

## **EXECUTIVE SUMMARY**

### **"A Study of Knowledge-Awareness-Practices to the Danger of Postwar Landmines/Unexploded Ordnance and Accidents in Quang Tri Province, Viet Nam".**

	Page
Table of Acronyms	1
Executive Summary	3
<b>SITUATION OF UXO/MINE RELATED ACCIDENTS IN QUANG TRI PROVINCE FROM 1975 TO 2002</b>	<b>11</b>
I. OVERVIEW	11
I.1 Landmines and Unexploded Ordnance (UXO) in Viet Nam	11
I.2 The Enduring Legacy of UXO/Mines in Quang Tri	12
I.3 Quang Tri Province Overview	13
I.4 Efforts to Address the UXO/Mine Problem in Quang Tri	14
II. ANALYSIS OF THE IMPACT OF UXO/MINES IN QUANG TRI	16
II.1 UXO/Mine Victims - Post-war Profile: 1975-2002	16
II.2 UXO/Mine Victims - Current Trends: 1998-2002	18
II.3 The Impact of UXO/Mines on Communities in Quang Tri Province	35
II.4 Residents' Knowledge, Awareness and Practices vis-à-vis the UXO/Mine Threat in Quang Tri	36
III. CONCLUSIONS AND RECOMMENDATIONS DRAWN FROM SURVEYS	59
IV. BACKGROUND OF THE <u>KAP</u> SURVEY AND LANDMINE/UXO VICTIM IMPACT SURVEY IN QUANG TRI PROVINCE	62
IV.1 SURVEY(S) OVERVIEW	62
IV.2 SURVEY(S) METHODOLOGY	68
IV.1 QUALITY ASSURANCE	73

## **ANNEXES**

ANNEX 1. SURVEY DATA

ANNEX 2. SURVEY QUESTIONNAIRE

## **DOCUMENTARY SOURCES OF REFERENCE**

## Table of Acronyms

CPFC	Committee for Population, Family and Children
DOLISA	Department of Labor, Invalids and Social Affairs
KAP	Knowledge, Awareness and Practices (survey)
MOH	Ministry of Health
MOLISA	Ministry of Labor, Invalids and Social Affairs
MRE	Mine Risk Education
NGO	Non-governmental Organization
PPC	Provincial People's Committee
UNICEF	United Nations Children's Fund
UXO	Unexploded Ordnance (bombs, grenades, mortars, rockets, bullets, etc.)
VND	Viet Nam Dong (Vietnamese currency: US\$ 1 ≈ VND 15,150)
VVMF	Vietnam Veterans Memorial Fund (an NGO)

## ACKNOWLEDGEMENTS

The staff of Project RENEW would like to acknowledge the Central Government agencies, PPC of Quang Tri, the people of Quang Tri as well as the local relevant agencies whose support has contributed to bring the success of these surveys.

We also greatly appreciate the funding support from UNICEF for these surveys. UNICEF's support is a reflection of UNICEF's continuing worldwide commitment to reducing or eliminating the threat of landmine/UXO, a threat which disproportionately affects children, and UNICEF's strong support of injury prevention in Vietnam from whatever causes.

We especially would like to recognize the contributions of Mr. Morton Giersing, former UNICEF Representative in Vietnam, Mr. Damien Personnaz, former Communication Director for UNICEF Vietnam, and the current Representative for UNICEF Vietnam, Mr. Anthony Bloomberg, who has taken a special interest in the landmine/UXO issue in Vietnam. UNICEF staff members have been extremely helpful partners and advisors in this project, in particular Mr. Jason Rush, former Communication Assistant for UNICEF and coordinator of the landmine/UXO program for the agency, and Ms. Nguyen Thi Y Duyen, now in charge of the landmine/UXO program at UNICEF, as well as other colleagues at UNICEF who have been involved and who have assisted.

We especially would like to acknowledge and recognize the direction of Mr. Nguyen Duc Chinh, Vice Chairman of Quang Tri PPC; Mr. Nguyen Chi Dung, Deputy Chief of Quang Tri PPC Secretariat; and Mr. Hoang Dang Mai, Director of Quang Tri FRD, during the process of implementing these surveys and for their constructive and valuable input for this report.

We also would like to acknowledge the excellent cooperation, during every step of design and implementation of these surveys, of the Quang Tri Provincial Health Service and healthcare centres of nine districts and towns of the province.

This is the first time such surveys have ever been undertaken, so mistakes and shortcomings are inevitable. We highly appreciate any constructive responses and recommendations for this study report.

With great thanks,

**Project RENEW Coordination Office**

## Executive Summary

Viet Nam is one of the most heavily bombed countries in the history of the world, and suffers from a serious landmine contamination problem as well. Quang Tri Province, located in central Viet Nam along the 17th Parallel, was the temporary border between the former North and South Viet Nam during the war, and was one of Viet Nam's most heavily affected provinces during the war between Viet Nam and the United States. The war destroyed nearly all the property of Quang Tri and, according to statistics of foreign newspapers, only 11 out of 3,500 villages in Quang Tri were left intact and still standing at the end of the war. Since the victory of the Vietnamese people and the reunification of Viet Nam in 1975, the people and the local government of Quang Tri have undergone many efforts to overcome the legacy of the war and to improve their lives, and they have gained considerable achievements in developing socio-economic stability, hunger eradication and poverty reduction, restoration of the infrastructure and upgrading the living standards of the people. However, due to the fierceness of the war, Quang Tri Province continues to suffer the lingering effects of this conflict even today, and the legacy of UXO and mines is one part of the problem.

Although some programs of local governments have been undertaken, and the army and local people as well as some organizations working in the field of international humanitarian UXO/mine solutions have implemented projects in Quang Tri, to date there has been little accurate, scientific or adequate data collected about the level of impact of UXO/mines on Quang Tri Province or elsewhere in Viet Nam. The analyses from the series of KAP and UXO/mine victim statistical surveys examined in this report most clearly and scientifically shed light on the legacy of UXO/mines in Quang Tri - on the suffering of the thousands of UXO/mine victims since 1975, and on the other lingering effects to local people caused by the UXO/mine problem.

### *UXO/Mine Casualties*

Survey results officially show that since the end of the war in 1975, a total of 2,540 people have died from UXO/mine encounters in Quang Tri Province, another 4,243 people have been injured, and there are another five cases for which we do not have enough information about the nature of the casualty - 6,788 victims in all.

Since 1980, the UXO/mine casualty rates have decreased significantly compared with early years after the war. Since 1996, UXO/mine clearance activities by provincial authorities and agencies in Quang Tri, in conjunction with international aid agencies and NGOs, have been introduced. Between 1996 and

1998, the annual average UXO/mine casualty rate dropped 56% from the previous five-year average. Since the introduction of UXO/mine risk education activities in Quang Tri in late 1998, there has been another 49% drop, and a dramatic 71% drop from casualty rates seen earlier in the 90s.

### *Males, Ethnic Minorities, the Poor and the Young Particularly Affected*

UXO/mine accidents disproportionately affect males, members of ethnic minority groups, the poor, the young, and those living in remote areas. The vast majority of UXO/mine victims in Quang Tri have been male, consisting of 83% of the total UXO/mine victims. Over the past five years people from ethnic minority groups (Pa Co and Van Kieu) have been far more likely to fall victim to UXO/mine accidents than ethnic majority Kinh; although only 9% of Quang Tri's residents belong to ethnic minority groups, more than one in four UXO/mine victims are Pa Co or Van Kieu. Approximately three-fourths of all families (73%) of UXO/mine victims since 1975 currently have a joint household income of less than VND 2 million (US \$130) a year, and 96% earn less than VND 5 million (US \$325) annually. The vast majority of UXO/mine accidents have occurred among children, youth and young adults, with over half of all UXO/mine injuries and fatalities (53%) occurring among those 21 years of age or younger, and approximately three out of four incidents (73%) occurring among those 30 years of age or younger.

### *UXO/Mine Risk Education Results in Lower Casualty Rates*

As indicated above, survey results show that UXO/mine action in general, and UXO/Mine Risk Education (UXO/MRE) in particular, have led to a marked decline in UXO/mine casualty rates. In every single one of Quang Tri's seven districts, there has been a significant drop in UXO/mine casualty rates over the past five years – 50% or more across the board. Moreover, in Trieu Phong District, where numerous community-level UXO/mine risk education activities have been carried out over the past two years (in addition to province-wide activities), residents are now 1.4 times less likely to be involved in UXO/mine incidents compared to those elsewhere in the province.

Survey data strongly indicates that persons who do not receive any information about the dangers of UXO/mines seem to be at much greater risk of being involved in a UXO/mine accident than those receiving UXO/Mine Risk Education (UXO/MRE).

Over the past five years, only 7% of UXO/mine victims or their family members say they received information on the risks of UXO/mines before their accident. In stark contrast, 80% of all Quang Tri residents questioned in the province-wide

Knowledge, Awareness and Practices Survey reported that they have received information about the risks posed by unexploded ordnance and mines. When provincial demographic data is factored in, survey results indicate that those who receive no information or education about the risks and dangers of UXO/mines are 45 times more likely to be involved in UXO/mine accidents than those who have received UXO/MRE.

### *Factors Contributing to UXO/Mine Accidents*

Over the past five years, the main activities giving rise to UXO/mine accidents have been (i) farming (27%); (ii) scrap metal collecting (20%), and; (iii) tampering with ordnance (13%). Tampering with ordnance has been the leading cause of UXO/mine casualties among all children and youth 18 years of age in every single age category. For the 6.5% of victims since 1998 who acknowledge that they knew they were entering into a dangerous area, the overwhelming reason they assumed this risk was to collect scrap metal.

Over the past five years UXO/mine incidents have most frequently occurred in mountainous areas (32% all incidents). Alarming, the second most frequent accident site has been near victims' homes (18%).

Only 33% of UXO/mine victims reported seeing the object that caused the explosion before their incident. Of those that did see the object, however, an alarming 90% went ahead and touched the object (as did more than 84% of victims since 1975). Survey data reveals that 92% of victims were uncertain whether the area where their accident occurred had any danger markers or UXO/mine warning signs.

Of those who can identify what explosive device caused their injury, 90% say UXO caused their accident, as opposed to landmines. Of those who can remember the type of UXO that caused their injury, the devices most often giving rise to UXO accidents since 1998 are: (i) cluster bombs ("bombies") (52%), and (ii) M-79 cartridges (23%).

### *The Impact of UXO/Mine Accidents*

Survey results demonstrate that there is a very strong and direct correlation between UXO/mine accidents and impoverishment. Moreover, UXO/mine victims have higher unemployment and school dropout rates than others.

### *Victims' Needs*

UXO/mine victims, suffering the physical as well as spiritual effects caused by their accidents, usually have to face difficulty in continuing to work in order to support themselves and their families, so they often find themselves in poverty. It is little surprise that approximately three in four UXO/mine victims say their primary need is financial credit (39%) or direct financial support (35%). Another 19% of victims say their most pressing need is educational scholarships.

### *Frequency of UXO/Mine Encounters*

Throughout Quang Tri Province, 4.5% of respondents say they encounter UXO/mines every day, while 10% report weekly encounters; 26% say they encounter UXO/mines every month, and 70% say that they have an encounter at least once a year.

UXO/mine encounter rates are even higher among certain demographic groups. Members of both major ethnic minority groups in Quang Tri Province – Van Kieu and Pa Co – are far more likely to regularly encounter UXO/mines than members of the majority Kinh ethnic group. People from poor families are also more likely to encounter UXO/mines on a daily and/or weekly basis. Moreover, in some districts, the frequency of encounters for children is more acute.

### *Knowledge of UXO/Mine Safety*

The survey indicates that most people in Quang Tri already have a good basic knowledge of safe behavior around UXO/mines. However, 26% of children between 6 and 8 years of age said that they don't know how to avoid UXO/mine accidents. As children grow older this knowledge deficit decreases to 9% for 9-11 year olds, 5% for people in their teens and 20s, and 2% for older adults.

In Trieu Phong District, where many mine risk education activities have been being carried out, in 2002, the proportion of youth not knowing how to avoid UXO/mine accidents was significantly lower than elsewhere in the province.

Younger children are slightly more likely not to understand the possible effects of UXO/mine explosions than others. Approximately 7% of 6-8 year olds said they didn't know what UXO/mine explosions can do to people, though less than 1% of those in other age groups didn't know.

All age groups – and particularly young children – still need to be educated about what to do if they find themselves in a minefield. Of all respondents, 49% said that if they ever found themselves in a minefield, they would walk back from where they'd come from, and another 6% said they would continue on their way. These are the most dangerous courses of action available – ones that are never advisable under almost any circumstances – and these responses evidence a serious knowledge deficit in this area.

### ***Reach of UXO/Mine Risk Education***

80% of respondents in Quang Tri Province said that they have received information about the risks posed by unexploded ordnance and mines. However, poverty, ethnicity and place of residence can affect the likelihood of one's receiving UXO/MRE. There is a strong and direct correlation between families' income and their likelihood of receiving information on the dangers of UXO/mines. For example, 68% of families earning less than VND 2 million a year reported receiving UXO/MRE, compared to 90% of top income earners. There were also striking disparities between ethnic groups. While 86% of ethnic (majority) Kinh reporting receiving information on the dangers of UXO/mines, only 60% of ethnic Van Kieu – and only 15% of Pa Co – received UXO/MRE. Persons living in remote and mountainous areas of Quang Tri Province (Dakrong and Huong Hoa districts) are far less likely to receive information on the dangers of UXO/mines than people living elsewhere.

### ***Most Effective Communication Channels for UXO/Mine Risk Education***

*One of the major findings of this survey is that television programs are more effective in providing people with information on UXO/mines than every other type of education, media and information dissemination activity combined.*

For those 80% of respondents who reported receiving information on the dangers of UXO/mines, the vast majority – 85% – say they received this information from television programs. In addition to television programs, respondents said other significant ways they receive information on UXO/mines include school (17%) and television spots (14%). Traditional means of disseminating information on UXO/mines in Viet Nam through line ministries (Committee on Family, Population and Children) and mass organizations (the Viet Nam Youth Union and Women's Union), through hospitals, community health centers and other local community organizations (e.g., mine awareness centers), via community leaders, and through outdated communication media such as posters, billboards,

public address systems, brochures and leaflets, have had a very limited effect, comparatively speaking.

While television programs aren't viewed to the same extent among the poor, 70% of respondents from Quang Tri's poorest families say that this is how they receive information on UXO/mines, *making television far and away the most effective means of providing information on the risks of UXO/mines to even the poorest of the poor.*

Not only does television have the greatest reach, people are also clearly saying that television is far and away the most effective communication medium for disseminating information on UXO/mines. Overall, people in Quang Tri said that the most effective sources of information on the dangers of UXO/mines have been television programs (86%), school (17%), and television spots (17%).

Survey results indicate that one's ethnicity plays a major role in how one receives information on UXO/mines, with friends, family members, neighbors, community leaders, radio and school all being significantly more important sources of information on UXO/mines for ethnic minority Van Kieu and Pa Co in comparison to majority Kinh. Radio is a particularly important source of information on UXO/mines for ethnic minorities, with approximately 39% of Pa Co and 30% of Van Kieu rating it as an effective information source, compared to just 1.5% of ethnic majority Kinh.

People living in the three most remote districts in Quang Tri - Dakrong, Huong Hoa, and Vinh Linh - were similarly more likely to rely on friends, family and neighbors for information on UXO/mines than those living elsewhere. Radio was rated as one of the most effective sources of information by respondents in Dakrong (46%) and Huong Hoa (18%), while only 3% of respondents elsewhere rated it as an effective information source.

### ***The Overall Effects of the UXO/Mine Problem***

The survey shows that the overall impact of UXO/mines in Quang Tri has been profound and far-reaching. Those who have been killed or suffered physical injuries from UXO/mine accidents are not the only victims of these explosive remnants of war. UXO/mine contamination has also created fear, limited access to farming land, and inhibited free travel. Those who have lost family members and friends to UXO/mines have suffered horrible grief, and families who have had someone injured in a UXO/mine accident often face a host of difficulties in adequately caring for their loved ones.

When asked what effect UXO/mines have on their daily lives, a majority of respondents in Quang Tri (66%) said that it creates a fear of injury or death. 42% of respondents listed the loss of a family member as a major effect of UXO/mines, while 13% said that they had to care for family members injured by UXO/mines. 15% of respondents also said a major effect of UXO/mine contamination was the loss of a friend. One in four respondents (25%) said UXO/mine contamination limits their access to land for farming, and one in five (21%) said UXO/mine contamination inhibits their ability to travel and move freely.

### ***Conclusions and Recommendations***

Though casualty rates in Quang Tri Province have dramatically decreased in recent years, there is still an overwhelming need for continued action. Casualty rates in Quang Tri Province *alone* still exceed those found in the nations of Kosovo, Croatia and Yemen, and constitute more than 50% of casualty levels seen in Bosnia/Herzegovina, Ethiopia, and Mozambique.

It is encouraging to note that survey data demonstrates that UXO/mine risk education can indeed work. UXO/MRE activities should therefore continue to be supported in Quang Tri and elsewhere in Viet Nam. Since males, members of ethnic minority groups, the poor and the young are all disproportionately affected by the UXO/mine problem, these demographic groups should be specifically targeted with appropriate UXO/MRE interventions.

Television should clearly be a cornerstone of any UXO/MRE program in the future, and in-school UXO/MRE activities should also play an important role in reaching children. Other interventions should be used carefully and thoughtfully, and should be driven by data rather than assumptions or good intentions. Radio should be aggressively utilized to reach ethnic minority groups living in remote areas.

With television and radio relatively cheap at the provincial level, such interventions should be promptly duplicated in all UXO/mine affected areas in Viet Nam. While there is little hard data on UXO/mine casualty rates outside of Quang Tri Province, it can safely be assumed that comparable problems exist in many other areas of the country.

With the second most frequent site of UXO/mine accidents in Quang Tri being near persons' homes, Emergency Ordnance Disposal (EOD) services should be immediately introduced to the greatest extent possible to mitigate this threat. With 92% of victims reporting that the areas where their accidents occurred were

not marked as dangerous areas, UXO/mine warning signs should also be promptly placed in contaminated areas until clearance can occur.

This series of surveys clearly and dramatically demonstrates that UXO/mine risk education (injury prevention) and environmental mitigation (clearance/markings), while effective, are not enough. Thousands of UXO/mine victims and their families need more than heightened awareness – the vast majority desperately need assistance, and need it now. With 73% of these families earning less than VND 2 million (US \$130) annually, and with a full 96% earning less than VND 5 million (US \$325) a year, even a small amount of assistance can make a dramatic change in these families' lives.

The overwhelming majority of UXO/mine victims and their families (74%) say they need some type of financial assistance, with another 19% saying their most pressing need is educational scholarships for their children. These needs should be recognized and the call of UXO/mine victims heeded. Micro-credit programs complimented by vocational training, as well as employment programs, should be developed for impoverished families with UXO/mine victims. Moreover, scholarship programs for children from impoverished families with UXO/mine victims – supported by inclusive education training for educators to reintegrate these children into mainstream classroom settings – should be offered to all children in need. Until such comprehensive programs are in place, first priority should be given to those most in need.