in the Kinh group (13.29%) than in the Van Kieu and Paco groups (9.70%).

8.2 Age

In both the total postwar period and the past five years, sub-munitions and rifle grenades were the two major types of UXO harming victims of all ages. Data indicate that children under 7 years old tend to have more accidents with rifle grenades (16.2% of the total) than all other age groups.

A landmine victim tends to his crop of mushrooms provided to him through a mushroom-growing sub-program in Trieu Phong District, Quang Tri Province
Photo: Thai Huu Lieu

IV. KNOWLEDGE, ATTITUDES, PRACTICES AND BELIEFS WITH RESPECT TO THE DANGER OF LANDMINES/UXO

1. The existence of Landmines/UXO

1.1 Landmine/UXO Encounters

The study results show that landmines/UXO contaminate many areas in Quang Tri Province, as indicated by the large percentage of respondents who had heard of landmines/UXO (92.4%). 63.3% of them even reported a direct encounter with a landmine/UXO device.

According to the respondents who directly encountered landmine/UXO, most landmines/UXO are located in hilly and mountainous areas (38.3%), cultivated fields (31.7%), bushes (14%), forests (13%), and on former military bases (10.2%). An equivalent proportion of respondents encountered landmine/UXO near their homes (4.4%) and on trails (4.9%). In addition, beaches, river banks, main roads and schools are also places where people have encountered landmines/UXO.

➢ *Graph 1, annex 2 (page 77)*

Hilly and mountainous areas

Most respondents who have encountered landmines/UXO in hilly and mountainous areas come from the districts of Vinh Linh (19%), Gio Linh (14%), and Huong Hoa (13.5%). Young adults (26 to 35 years of age) frequently encounter landmine/UXO on hilly and mountainous areas. Also, farmers (48.4%), laborers (17.8%) and pupils (16.2%) often encounter landmine/UXO on hilly and mountainous areas.

Cultivated fields

Residents of Trieu Phong District have the highest rate of landmine/UXO accidents in cultivated fields (21%), followed by residents in Huong Hoa (18%), Vinh Linh (16.8%), Gio Linh (13%), Hai Lang (8.6%), and Cam Lo (6.5%) districts. Only the mountainous district of Dakrong (1.7%) and the towns of Dong Ha (11.5%) and Quang Tri (2.7%) have lower levels of landmine/UXO encounters on cultivated lands.

The vast majority of landmines/UXO found on cultivated fields were encountered by Kinh residents (90%) as compared to members of Pa Co (3%) and Van Kieu (6%) ethnic groups. Middle-aged respondents accounted for the highest proportion of those who encountered landmines/UXO on cultivated fields among all age groups (21%).

The occupational groups who most frequently encountered landmines/UXO in hilly and mountainous areas are farmers (58.3%), laborers(12.2%) and pupils (12.7%). These figures are easy to understand because farmers and laborers mainly work in agriculture while pupils in rural areas usually assist their family members on household farms. Obviously, these groups are more likely to encounter landmines/UXO on cultivated fields

Bushy areas

Residents of Trieu Phong, Hai Lang and Gio Linh districts account for the highest proportion of the respondents who encountered landmines/UXO in bushes (40.8%, 17%, and 14% respectively). People in the over 45 year-old age group are most likely to encounter landmines/UXO in these areas.

Near home and school

Alarmingly, people encounter landmine/UXO even near their homes and schools. As mentioned above, 4.4% of the respondents have encountered landmine/UXO near their homes. Most of these people come from Trieu Phong (26.5%), Vinh Linh (25%), and Hai Lang (22.3%) districts. Most of them are young (under 16) middle-aged (26 years or over) and mainly work in agriculture or attend school.

Although the proportion of people who encounter landmines/UXO at school is small, it is noteworthy because of the high accident rate. Study data show that pupils under 15 years of age in Huong Hoa (25.7%), Trieu Phong (23%) and Gio Linh (17.6%) districts are more likely to encounter landmines/UXO at or near their schools than those in other localities.

Other areas

While residents in Vinh Linh, Dong Ha and Cam Lo districts account for a high proportion of those who encounter landmine/UXO in forests, residents in Huong Hoa, Cam Lo, Gio Linh and Vinh Linh districts constitute the highest proportion of those who encounter landmine/UXO on former military bases.

A UXO explosion happened at this farmer's home in Trieu Dong Commune, Trieu Phong District, Quang Tri Province (Jan 2006)

Photo: Phan Van Hung

Never encounter landmine/UXO before

Few ethnic Kinh respondents said they had never encountered landmines/UXO before (5%) as compared to a higher percentage of Van Kieu (11.7%) and Paco (12%) respondents. Most of them (56.5%) are under 15 years of age. Residents in Hai Lang and Dakrong districts account for the highest proportions of those who have not encountered landmine/UXO (37.5% and 23.6% respectively), followed by residents living in the urban areas of Dong Ha and Quang Tri towns (9% and 7% respectively). Females, as compared to males, make up a much higher perentage of respondents who had never encountered landmines/UXO (67.2% female to 32.8% male). Very few respondents cannot remember where they encountered the landmine/UXO device (0.7%).

1.2 Frequency of encountering landmines/UXO

The frequency of landmine/UXO encounters again affirms the widespread existence of landmines/UXO in the province. Over half of the interviewed residents said they see landmine/UXO at least once a year (50.4%). Meanwhile, one out of every seven respondents encounters landmines/UXO every month (14.8%), one out of 13 respondents encounters landmines/UXO every week (7.8%) and one out of 16 respondents encounters landmines/UXO every day (6.1%).

➢ *Graph 2, annex 2 (page 77)*

Encountering landmines/UXO on a daily basis

Residents in the districts of Gio Linh, Dakrong, Trieu Phong, Cam Lo and Hai Lang have the highest frequency of encountering landmine/UXO on daily basis (37.4%, 21.4%, 14.4% and 14% respectively).

Residents in middle-aged and elder (over 46 years old) age groups most frequently encounter landmines/UXO every day. Farmers, pupils and laborers most frequently encounter landmines/UXO on a daily basis (57.2%, 18.2% and 7.5% respectively). The study shows that people with lower incomes have a higher likelihood of running into landmines/UXO on a daily basis. The majority of respondents who earn under 2.5 million VND per year encounter landmines/UXO every day (56%) in comparison to a smaller proportion of respondents who earn between 2.5 and 5 million VND per year (26.7%). Respondents with an income level of between 5 and 10 million VND per year (6%) and respondents earning over 10 million VND per year (2.7%) constituted much smaller proportions in comparison. Males account for a higher proportion of respondents who encounter landmines/UXO every day, compared to females (59.4% male - 40.6% female).

Encountering landmines/UXO on a weekly basis

Residents in the districts of Gio Linh, Trieu Phong and Huong Hoa most frequently encounter landmine/UXO every week (39%, 20.2%, and 14.3% respectively).
Middle-aged and elder residents most frequently encounter landmine/UXO weekly. Farmers, pupils and laborers also are likely to encounter landmine/UXO weekly (57.2%, 18.2% and 7.5% respectively). The less income respondents earn, the more likely they are to encounter landmines/UXO on weekly basis. The majority of respondents who encounter landmine/UXO weekly earn less than 2.5 million VND per year (56%) compared to the proportion of respondents with an income level of 2.5 to 5 million VND per year (26.7%).

People earning between 5 and 10 million VND per year (6%) and those with an income of over 10 million VND a year (2.7%) account for much smaller proportions. More males encounter landmines/UXO on weekly basis than females (59.4% male - 40.6% female).

Encountering landmine/UXO on a monthly basis

Residents of Trieu Phong, Cam Lo and Gio Linh districts account for the highest proportion of respondents who encounter landmines/UXO monthly (26.4%, 21.8% and 16.5% respectively). The two districts of Dakrong (12.8%) and Huong Hoa (12.1%) have almost equivalent proportions of respondents who encounter landmine/UXO every month. Other indicators related to age, occupation, income and gender groups do not reveal many differnces among respondents who encounter landmines/UXO on weekly basis.

Comparison with the 2002 study result

The number of respondents encountering landmine/UXO on a day basis has increased over the last four years: 6.1% of respondents encounter landmines/UXO daily in 2006 as compared to 4.5% in 2002. Meanwhile, there was a sharp decrease in the number of respondents who encountered landmine/UXO on a weekly, monthly or yearly basis. Generally, the number of people running into landmine/UXO on a weekly, monthly or yearly basis has decreased significantly; however, the fact that over half of respondents are likely to have a landmine/UXO encounter is a serious matter.

A notable issue raised by the study data is that differences in the likelihood of encountering landmines/UXO across age, occupation and income groups are not significant. Nevertheless, middle-aged people, laborers and school pupils who have low levels of income have the highest possibility of encountering landmine/UXO. Additionally, Gio Linh, Dakrong and Huong Hoa districts contain the majority of people who could possibly encounter landmines/UXO. This finding remained the same between the two studies.

There is a difference in the gender distribution of people who encountered landmines/UXO. This study indicates a larger proportion of males running into landmine/UXO in 2006 compared to the findings from the KAP study in 2002.

1.3 Activities when encountering landmine/UXO

A near majority of respondents said that they encountered landmine/UXO while working on agricultural fields (47.4%). Other activities which led to an encounter with landmines/UXO include herding livestock (26.7%), collecting firewood and water (22.3%), walking (17.4%), cutting grass and trees (14.6%), searching for scrap metal (14.4%), and burning bushes to clear land for cultivation (about 10%).

Encountering landmines/UXO while herding livestock is common for those who are between the ages of 26 and 35 (18.2% of the total), followed by the 36 - 45 year-old age group (17.8%) and the 46 - 55 year-old age group (14.5%). Children under 15 years also make up a considerable proportion (13%).

Encountering landmines/UXO while burning bushes is not only a problem among the Van Kieu/Paco ethnic minority groups, as is usually assumed, but is also widespread in the majority Kinh group. A large number of the Kinh people said they encountered landmine/UXO while burning bushes to clear land for cultivation (60%) compared to a smaller number of Van Kieu (20.7%) and Paco (19.3%) respondents.

- *Graph 3, annex 2 (page 78)*

Comparison to the 2002 study result

A remarkable difference between the two studies is the sharp increase in the proportion of respondents who reported encountering landmines/UXO while working in cultivated fields, from 21% in 2002 to 47.4% in 2006.

In addition, the proportion of respondents encountering landmines/UXO while searching for scrap metal has also increased noticeably, from 9.2% in 2002 to 14.4% in 2006.

Landmine victim data also indicates that within the last 5 years, agricultural work and searching for scrap metal are the two primary activities responsible for landmine/UXO accidents in Quang Tri Province.

- *Graph 4, annex 2 (page 78)*

UXO near the house of a family in Trieu Phong District, Quang Tri Province
Photo: Phan Van Hung

2. Knowledge, Attitudes, Practices and Beliefs of People with respect to the Dangers of Landmines/UXO

2.1 General impacts of Landmines/UXO to people

Over the 30 years since the end of the war, study data show positive trends in the levels of awareness among residents towards the impacts of landmines/UXO. The majority of the respondents understand that landmines/UXO can kill (89%) or injure (75.8%) human beings.

Many respondents are aware of both consequences, fatality and injury (66.3%). Some respondents believe that landmines/UXO spoil the environment (6%), impoverish residents, and affect economic development, family health and cattle raising (each accounts for 3%).

A small number of respondents do not know the effects of landmine/UXO accidents and suppose that landmines/UXO have no impact (0.9%). Most of these people live in Dakrong (44.2%), Vinh Linh and Huong Hoa districts (both account for 11.5% each).

A notable issue is that a high proportion of Pa Co respondents is unaware of or misunderstands the impacts of landmines/UXO (44.2%). Furthermore, many Kinh residents (48%) also do not properly grasp the landmine/UXO problem. A small proportion of the Van Kieu group also shares this problem (7%).

Young people less than 15 years old make up the highest proportion among the respondents who have no knowledge or incorrect knowledge of landmine/UXO consequences (46.2%). People older than the age of 36 make up the smallest proportion of such respondents (3.8%).

One out of every two respondents with no knowledge or incorrect knowledge of the consequences of landmine/UXO accidents are pupils (50%). Farmers also account for a considerable proportion of these respondents (42.3%); followed by laborers (5.8%) and the unemployed (1.9%).

Also, 57.7% of respondents without proper knowledge of the consequences of landmine/UXO accidents are female, and 42.3% are male.

Comparison to the 2002 study result

Awareness of the consequences of landmine/UXO incidents has increased over the last few years, although it is still not very high. However, this tendency proves that provincial residents have a growing interest in mine awareness information. The percentage of respondents who have no knowledge of the consequences of landmine/UXO incidents has declined from 1.27% in 2002 to 0.9% in 2006. The majority of these respondents come from areas in Dakrong and Huong Hoa districts.

Many children still lack proper levels of mine awareness knowledge as they account for a high proportion of this population in both studies (42,6% of the total of the interviewees who having no knowledge of the impacts of landmines/UXO).

2.2 Landmine/UXO impacts on the daily lives of people

Ten out of every twelve respondents said that their lives are affected by postwar landmine/UXO (83.4%). The majority of these respondents said landmine/UXO can cause death or injury (66.76%). Landmines/UXO are also said to negatively affect people's agricultural activities (36.2%), and cause fear and worry over the possiblitity of relatives and friends becoming landmine/UXO victims (36%). Other problems include the restriction of travel (14.3%), the demands of caring for injured/disabled relatives (about 10%), the extra danger of firewood/water/food collection activities (6.7%) and the limiting of land for construction (6.2%).

Many respondents who recognize that landmine/UXO accidents can result in death and injury are from Trieu Phong (about 20%) and Hai Lang (16.3%) districts. Meanwhile, Dakrong and Huong Hoa districts account for the lowest proportion of respondents on this issue (l7% and 5% respectively). Most of the people in these two districts who do not know that landmines/UXO can cause death and injury are farmers (38.5%) and laborers (13.6%).

Over half of respondents who reported that landmines/UXO limit the available agricultural land are farmers between 26 and 55 years old (54.2%) and many earn less than 5 million VND per year (40%). Respondents who reported that landmines/UXO restrict their firewood/water/food collection activities also tend to be farmers between 26 and 55 years old (46.1%) and many earn less than 5 million VND a year (55.8%).

A large number of respondents who said their lives are not affected by landmine/UXO are civil servants (45%), traders (32%), and people who earn more than 5 million VND per year and live in Dong Ha town (30%).

Comparison to the 2002 study result

There is no significant change in the respondents' thoughts about the impacts of landmines/UXO between the two studies. The most remarkable finding is that the proportion of respondents who reported that landmines/UXO restrict the size of their agricultural land has increased. Future population growth and the necessary expansion of agricultural land could be important factors that will make people in Quang Tri Province more aware of the constraints landmines/UXO place on land usage.

- *Graph 21, annex 2 (page 87)*

2.3 Areas thought to be contaminated with landmines/UXO

People in Quang Tri Province are most likely to run into landmines/UXO in the following areas: hilly and mountainous area (60.9%), arable fields (36.4%), former military bases (24.7%), woods (23.4%), and bushes (18.2%). Places usually considered safe, such as home or school, are also contaminated with landmines/UXO on occasion.

According to the above results, hilly and mountainous areas are most likely to be contaminated with landmines/UXO. The most remarkable detail is the dramatic increase in respondants who indicated that arable cultivation fields have the most existing landmine/UXO devices (from 11.6% in 2002 to 36.4% in 2006). There is an increasing number of respondents who report that landmines/UXO still exist on former military bases, and in forests or bushes. Although other areas such as schools and homes are selected by only a small number of respondents in both studies, these responses indicate the contamination of supposedly 'safe' areas by landmine/UXO.

➢ *Graph 6&7, annex 2 (page 80)*

2.4 Recognizing areas contaminated with landmines/UXO

Many respondents thought that there are signs which help identify an area as possibly contaminated with landmines/UXO. Over half of respondents (53.2%) thought that if they see landmine/UXO object on the ground, that area is definitely contaminated. Another large proportion of respondents believed in rumors discussed by surrounding residents about the presence of landmines/UXO in certain areas (34%). 23.9% of respondents looked for standardized landmine/UXO warning signs to determine if an area was contaminated, and a small percentage of others recognized contaminated areas thanks to homemade warning signs made by local residents.

Though only 7.6% of respondents can identify areas contaminated with landmines/UXO, it should be noted that the plurality of these respondents are under 15 years old (47.3%). The 26 to 35 year-old (15%), 16 to 19 year-old (11%), 20 to 25 year-old (8.2%), and 36 to 45 year-old (7%) age groups each account for lower proportions. Respondents over 46 years old account for the lowest proportion (6.5%).

The ability of people to recognize contaminated areas is positively associated with levels of education. People with low levels of education usually cannot recognize dangerous areas. 46.5% of those who cannot recognize dangerous areas have only a primary education and 40% have just a secondary-level education. Those with a high school education (12%) or university education (0.3%) account for much smaller percentages.

School pupils are the largest single group among those who cannot identify contaminated areas, constituting more than half of these respondents (54%). The next largest group is farmers (32.3%). Meanwhile, laborers, civil workers and the unemployed account for very small proportions (4.1%, 0.3% and 1.6% respectively). Residents who work in commerce and other jobs make up equally small proportions (both 3.5%)

Data show that the males are more likely to recognize areas as contaminated with landmine/UXO than females. Males constituted 40.8% of respondents who were not able to identify contaminated areas, while females made up the remaining 59.2%.

Localities that have high proportions of residents unable to recognize landmine/UXO contaminated areas include Hai Lang (25%), Gio Linh (21.7%), Dakrong (13.9%) and Trieu Phong (13.3%) districts. Vinh Linh (9%) and Cam Lo (6%) districts as well as Dong Ha (5.2%) and Quang Tri (3%) towns are areas where the proportion of residents who cannot recognize landmine/UXO contaminated places is on the decline.

Some respondents reported that they could recognize landmine/UXO contaminated areas thanks to other indications (1.1%), e.g. the identification of landmine/UXO contaminated areas by mass media broadcasts, mainly via television.

➢ *Graph 8, annex 2 (page 81)*

Comparison to the 2002 study result

There has been a considerable increase in awareness of the warning signs which indicate contaminated areas. Impressively, the proportion of people who could not recognize areas contaminated with landmines/UXO has sharply decreased, from 22% in 2002 to 7.6% in 2006. Beside this positive change, other indexes also show the gradual increase in awareness of other indications of landmine/UXO contamination.

➢ *Graph 9, annex 2 (page 81)*

2.5 Causes of Landmine/UXO explosions

According to the respondents, the main ways to accidentally detonate landmine/UXO devices are attempting to disassemble (50.3%), intentionally touching (47.5%), unintentionally touching (46.4%), stepping on (40.9%), throwing hard objects at (33.9%), and setting off the tripwire of (10.5%) the device. According to the data from the mine victim survey, over the past five years, these are the main causes of landmine/UXO accidents in Quang Tri Province.

A small number of respondents, approximately one in thirty, did not know what could cause a landmine/UXO device to explode (3.3%). Many of them live in Dakrong district (42.8%). Hai Lang, Trieu Phong and Gio Linh districts each account for approximately equivalent proportions (11.3%, 10.7% and 10% respectively). The remaining districts contain fewer respondents who lack this knowledge (8% of the total).

A majority of respondents who do not have this knowledge belong to the Kinh ethnic group (50.3%). However, despite the fact that they only account for 1.52% of the total population, 40.3% of respondents who were not aware of the causes of landmine/UXO detonation came from the Paco ethnic group. A considerable proportion of Van Kieu respondents also do not have this information (9.4% of the total).

People with poor knowledge about this question are often under 15 years of age (35.8%). The older people are, the more likely it is that they know what actions can cause a landmine/UXO device to explode. Data on educational groups show that most of these respondents have only a primary education (47.8%), a secondary education (32%) or are illiterate (33.8%).

Most respondents without this knowledge are farmers (44%), pupils (38.4%) and laborers (8.8%). Those who work in business or in other jobs account for a smaller proportion (about 3% each).

Respondents who cannot identify the causes of a landmine/UXO explosion generally have low levels of income. 55.3% earn less than 2.5 million VND a year, 27.7% make between 2.5 and 5 million VND per year and 9.4% have an income of between 5 and 10 million VND per year. Only a very small percentage of this group earns over 10 million VND per year (0.6%).

Of the group of respondents who cannot name the actions that can cause a landmine/UXO explosion, 58.5% are females and 41.5% are males. Only a very select group can identify all of the actions which can lead to a landmine/UXO explosion (about 2%).

- *Graph 10, annex 2 (page 82)*

Comparison to the 2002 study result

The majority of interviewees in the two studies select the same actions which can lead to a landmine/UXO explosion. However, study data show both increases and decreases in the percentage selecting certain causes. In particular, the percentage of people who are aware that disassembling landmines/UXO can lead to an explosion has skyrocketed from 27.3% in 2002 to 50.3% in 2006. Meanwhile, the proportion of people who cannot name any of these actions has decreased from 5% in 2002 to 3.3% in 2006.

- *Graph 11, annex 2 (page 82)*

A Mine Risk Education training event for local people organized by the Trieu Phong Youth Union

Photo: Phan Van Hung

2.6 Prevention of landmine/UXO accidents

Study data show an impressive trend: the majority of residents have adopted the right knowledge of and attitude towards the prevention of landmine/UXO incidents. Participants' responses highlight some solutions including avoiding dangerous areas (chosen by 74.7% of respondents), and not playing with or touching landmines/UXO (56%). Other responses include avoiding an area where other people are playing with landmine/UXO (15.8%), avoiding unfamiliar objects (13.3%), taking care when clearing bushes (9.3%) and walking on safe trails/roads (4.5%).

However, there remains a proportion of the population (1.9%) that does not know how to avoid landmine/UXO accidents. Half of them live in Dakrong district (50%), and a smaller number live in Huong Hoa district (12.8%). Gio Linh and Hai Lang districts have the same proportion (9.6%) while other towns and districts have lower proportions of those who do not know how to avoid accidents: Dong Ha and Vinh Linh (both 6.4%), Cam Lo (4.3%), and Trieu Phong (about 1%).

Alarmingly, data show that a majority of respondents (52%) who do not know how to avoid landmine/UXO accidents belong to the Paco ethnic group, followed by the Kinh (35%) and the Van Kieu (12.8%) groups.

Young people under 15 years old account for the highest proportion of respondents without this information out of any age group(40.4%). The older the respondents are, the higher levels of awareness they tend to have about avoiding landmine/UXO accidents. Data regarding educational attainment show that most residents who have no knowledge of risk avoidance strategies or the causes of landmine/UXO explosions have only a primary education (50%) or a secondary education (25.5%).

The majority of respondents who do not have this knowledge are farmers (53.2%), school pupils (41.5%) and laborers (4.3%). Traders and other occupations make up only a very small proportion of this group (about 1%).

Most people who lack information about avoiding landmine/UXO accidents have an income of less than 2.5 million VND per year (72.3%). The proportion sharply decreases in higher income groups. Respondents with an income of between 2.5 and 5 million VND per year account for 9.6% of this group, 6.4% more make between 5 and 10 million VND per year, and very few make over 10 million VND a year (about 2%).

A higher proportion of females reported not knowing how to prevent landmine/UXO accidents than males (52% females - 48% males). Only a vey small proportion (0,1%) of the interviewees selected all those activities.

➢ *Graph 12, annex 2 (page 83)*

Comparison to the 2002 study result

Data show that the public's knowledge of accident prevention techniques has improved since 2002. The proportion of respondents who do not know how to prevent mine incidents has dramatically declined, from 5% in 2002 down to 1.9% in 2006.

A significant finding of both KAP studies is that younger respondents tend to know less about accident prevention. Huong Hoa and Dakrong districts continue to account for the highest proportion of uninformed residents. The Paco ethnic group still demonstrates a disproportional lack of knowledge about preventing landmine/UXO accidents.

➢ *Graph 13, annex 2 (page 83)*

2.7 Knowledge of activities leading to landmine/UXO accidents

The study shows that activities most likely to cause landmine/UXO encounters and accidents are hunting for scrap metal (selected by 68.5% of respondents), disassembling landmines/UXO (40.7%), playing with landmine/UXO (40.6%), and watching others dismantle landmines/UXO (19.2%).

The prevalence of landmine/UXO contamination in agricultural fields in Quang Tri Province and the dependence of local people on agriculture is a dangerous combination. According to survey data, farming is the third most dangerous activity that could lead to landmine/UXO accidents. Respondents characterized farming as only slightly less dangerous than disassembling landmine/UXO objects. A plurality of victims in the 1975 – 2005 period were farmers (38.6%), proving farming's dangerous potential. In the past five years, farmers continue to endure a large percentage of landmine/UXO accidents (23.4%). As a result, farmers are the occupational group that needs the most attention from mine action organizations as their activities are dangerous, yet essential to rural communities and the province as a whole.

A small number of respondents also noted other activities likely to cause landmine/UXO accidents such as tending cattle, burning bushes for farming, digging, collecting firewood/water, playing/recreation, chopping down trees, foraging for food, walking, watching others destroy landmines/UXO, catching fish and hunting. These activities each account for less than 13% of the total. Most of these activities provide crucial economic support to families and help to improve rural inhabitants' basic standards of living.

According to victim data, the main activities which lead to landmine/UXO accidents for Quang Tri people from 1975 to 2005 were farming (38.6%), collecting scrap metal (11%), tending cattle (8.3%) and playing with landmines/UXO (6.3%). As noted above, data for the last five years indicate that the proporiton of landmine/UXO incidents that happened while the victims are farming has remarkably declined to 23.4%, despite remaining the most dangerous activity. In stark contrast, the proportions corresponding to collecting scrap metal and playing with landmines/UXO have increased dramatically (18% and 15.8% respectively).

➢ *Graph 14, annex 2 (page 84)*

Comparison to the 2002 study result

The number of respondents who understand possible causes for landmine/UXO incidents has clearly increased in recent years. There are more people now who perceive activities such as collecting scrap metal and playing with or disassembling landmines/UXO as dangerous than did in 2002, an increase of at least 20% between 2002 and 2006. Also, farming is now considered one of the leading causes of landmine/UXO incidents.

One notable finding is the increase in the respondents' levels of knowledge: In 2002, 11.66% of respondents reported not knowing about activities which can result in landmine/UXO accidents compared to none in this study. This is probably one of the most positive and impressive changes observed over the past five years.

➢ *Graph 15, annex 2 (page 84)*

Since 1975), there have been 770 landmine/UXO victims in Quang Tri Province hurt while searching for and sawing/dismantling landmine/UXO devices for scrap metal.

T.L. is the latest scrap metal collecting victim to participate in this study. In June 19th, 2006, he used a home-made detector and tools to search for war waste in Trieu Phong District.
While working, he accidentally struck a metal object with his hoe. The explosion resulted in the loss of both his arms.

(Photo: Thai Huu Lieu)

2.8 Reasons for entering landmine/UXO contaminated areas

Since the living standards of many Quang Tri residents, particularly those in rural areas, are low, decisions to enter landmine/UXO contaminated areas are most often financially-motivated. The majority of respondents indicated that searching for scrap metal is the leading reason convincing people to go into dangerous areas (75.5%). Also, the need towork in rice fields is listed as another main reason why people put themselves in danger (31.8%). This stastistic shows that a number of people their tilled land regardless of landmine/UXO contamination levels.

Other income-generating and related activities such as tending cattle (23.5%), traveling to work (14.5%), collecting firewood/water (7.4%), looking for food (about 7%), and catching fish/hunting (0.8%) force people enter landmine/UXO infested areas. Respondents also highlighted professional demining work as one of the main reasons to enter such areas (17.6%). Some respondents considered curiosity to be a reason that makes people enter landmine/UXO areas (7%). A small amount of people (35.7%), most of them under 15 years of age, think group pressures (namely peer pressure) encourages people to enter dangerous areas.

Remarkably, 7.6% of (or one out of thirteen) respondents do not know why people go into landmine/UXO contaminated areas. These respondents mainly come from the districts of Gio Linh (25%), Hai Lang (17%), Dakrong (15%) and Huong Hoa (13.6%). The rest of the province's administrative units each account for a small proportion of this group, all less than 9%. The majority of respondents unaware of the reasons for entering dangerous areas belong to the Kinh ethnic group (71.2%), while Pa Co and Van Kieu respondents account for smaller proportions of the total (20% and 8.7% respectively). With respect to age group, respondents under 15 years old account for the highest proportion of this population (43.8%), followed by the 26 to 35 year-old age group (about 15%). The data show that people in higher age groups are less likely to lack this knowledge. 46.7% of respondents unaware of the motivations causing people to enter landmine/UXO contaminated areas had a primary education, 31.3% had a secondary school education and 12.2% had a high school education. Illiterate people, meanwhile, represent a relatively high proportion of these respondents (18.4%). Regarding occupational groups, school pupils, farmers and laborers are more likely to not know why others go into landmine/UXO affected areas (51%, 36.4% and 5.4% respectively).

People with lower incomes are more likely to lack of this knowledge: A considerable amount of people (53.5%) who were unaware of the reasons for entering dangerous areas earn less than 2.5 million VND per year. 28% of these respondents earn around 2.5 to 5 million VND per year and 10% of these people earn between 5 and 10 millions/year.

More females than males do not know the reasons why people enter into dangerous areas. The gender distribution of this group of respondents is: 54.3% female - 45.7% male.

➢ *Graph 16, annex 2 (page 85)*

Comparison to the 2002 study result

There is no remarkable discrepancy between the two studies in listing the reasons which make people enter landmine/UXO contaminated areas. However, the proportion of people who are aware of what these reasons are has considerably increased since 2002. Scrap metal searching is the leading reason followed by other income-generating activities. Dakrong, Huong Hoa and Gio Linh districts have the highest proportions of respondents who reported to not have this type of knowledge.

In 2002, there were more people who lacked of this type of knowledge than in 2006, a decrease of 12.8% (22.4% in 2002 ; 7.6% in 2006).

- *Graph 17, annex 2 (page 85)*

2.9 Groups most likely to experience to landmine/UXO accidents

Scrap metal searchers are considered most likely to endure landmine/UXO accidents according to all respondents (55.2%), and especially by children under 15 years of age (41%) and farmers (25.8%). Males are believed to be more likely to have landmine/UXO accidents than females (18.2% males - 2.7% females). Meanwhile, the elderly, demining workers and soldiers are believed to have least possibility of involving in landmine/UXO accidents.

Half of children (51%) under 15 years old who have heard of landmines/UXO said they could easily become a victim of a landmine/UXO accident. Meanwhile, fewer men think of themselves as possible victims of landmine/UXO accidents (19%).

- *Graph 18, annex 2 (page 86)*

Comparison to the 2002 study result

Relevant data drawn from survey responses about potential landmine/UXO victims show little change between the two studies. Those searching for scrap metal continue to be thought of as most likely to suffer landmine/UXO accidents. The proportion of respondents selecting collecting scrap metal as a possible incident cause grew by 18% between 2002 and 2006. Meanwhile, children and farmers are still categorized as highly vulnerable groups.

- *Graph 19, annex 2 (page 86)*

3. Practices of people to landmine/UXO threats

3.1 Practices when discovering landmine/UXO items and accidents

The majority of respondents showed constructive behavior when asked what they would do in a landmine/UXO encounter. 57.8% would report to their community representatives, 43% would inform their relatives, and 21.7% would notify friends/neighbors. These reactions help to avoid or prevent future landmine/UXO incidents.

A considerable amount of respondents prefer to keep themselves safe by leaving the dangerous area (21%) while a smaller number of respondents would elect to solve the problem more thoroughly by reporting to local landmine/UXO clearance teams (14.4%). Another encouraging response made by respondents is to report the sighting to local organizations, mainly Youth Unions (7%).

Some respondents (10.6%) indicated that they would take all three actions, leaving the contaminated area, reporting to their local authority/organizations and mine clearance teams and informing their families/neighbors. Trieu Phong District boasts the most impressive proportion of respondents who choose to take all three actions (44.8% of the total), followed by Vinh Linh District (21.4%), Dong Ha town (8.3%) and Gio Linh district (7.1%). The districts of Hai Lang and Huong Hoa account for approximately equivalent proportions (about 6% each). Lowest proportions are recorded with the respondents from Cam Lo district (4.4%), Quang Tri town (1%) and Dakrong district (0.8%). Most of these respondents are members of the Kinh ethnic group (96.7%) in contrast to very few Van Kieu and Paco residents. The predominant age group among those would take all three actions is middle-aged respondents from 36 to 45 years old (19.3%). Youth and adolescents make up the smallest proportion (8.3%).

Those respondents who selected the option of reporting to landmine/UXO clearance teams mainly live in areas where there are currently or have been mine risk education programs and/or mine clearance operations. This includes the districts of Hai Lang (20.7%), Gio Linh (18%) and Cam Lo (15.4%). Unfortunately, no one in Dakrong district selected this option. Most Van Kieu and Paco respondents must have not been aware of this option since the proportion of respondents who selected to report to clearance teams is extremely low (0.3%). 99.7% of all those who would report to clearance teams are Kinh residents. Many respondents who selected this option come from the middle-aged 26 to 35 year-old age group.

UXO containing chemical substance can only be detonated under certain weather conditions.

Photo: Phan Van Hung

As for the option of reporting landmine/UXO encounters to organizations/schools, the highest proportions of respondents who selected this practice live in Trieu Phong (21%) and Hai Lang (19.2%) districts, where a series of landmine/UXO risk prevention activities have been carried out by local Youth Union chapters. Meanwhile, the districts of Vinh Linh and Dakrong have low proportions of respondents who selected this practice (4.4% and 0.6% respectively). Most of these cases came from ethnic Kinh individuals (99%) and those in childhood or adolescence (61%).

Apart from the above positive practices, there were also some respondents who selected unsafe courses of action, including retrieving the landmine/UXO object for sale (1%), approaching to watch the landmine/UXO object be defused (0.7%), bringing landmine/UXO home or to local authority (0.1%) and even throwing hard objects at the landmine/UXO device (less than 0.1%) .

Although thankfully accounting for only a small proportion of responses, these practices are highly dangerous; therefore it is necessary to find out more about this group of respondents. Among those who selected the option of taking landmine/UXO for sale, a large number of them are from Vinh Linh (25.5%), Dakrong (23.4%), Gio Linh (15%) and Huong Hoa (also 15%) districts. Other districts and towns account for very low proportions of respondents who selected the above practices (all less than 8%).

These choices were made by members of each ethnic community, Kinh, Van Kieu and Paco (61.7%, 17% and 21.3% of respondents respectively). The plurality of those who selected risky courses of action fall in the middle aged 26 to 45 year-old age group (42.6%). The dominant occupations of these respondents were farmer (72.3%), laborer (8.5%) and pupil (15%). Most of respondents who chose these risky actions make less than 2.5 million VND per year (68%). More males perform these actions than females (78.7% males - 21.3% females).

Similarly, most respondents who selected the option of trying to defuse landmine/UXO fall in the middle-aged (26 to 45 years old) and low-income (less than 2.5 millions VND/year) groups. Younger people tend to take more risks when they encounter war landmines/UXO. 28.6% of respondents who selected other risky practices, such as approaching to take a closer look at the landmine/UXO device, come from the youth and adolescents age group. Most of respondents who selected this dangerous practice live in Vinh Linh district (60%). Again, in this group, males account for a higher proportion of responses than females (65.7% males - 24.3% females).

There are still a few people who selected the option of taking landmine/UXO home, defusing, and bringing them to local authorities, seeing that as the safest course of action. The remaining options received little attention (chosen by just 2.8% of respondents) and include trying to mark the item with tree stems, throwing the item into bomb craters, digging and burying the item, throwing the item down into ponds, lakes, rivers and streams or just ignoring it (each accounts for a very small percentage of responses).

When faced with the hypothetical situation of witnessing a landmine/UXO accident, half of respondents chose to take the victim to the nearest health care service provider (50%). Other popular choices included calling neighbors for help (42.2%), reporting the incident to local authorities (30.8%), entering accident site to help (25.4%) and taking the victim to his or her respective home (2%).

Apart from those who selected the constructive responses listed above, some respondents reported that they would avoid the scene of the accident (2.5%) or not know what to do (2.4%).

Those who would avoid the accident site altogether are mainly school pupils (52%) and laborers (23.3%). Many are children under 15 years of age (45%) and the majority live in Dong Ha town (61.7%), or in Dakrong (12.5%) and Gio Linh (11%) districts.

Meanwhile, the majority of respondents who would taking no action in the event of a landmine/UXO incident are pupils (56.5%) or farmers (33%). Most are children under 15 years of age children (52%). A number of respondents who would take no action live in Gio Linh (21%) and Dakrong (15.7%) districts. The ethnic distribution of this group is 58.3% Kinh, 24.3% Van Kieu and 17.4% Paco. The gender distribution of this group is rather even.

- *Graph 22, annex 2 (page 88)*

Comparison to the 2002 study result

As compared to the 2002 results, 2006 respondents in general have selected safer and more community-focused behaviors. Study data show a drastic increase in the proportions of respondents who choose to inform local authorities, professional UXO/mine clearance teams and social organizations (particularly Youth Unions). Localities that showed the most encouraging results include those in Trieu Phong district, which accounted for 44.8% of all positive responses. Units needing to show improvement include those in Dakrong district (which accounted for only 0.8% of all constructive responses). High proportions of respondents in areas with an active MRE presence (namely Trieu Phong and Hai Lang districts) chose to report incidents to local authorities.

A majority of respondents who selected dangerous behaviors come from the lowest income group (earning less than 2.5 million VND per year). Youth also comprise a large proportion of those who selected dangerous behaviors, another similarity shared with the 2002 study.

- *Graph 23, annex 2 (page 88)*

3.2 Practices of people to anti-personnel mines

The differences between minefields and UXO contaminated areas are obvious as minefields contain relatively distinct features. "A mine field is an area or ground that contain mines laid in or off lines" and a "mine is a weapon designed to lay under, on or near the ground surface or other plates and detonated by the presence, contacts or impacts of residents or vehicles".[10]

(10). International Center for Humanitarian Mine Action at Geneva, Guideline to establish Mine Action Rules, 2005

Therefore, awareness and practices of residents in minefields, apart from basic risk prevention strategies, require responses distinct from those applied to landmine/UXO infested areas. One safe measure for a person to take once after realizing that they are walking in a mine field are "stopping, standing still and calling for help" [(11)].

The survey result shows that while a majority of respondents would perform positive practices if caught in a minefield such as stopping, standing still and calling for help (20.8%), an even larger percentage of respondents would carefully retrace their steps out of the minefield (33.5%), or if forced to continue walking, would probe the ground in front of them to ensure safe footing (0.8%). In addition, some respondents indicated very risky behaviors, such as continuing on their way (6.9%).

Meanwhile, a rather large proportion of respondents reported having taken no measures in such cases (9.4%). A small number of respondents selected other practices, including running out of the minefield (accounting for 7% of the total selections of other practices), continuing on while trying to avoid mines (7%), and going back to inform authorities, collecting mines for scrap metal and collecting for disposal (each 3.6%).

Another question related to the anti-personnel mine issue is what should be done when encountering others trapped in a minefield. As mentioned above, there are specific safe processes for aiding those caught in a minefield. According to international documents for landmine/UXO risk prevention education, bystanders should avoid entering the minefield and instead, call for help [(12)]. Thus, answers that reflect sound knowledge and safe practices are fetching experts or authorities for help, or in an emergency, prodding to find a safe path to the stranded individual and taking him or her out of harm's way along the same path. A majority of respondents selected to report to experts/authorities who could handle the situation (54%), while a small number of respondents (1.3%) selected the latter option, finding a safe path along which to rescue the individual.

Additionally, there are still respondents who selected options that could result in accidents for themselves like entering the minefield to take victims to health care centers (25.7%), going into accident site to help (10.4%), and going into the minefield to take the victim home (0.7%). Notably, some respondents (7%) did not know what to do while others showed indifference by choosing to avoid the accident scene entirely (5%).

Those who reported that they would enter the minefield to rescue victims are mainly farmers (48.5%), pupils (20%) and laborers (12.8%). Many are between 26 and 55 years of age, and most live in the districts of Vinh Linh (31%), Hai Lang (19%), Trieu Phong and Huong Hoa (each accounts for 13.6%). For those who selected this practice, males account for a higher proportion than females (53% males vs. 47% females). The survey data also show similar proportions for those who selected the option of entering the accident site to help victims.

One important aspect is although the rate is not high, most of the people who choose to bring the victims home come from the districts except for the two towns of Dong Ha and Quang Tri where the medical service is better provided. The situation is especially grave in Dakrong where the majority said they would bring the victims home instead of to local clinics or other places (57%).

(11). UN, Guideline to implement landmine/UXO risk prevention education, Volume 5, Education and training, page 33

(12). Handicap International, International Guideline for conducting MRE programs, page 40

As mentioned above, a certain amount of interviewees said they don't know what to do when encounter accidents in a mine field. These are mostly children (53%) in the age of under 15 (44,5%) and farmers (32%) at the age from 26-35 (12,5%) and live in the districts of Huong Hoa (33,8%), Trieu Phong (15,8%) và Hai Lang (13,4%). These people are from all the Kinh, Vân Kieu, Paco communities with quite high ratio (67,7%, 18% and 13,6% respectively).

As for the group of people who react by avoiding the place of accident without doing anything including informing others, most of them are pupils (36,4%) under the age of 15 (31%), farmers (25,5%) from 26-35 years old (22,6%) and mostly come from Dong Ha (53%) and Vinh Linh (17,6%).

- *Graph 24 & 26, annex 2 (page 89 & 90)*

Comparison to the 2002 study result

Studying residents' behaviors in response to discovering themselves in a minefield has produced some interesting results. While the proportion of respondents who selected the safest alternatives (stopping and calling for help) has significantly increased, the proportion of respondents who selected to retrace their steps has decreased. Although the percentages of respondents who selected dangerous behaviors (e.g. collecting mines for scrap metal) have declined, the proportion of respondents who would take no action has not significantly changed over the past few years.

Related to behaviors performed in minefield is how to provide immediate aid to individuals hurt or stranded in a minefield. A drastic increase has been observed in the number of respondents who selected to report the situation to local authorities instead of turning to friends/relatives for help. Insufficient knowledge of the risks involved results in unsafe behaviors like entering the minefield to rescue the hurt or stranded individual, avoiding and ignoring the situation or taking no action. Occupation groups that most often choose unsafe behaviors are farmers and pupils, many of whom live in the districts of Vinh Linh and Hai Lang. This study also discovered that a high proportion of Van Kieu and Paco residents would select unsafe behaviors.

- *Graph 25, 26, 27, 28, annex 2 (page 89-91)*

4. People's access to mine action information

4.1 Sources of Landmine/UXO risk prevention information

Quang Trị has an impressive number of residents with access to landmine/UXO risk prevention information as shown by the vast majority of respondents (93%) who reported having been exposed to such information. Nearly all of these respondents had received information from TV programs (93.8%). Other sources of landmine/UXO risk prevention information include schools (26.6%), local representatives (14%), broadcast programs (13.2%), neighbors/friends (12.8%),

landmine/UXO clearance teams (10.5%), Youth Unions (8.7%), panels/posters (6.6), as well as newspapers and Women's Unions (each accounts for 4.7%).

➢ *Graph 29, annex 2 (page 92)*

The highest proportions of access to risk prevention information through television programs have been recorded from the districts of Trieu Phong (17.6%), Hai Lang (16%), and Vinh Linh (15%) as well as in Dong Ha town (also 15%). The districts of Cam Lo and Dakrong, in turn, represent the lowest proportions (7.3% and 4% respectively). Most respondents across all age groups have demonstrated interest in televised risk prevention programs. No significant variation in interest levels was observed across occupational and gender groups with access to televised landmine/UXO risk prevention information.

Meanwhile, local radio programs are accessed by a lower proportion of residents than televised programs. Residents making use of information from radio broadcasts mainly come from Vinh Linh district (30.8%), Dong Ha town (18.4%) and Dakrong district (16.3%). Farmers account for the highest proportion of respondents who have accessed risk prevention information through radio broadcasts (47.3%) while very few unemployed residents listen to these programs (0.7%). For the above two sources of information, TV and radio, Kinh residents accounted for 90% of respondents with access, compared to a much smaller proportion of Van Kieu and Paco residents (only about 7% each).

It is easy to understand the popularity of schools as a source of risk prevention information in Trieu Phong and Hai Lang districts in light of the extensive MRE activities sponsored by schools in those areas. 26% of all respondents who reported receiving information through a local school live in Trieu Phong district, and 17.3% come from Hai Lang district. These activities have been focused towards children under 15 years of age (56.4%) and pupils (78.4%).

Child-to-child MRE programs integrated with cultural performances often draw a large audience of local community members, especially children and teenagers.

Photo: Duong Trong Hue

Meanwhile, residents in Vinh Linh district and Dong Ha town account for the highest proportion of respondents who have accessed information from local representatives (37% and 19% respectively). A majority of these residents fall in the middle-aged 36 to 55 year-old age group.

Landmine/UXO risk prevention education information from landmine/UXO clearance teams is mainly provided in the districts of Hai Lang (40%), Trieu Phong (23%) and Cam Lo (13.4%), but actually only benefits Kinh residents. Meanwhile, landmine/UXO risk prevention information distributed by Youth Unions is concentrated in the districts of Hai Lang (32.9%) and Trieu Phong (21%). A majority of residents with access to these programs are youth and adolescents under 25 years of age.

Other notable points in this study are that civil servants constitute the highest proportion of residents with access to landmine/UXO risk prevention information via newspapers (31.3% of the total) and that information from Women's Unions make up a very high proportion of the information women receive (91.9%).

Television is an information channel through which many residents receive information that they deemed important (86.7%), followed by local representatives (19.6%) and friends and neighbors (each 10.8%).

4.2 Most notable sources of Mine Risk Education

Among sources of landmine/UXO risk prevention education in Quang Tri province, residents pay most attention to information from television programs (81%), followed by schools (8.5%), landmine/UXO clearance teams (2.8%) and local representatives (1.5%).

Those who selected televised programs as their most important information source are evenly distributed across all districts and towns as well as across age, occupation and gender groups. However, Kinh residents account for a disproportional percentage of those who get MRE information from television as compared to the percentages from the Van Kieu and Paco ethnic groups.

Those who selected schools as their primary source of MRE education are mainly located in the districts of Trieu Phong (40%) and Gio Linh 16.3%). Most of them are pupils (93% of these respondents) and are under 15 years of age (74.5%). Meanwhile, information from landmine/UXO clearance teams is mainly provided to those who live in districts where regular landmine/UXO clearance activities are being or have been conducted (namely Hai Lang, Trieu Phong, Cam Lo, and Gio Linh districts).

4.3 Impacts of Mine Risk Education information

92.2% of respondents reported that receiving MRE information has positively changed their awareness and practices vis-à-vis the landmine/UXO issue. Few respondents reported that the information had no impact (1%) or had a negative impact (1.1%) on their awareness and practices. 5.7% of respondents provided no opinion on this issue.

➢ *Graph 31, annex 2 (page 93)*

4.4 Information on local humanitarian mine action

In Quang Tri, many projects have sought to tackle the consequences of post-war landmine/UXO contamination. Over half of respondents reported that they knew of one or more of these projects. More specifically, 55.5% of respondents reported knowing of Project RENEW™, 51.2% knew of MAG and 8.4% knew of SODI. The humanitarian efforts of Peace Trees Viet Nam and CRS were each recognized by 2% of respondents. 12% of respondents reported knowing of other landmine/UXO action projects. As showed by the results of some references and group discussions, residents are not aware of specific projects apart from the activities of Project RENEW™ and MAG, or cannot distinguish between locally-operated landmine/UXO action projects. A majority of them know of these projects via television projects (61.7%) and specific activities carried out at their communities (landmine/UXO clearance: 42%, Mine Risk Education: 22.7%, Mine Victim Assistance: 13%).

Comparison to the 2002 study result

Compared to 2002, the 2006 study result shows that the proportion of respondents who reported having access to information on landmine/UXO threats has remarkably increased.

Among the 93% of respondents who reported having accessed landmine/UXO information, the most common source of information by far was television programs. The proportion who received information from TV programs rose 7% since 2002. Similar increases were seen across the board in schools (an increase of 9.6% since 2002), local representatives (12.3%), radio station (8.2%), Youth Unions (8%) and neighbors/friends (4.8%). Generally, information on UXO/mine threats coming from social sources has considerably increased in recent years. Television in particular and mass media in general are the main means of providing provincial residents with information on UXO/mine threats. Reports of receiving information from schools and Youth Unions are mainly concentrated in Trieu Phong and Hai Lang districts. Meanwhile, residents in the mountainous districts of Dakrong and Huong Hoa have most frequently accessed information on UXO/mine threats through mass broadcast.

One more notable detail, as discovered in the previous survey, is that differences in levels of income do not restrict residents' access to information provided via mass media broadcasts. Television is still an effective means for disseminating information on UXO/mine threats to poor households and/or households with a high risk of landmine/UXO accidents. In addition, the access to MRE information from schools, local representatives, radios and social organizations (mainly Youth Unions) has increased in recent years.

➢ *Graph 30, annex 2 (page 92)*

PART IV
CONCLUSION AND RECOMMENDATION

I. CONCLUSION

The findings of this study show that postwar landmine/UXO contamination is still a very serious problem in Quang Tri Province. Landmines/UXO negatively impacts the health, spirituality and property of local residents, harms the natural environment and restricts the socio-economic development of Quang Tri Province- currently considered one of the most impoverished provinces in Vietnam.

In Quang Tri, the number of landmine/UXO victims since the war ended is higher than several entire countries and territories which suffer from landmine/UXO contamination. In 2003, the number of casualties from landmine/UXO incidents in Quang Tri Province alone was higher than the number in Bosnia, Herzegovina, Chad, Azerbaijan, Eritrea, and Mozambique, twice the number in Albania, Thailand, and Croatia and more than three times the number in Kosovo, Lebanon and Tajikistan.

Children under 16, farmers, ethnic minority groups, males and the poor constitute a high percentage of total landmine/UXO victims.

Landmines/UXO exist in almost everywhere in Quang Tri Province: 63 % of the population has encountered landmine/UXO objects. 50.4% of the population sees landmines/UXO at least once a year, 14.9% sees landmine/UXO devices once a month and 6.1% of the population sees landmines/UXO on a daily basis.

Areas with the highest rates of landmine/UXO incidents include agricultural land, hills, inhabited areas, and former military bases. Alarmingly, a high percentage of accidents in the past five years have occurred near victims' homes.

Landmine/UXO incidents are most frequent when people are farming, herding cattle, searching for scrap metal and (obviously) when tampering with landmine/UXO devices. As observed in the past five years, a large number of accidents take place after victims deliberately enter dangerous areas to search for scrap metal.

The three districts with the highest number of landmine/UXO victims are Trieu Phong, Hai Lang and Huong Hoa. However, the districts with the highest number of victims as a percentage of their population are Huong Hoa, Cam Lo and Gio Linh. The accident rate of the Van Kieu and Paco ethnic minority groups is twice the rate of the Kinh ethnic majority.

Study data also show the linkages between levels of educational attainment and the incidence of landmine/UXO accidents as well as between income levels and accident rates. A greater proportion of landmine/UXO accidents involve people with lower levels of education and those from low-income families.

Landmine/UXO accidents are predominantly caused by unexploded ordnances, namely M79 rifle grenades and sub-munitions (bomblets). Anti-personnel landmines cause a small percentage of accidents, which has declined over the past five years. Reports from

humanitarian demining programs working in Quang Tri Province also show that the number of UXO devices detected and destroyed outnumbers that of landmines.

The access of people to MRE programs is a closely linked to the prevention of future landmine/UXO accidents. The majority of people who involved in landmine/UXO incidents had not received MRE information prior to their accident.

Study data prove that television is the most effective means of disseminating MRE information when used in conjunction with other community activities that raise public awareness of the danger of landmines/UXO. In recent years, MRE activities have helped to decrease the number of landmine/UXO victims in their project areas. Nevertheless, a certain number of people still possess insufficient knowledge and exhibit risky behavior towards the threat of landmines/UXO. Moreover, many do not know how to prevent landmine/UXO accidents which threaten their lives and those of others in their community.

The majority of the landmine/UXO victims died at the scene of the accident. Another significant proportion of victims died at or in transport to community healthcare centers.

Although it is not the focal point of this study, a comparison between the seriousness of the landmine/UXO problem and the amount support from the international community shows that the financial commitments to mine action programs in Quang Tri Province are short-term and very modest in comparison those made to mine action programs launched in other countries, regions and territories with similar or even lesser levels of contamination.

II. RECOMMENDATION

The findings of this study once again affirm the existence and continuing consequences of postwar landmine/UXO contamination in Quang Tri Province. The study also shows changes in the landmine/UXO problem over time. In recent years, several practical mine action interventions have been made in Quang Tri Province, however, these interventions do not sufficiently meet the demand for such programs. Therefore it is necessary to direct the complete attention of all levels of government, plus international institutions and the local community to alleviate the problems caused by landmines/UXO in Quang Tri Province.

It is necessary to speed up explosive ordnance disposal activities, especially in inhabited areas. These activities would be best complimented by conventional clearance projects in targeted areas.

Continuing and intensifying MRE activities especially in context of ongoing demining and clearance programs, requires a great deal of financial and human resources. MRE programs should focus on high-risk groups, namely children under 16 years of age, farmers, ethnic minorities and the poor.

When planning and implementing mine action programs, organizations should take into account the fact that UXO poses a more serious threat than landmines to the residents of Quang Tri Province.

Attention should be continue to be focused on upgrading the capacity of local medical service providers, especially on improving first aid knowledge at the commune and district levels.

Improving the access of people to proper healthcare services can help save lives and prevent a number of long-term injuries caused by landmine/UXO accidents.

It is essential that mine action activities are coordinated effectively in terms of program location, target groups, and methodologies. Cooperation among programs is essential to both providing an effective response to community needs and maximizing the contribution of each program. Poverty alleviation programs, vocational training programs and socio-economic developmental programs should look at the landmine/UXO problem in context of the multi-dimensional response of international organizations to avoid redundancy and maximize effectiveness.

The province as a whole, with the cooperation of all relevant organizations, must find effective ways to support victims of landmine/UXO accidents, people living in heavily contaminated areas and those who depend on scrap metal searching for income. Together, the province and mine action organizations can provide financial support, vocational training, and job opportunities to improve the quality of life of the community and to prevent further landmine/UXO casualties.

Finally, it is essential for Quang Tri Province to develop a strategy which maximizes long-term and large-scale resource contributions from national and international sources in order to completely solve the serious landmine/UXO problem faced by its residents.

ANNEX

Annex 1: Graphs showing figures of landmine/UXO accident in Quang Tri Province (30 years after the war ended)

Annex 2: Graphs of Study of Knowledge – Attitudes – Practices – Beliefs with respect to the danger of Landmines/UXO

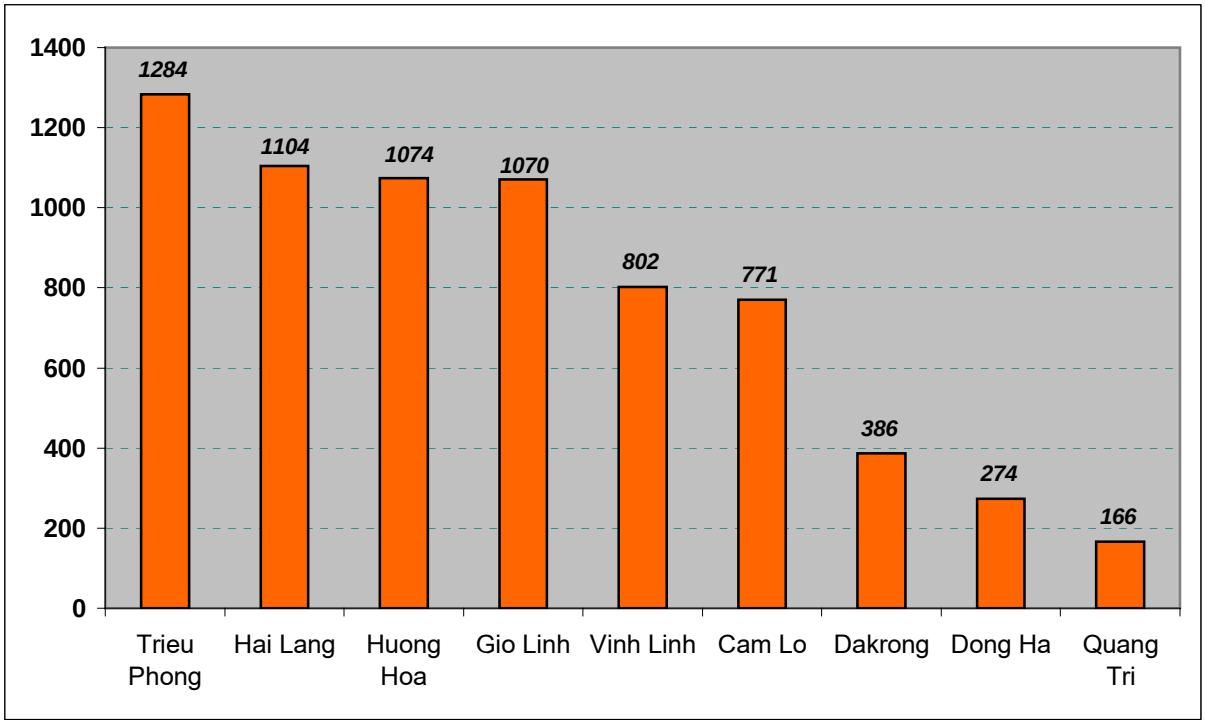
Annex 3: Survey questionnaires

Annex 4: List of studied communes of Knowledge – Attitudes – Practices – Beliefs Survey

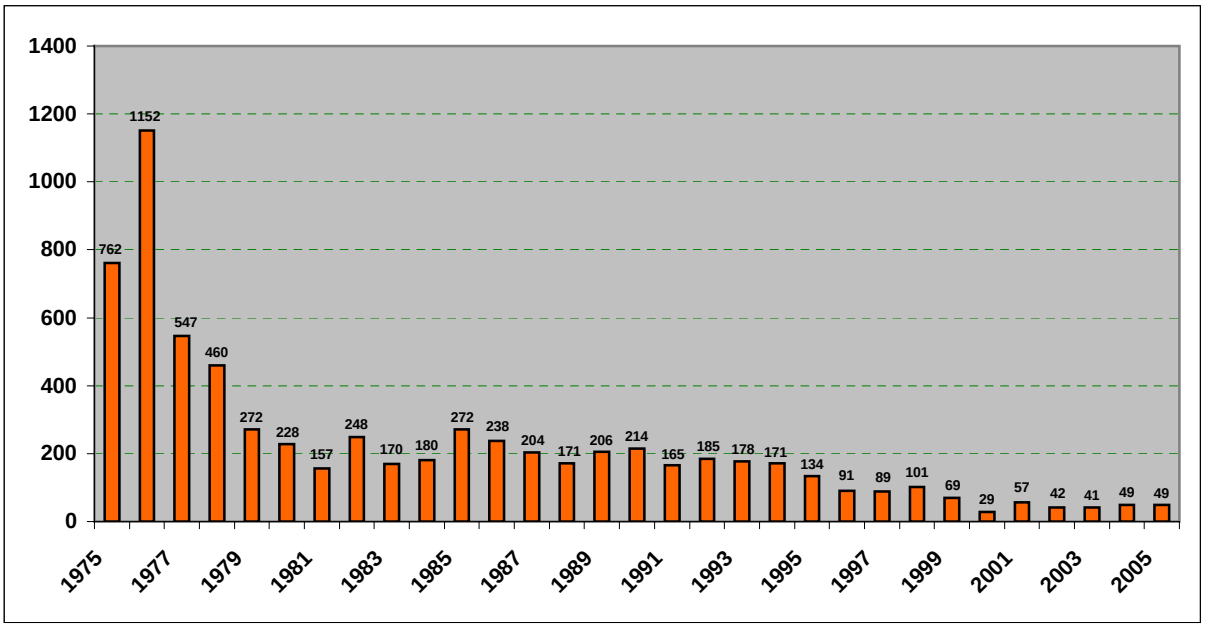
Annex 5: Countries/territories received from 1 million US dollars and above to solve landmine/UXO problems in 2004

Annex 1. Graphs showing figures of landmine/UXO accidents in Quang Tri Province (30 years after the war ended)

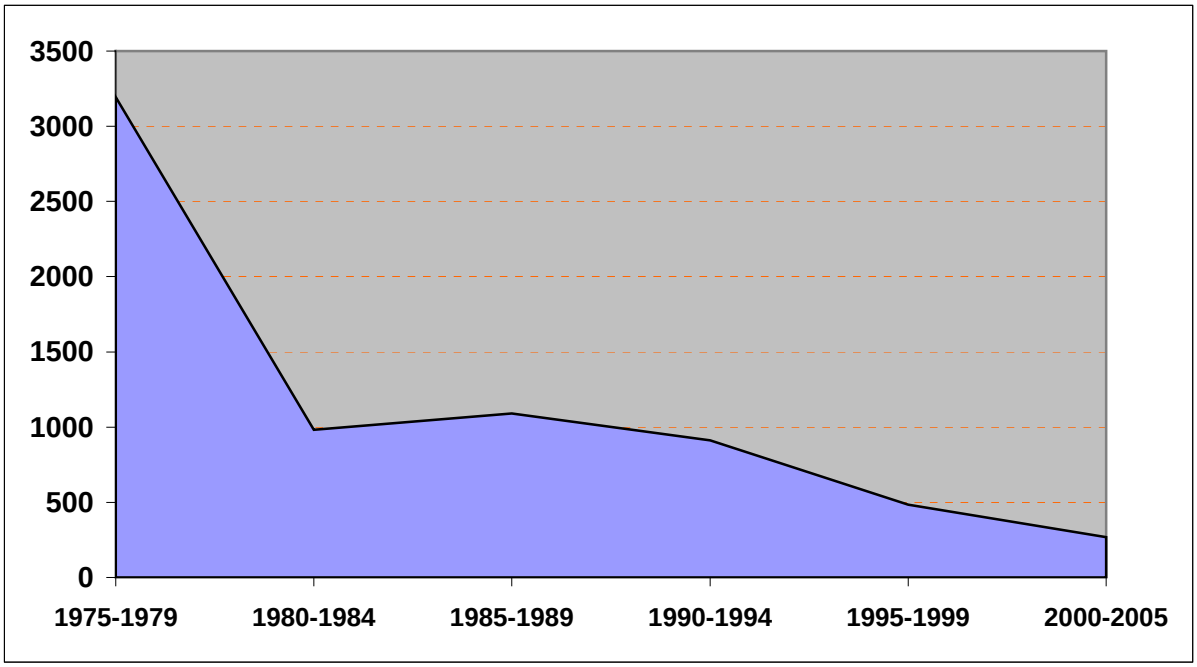
1. Total victims by District/Town (1975-2005)



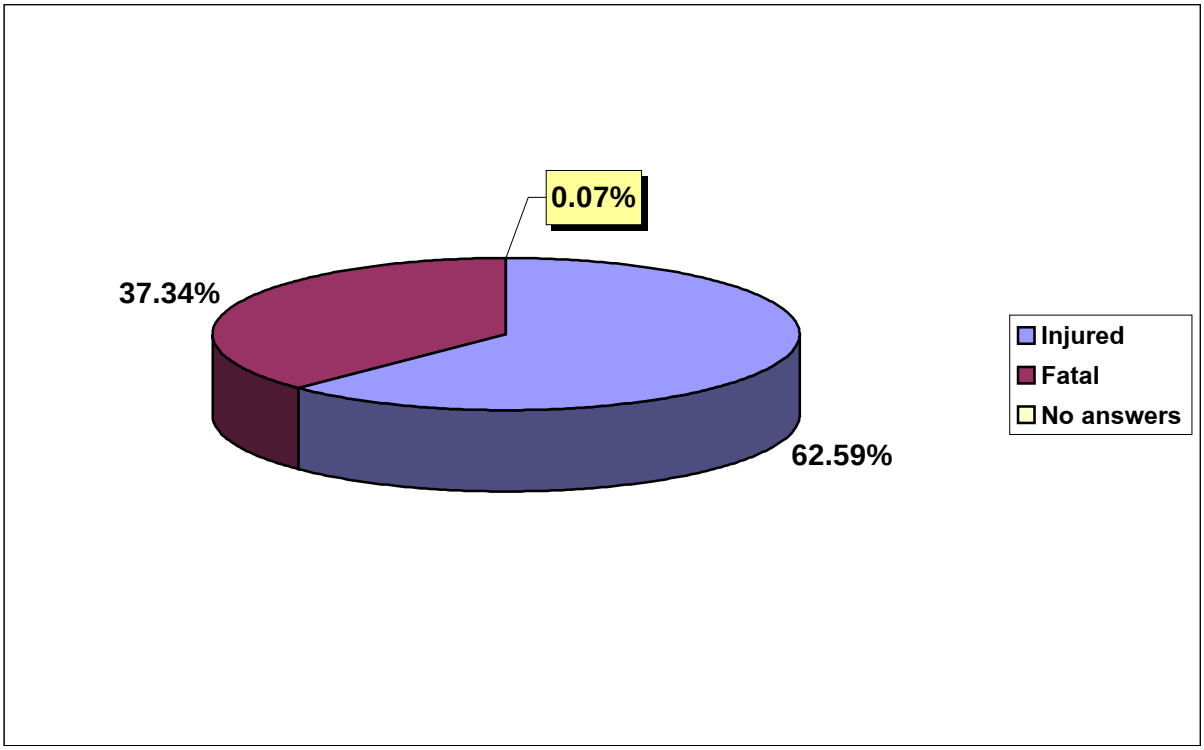
2. Total victims by year (1975-2005)



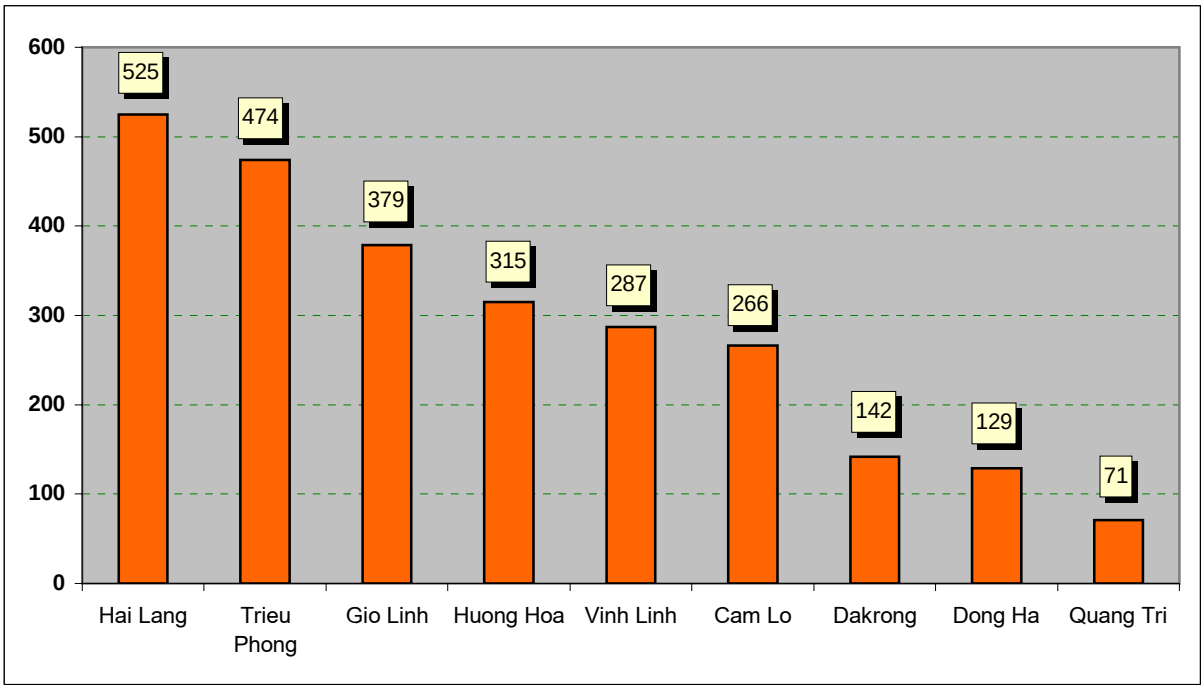
3. Total victims of the whole province by 5-year period (1975-2005)



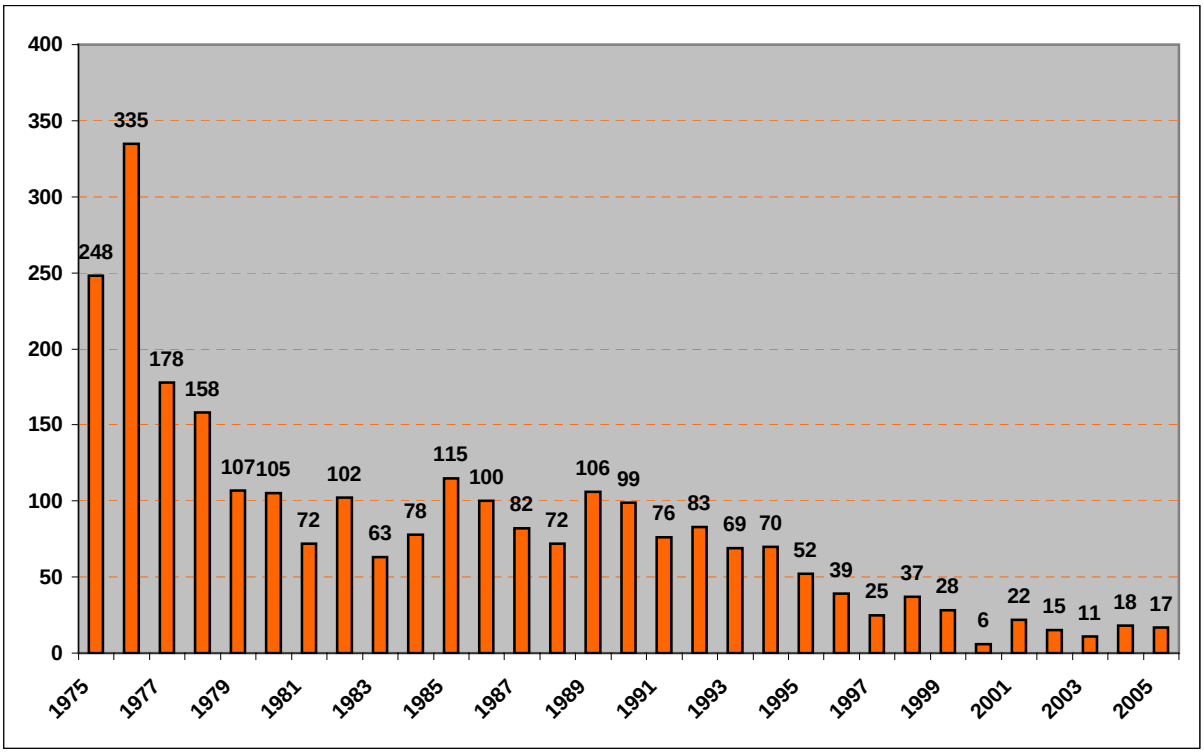
4. Proportions of Injured – Fatal victims (1975-2005)



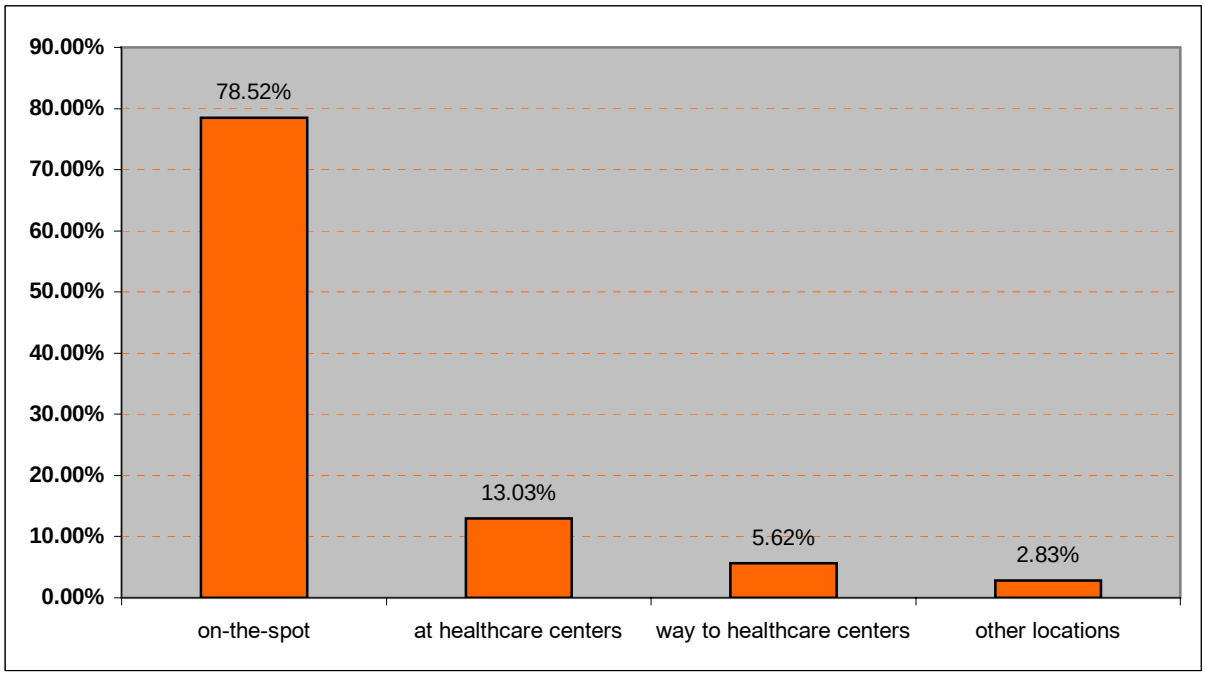
5. Total fatalities by District/Town (1975-2005)



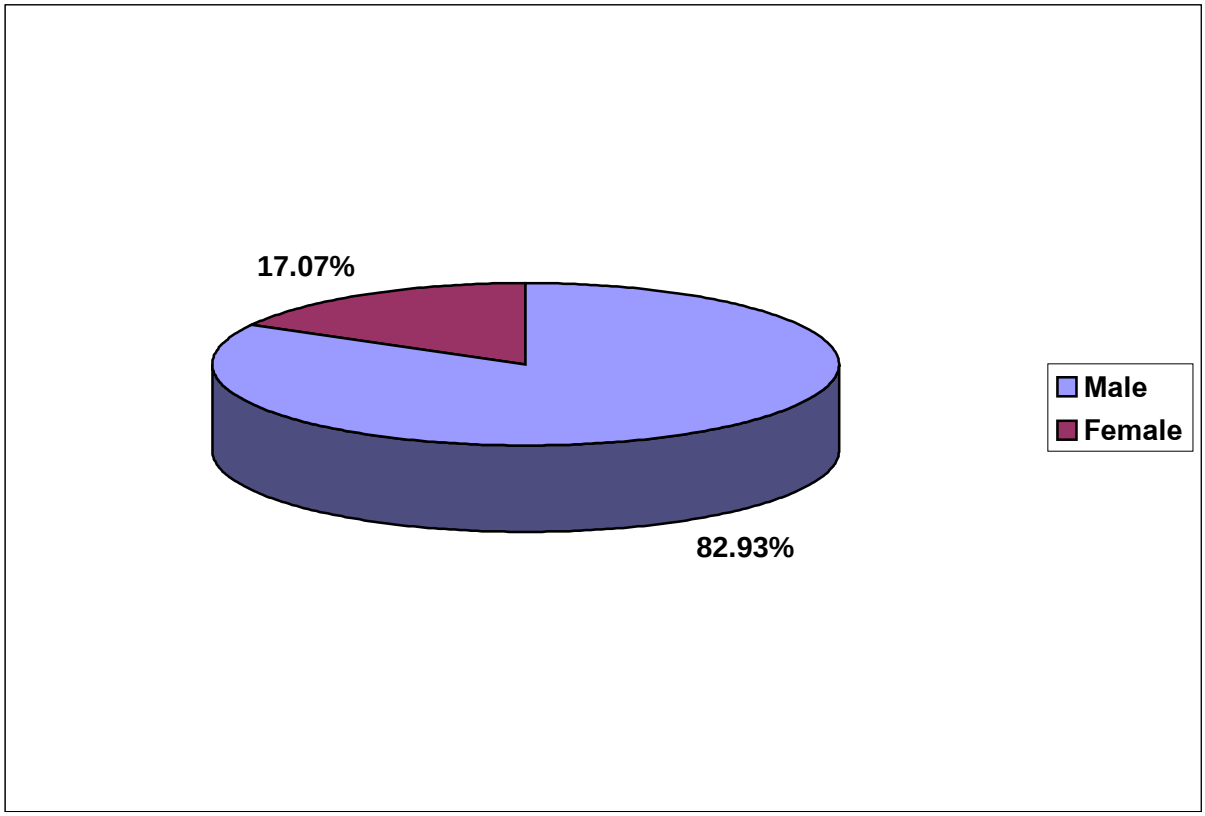
6. Total fatalities by year (1975-2005)



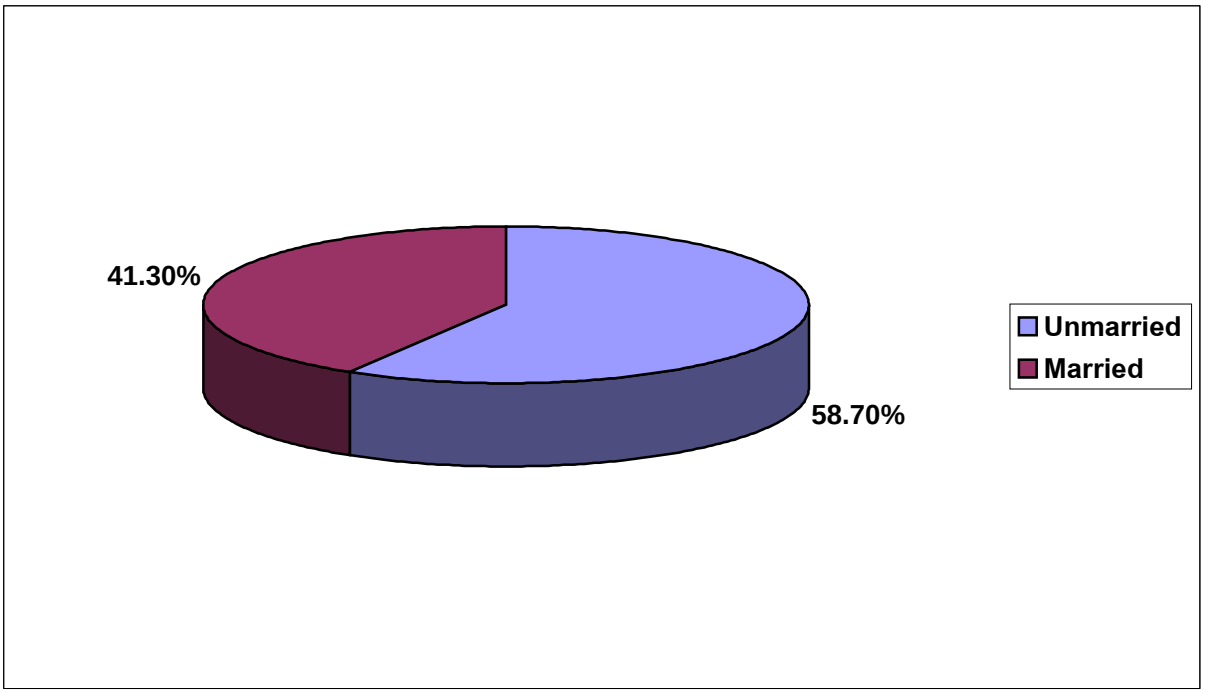
7. Fatalities by location (1975-2005)



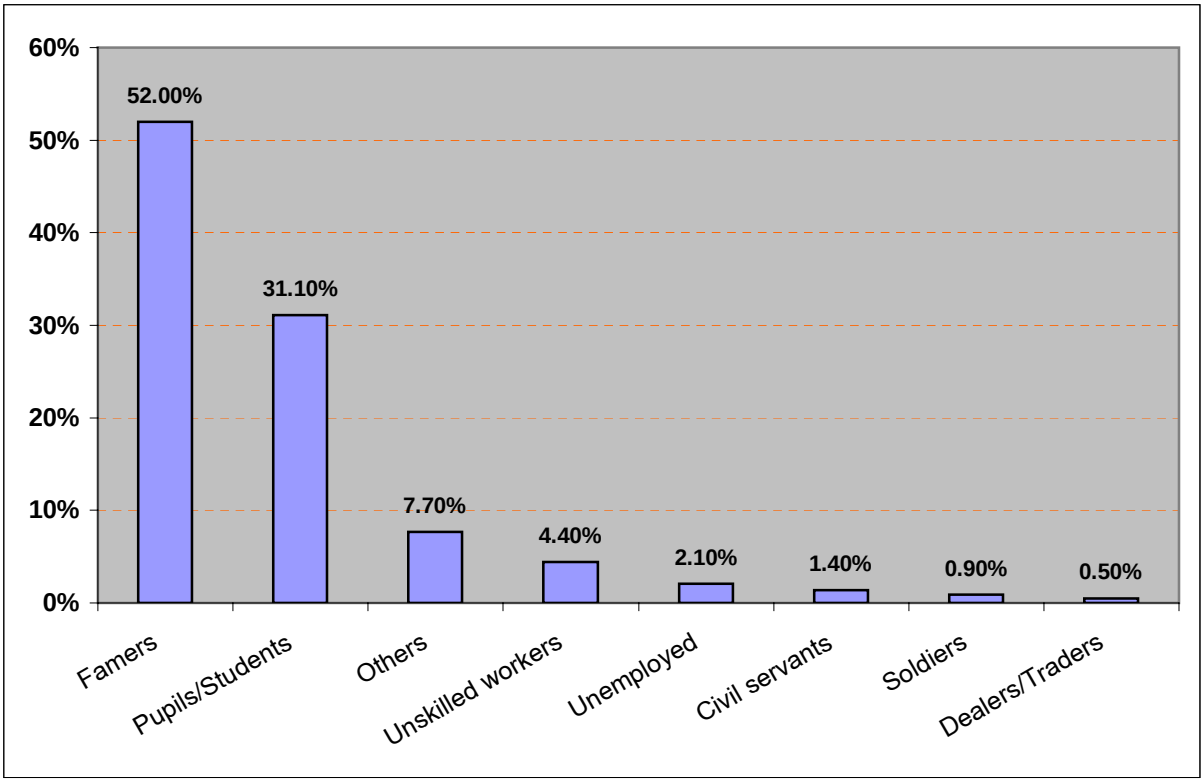
8. Proportions of Victims by Gender (1975-2005)



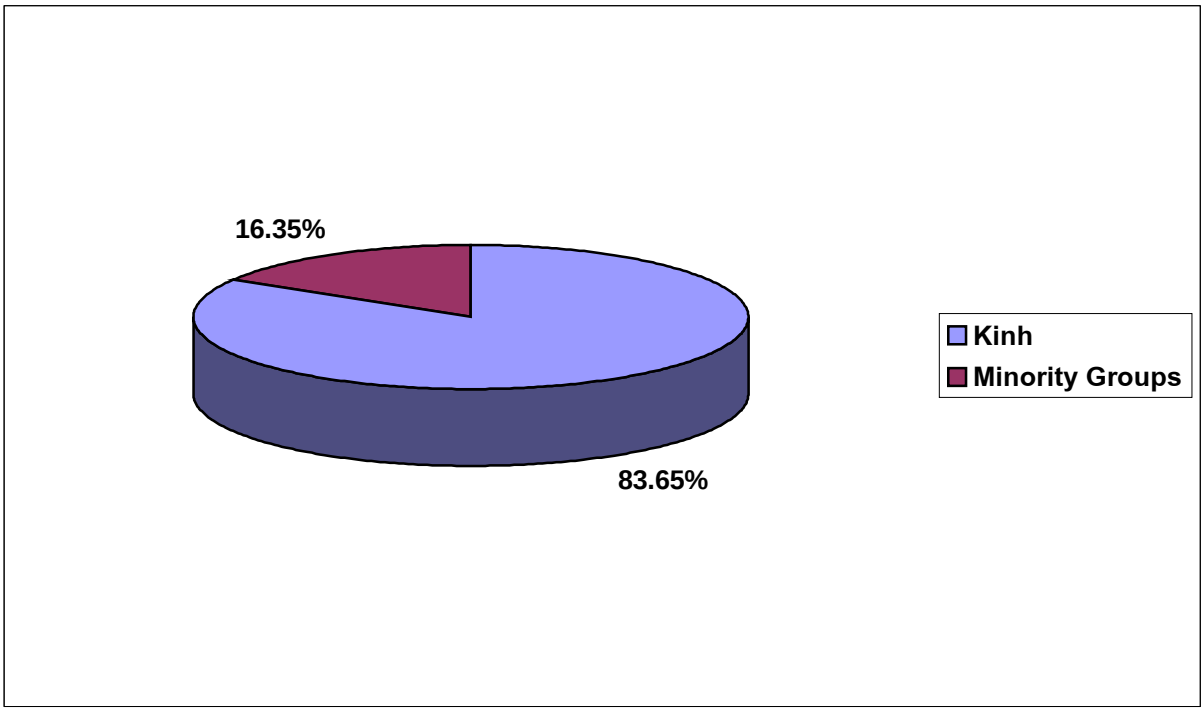
9. Marital Status of the Victims before the accidents (1975-2005)



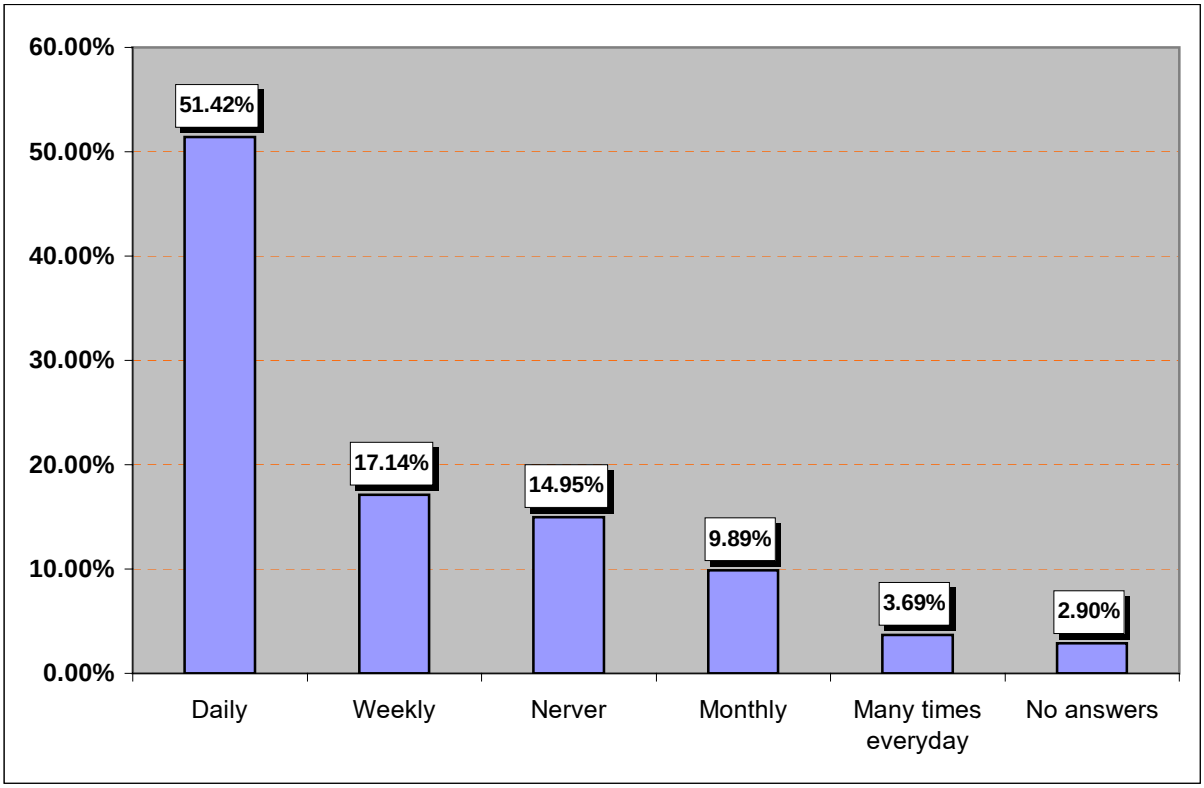
10. Occupations of the Victims before accidents (1975-2005)



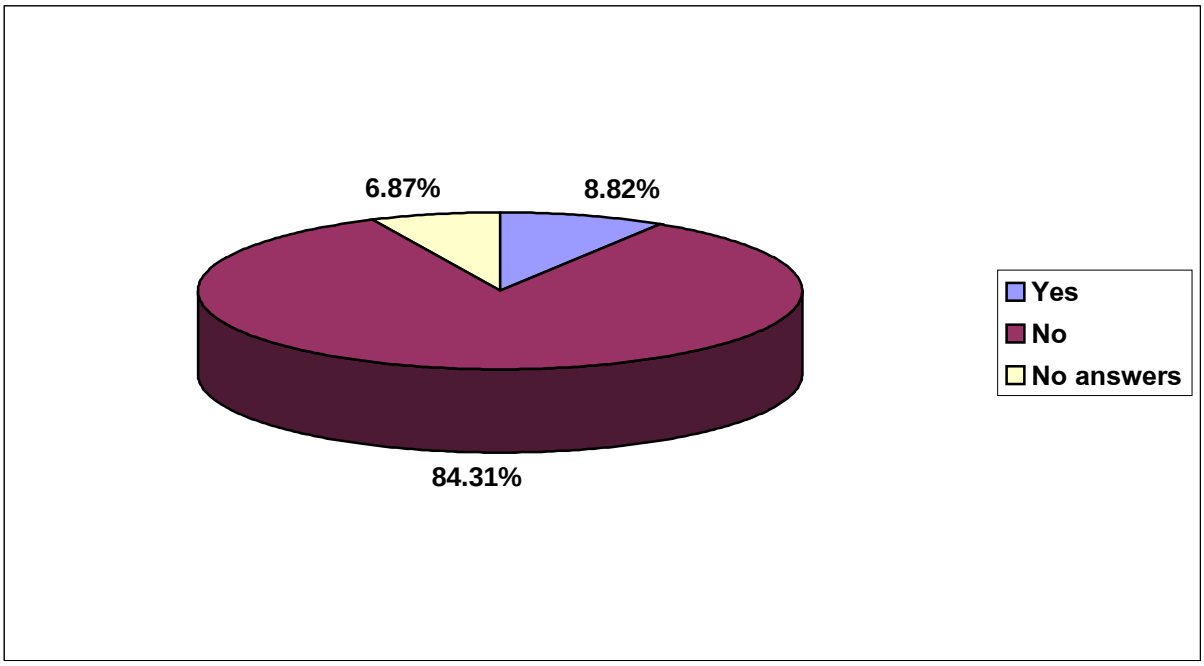
11. Proportions of Victims by Ethnicity (1975-2005)



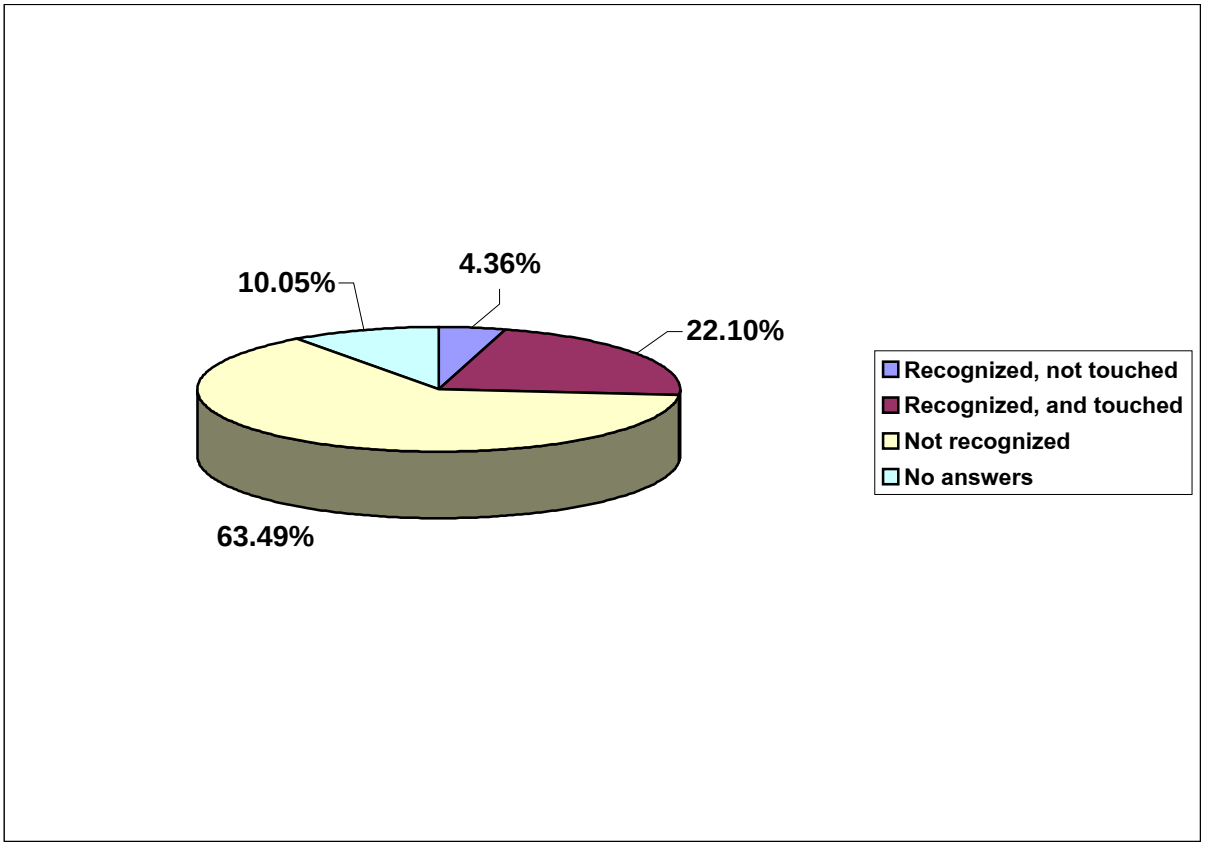
12. Frequency of entering the dangerous area before accident (1975-2005)



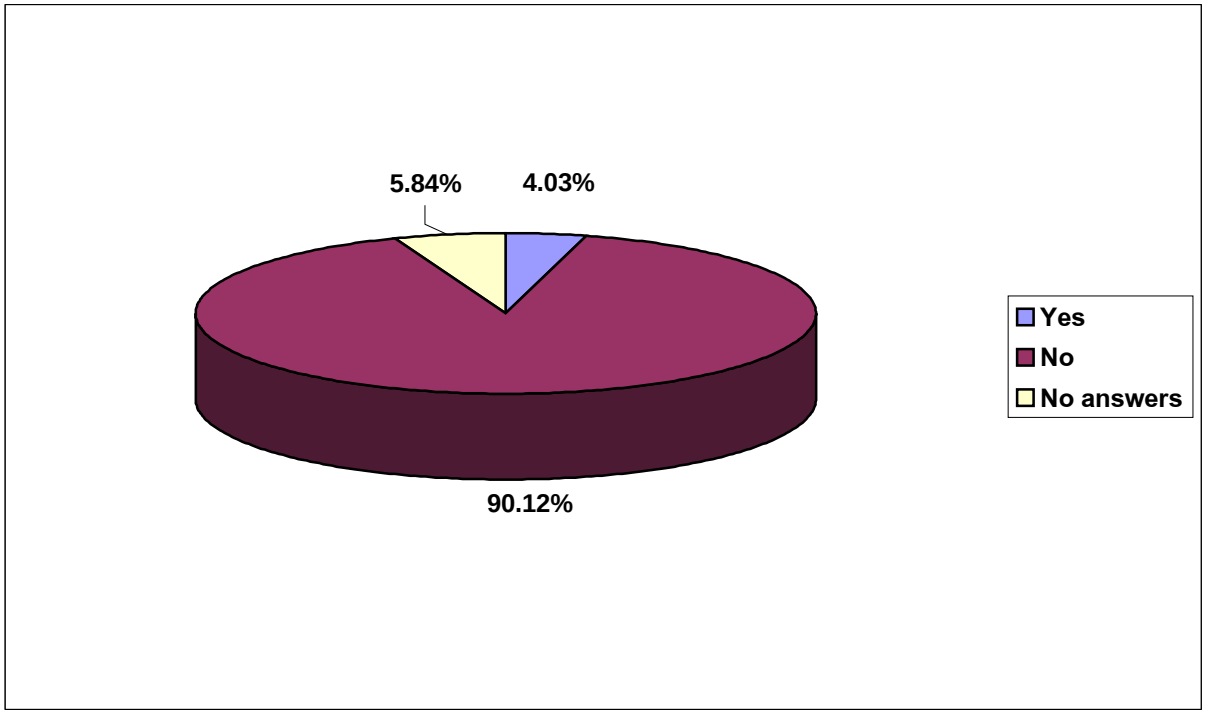
13. Proportions of victims who knew the dangerous area before accident (1975-2005)



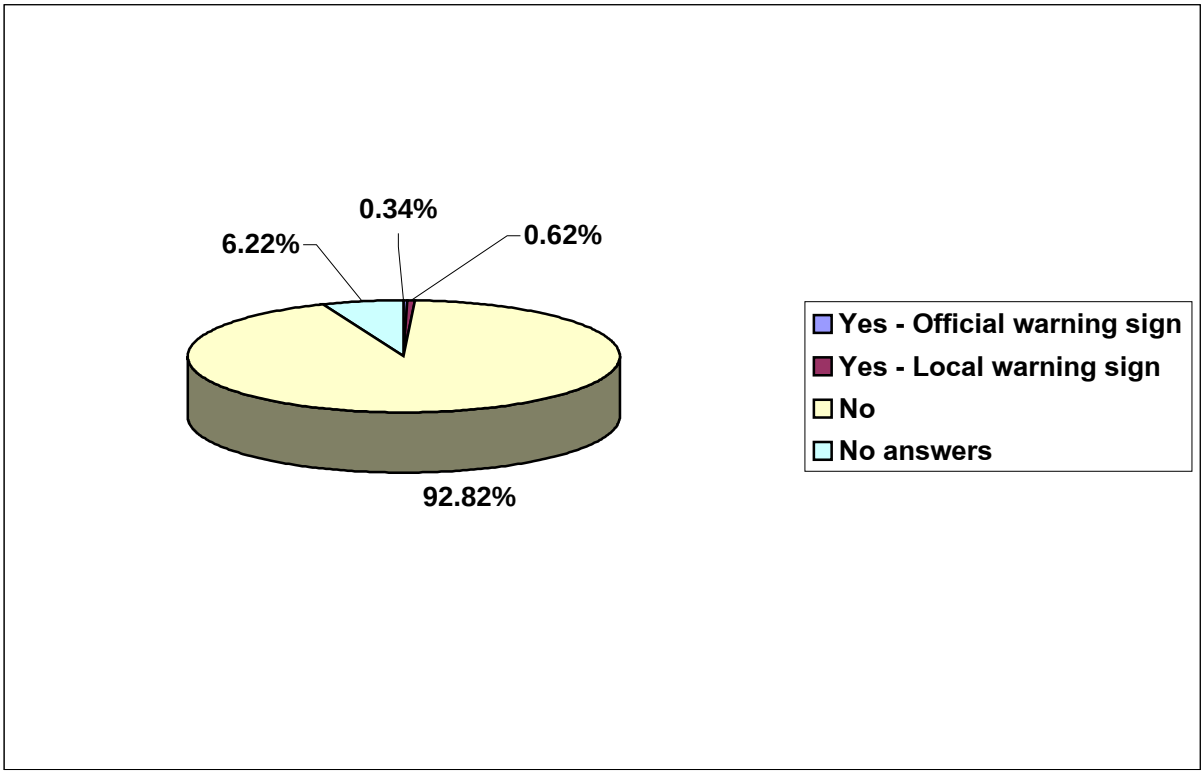
14. Recognition and/or reaction of victims to landmines/UXO (1975-2005)



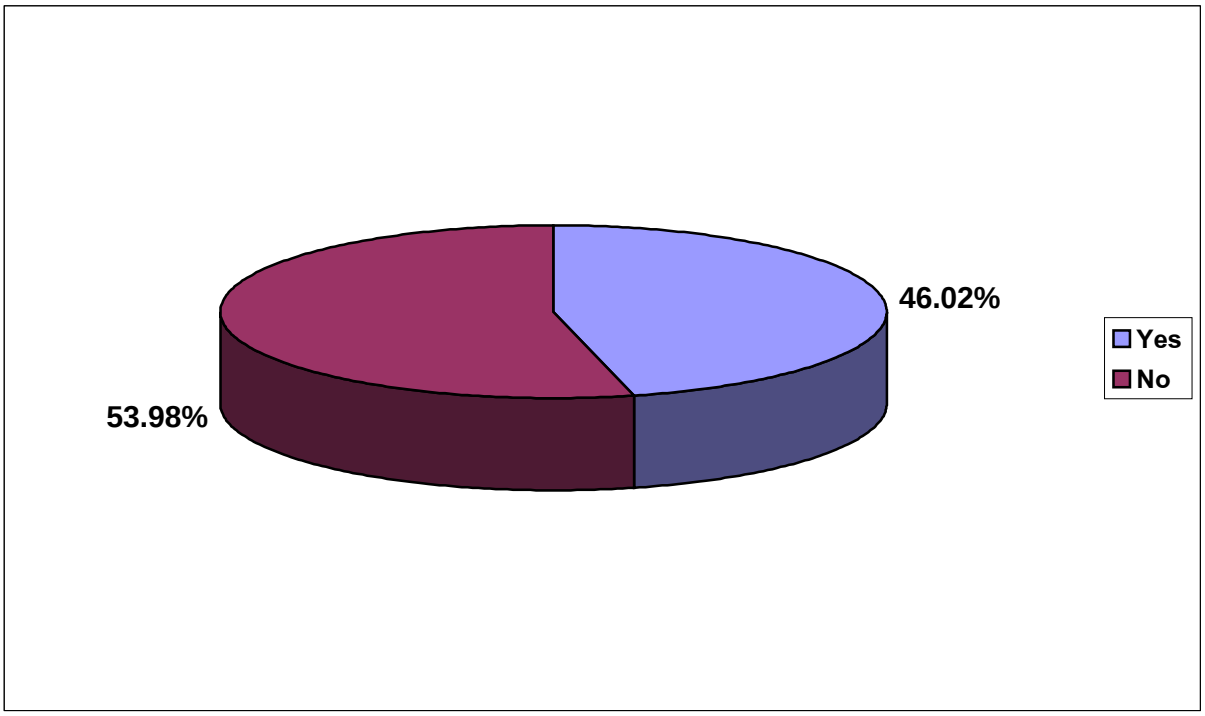
15. Victims' Exposure to MRE Information before accidents (1975-2005)



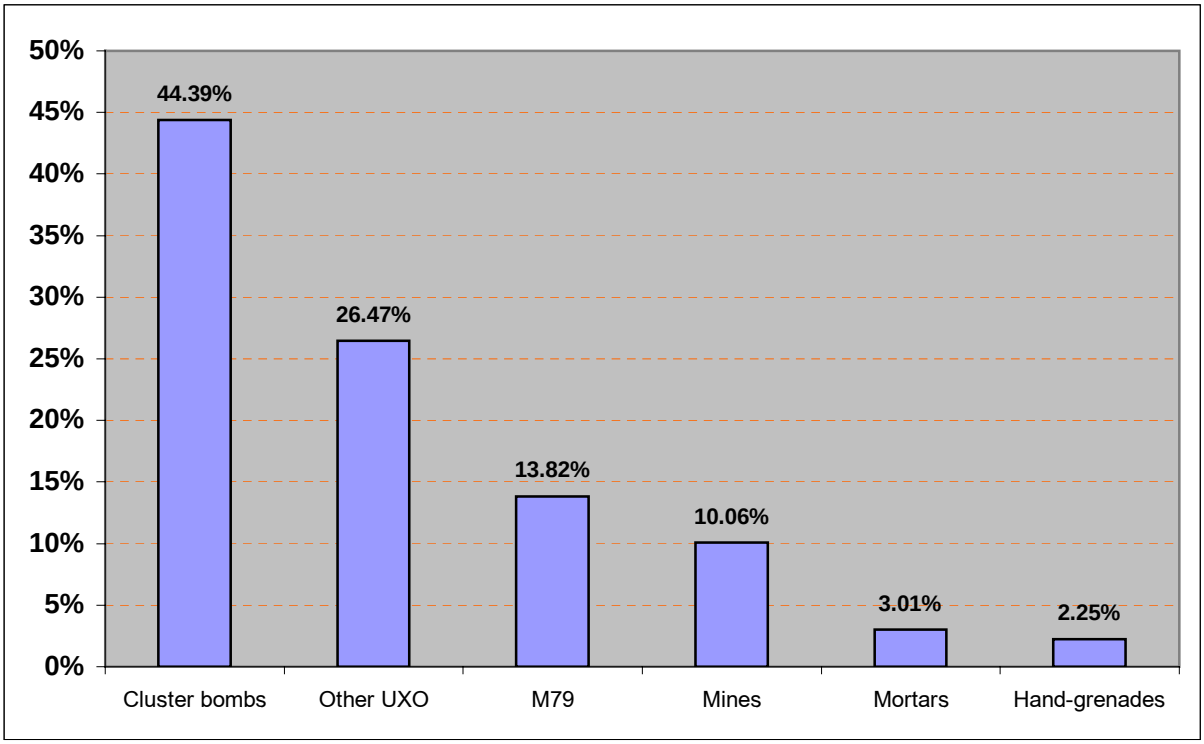
16. Marking of the landmine/UXO object at the accident site (1975-2005)



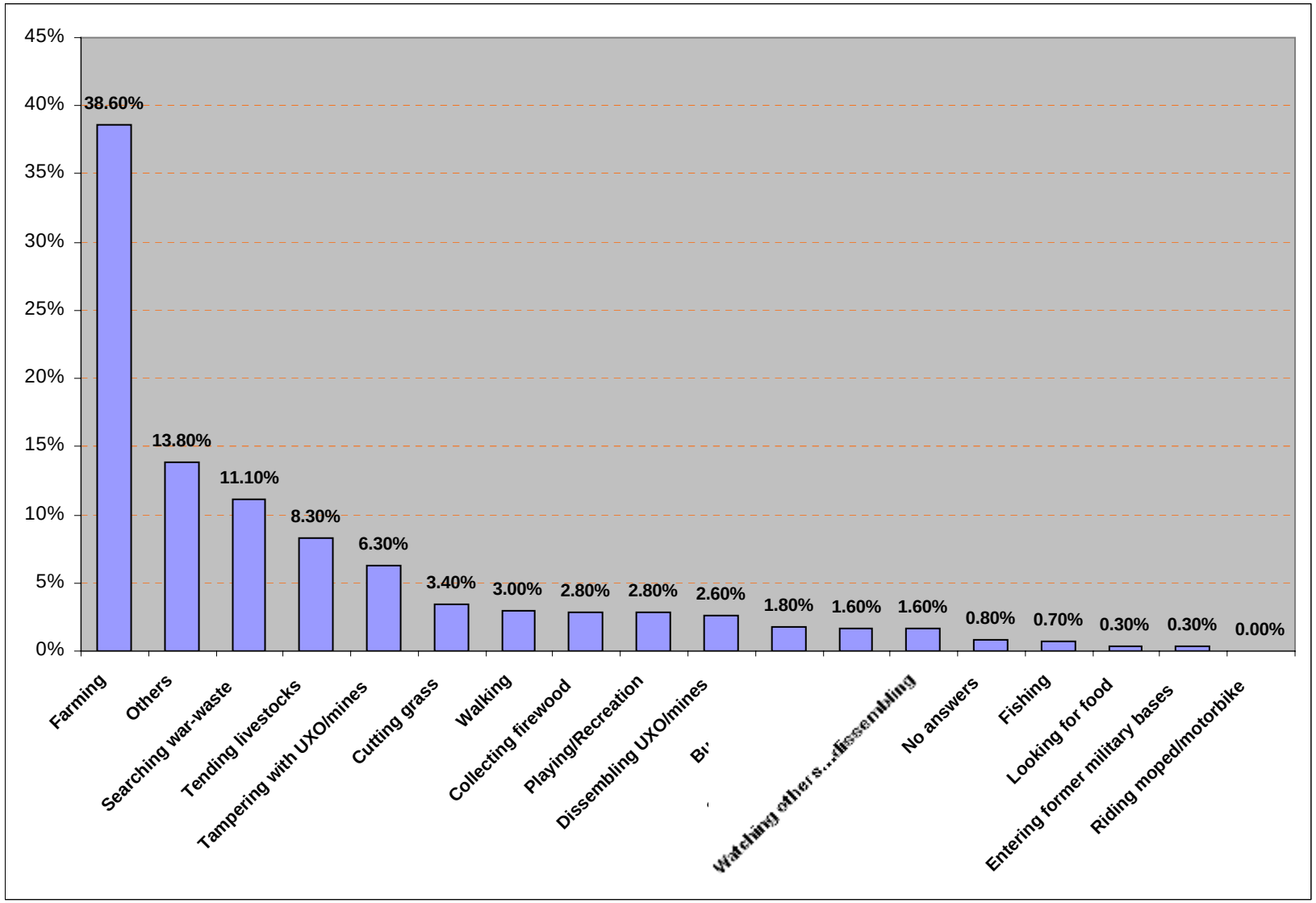
17. Percentage of multiple-victim accidents (1975-2005)



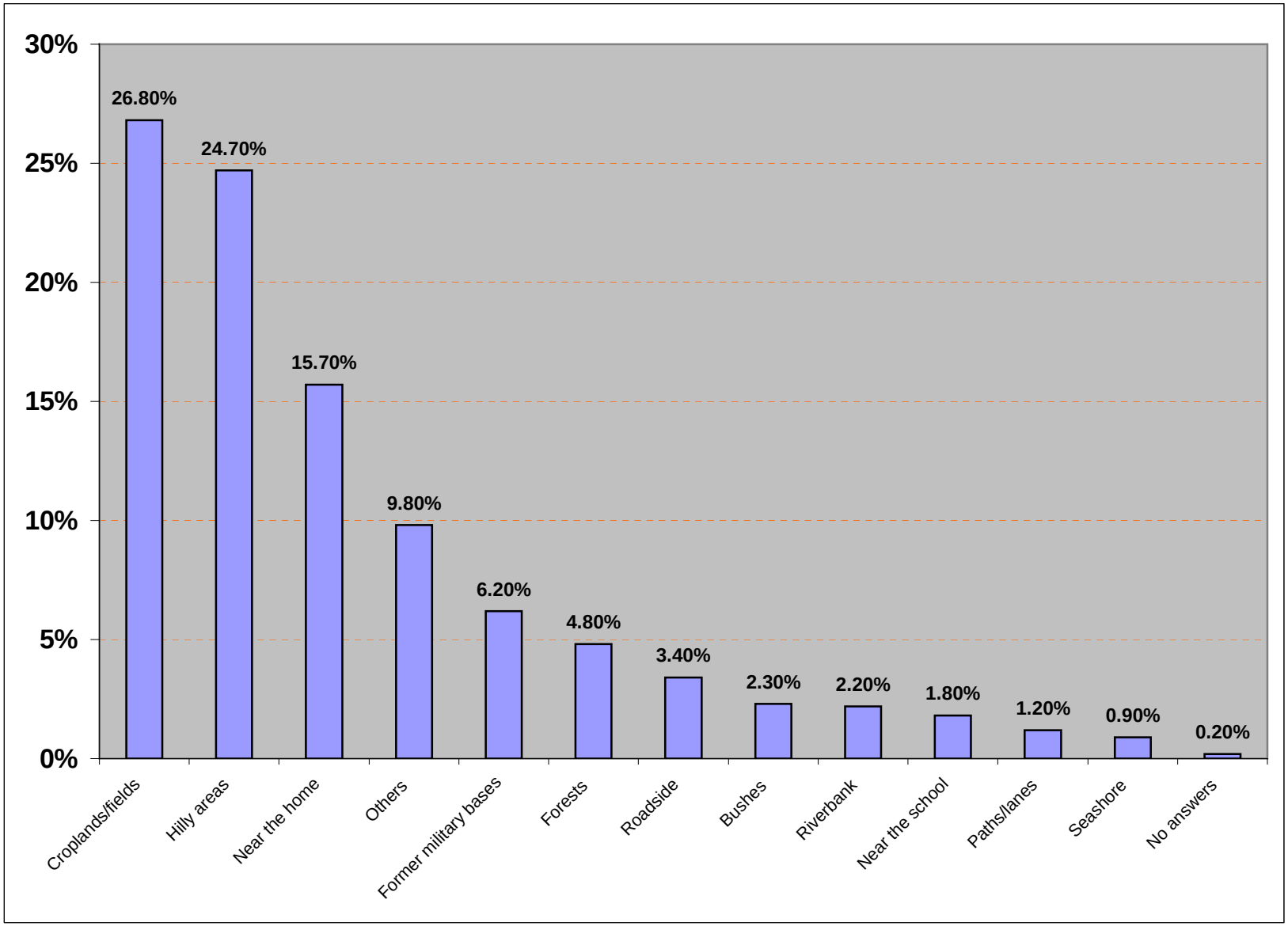
18. Type of landmine/UXO object causing accident (1975-2005)



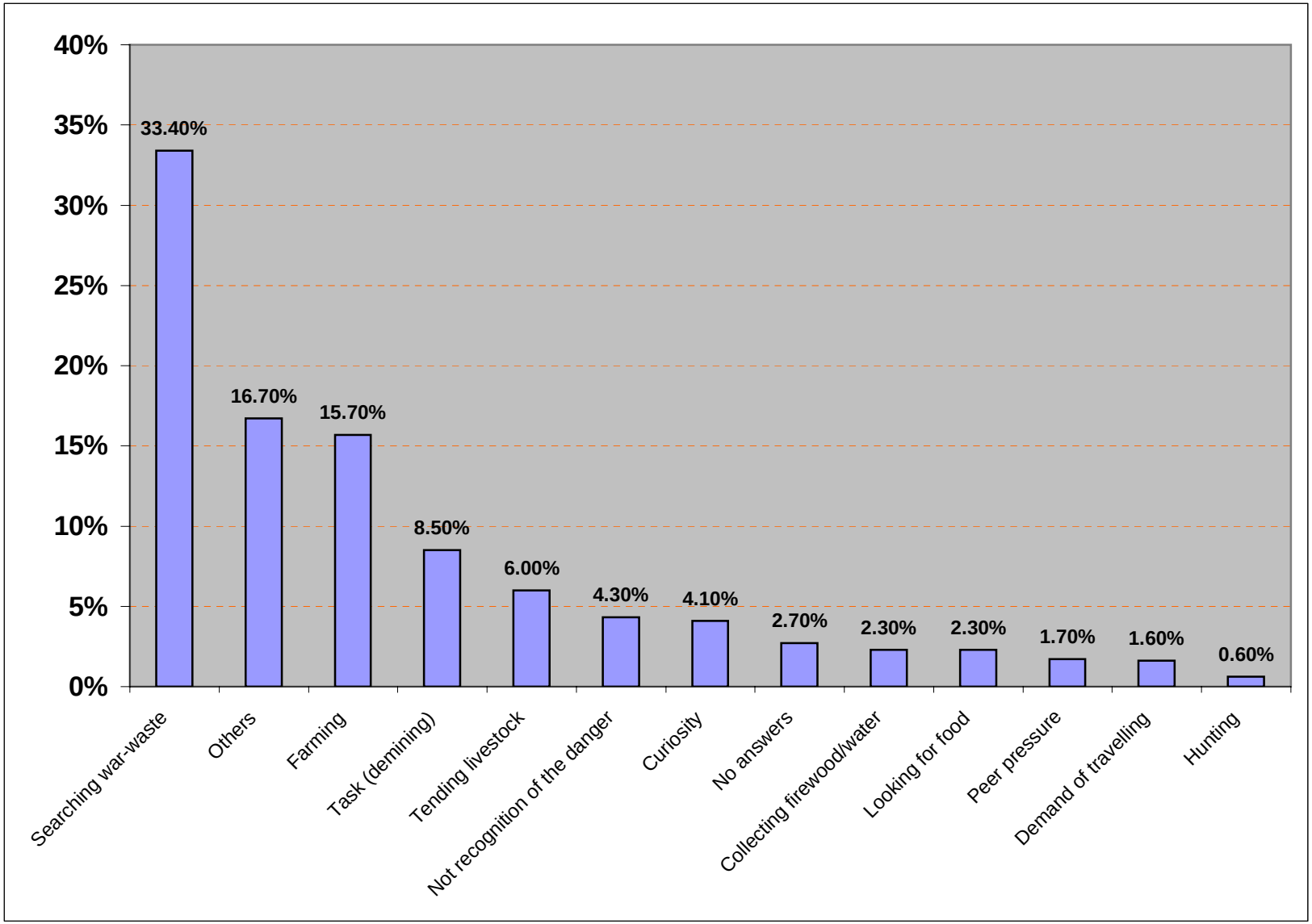
19. Activities at the time of accident (1975-2005)



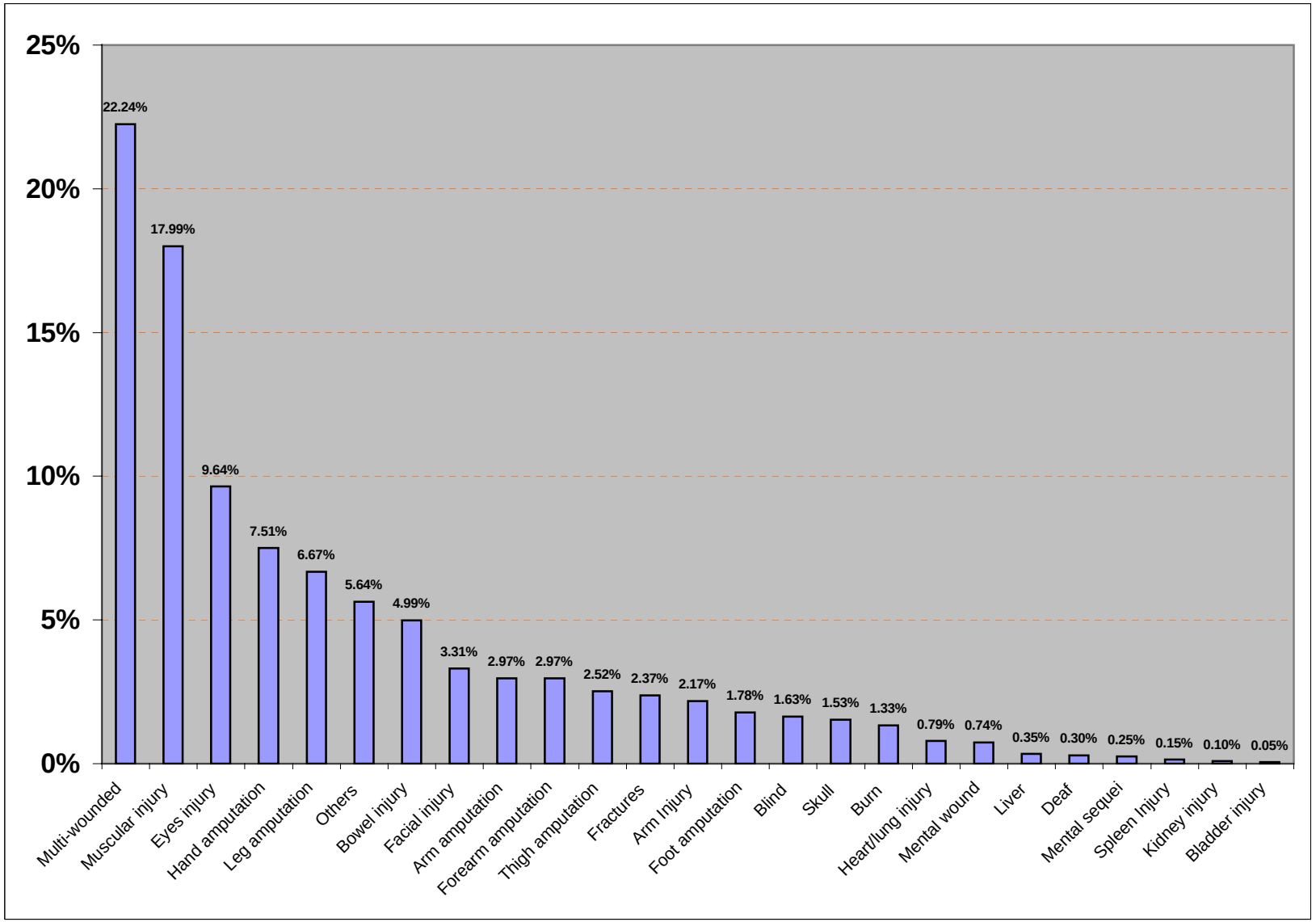
20. Locations of accidents (1975-2005)



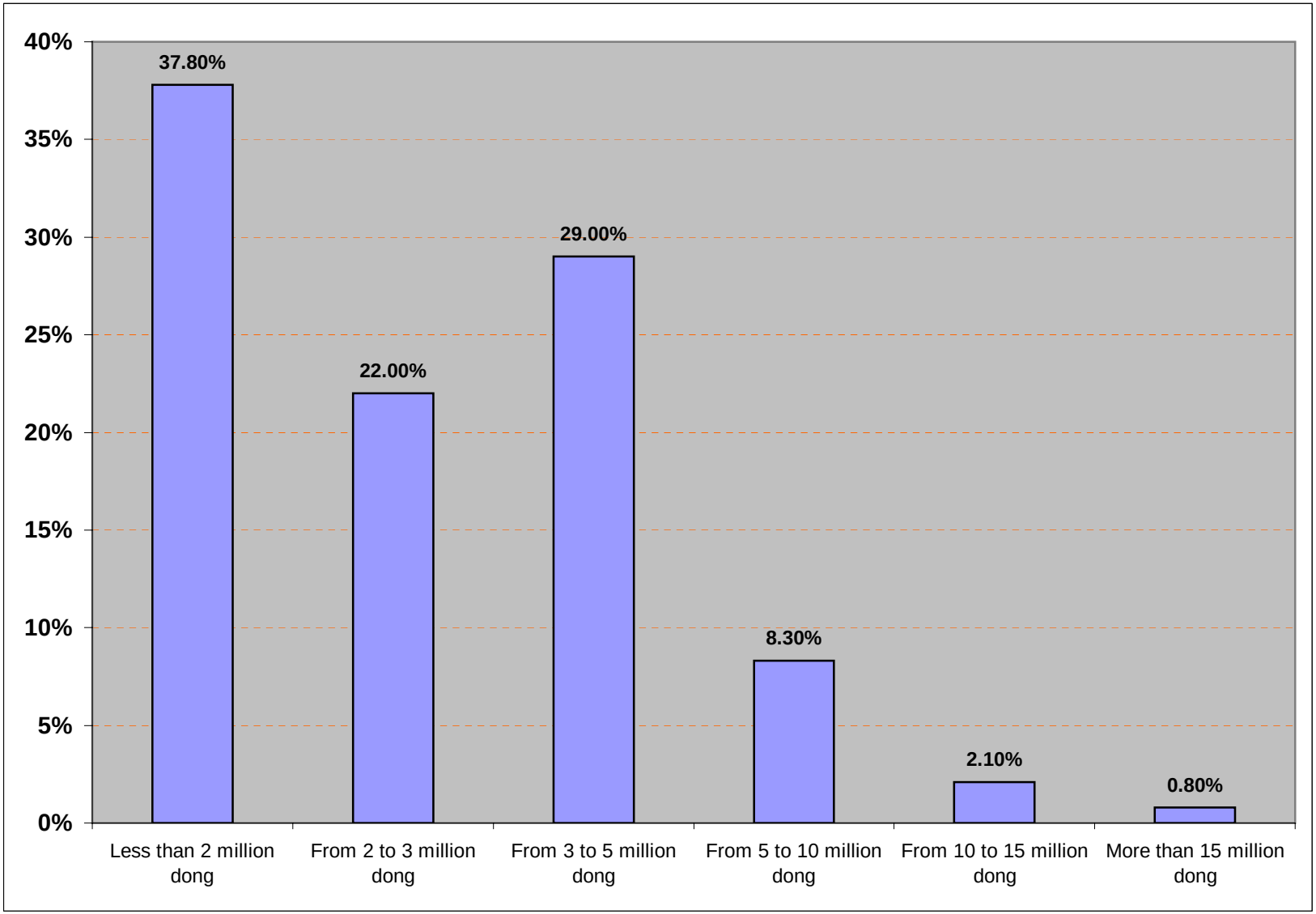
21. Reasons for entering the area of accident (1975-2005)



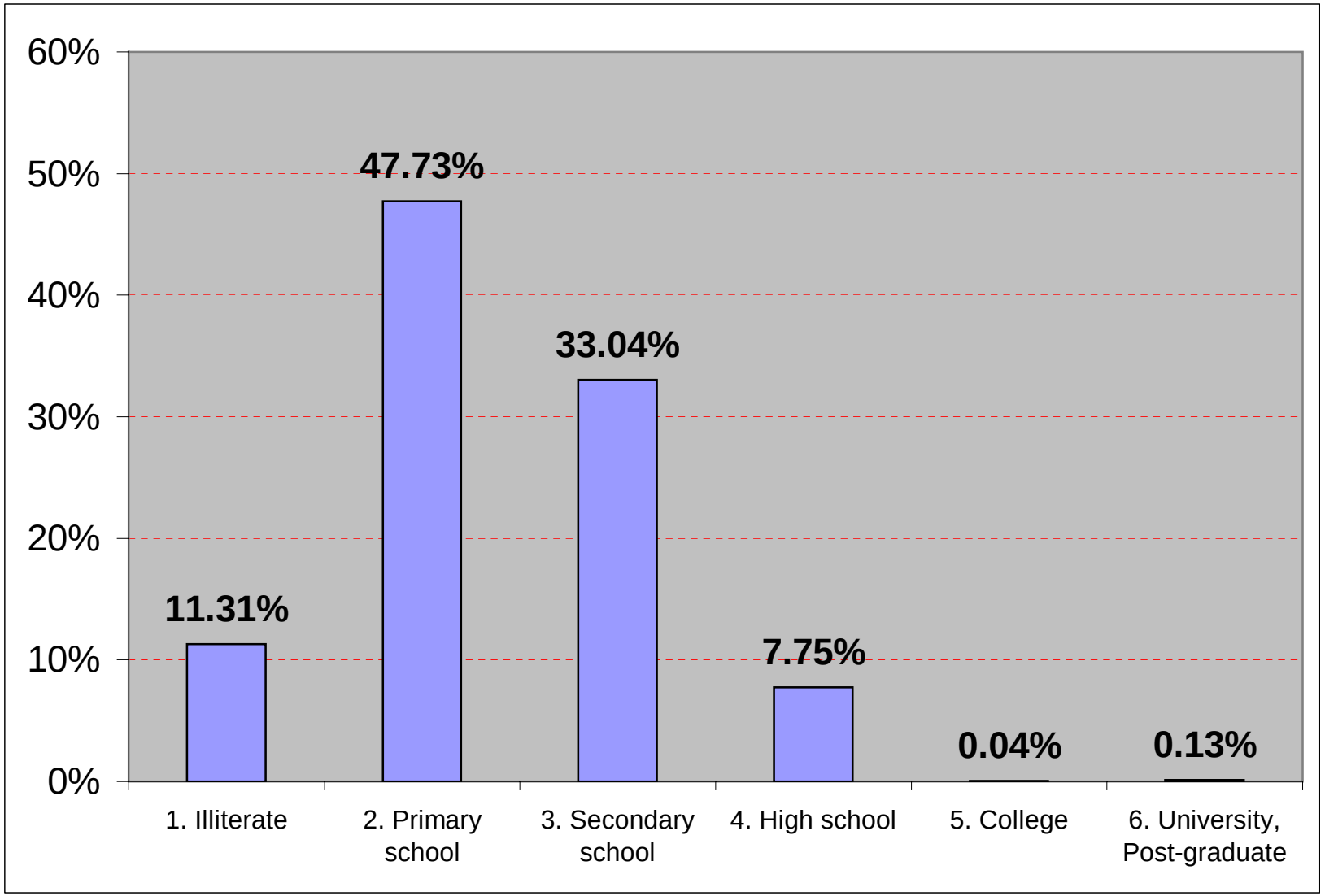
22. Injury Description (1975-2005)



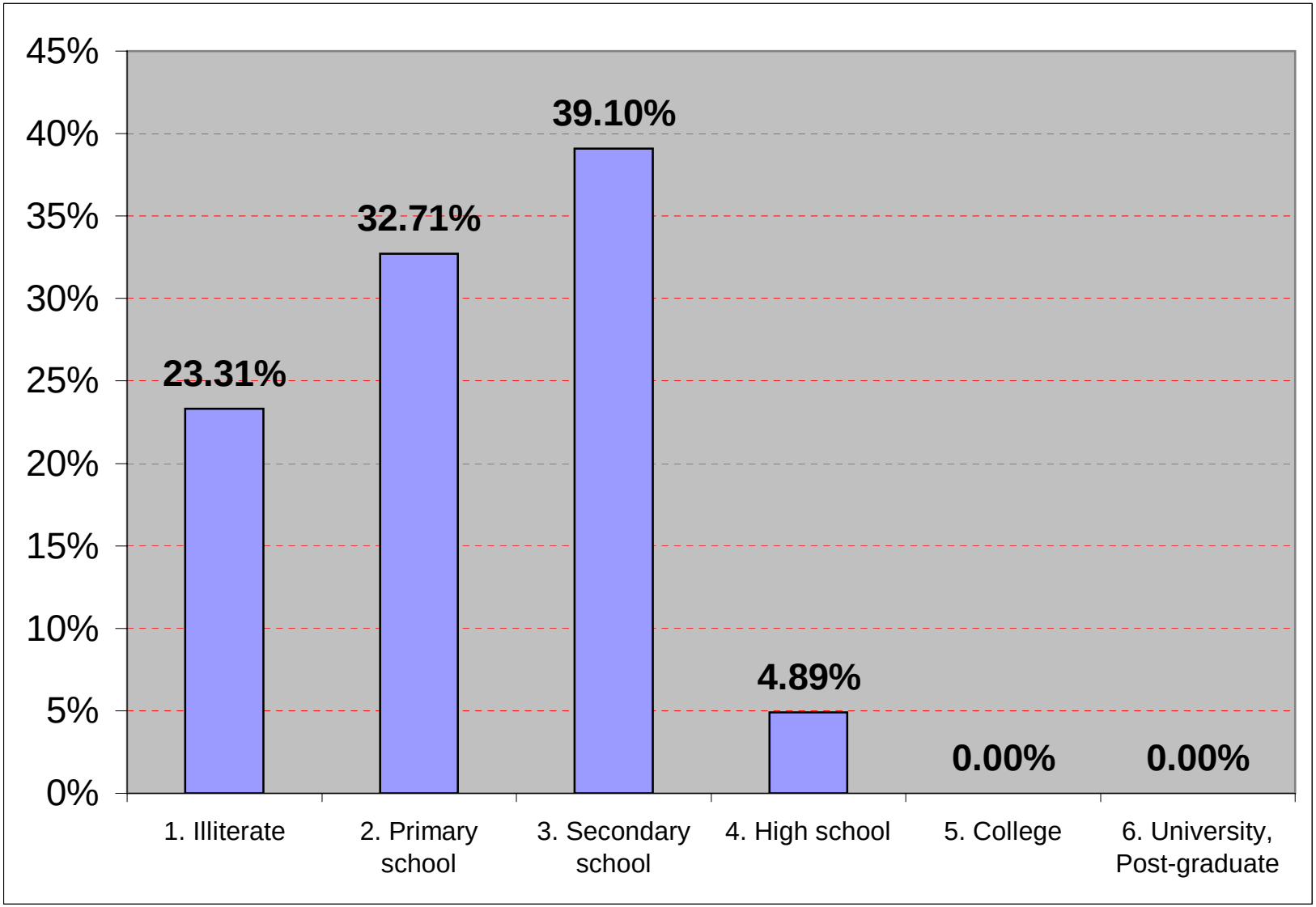
23. Annual average income of victim families (2000-2005)



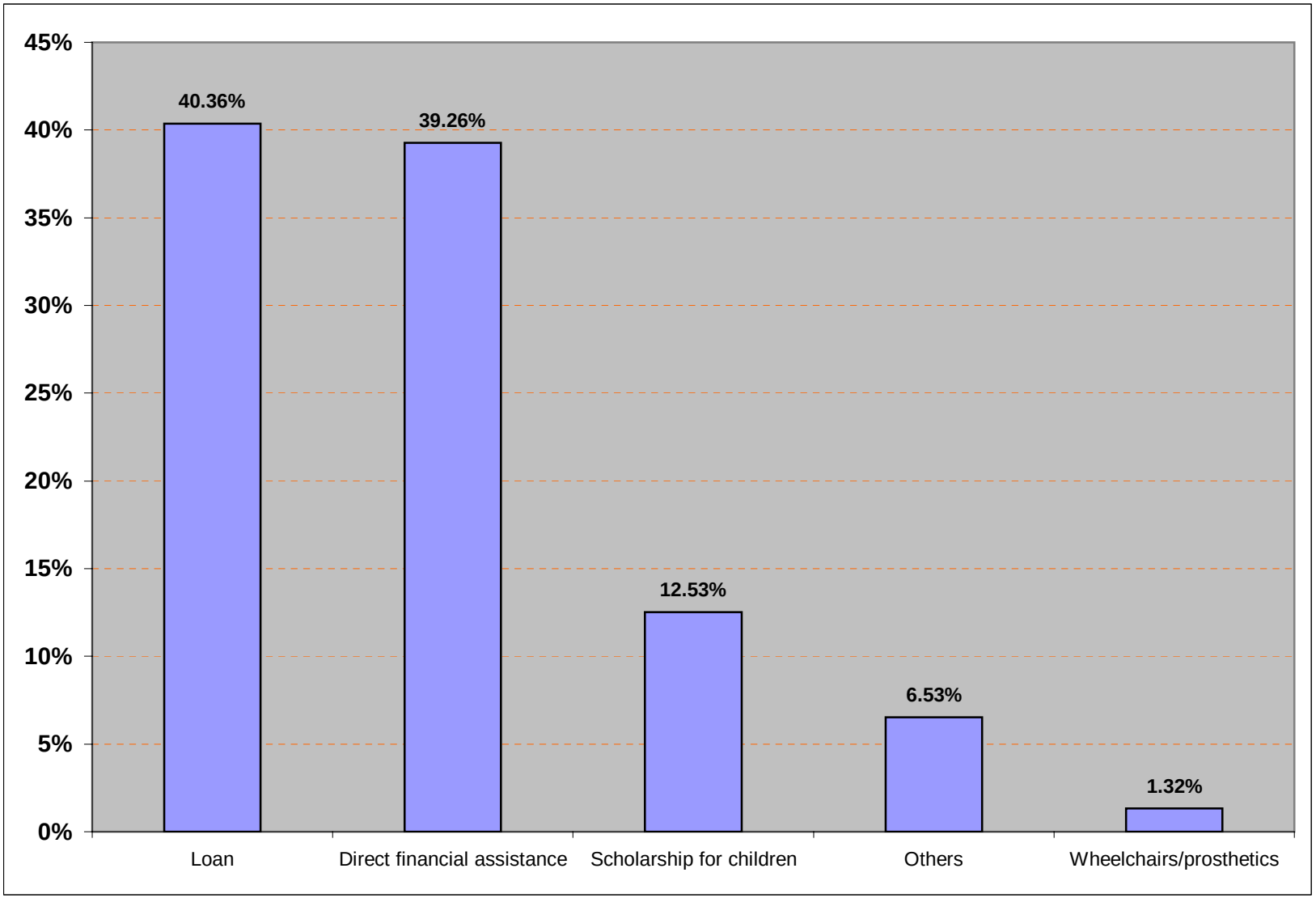
24. Education Levels of the Victims (1975-2005)



25. Education Levels of the Victims (2000-2005)

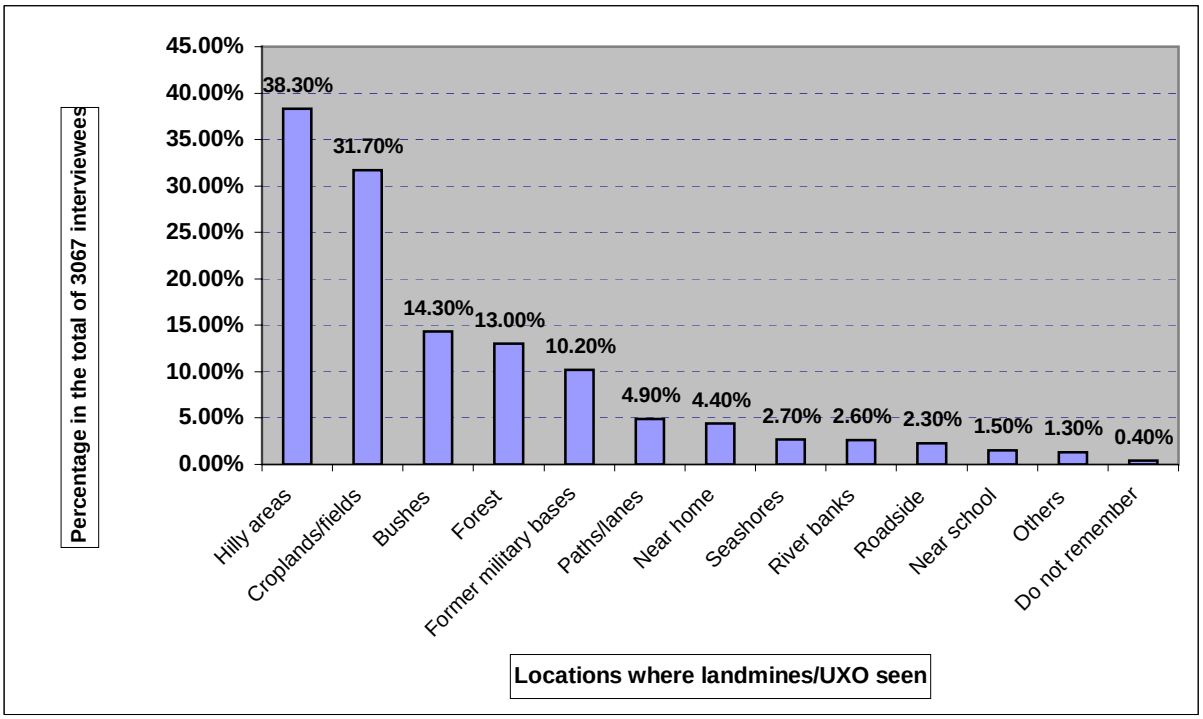


26. Needs of the victims' families (2000-2005)

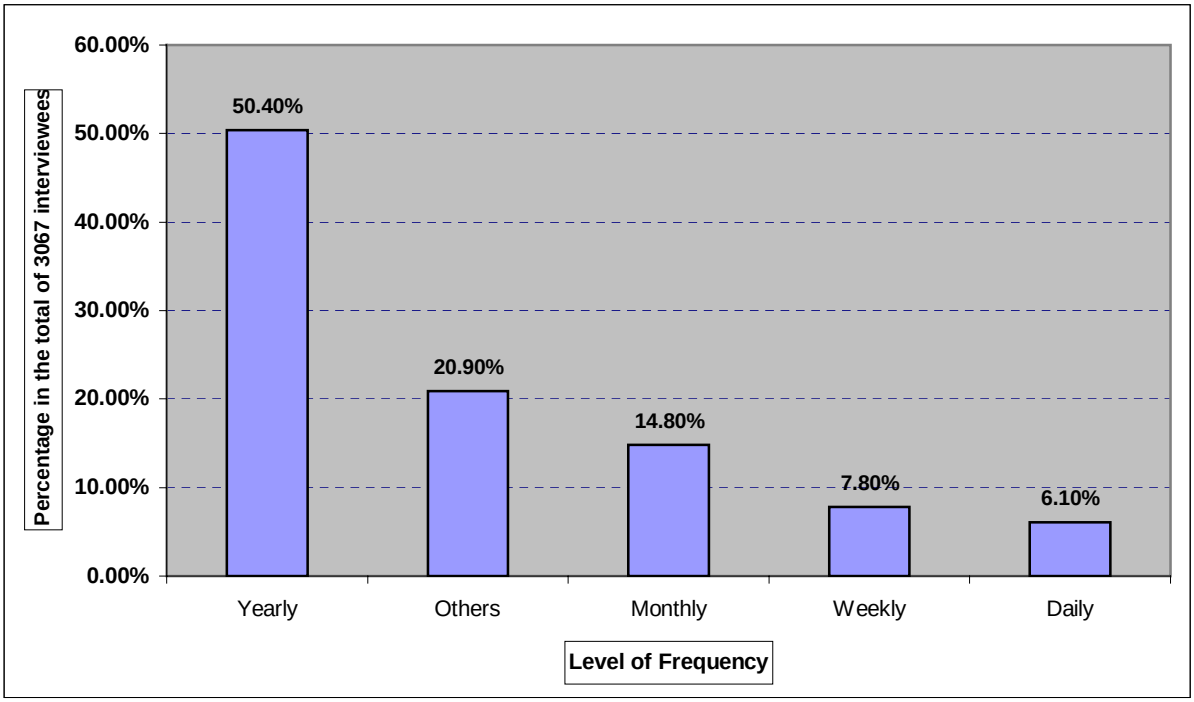


Annex 2. Graphs of Study of Knowledge – Attitudes – Practices – Beliefs with respect to the danger of Landmines/UXO

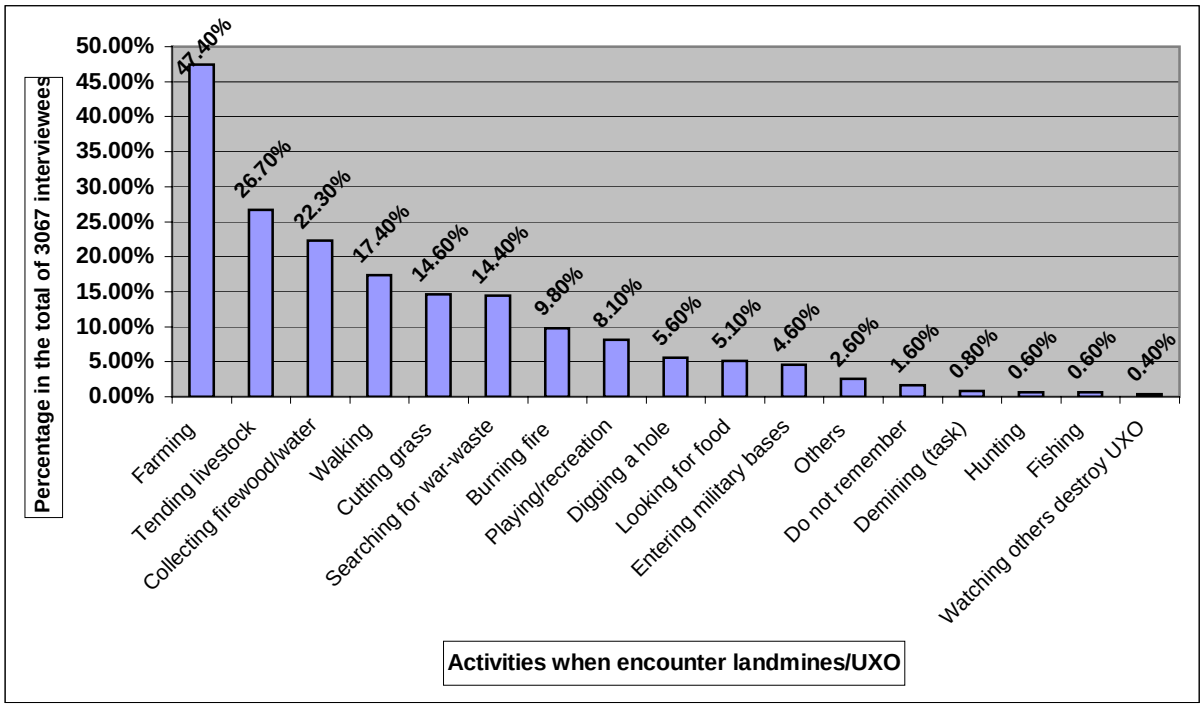
1. Locations of Landmine Encounters (2006 Survey)



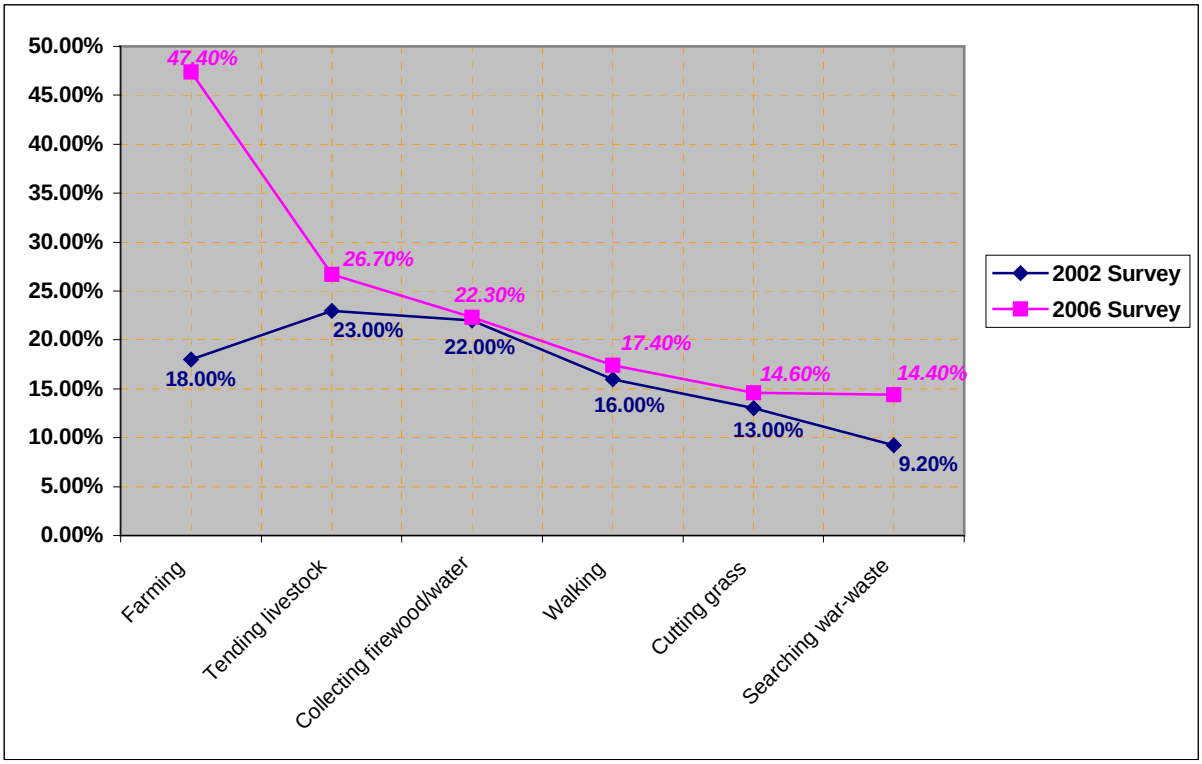
2. Frequency of landmine/UXO encounters (2006 Survey)



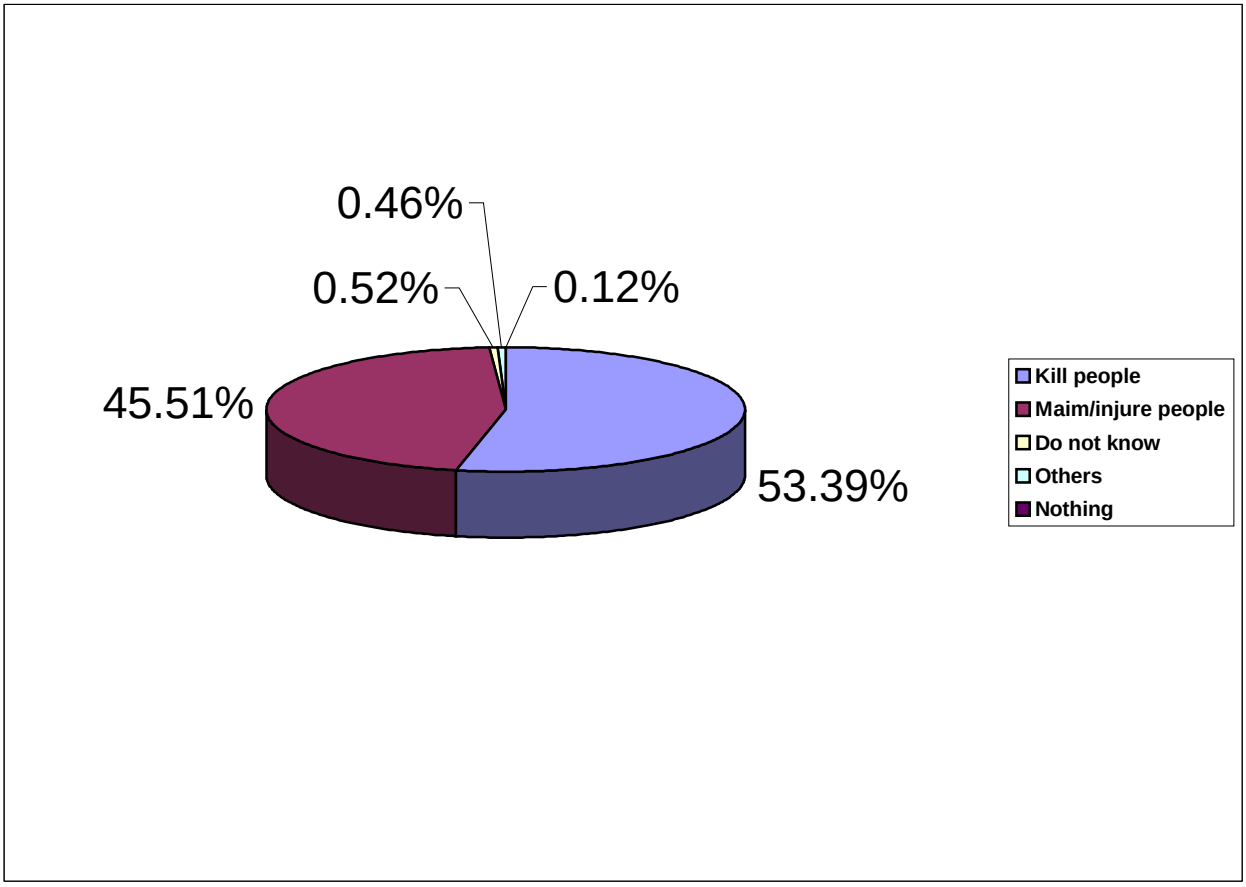
3. Activity at the time of the landmine/UXO encounter (2006 Survey)



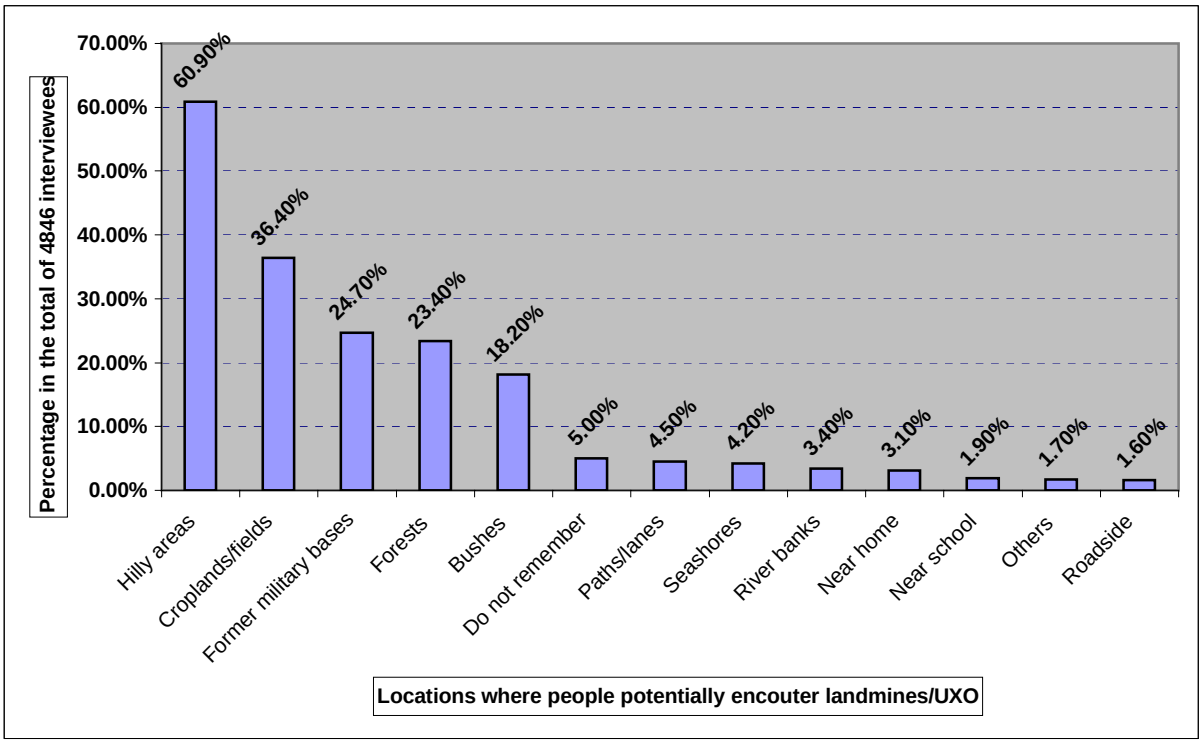
4. *Comparison of the 2002 Survey with 2006 Survey, Activity at the time of the encounter*



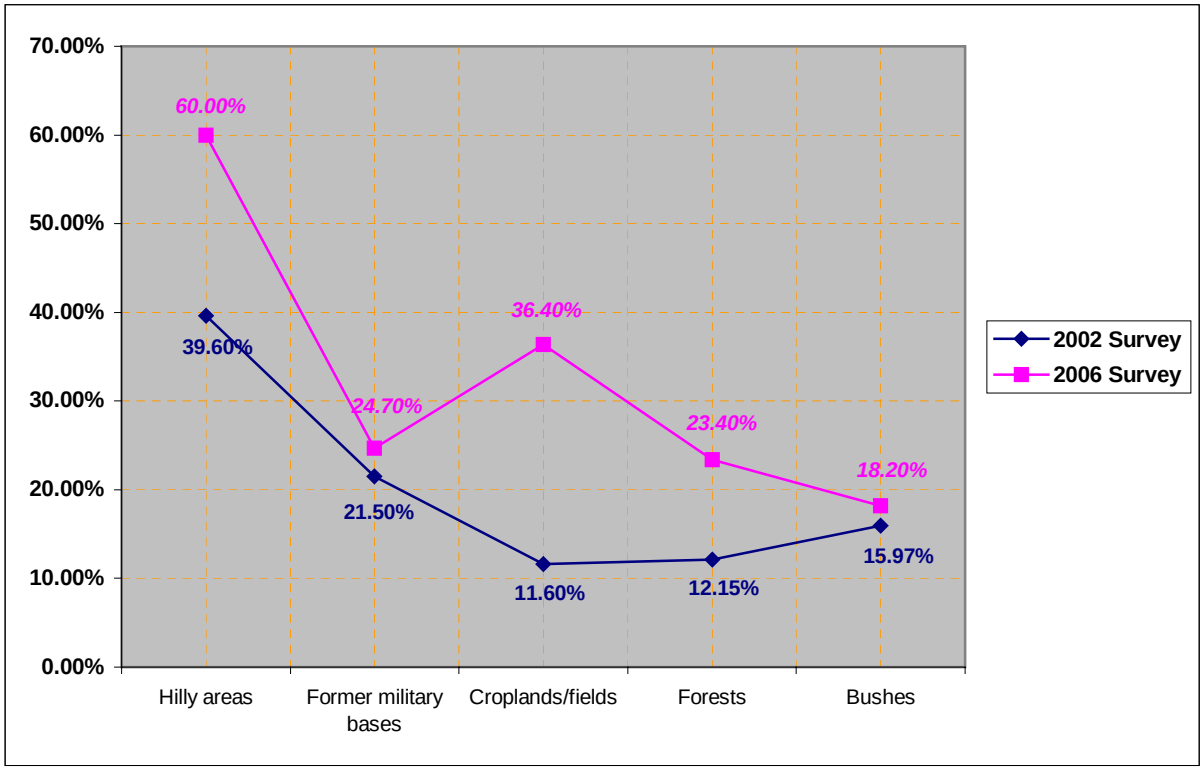
5. Percentage of respondents who know of the consequences of landmines/UXO (2006 Survey)



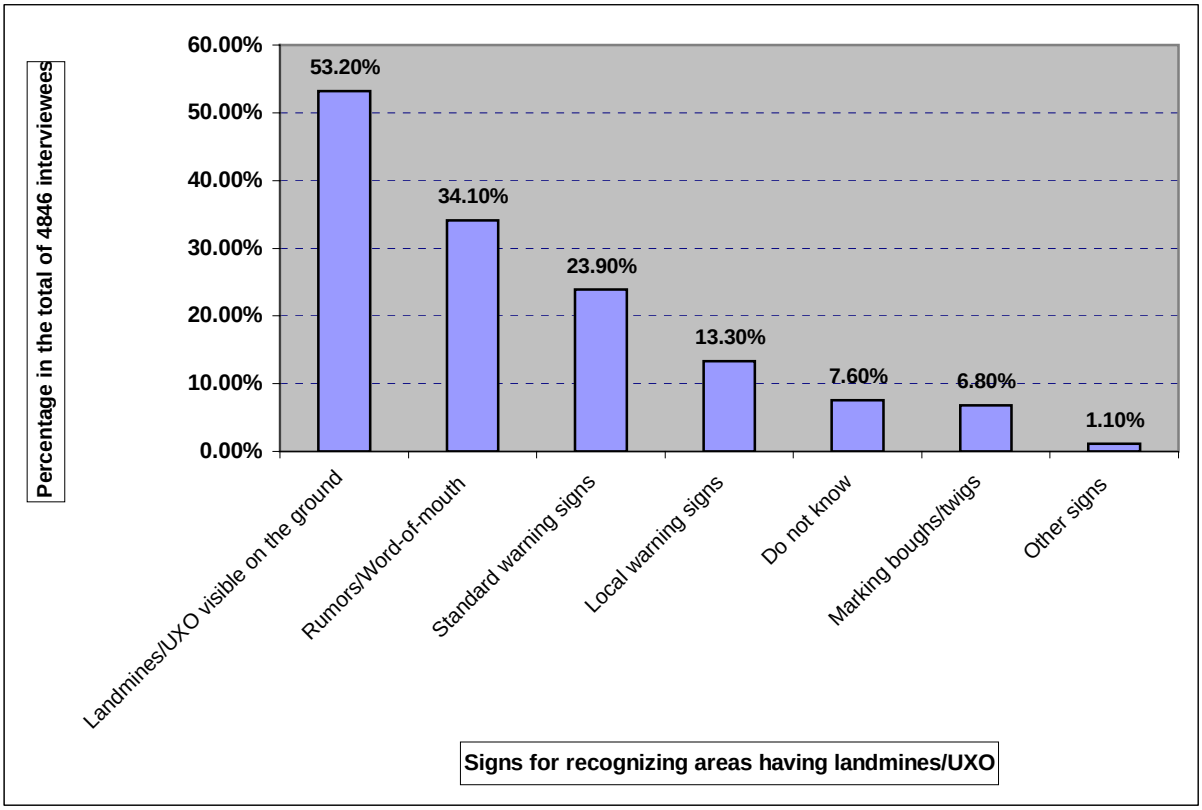
6. Locations where people could potentially encounter landmines/UXO (2006 Survey)



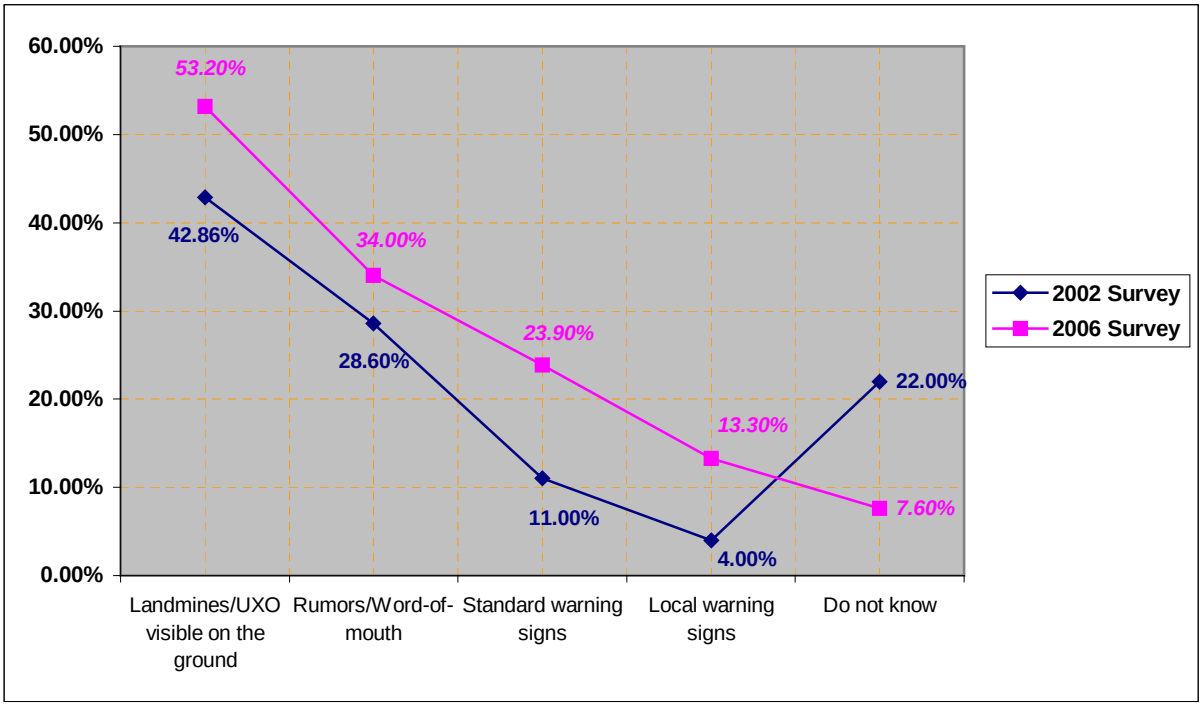
7. *Comparison of the 2002 Survey with the 2006 Survey, Locations of potential encounter*



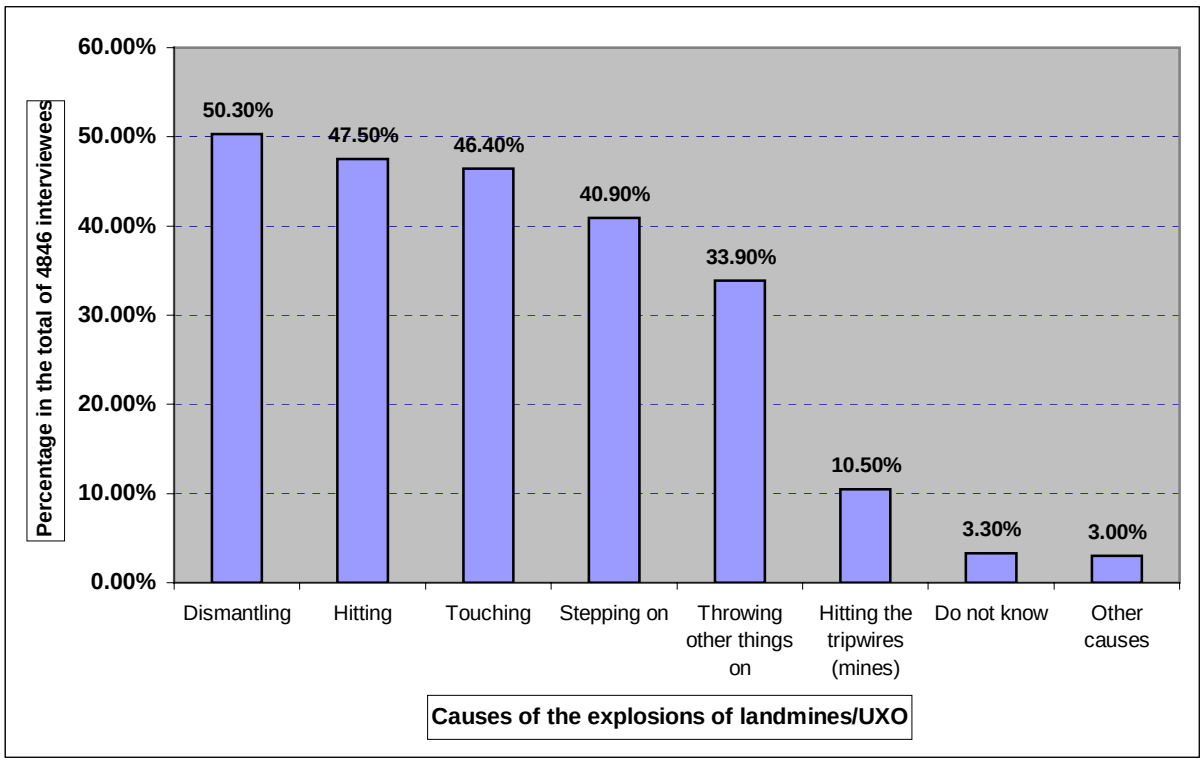
8. Reported indications of landmine/UXO contamination (2006 Survey)



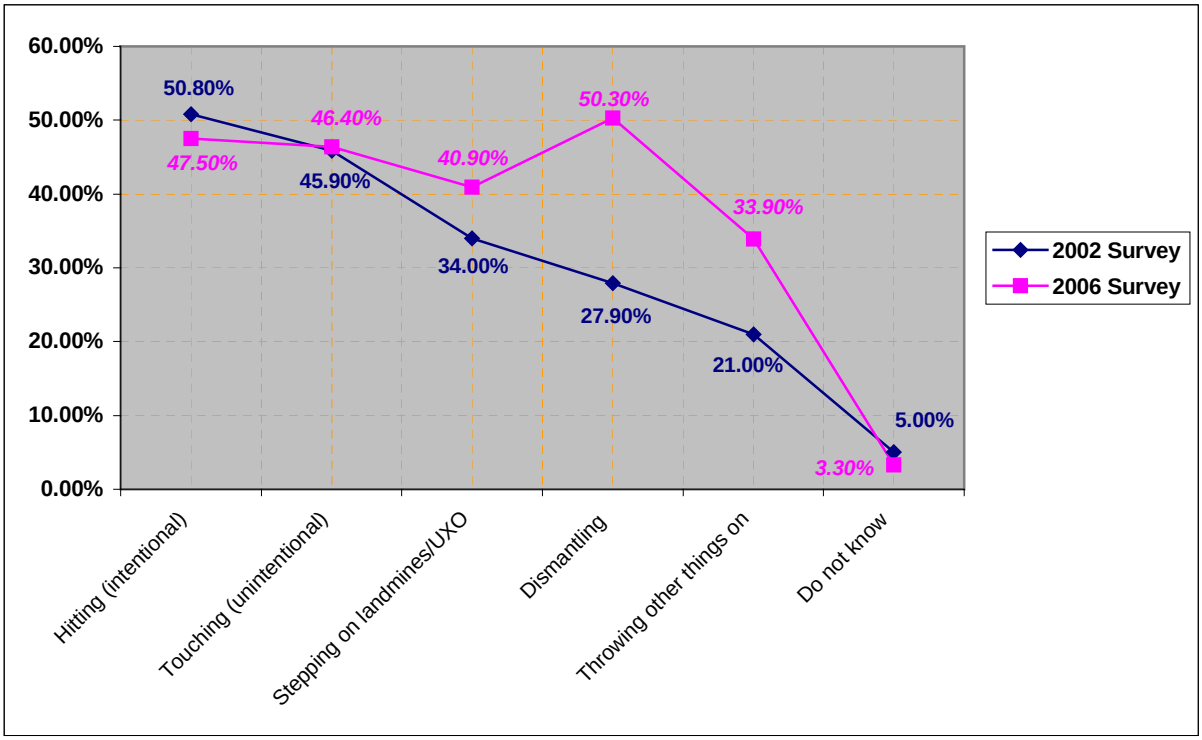
9. *Comparison of the 2002 Survey with the 2006 Survey, Indications of contamination*



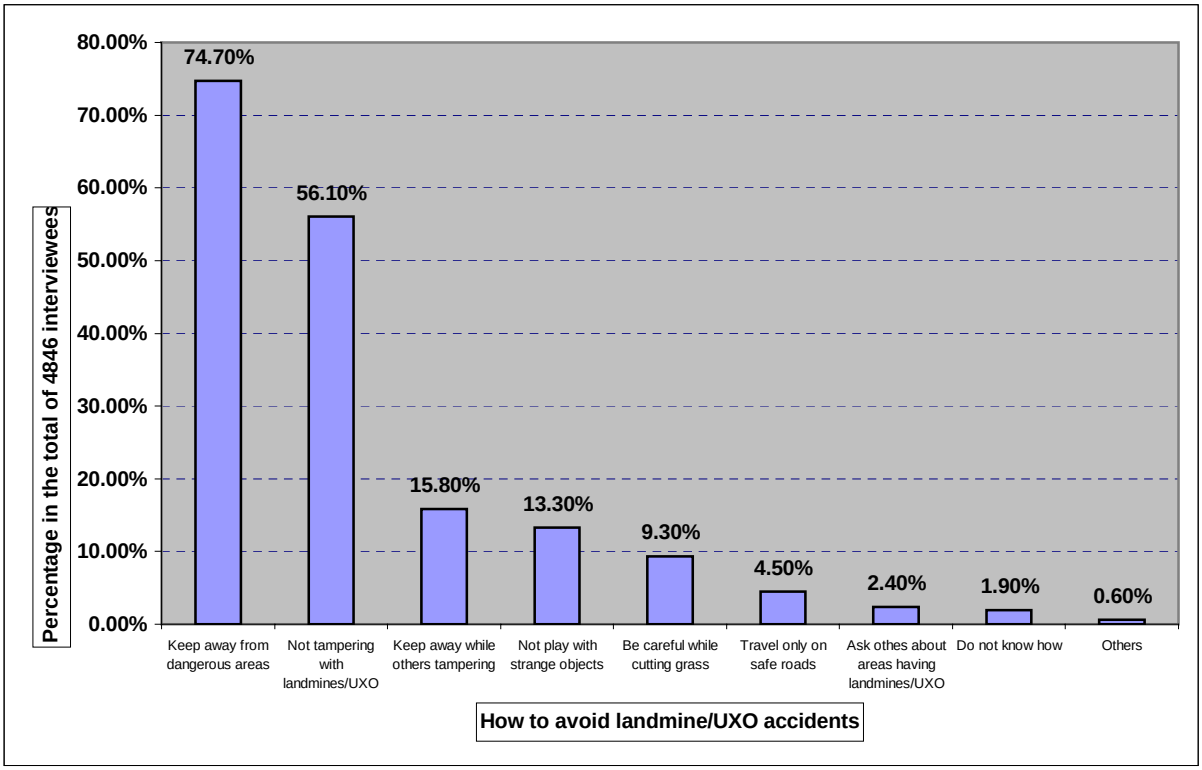
10. Causes of landmine/UXO explosions (2006 Survey)



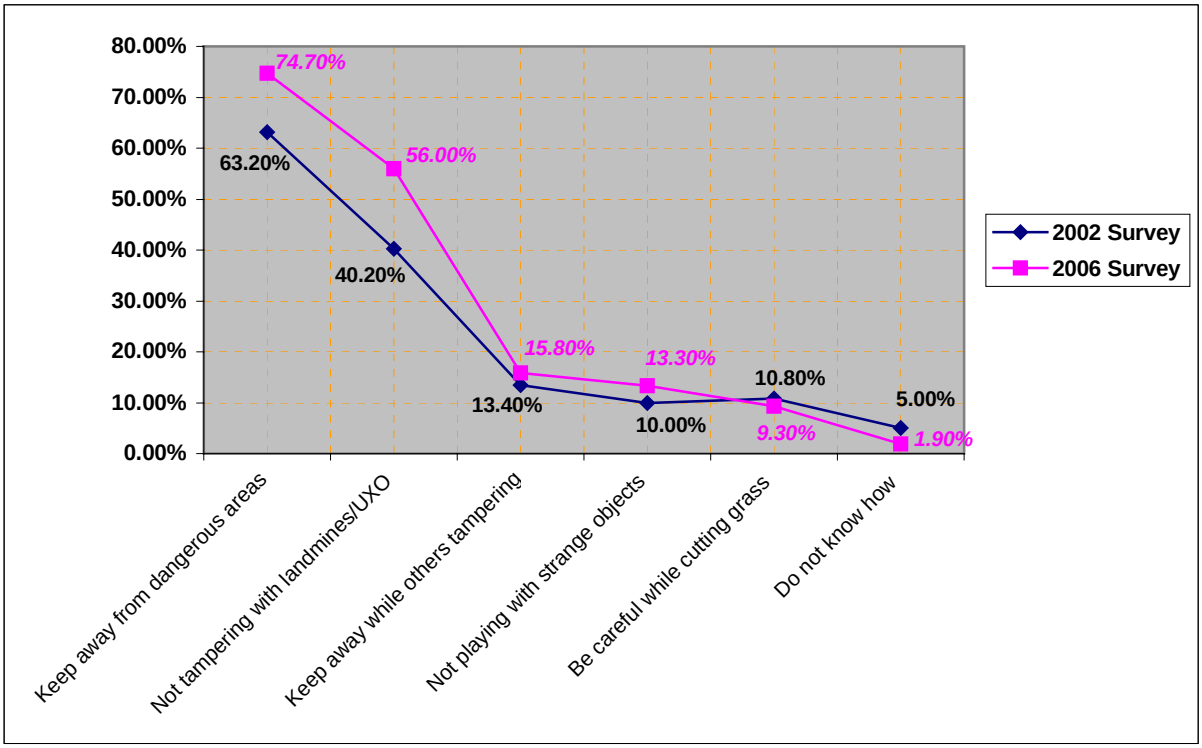
11. *Comparison of the 2002 Survey with the 2006 Survey, Causes of explosions*



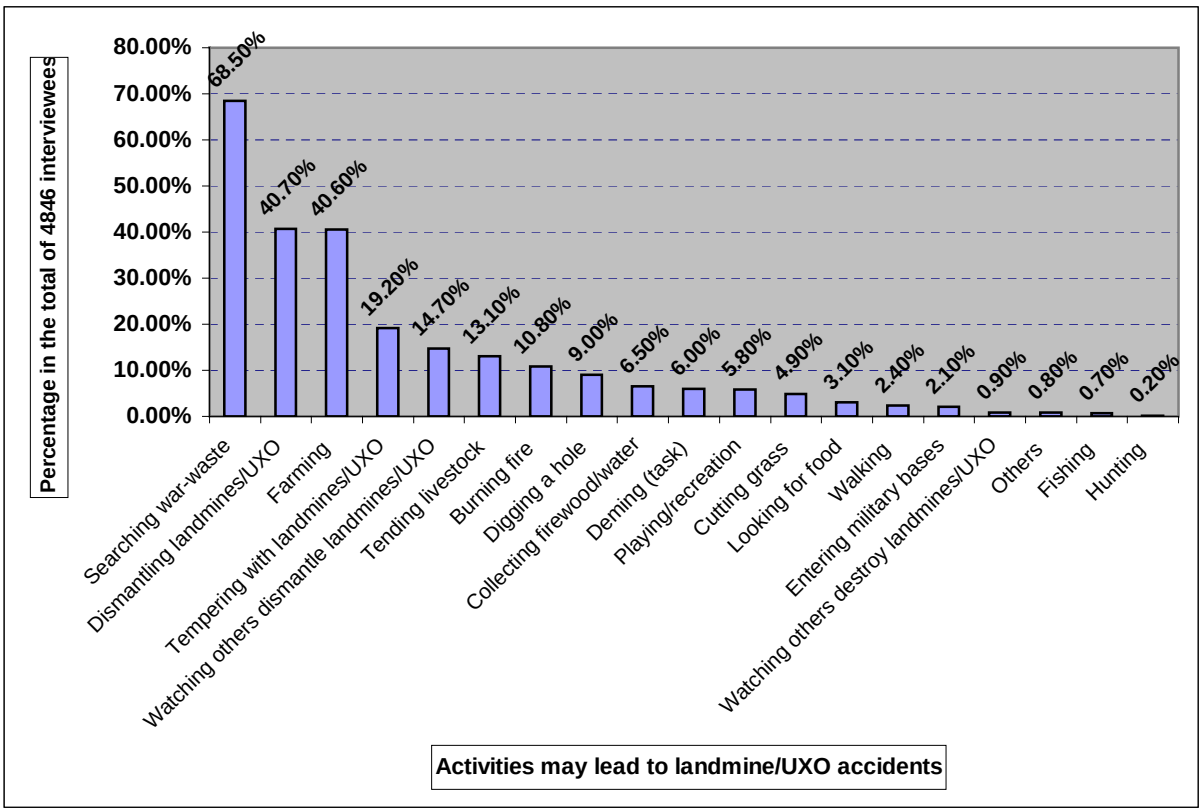
12. How to avoid landmine/UXO accidents, by respondent percentage (2006 Survey)



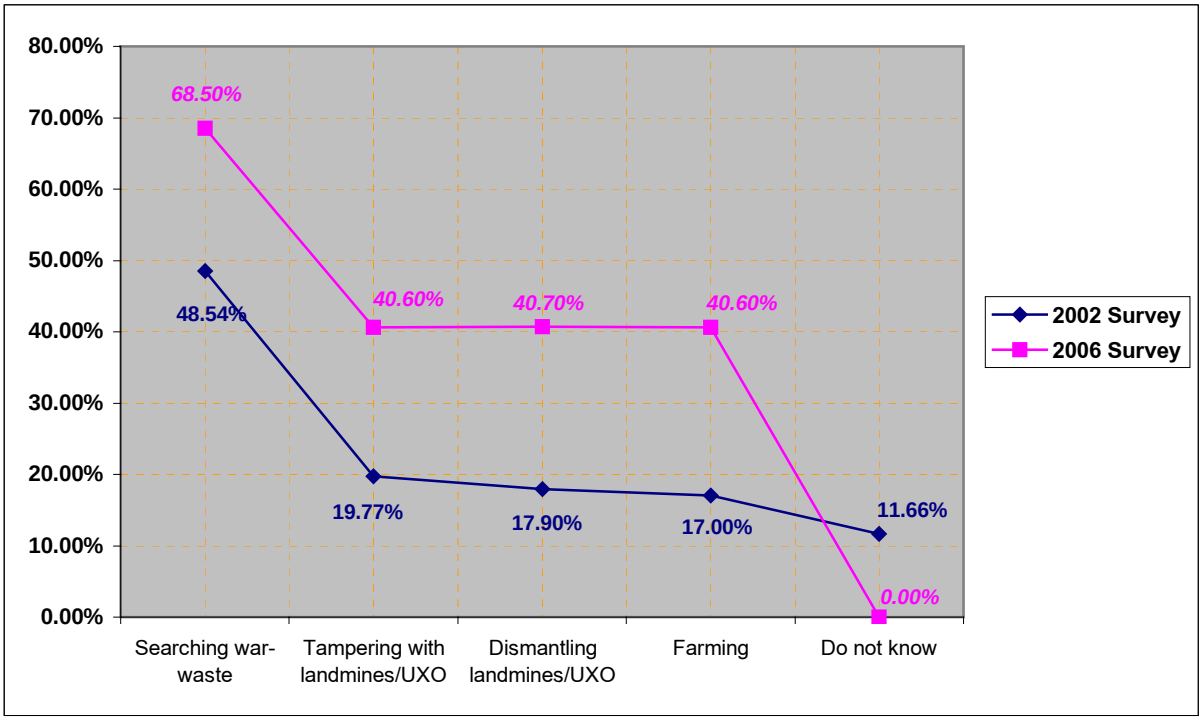
13. *Comparison of the 2002 Survey with the 2006 Survey, Avoiding landmine/UXO accidents*



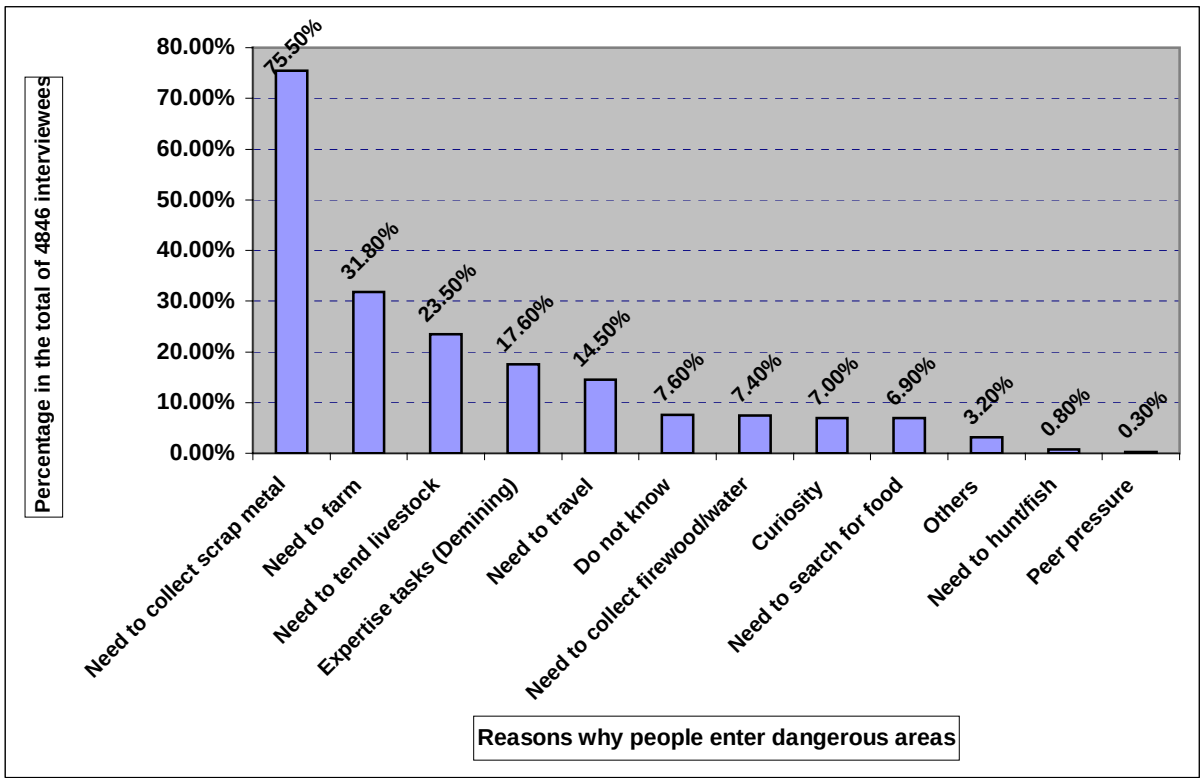
14. Activities that may lead to landmine/UXO accidents (2006 Survey)



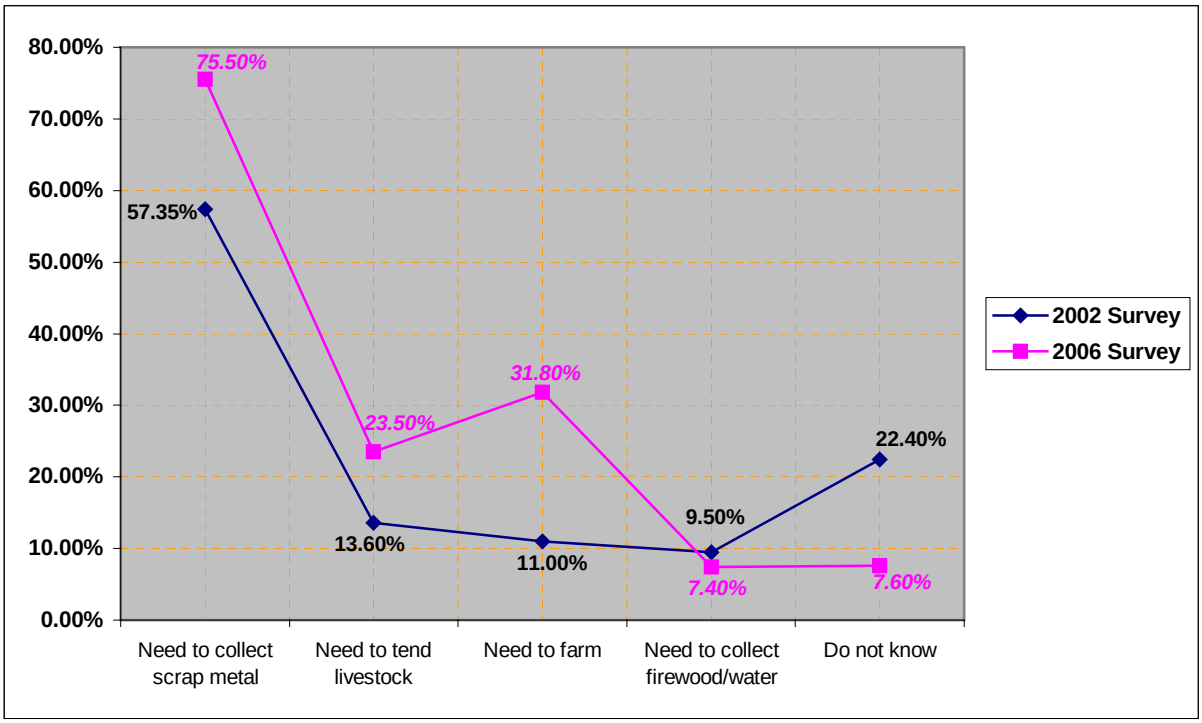
15. *Comparison of the 2002 Survey with the 2006 Survey, Activities that may lead to accidents*



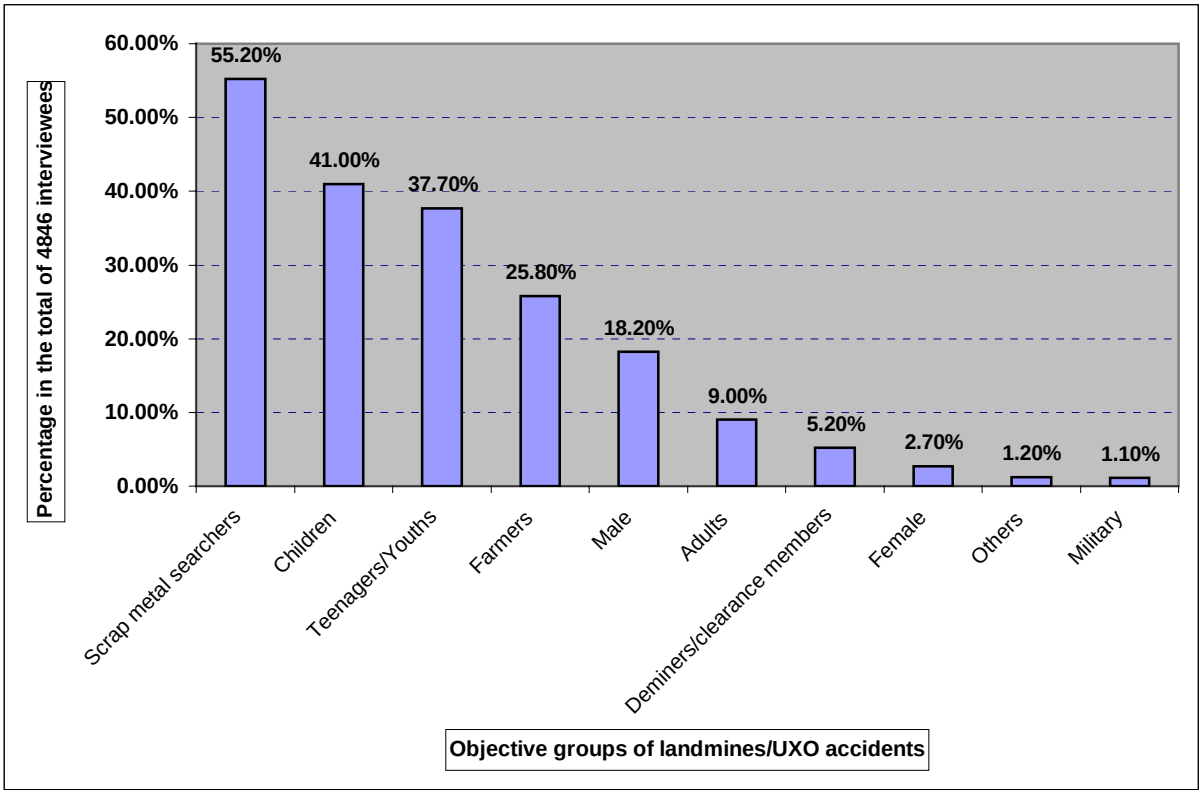
16. Reasons why people enter dangerous areas, by respondent percentage (2006 Survey)



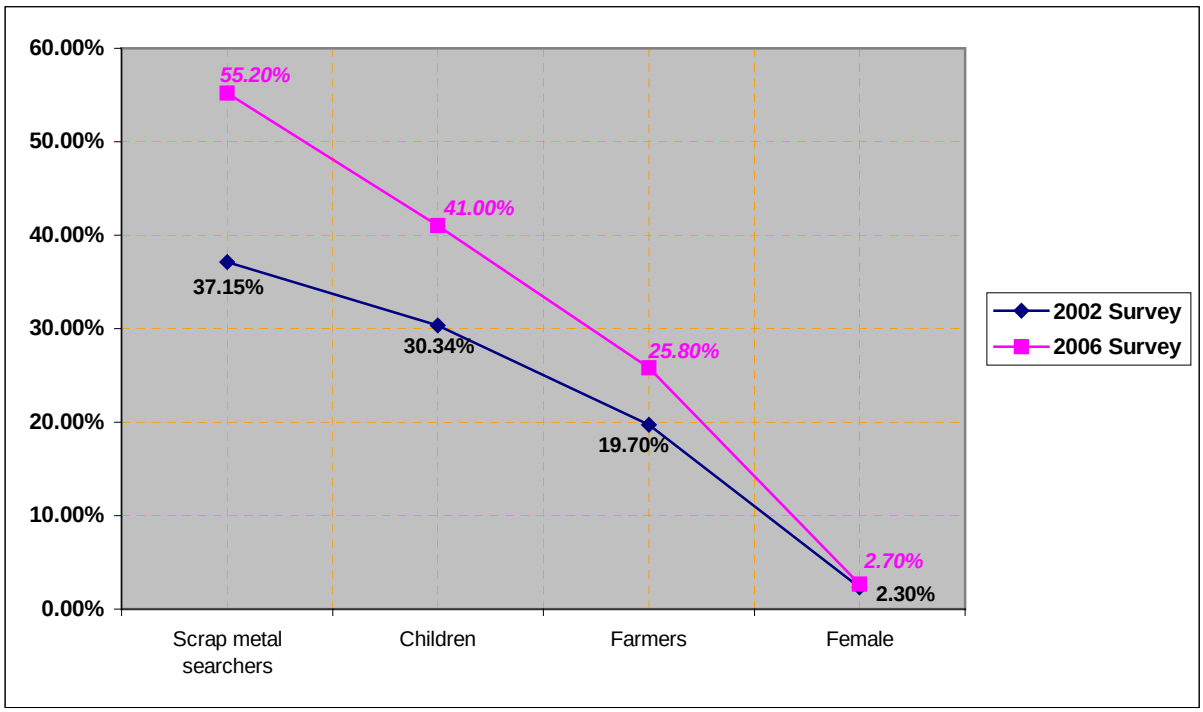
17. *Comparison of the 2002 Survey with the 2006 Survey, Reasons to enter dangerous areas*



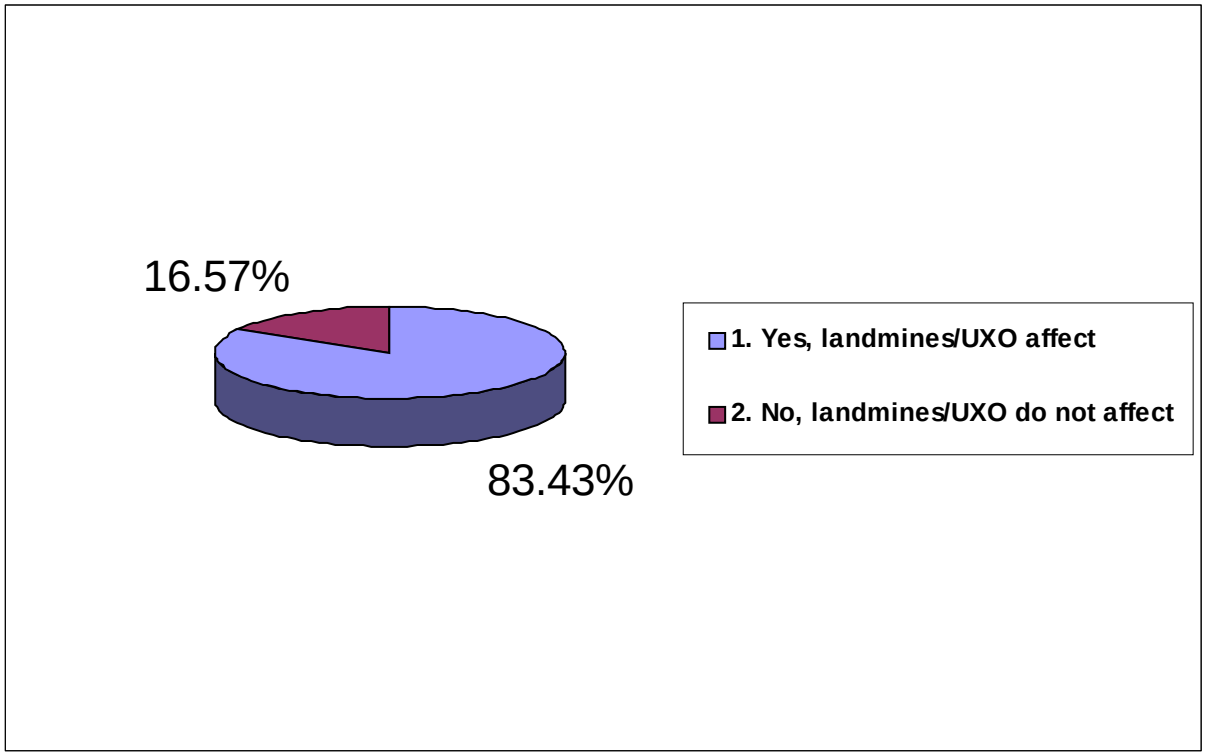
18. Groups of accident victims (2006 Survey)



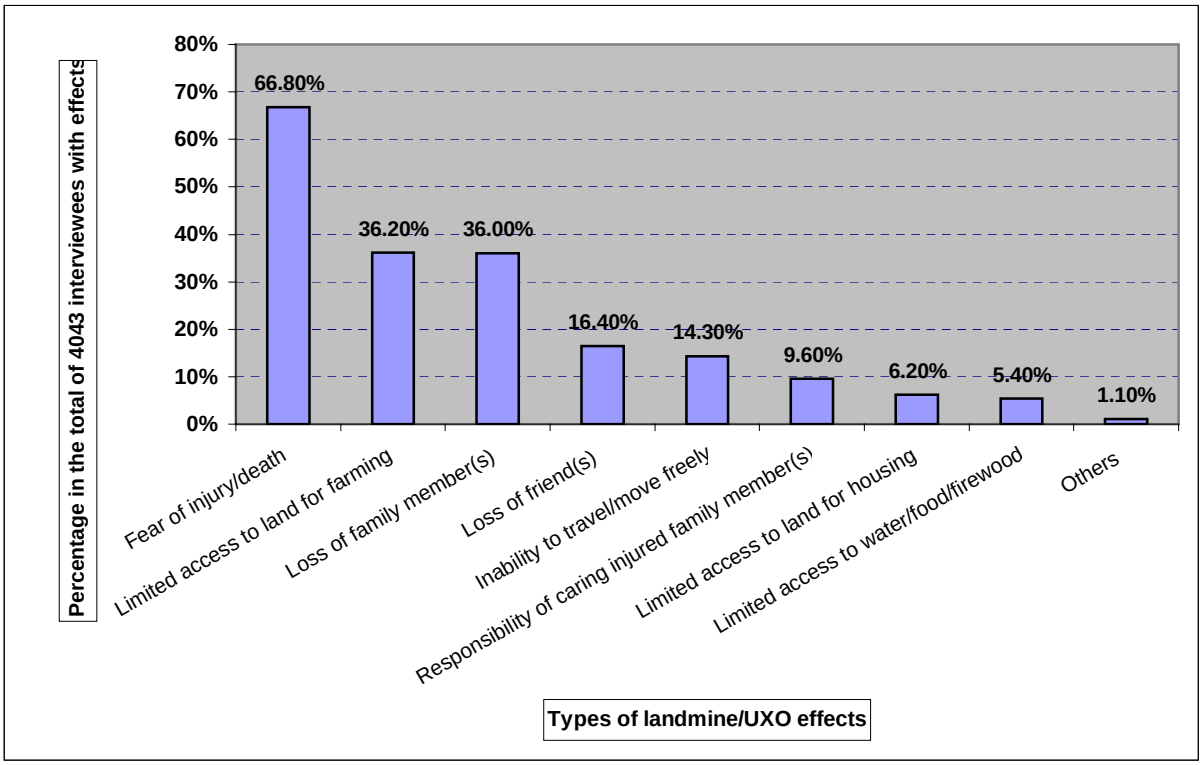
19. *Comparison of the 2002 Survey with the 2006 Survey, Groups of accident victims*



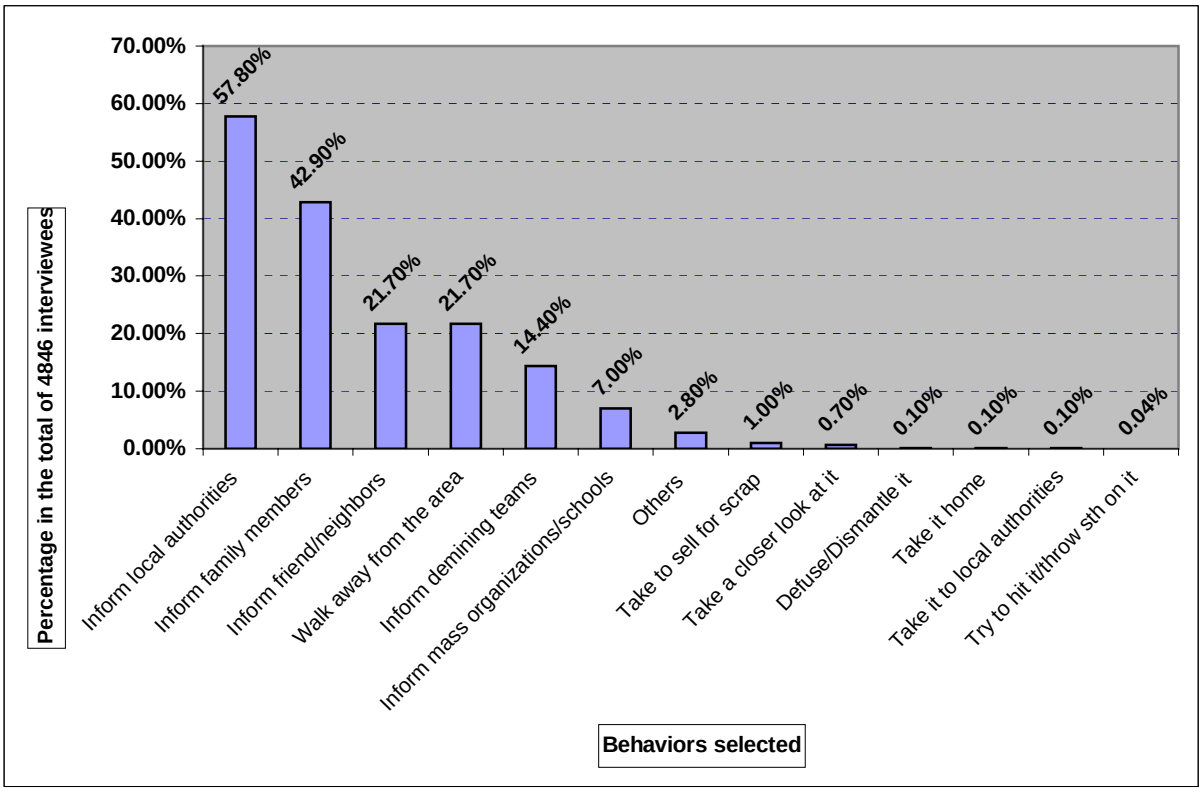
20. Percentage of respondents whose lives are affected by landmines/UXO (2006 Survey)



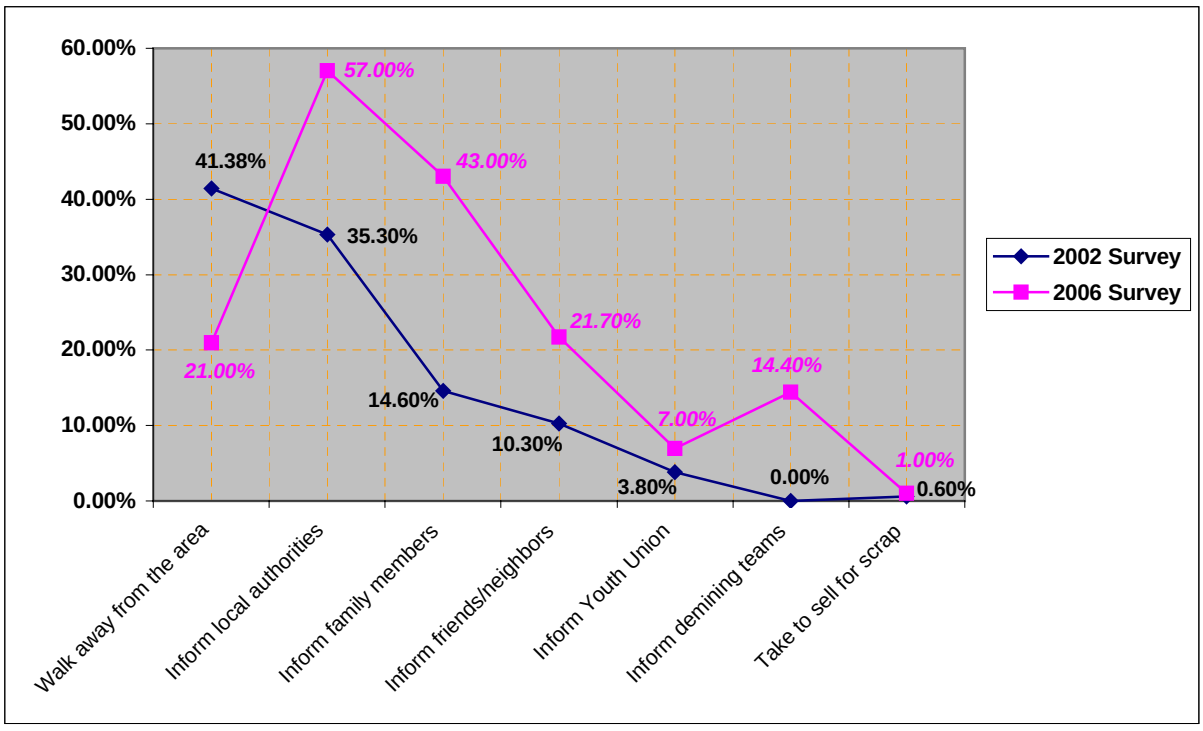
21. Ways in which landmines/UXO affect respondent's lives, by percentage (2006 Survey)



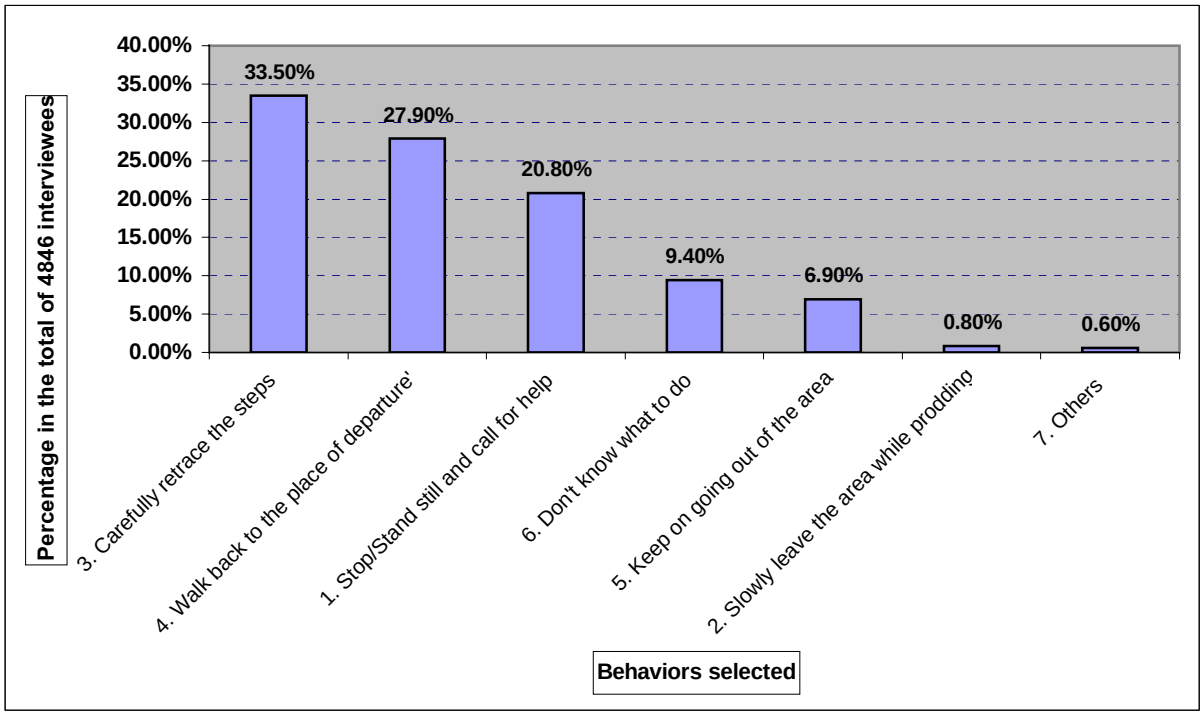
22. Behavior in response to a landmine/UXO encounter (2006 Survey)



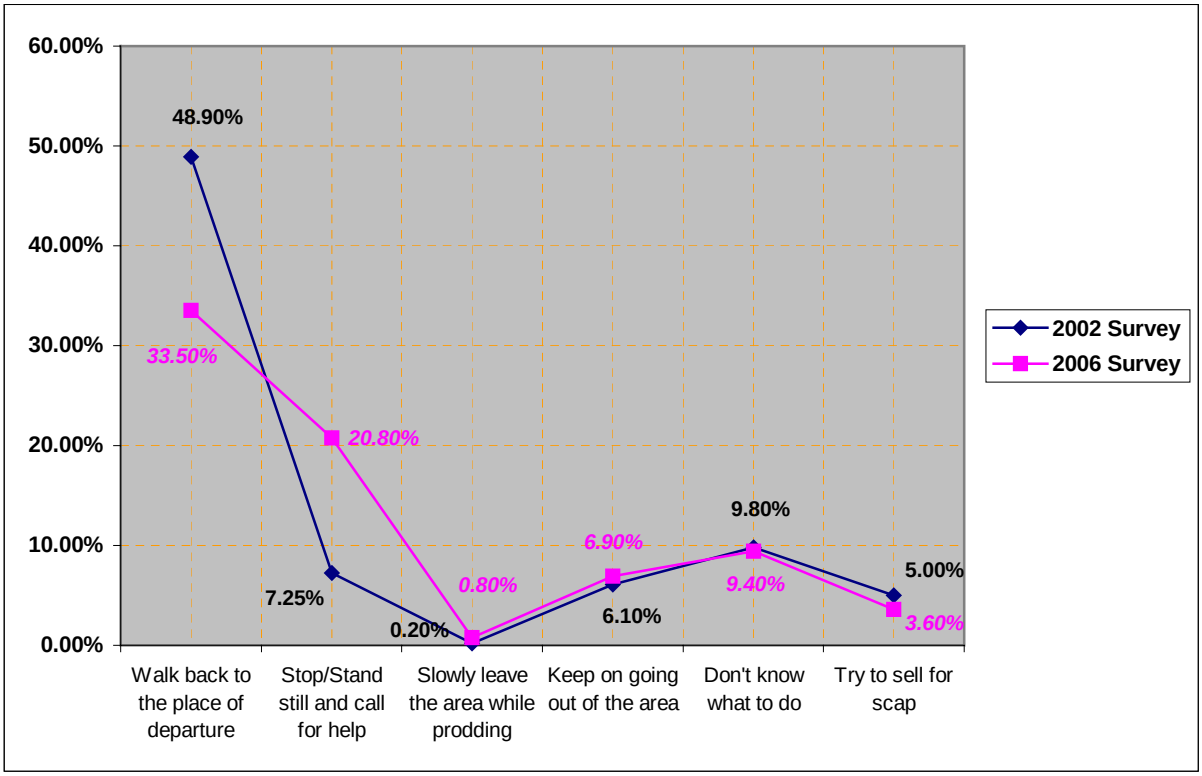
23. *Comparison of the 2002 Survey with the 2006 Survey, Behavior when encoutering UXO*



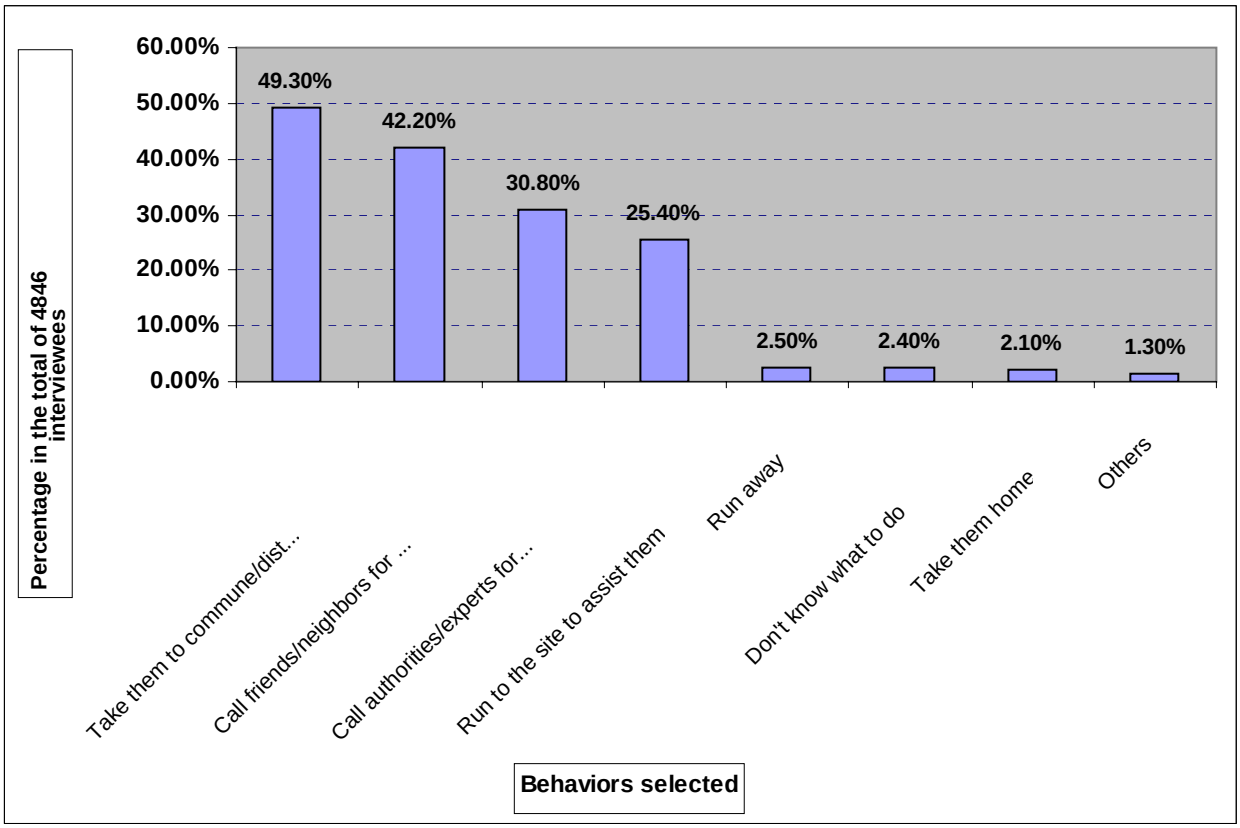
24. Hypothetical behaviors of respondents after discovering themselves in a minefield (2006 Survey)



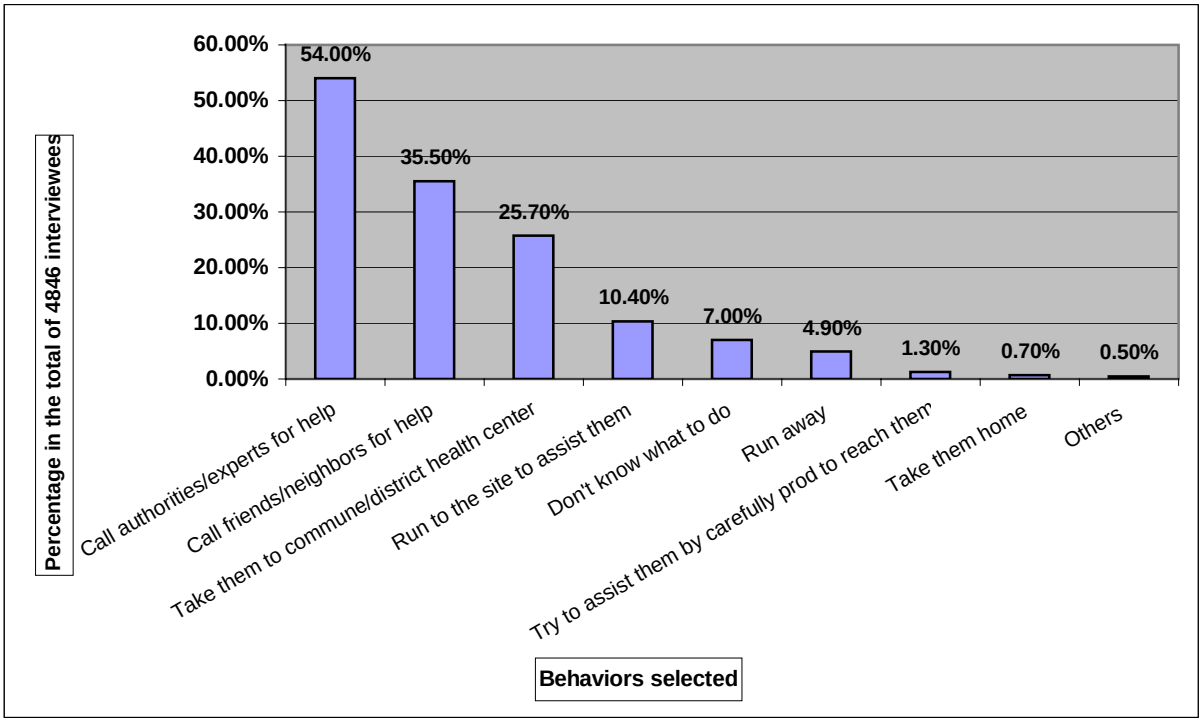
25. *Comparison of the 2002 Survey with the 2006 Survey, Behaviors in a minefield*



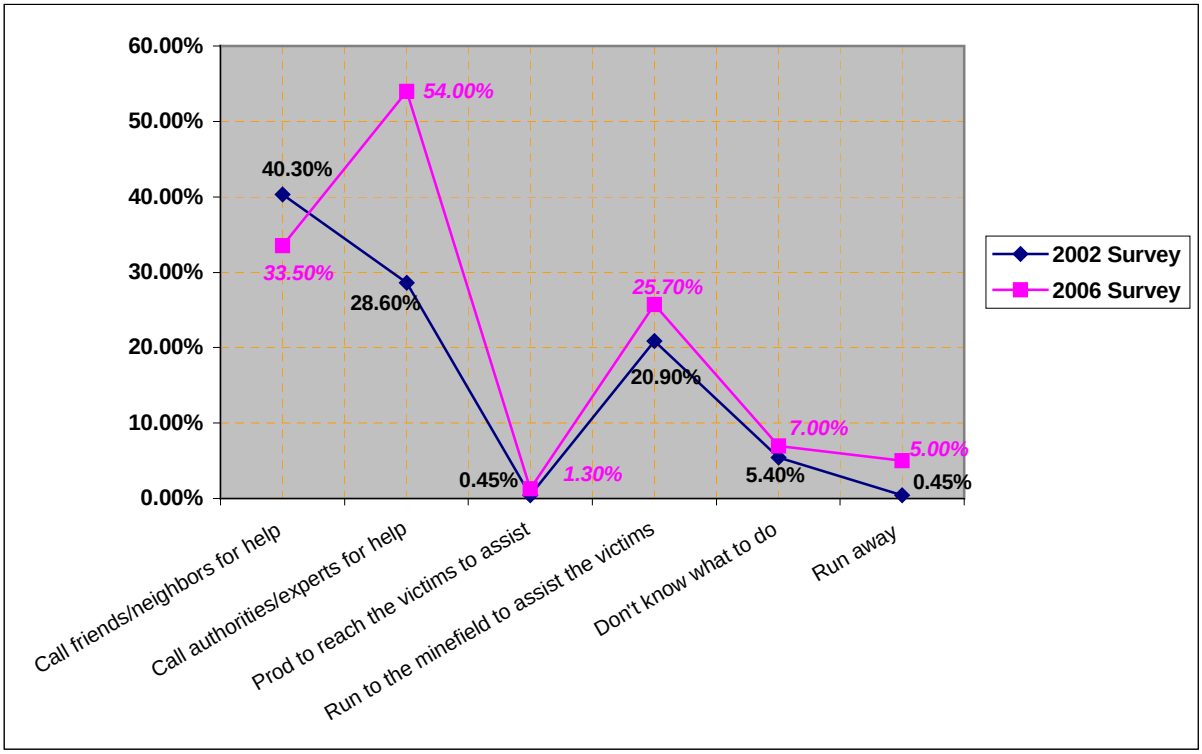
26. Hypothetical behaviors in response to witnessing a landmine/UXO accident (2006 Survey)



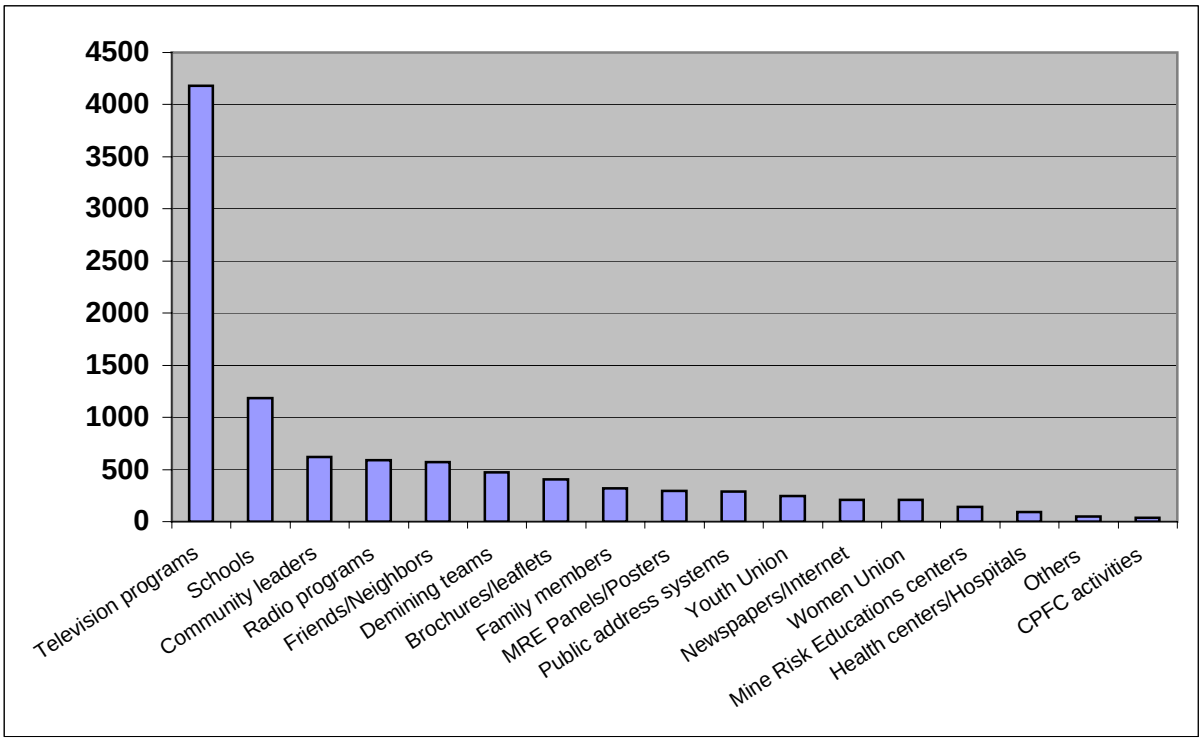
27. Hypothetical behaviors after witnessing an injurious explosion in a minefield (2006 Survey)



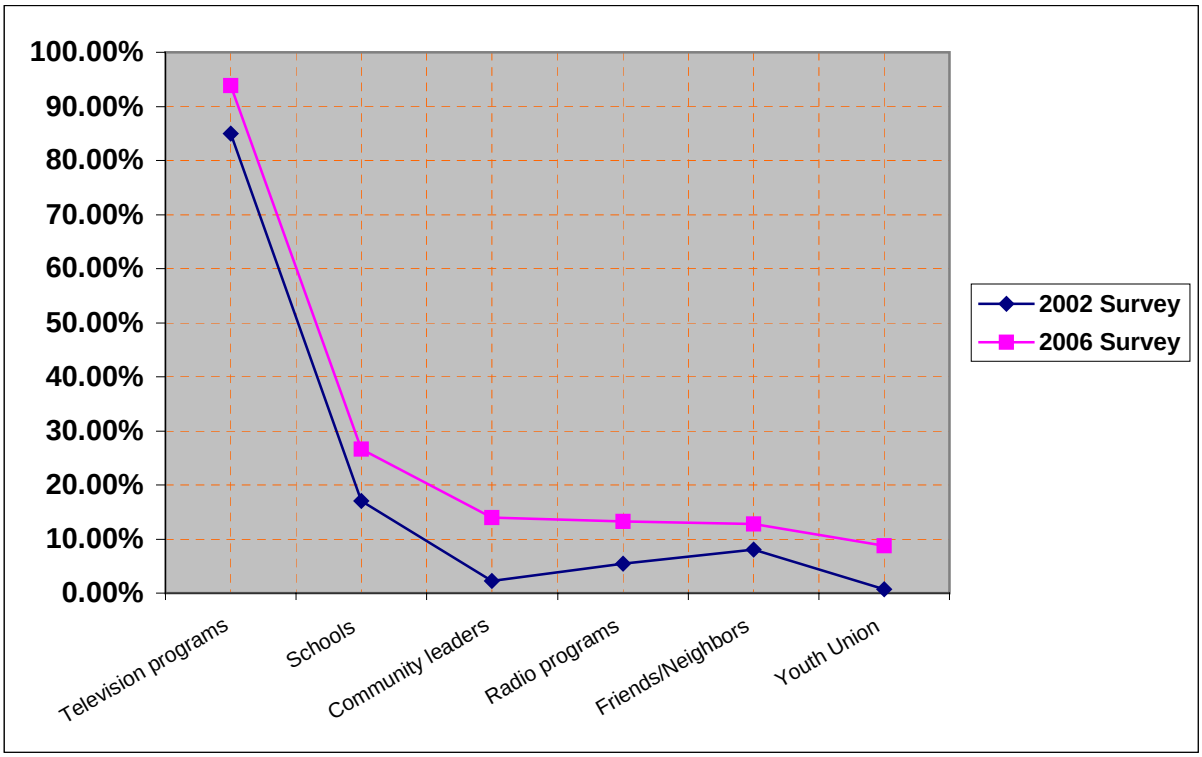
28. *Comparison of the 2002 Survey with the 2006 Survey, Seeing people injured in a minefield*



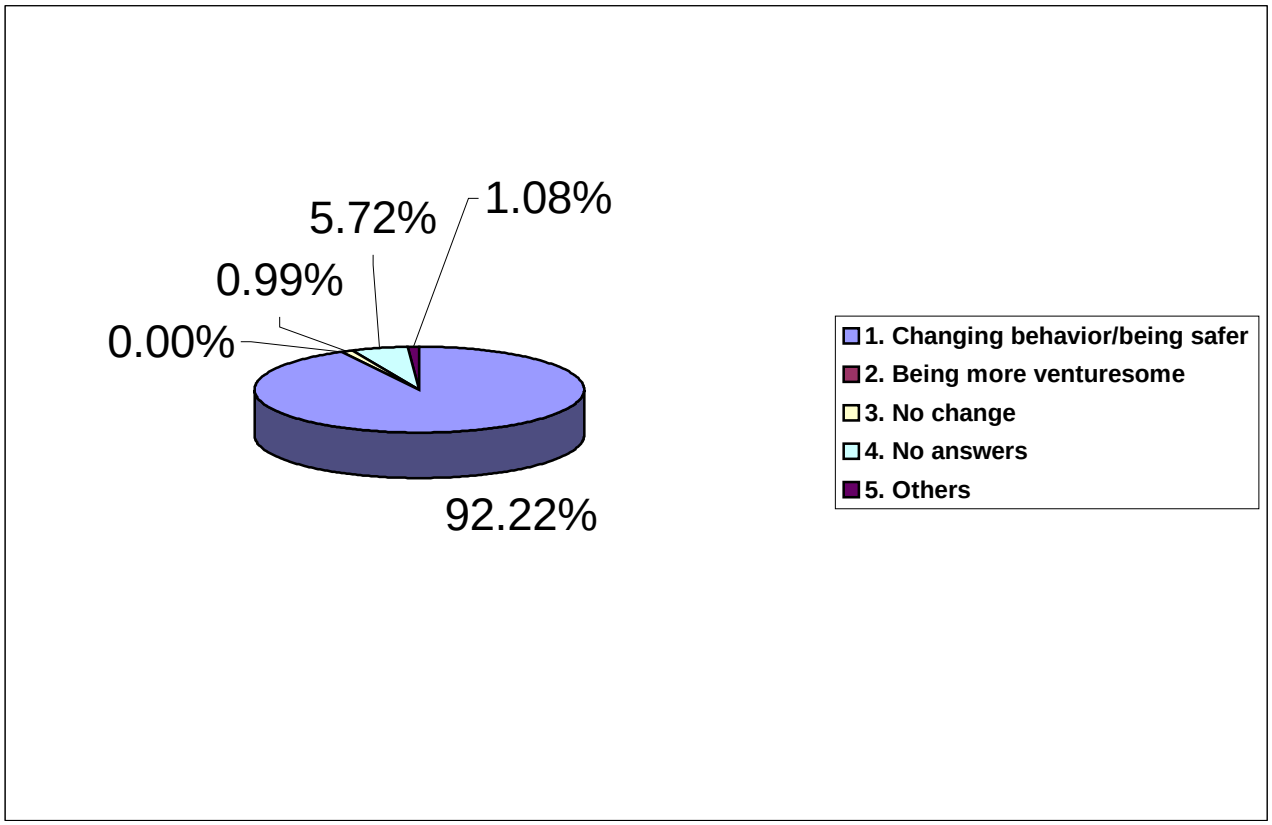
29. Leading sources of MRE Information by respondent percentage (2006 Survey)



30. *Comparison of the 2002 Survey with the 2006 Survey, Sources of MRE information*



31. Behavioral Impact of MRE Information (2006 Survey)



Annex 3: Survey questionnaires

UXO/Mine Incident Form

1.General Information	
Interviewer name:	Date:

Introduce yourself to the interviewee. Explain who you are, for which organisation you work, and the purposes of this interview. Follow the italicised instructions. Record the interviewees' answers by marking their response and/or filling in the blanks provided.

Never read the answer options to the interviewee! Wait for the interviewee's response and then mark the appropriate items.

2.Date of Incident		
Year:	Month:	Day

3.Location of Incident	
Village(or km/direction to nearest village):	
Commune:	District:

4.Victim Data				
Family name:	Middle name(s):		First name:	
Address:				
Date of birth:			Sex: ☐ Male ☐ Female	
Ethnicity: ☐Kinh ☐Paco ☐Vankieu ☐Others			Education level:	
Occupation at time of incident:			Approximate family income/year (VND) before incident	
☐ Farmer	☐ Labourer	☐ Sales/shop	☐ 0-2 million	☐ 2-3 million
☐ Military	☐ Government	☐ Unemployed	☐ 3-5 million	☐ 5-10 million
☐ Student	☐ Other (specify):		☐ 10-15 million	☐ 15 million+

5.Injuries			
Was the person injured or killed?	☐ Injured	☐ Killed	☐ Unknown
If injured, is the person still alive?	☐ Yes	No	☐ Unknown

6.Location of Death		
☐ On site	☐ During transport to health care facility	☐ At health care facility
Other (explain):		

7.Description of Injuries	
(*insert figures from IMSMA questionnaire)*	

8.Victim's Activity at Time of Incident		
☐ Walking/travelling on foot	☐ Collecting wood/water	☐ Farming
☐ Entering into old military base	☐ Playing/recreation	☐ Fishing/hunting
☐ Tampering with UXO/mines	☐ Collecting scrap metal	☐ Defusing a bomb
☐ Cutting/clearing vegetation	☐ Tending to livestock	☐ Lighting a fire
☐ Entering into old military base	☐ Travelling by vehicle	☐ Demining
☐ Watching person defuse bomb	☐ Searching for food	☐ Don't know
☐ Other(s) (specify):		

9.Location of Incident		
☐ Rice paddy/field	☐ Old military base	☐ River bank
☐ Seaside	☐ Trail	☐ Forest
☐ Roadside	☐ Mountains	☐ Near home
☐ Tall grass/vegetation	☐ Don't know	
☐ Other (specify):		

10.How Often Did the Victim Go to the Area Where the Incident Occurred?					
☐ More than once/day	☐ Daily	☐ Weekly	☐ Monthly	☐ Never	☐ Unknown

11.Did the Victim Know That the Area Was Dangerous?		
☐ Yes	☐ No	☐ Unknown

12.Did the Victim See the Object Before the Incident?			
☐ Yes, but didn't touch it	☐ Yes – did touch it	☐ No	☐ Don't know

13.Had the Victim Received Any UXO/mine Risk Education/Awareness Information?		
☐ Yes	☐ No	☐ Unknown

14.Were There Any Danger Area Markers?			
☐ Yes – official signs	☐ Yes – local signs (sticks, rocks, etc.)	☐ No	☐ Unknown

15.If the Victim Knew the Area Was Dangerous, Why Did They Go There?		
☐ Scrap metal collection (income)	☐ Need to travel	☐ Farming
☐ Tending to livestock	☐ Collecting wood/water	☐ Work (demining)
☐ Not aware it's dangerous	☐ Searching for food	☐ Peer pressure
☐ Curiosity	☐ Fishing/hunting	☐ Don't know
Other(s) (specify):		

16.Were Any Other Persons Involved?	
☐ Yes	☐ No

17.List of Other Casualties				
Family Name	Middle Name(s)	First Name	Status	
			☐ Killed	☐ Injured
			☐ Killed	☐ Injured
			☐ Killed	☐ Injured

18.Device That Caused the Incident					
☐ Bombie	☐ Grenade	☐ Mortar	☐ M-79	☐ Other UXO	☐ Mine
☐ Don't know	Other (specify):				

19.Current Victim Data				
Current occupation:			Current family income/year (VND)	
☐ Farmer	☐ Labourer	☐ Sales/shop	☐ 0-2 million	☐ 2-3 million
☐ Military	☐ Government	☐ Unemployed	☐ 3-5 million	☐ 5-10 million
☐ Student	☐ Other (specify):		☐ 10-15 million	☐ 15 million+

20. Victim/victim family stated needs			
☐ Direct support	☐ Credit	☐ Scholarship	☐ Rehabilitation(wheelchair/prosthetics)
☐ Other(s)(Specify):			

21. Is the victim still attending school?(If in school age)	
☐ Yes	☐ No
☐ If No, then Why?	

The questionnaire is now finished.

Thank the interviewee for his/her time and patience before moving on.

SURVEY

on the Knowledge – Attitudes – Behaviors and Practices of local people to the danger of postwar landmines/UXO in Quang Tri Province

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A. GENERAL INFORMATION

1. Code of the form:	

2. Name of Interviewer:	**5. Commune/ward/township (D):**
3. Date of surveying:……*2006*	**6. District/town (P):**
4. Village/quarter (urban):	**7. Province:** ***Quang Tri***

Introduce yourself to the interviewee. Explain who you are, for which organisation you work, and the purposes of this interview. It is important to explain that all information gathered in confidential – the interviewee's name will not be asked.

B. GENERAL INFORMATION ABOUT THE INTERVIEWEE

8. Year of Birth:	*The interviewee must be between the ages of 7 and 70*

9. Sex:	Male ☐	Female ☐	Refuse to answer ☐

10. Marital Status:	Married ☐	Single ☐	*If Single than skip question* **11**

11. Number of children:	**12. Number of family members:**

13. Ethnicity:	Kinh ☐	Pa-co ☐	Van Kieu ☐	Other ☐

14. Education Level:

Illiterate ☐	Primary ☐	Secondary ☐	High school ☐
Professional College ☐		University, Post-graduate ☐	

15. Occupation:

Farmer ☐	Laborer ☐	Sales/shop ☐	Military ☐
Government ☐	Student ☐	Pupil ☐	Unemployed ☐
	Others ☐	***Specify:***……...	

16. Approximate private income/year (VND) (*calculated from family income*):

Less than 2.5 million ☐	From 2.5 to 5 million ☐	
From 5 to 10 million ☐	More than 10 million ☐	No answers ☐

C. MAIN INFORMATION OF KNOWLEDGE – ATTITUDE - PRACTICES

17. Have you ever heard of bombs, unexploded ordnance (UXO) or landmines?

Yes ☐	No ☐	If ***No*** then skip all the rest questions

18. Since the war ended, have you ever seen landmines/UXO on field?

Yes ☐	No ☐	If ***No*** then skip questions **18a, 18b, 18c**

18a. Where have you seen landmines/UXO?

*Interviewee may give **more than one** answer:*

Rice fields ☐	Mountains ☐	Seaside ☐	River banks ☐
Roadside ☐	Trails ☐	Bushes ☐	Former military bases ☐
Near home ☐	Near schools ☐	Forest ☐	Do not remember ☐
	Other ☐	***Specify***:……..	

18b. How frequently do you encounter landmines/UXO?

Daily ☐	Weekly ☐	Monthly ☐	
Yearly ☐	Other ☐	***Specify***:……..	

18c. What were you doing when you encountered landmines/UXO?

*Interviewee may give **more than one** answer:*

Walking ☐	Farming ☐	Playing/recreating ☐	Do not remember ☐
Lighting fire ☐	Collecting water/wood ☐	Searching war waste ☐	Other ☐
Digging ☐	Searching for food ☐	Demining (task) ☐	***Specify***: ……
Hunting ☐	Cutting grass ☐	Entering military bases ☐	……..
Fishing ☐	Tending livestock ☐	Watching person dismantle UXO ☐	……..

19. What can a landmine/UXO explosion do to a person?

*Interviewee may give **more than one** answer:*

Kill them ☐	Maim/Injure them ☐	Nothing ☐	
Do not know ☐	Other ☐	***Specify***: ……..	

20. Where are landmines/UXO most likely to be encountered?

*Interviewee may give **more than one** answer:*

Rice fields ☐	Mountains ☐	Seaside ☐	River banks ☐
Roadside ☐	Trails ☐	Bushes ☐	Former military bases ☐
Near home ☐	Near schools ☐	Forest ☐	Do not remember ☐
	Other ☐	***Specify***:……..	

21. How can you recognize places that may have landmines/UXO?

*Interviewee may give **more than one** answer:*

Warning signs (standard) ☐	Seeing UXO on the ground ☐	
Local warning signs (made by locals) ☐	Word of mouth ☐	Do not know ☐
Crossed sticks/branches ☐	Others ☐	*Specify*:……

22. What would you do if you saw UXO and/or a mine?

*Interviewee may give **more than one** answer:*

Inform family members ☐	Inform friends/neighbors ☐	Inform mass organizations, schools ☐
Inform local authorities ☐	Take to sell for scrap ☐	Defuse/Dismantle it ☐
Inform demining teams ☐	Walk away from the area ☐	Other ☐
Take it home ☐	Take a closer look at it ☐	***Specify***:……..
Take it to local authorities ☐	Try to hit it/throw sth on it ☐	……

23. What would you do if you thought you had entered into a minefield?

Stop/Stand still and call for help	☐	Slowly leave the area while prodding	☐
Carefully retrace my steps	☐	Walk back to from where I came from	☐
Keep on going out of the area	☐	Don't know what to do	☐
Other ☐	***Specify***:……...		

24. What makes landmines/UXO explode?

*Interviewee may give **more than one** answer:*

Stepping on them	☐	Throwing things at them	☐	Hitting them	☐
Touching them	☐	Hitting trip wires (landmines)	☐	Defusing/Dismantling	☐
Do not know	☐	Other ☐	*Specify*:…….		

25. How can you avoid a landmine/UXO accident?

*Interviewee may give **more than one** answer:*

Staying away from dangerous areas	☐	Taking care if cutting/clearing vegetation	☐
Not tampering with/touching landmines/UXO	☐	Not tampering with strange objects	☐
Staying away when others tampering with UXO	☐	Walking on well-used paths/trails	☐
Asking others about dangerous areas	☐	Do not know ☐	
Other ☐	***Specify***:……..		

26. What are people usually doing when they are injured by landmines/UXO?

*Interviewee may give **more than one** answer:*

Walking	☐	Farming	☐	Playing/recreating	☐	Dismantling UXO	☐
Lightning fire	☐	Collecting water/wood	☐	Searching for war waste	☐	Watching others dismantle	☐
Digging	☐	Searching for food	☐	Demining (task)	☐	Tampering with UXO	☐
Hunting	☐	Cutting/clearing vegetation	☐	Entering old military bases	☐	Other	☐
Fishing	☐	Tending livestock	☐	Watching others defuse UXO	☐	*Specify*:……..	

27. Why do people in your community enter dangerous areas?

*Interviewee may give **more than one** answer:*

Need to travel	☐	Need to collect scrap metal	☐	Expertise tasks (Demining…)	☐
Need to farm	☐	Need to tend livestock	☐	Other ☐	
Curiosity	☐	Need to search for food	☐	***Specify***:……..	
Peer pressure	☐	Need to collect water/wood	☐	…….	
Do not know	☐	Need to fish/hunt	☐	…….	

28. What would you do if you saw a person (s) injured in a UXO explosion?

*Interviewee may give **more than one** answer:*

Run to the site to assist them	☐	Take them home	☐	Run away	☐
Call authorities/experts for help	☐	Take the to commune/district health center			☐
Call friends/neighbors for help	☐	Don't know what to do	☐		
Other ☐	***Specify***:……..				

29. What would you do if you saw a person (s) injured by a mine in a place you think might be a mine field?

*Interviewee may give **more than one** answer:*

Run to the site to help them	☐	Take them to commune/district health center	☐		
Call authorities/experts for help	☐	Try to assist them by carefully prod to reach them	☐		
Call friends/neighbors for help	☐	Take them home	☐	Run away	☐
Don't know what to do	☐	Other	☐	***Specify:***……	

30. Have you ever received any information about the danger of landmines/UXO?

Yes ☐	No ☐	If ***No*** then skip the question **30a, 30b, 30c**

30a. If yes, where did you received this information?

*Interviewee may give **more than one** answer:*

Television programs	☐	Radio programs	☐	Newspapers/Internet	☐
Health centers/Hospitals	☐	Schools	☐	Mine Risk Education centers	☐
Demining/EOD Teams	☐	Community leaders	☐	Family members	☐
Friends/Neighbors	☐	CPFC activities	☐	Youth Union	☐
Women Union	☐	Public address systems	☐	MRE Panels/Posters	☐
Brochures/leaflets	☐	Other	☐	***Specify:***……...	

30b. Of these sources, which one you pay your most attention?

Television programs	☐	Radio programs	☐	Newspapers/Internet	☐
Health centers/Hospitals	☐	Schools	☐	Mine Risk Education centers	☐
Demining/EOD Teams	☐	Community leaders	☐	Family members	☐
Friends/Neighbors	☐	CPFC activities	☐	Youth Union	☐
Women Union	☐	Public address systems	☐	MRE Panels/Posters	☐
Brochures/leaflets	☐	Others	☐	***Specify:***……...	

30c. How does Mine Risk Education information affect you?

Changing behavior/being safer	☐	Being more venturesome	☐	No change ☐	
No answers	☐	Other	☐	***Specify:***…….	

31. From which sources do you receive information about important matters?

*Interviewee may give **more than one** answer:*

Television programs	☐	Radio programs	☐	Newspapers/Internet	☐
Health centers/Hospitals	☐	Schools	☐	Mine Risk Education centers	☐
Demining/EOD Teams	☐	Community leaders	☐	Family members	☐
Friends/Neighbors	☐	CPFC activities	☐	Youth Union	☐
Women Union	☐	Public address systems	☐	MRE Panels/Posters	☐
Brochures/leaflets	☐	Others	☐	***Specify:***……...	

32. Do you know any landmine/UXO victims?

Yes ☐	No ☐	If ***No*** then skip question **32a**

32a. How many landmine/UXO victims do you know?

1 victim ☐	From 2 to 3 victims ☐	From 4 to 5 victims ☐	More than 5 victims ☐

33. Which objective group (s) are most often landmine/UXO victims?

*Interviewee may give **more than one** answer:*

Children ☐	Teenagers/Youth ☐	Adults ☐	Deminers/clearance members ☐
Male ☐	Female ☐	Farmers ☐	Scrap metal searchers ☐
Military ☐	Other ☐	***Specify:***……..	

34. Do landmines/UXO affect your daily life?

Yes ☐	No ☐	If ***No*** then skip question **34a**

34a. If yes, how do they affect you?

*Interviewee may give **more than one** answer:*

Limited access to land for farming ☐	Loss of family member(s) ☐	Loss of friend(s) ☐
Limited access to land for housing ☐	Limited access to water/food/firewood ☐	
Inability to travel/move freely ☐	Responsibility of caring injured family members ☐	
Fear of injury/death ☐	Other ☐	***Specify:***……

35. Do you know any specific mine action projects/programs in Quang Tri Province?

Yes ☐	No ☐	If ***No*** then skip question **34a, 35b**

35a. Which project(s)/program(s) do you know?

*Interviewee may give **more than one** answer:*

Project RENEW™ ☐	Peace Trees Viet Nam (PTVN) ☐
MAG (Mine Advisory Group) ☐	CPI (Clear Path International) ☐
SODI/Gerbera Demining Team ☐	CRS (Catholic Relief Service) ☐
Other ☐	***Specify:***……...

35b. How do you know that (those) project(s)/program(s)?

*Interviewee may give **more than one** answer:*

Through TV programs ☐	Through Mine Risk Education activities ☐	
Through Radio programs ☐	Through Mine Victim Assistance activities ☐	
Through Newspapers/Internet ☐	Through Landmine/UXO clearance activities ☐	
Through MRE Panels/Posters ☐	Through public address system ☐	
Through brochures/leaflets ☐	Through family members ☐	Through friends/neighbors ☐
Through community leaders ☐	Other source(s) ☐	***Specify:***……

****

The questionnaire is now finished.
Thank the interviewee for her/his time and patience before moving on.

****

Annex 4

List of studied communes of Knowledge – Attitudes – Practices – Beliefs Survey

Administrative Unit Province	Population by the end of studied period Total 619,271	Number of households by the end of studied period Total 132,516	Accumulated population	Sampling Interval 20,642 Selected commune (N^0)
1, N^0 1 Ward QT	7,685	1,887		
2, N^0 2 Ward QT	9,142	2,040	16,827	***1***
3, N^0 1 Ward DH	21,712	4,411	38,539	***2***
4, N^0 2 Ward	4,359	856	42,898	
5, N^0 3 Ward	5,137	1,098	48,035	
6, N^0 4 Ward	4,639	792	52,674	***3***
7, N^0 5 Ward	19,647	4,420	72,321	
8, Dong Giang Ward	4,783	1,000	77,104	***4***
9, Dong Thanh Ward	4,059	838	81,163	
10, Dong Luong Ward	8,038	1,720	89,201	
11, Dong Le Ward	6,815	1,545	96,016	***5***
12, Ho Xa Townlet VL	12,144	3,132	108,160	
13, Ben Quan Townlet	3,630	879	111,790	
14, Vinh Son Commune	7,003	1,665	118,793	***6***
15, Vinh Lam Commune	5,398	1,301	124,191	
16, Vinh Thuy Commune	6,227	1,496	130,418	
17, Vinh Long Commune	6,094	1,588	136,512	
18, Vinh Chap Commune	5,043	1,157	141,555	***7***
19, Vinh Tu Commune	3,322	889	144,877	
20, Vinh Trung Commune	2,886	678	147,763	
21, Vinh Nam Commune	3,475	898	151,238	
22, Vinh Hoa Commune	4,029	1,040	155,267	
23, Vinh Hien Commune	2,047	516	157,314	
24, Vinh Thanh Commune	3,759	978	161,073	***8***
25, Vinh Tan Commune	2,482	586	163,555	
26, Vinh Giang Commune	5,449	1,313	169,004	
27, Vinh Quang Commune	5,278	1,264	174,282	
28, Vinh Kim Commune	2,949	655	177,231	
29, Vinh Thach Commune	4,218	1,158	181,449	***9***
30, Vinh Thai Commune	2,980	647	184,429	
31, Vinh Khe Commune	759	157	185,188	
32, Vinh Ha Commune	1,151	241	186,339	

33, Vinh O Commune	1,027	178	187,366	
34, Gio Linh Townlet GL	7,369	1,603	194,735	
35, Trung Giang Commune	4,082	848	198,817	
36, Trung Hai Commune	4,827	1,045	203,644	***10***
37, Trung Son Commune	4,963	1,077	208,607	
38, Gio Phong Commune	3,628	772	212,235	
39, Gio Chau Commune	3,625	750	215,860	
40, Gio Quang Commune	2,748	592	218,608	
41, Gio My Commune	5,310	1,117	223,918	***11***
42, Gio Thanh Commune	3,089	632	227,007	
43, Gio Mai Commune	4,916	976	231,923	
44, Gio Viet Commune	7,551	1,441	239,474	
45, Gio Hai Commune	5,615	1,083	245,089	***12***
46, Gio Son Commune	2,943	647	248,032	
47, Gio Hoa Commune	1,670	362	249,702	
48, Gio An Commune	3,281	728	252,983	
49, Gio Binh Commune	2,245	492	255,228	
50, Linh Hai Commune	2,409	540	257,637	
51, Hai Thai Commune	3,934	913	261,571	
52, Linh Thuong Commune	1,537	289	263,108	
53, Vinh Truong Commune	1,500	283	264,608	***13***
54, Cam Lo Townlet CL	6,187	1,327	270,795	
55, Cam An Commune	5,156	1,130	275,951	
56, Cam Thanh Commune	2,253	517	278,204	
57, Cam Thuy Commune	4,955	1,086	283,159	***14***
58, Cam Hieu Commune	5,523	1,178	288,682	
59, Cam Tuyen Commune	5,223	976	293,905	
60, Cam ***Thành*** Commune	7,525	1,677	301,430	
61, Cam Chinh Commune	4,158	982	305,588	***15***
62, Cam Nghia Commune	5,727	1,237	311,315	
63, Ai Tu Townlet TP	3,279	769	314,594	
64, Trieu Phuoc Commune	8,083	1,700	322,677	
65, Trieu Trach Commune	6,468	1,338	329,145	***16***
66, Trieu Son Commune	4,494	1,038	333,639	
67, Trieu Trung Commune	5,916	1,223	339,555	
68, Trieu Tai Commune	5,918	1,202	345,473	***17***
69, Trieu Dai Commune	6,046	1,145	351,519	
70, Trieu Do Commune	6,469	1,285	357,988	
71, Trieu Thuan Commune	5,948	1,200	363,936	
72, Trieu Hoa Commune	6,778	1,355	370,714	***18***

73, Trieu Dong Commune	6,064	1,320	376,778	
74, Trieu Long Commune	7,935	1,532	384,713	
75, Trieu Thanh Commune	3,638	765	388,351	***19***
76, Trieu Giang Commune	4,697	968	393,048	
77, Trieu Ai Commune	4,457	910	397,505	
78, Trieu Thuong Commune	7,633	1,610	405,138	
79, Trieu Van Commune	2,819	618	407,957	***20***
80, Trieu An Commune	6,246	1,205	414,203	
81, Trieu Lang Commune	5,441	1,148	419,644	
82, Hai Lang Townlet HL	2,417	625	422,061	
83, Hai Le Commune	4,535	936	426,596	
84, Hai Phu Commune	4,307	1,201	430,903	***21***
85, Hai Thuong Commune	5,508	1,382	436,411	
86, Hai Quy Commune	4,955	1,120	441,366	
87, Hai Xuan Commune	4,771	1,066	446,137	
88, Hai Vinh Commune	5,393	1,184	451,530	***22***
89, Hai Ba Commune	6,440	1,329	457,970	
90, Hai Que Commune	4,110	966	462,080	
91, Hai Duong Commune	5,176	1,086	467,256	
92, Hai Thanh Commune	2,346	527	469,602	***23***
93, Hai Thien Commune	4,311	937	473,913	
94, Hai Tho Commune	6,524	1,337	480,437	
95, Hai Lam Commune	4,283	972	484,720	
96, Hai Truong Commune	6,625	1,190	491,345	***24***
97, Hai Son Commune	4,917	1,033	496,262	
98, Hai Chanh Commune	7,489	1,522	503,751	
99, Hai Tan Commune	5,655	1,103	509,406	
100, Hai Hoa Commune	4,728	1,027	514,134	***25***
101, Hai An Commune	4,571	965	518,705	
102, Hai Khe Commune	3,156	569	521,861	
103, Khe Sanh Townlet HH	9,700	1,938	531,561	***26***
104, Lao Bao Townlet	8,264	1,637	539,825	
105, Tan Thanh Commune	2,657	536	542,482	
106, Tan Long Commune	2,941	622	545,423	
107, Tan Lap Commune	3,419	706	548,842	
108, Tan Lien Commune	3,599	734	552,441	***27***
109, Tan Hop Commune	3,685	769	556,126	
110, Huong Lap Commune	1,165	188	557,291	
111, Huong Phung Commune	3,557	928	560,848	
112, Huong Son Commune	1,554	262	562,402	

113, Huong Linh Commune	1,918	352	564,320	
114, Huong Tan Commune	2,565	466	566,885	
115, Huc Commune	2,730	466	569,615	
116, Ba Tang Commune	2,727	467	572,342	
117, Thuan Commune	2,275	446	574,617	***28***
118, Thanh Commune	2,569	505	577,186	
119, Huong Loc Commune	1,695	319	578,881	
120, A Xing Commune	1,739	331	580,620	
121, A Tuc Commune	1,724	346	582,344	
122, A Doi Commune	1,459	371	583,803	
123, Xy Commune	1,454	269	585,257	
124, Huong Viet Commune	1,063	185	586,320	
125, Dakrong Commune DK	4,019	750	590,339	
126, Ba Nang Commune	2,241	397	592,580	
127, A Vao Commune	2,032	348	594,612	
128, A Bung Commune	2,218	390	596,830	***29***
129, A Ngo Commune	2,455	425	599,285	
130, Ta Rut Commune	3,078	610	602,363	
131, Huc Nghi Commune	1,178	211	603,541	
132, Ta Long Commune	2,751	425	606,292	
133, Mo O Commune	1,453	209	607,745	
134, Huong Hiep Commune	3,494	629	611,239	
135, Trieu Nguyen Commune	2,119	356	613,358	
136, Ba Long Commune	3,057	542	616,415	***30***
137, Hai Phuc Commune	510	99	616,925	
138, Krong Klang Townlet	2,346	551	619,271	

Annex 5

Countries/territories who received at least $1 million US dollars to solve landmine/UXO problems in 2004

Data from Landmine Monitor Report 2005, page 81
(International Campaign to Ban Landmines, copyright of Mine Action Canada, 2005)

Country/territories	Funding received (US dollars, in millions)
Afghanistan	91.8
Iraq	58.7
Cambodia	41.6
Angola	28.0
Sri Lanka	23.6
Bosnia and Herzegovina	18.8
Sudan	15.0
Mozambique	12.0
Croatia	9.3
Lao	8.1
Lebanon	5.2
Eritrea	4.9
Vietnam	**4.9**
Congo	4.5
Somali	4.1
Nicaragua	4.0
Colombia	3.5
Azerbaijan	3.2
Sip	3.1
Albania	3.0
Yemen	2.6
Ethiopia	2.3
Tajikistan	2.3
Jordan	2.2
Abkhazia	2.0
Chad	1.9
Serbia & Montenegro	1.7
Kosovo	1.6

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