

Executive Summary

In March 1999, the Foreign Relations Department of the People's Committee of Quang Tri Province (PPC) assembled various international non-governmental organizations (INGOs) cooperating with mine action projects in Quang Tri and proposed that these organizations come up with a "comprehensive and integrated" management approach to the problem of landmines and unexploded ordnance (UXO) in the province. In December, 2000 the Vietnam Veterans Memorial Fund (VVMF) and the PPC signed a Memorandum of Understanding (MOU) to launch "Project RENEW" in Trieu Phong District as a model for the requested comprehensive and integrated response to the landmine/UXO problem.

Project RENEW ("Restore the Use of lands to Vietnamese through Education and Neutralization of the Effects of War") was designed beginning with the following components:

- A Coordination Office in Dong Ha Town under authority of the People's Committee to manage all aspects of Project RENEW.
- Mine Awareness or "Mine Risk Education" (MRE) to teach and inform children and adults about the dangers of landmines and UXO, thus reducing accidents, injuries, and deaths.
- Victim assistance, to provide emergency medical treatment to accident victims, and to help survivors of landmine/UXO accidents and their families recover from the devastation of a disabling explosion and to resume independent, self-sustaining lives.
- A "Level One Survey" (now referred to in United Nations terminology as a "General Mine Action Assessment") to determine levels of contamination and exact locations of contaminated sites in the target area, as well as socio-economic data about the affected populations, to help local officials determine future strategies and priorities in mine action programs.

This written report is a *summary* of data collected during the General Mine Action Assessment, data including relevant maps, information about localized war history, identified impediments to safety and development and other subsequent impact of landmine/ UXO on people's lives since the war and today. The total amount of data collected and analyzed is far too extensive to include in this report; however, it is stored in the database at the Project RENEW Coordination Office in Dong Ha Town, Quang Tri Province, under the control and authority of the PPC. The data is available and accessible to interested individuals, organizations, and government agencies upon request and with approval from the PPC. The original completed survey questionnaires and sketch maps – voluminous files of documents – have been duplicated and are also safely stored for later verification and certification if required.

Introduction

Quang Tri Province is located in the center of Vietnam at the 17th parallel. Nearly 600,000 people populate about 6,000 sq. km. of land in the province, which is made up of nine administrative districts and towns of which Trieu Phong District, the site of this survey, is one.

Quang Tri is one of the poorest provinces in the country, with an economy hampered by cycles of droughts and floods, limited productive agricultural land, an unskilled and poorly educated population, and a dangerous legacy of landmines and unexploded ordnance remaining from the end of the war in 1975.

During the 10-year conflict between the U.S. and Vietnam, Quang Tri Province endured one of the most massive bombing and shelling campaigns in history, plus heavy ground fighting. Quang Tri and Dong Ha Towns were both reduced to ashes. Most of the province was cratered and scorched, agricultural production was ruined, and almost all forest cover was destroyed by bombing or the use of chemical defoliants.

After 1975, the army and people of Quang Tri Province conducted extensive clearance of mines and UXO, but most of these efforts concentrated on visible surface munitions which were easy to discover and dispose of. Removal of underground UXO was limited. Some support from the international community began in 1996, but these efforts have been also been limited.

Trieu Phong District

Trieu Phong District comprises 354.92 sq. km., most of which is devoted to agricultural production in some flat areas suitable for cultivation. Along a 30-km shoreline are coastal sand dunes, and to the west are hilly lands. There are two rivers and an extensive network of roads. Trieu Phong District is plagued with droughts, storms, a lengthy rainy season, and floods, and has few natural resources. The quantity of landmine/UXO from the war is huge, resulting in frequent accidents, injuries, and deaths. The district has 18 communes and one small town. Population is 105,836.

The Project RENEW Survey

The United Nations has established international standards for mine/UXO clearance. These standards provide for three levels, or three missions, within investigations and assessments of mine impact on local communities:

- (1) A General Mine Action Assessment (formerly termed "Level One Survey").
- (2) A Level Two or technical survey, which is a detailed technical and topographical investigation.
- (3) A Level Three or post-clearance survey, once land has been cleared of mines and UXO, to make the land available for productive use.

Objectives and significance of the survey

Before this survey was implemented, no official information or figures related to the landmine/UXO situation and associated problems in Trieu Phong District were available. The survey results are intended to help formulate better strategy. Specifically, the goals are (a) to better coordinate mine action activities; (b) to provide necessary information for the design and implementation of mine action programs including clearance, victim assistance, resettlement, and infrastructure development; (c) to develop future long-term and stable capacity for the district, based on these imperatives:

- The survey is carried out by native Vietnamese.
- Local staff are trained with relevant skills so they will have enough capacity to carry out similar tasks, independently, in the future.
- All survey outputs (software, maps, etc.) will be managed and operated by the Project RENEW Coordination Office according to the direction of the People's Committee of Quang Tri Province.

Survey implementing partners

Survey implementing partners were the Trieu Phong District People's Committee, Project RENEW Coordination Office staff, and Hue University faculty and staff. Cooperation and participation extended to all layers of administrative and support authority down to the commune and village level, from district military headquarters and Youth Union staff, to local civil defense and Youth Union surveyors. Hue University provided highly qualified faculty and staff from multiple disciplines, experienced in survey design and implementation. Many of them were born in and grew up in Quang Tri Province. Project RENEW staff provided coordination and took responsibility for data entry and management of survey results.

Methodology

All survey team supervisors and interviewers were trained in survey methodology prior to field work. Applied methodology included sociological analysis methodology (qualitative and quantitative); field survey methodology; systematic analysis methodology; map reading and analyzing methodology; expertise methodology.

The main activities were to (1) complete and compile five questionnaire forms in order to collect the required data; (2) train surveyors; (3) carry out field operations to collect the data in the 19 communes of Trieu Phong District; (4) construct open software to access, manage, and update the data; (5) build a master map to show landmine/UXO contaminated areas in the district; and (6) analyze the impact of contamination on the local socio-economic situation.

Contents of the survey

To accurately identify landmine/UXO contaminated areas and uncontaminated or "clean" areas, the following indices were used: (1) reports of commune leaders about landmine/UXO contamination in their villages; (2) data about areas where fighting took place and sites of

former military bases, forts, and bunkers; (3) findings and/or discoveries and experiences of local people that are relevant to the landmine/UXO problem; (4) historical, natural and geographical elements which allow compilation of a map distinguishing contaminated areas and non-contaminated areas; (5) data about landmine/UXO victims, their circumstances, and their needs; (6) other relevant information.

The survey questionnaire was comprised of five different forms, created and compiled in conformity with international standards and with attention to the practical local situation (see Appendix 4).

Survey personnel and activity structure

The following survey structure was established: (a) Survey Management Team, consisting of Director of the Provincial Foreign Relations Department, Vice Chairman of Trieu Phong District People's Committee, and Project RENEW Coordinator; (b) Survey Supervisory Team, consisting of one staff expert or officer each from the Trieu Phong DPC, Military Headquarters, Project RENEW, Hue University, and District Youth Union. The supervisory team was in charge of supervising and providing technical assistance to the surveyors during the entire process of collecting information in 19 communes. The 35 surveyors were trained in basic Mine Risk Education, knowledge of Landmine and Unexploded Ordnance (UXO), skills in gathering mine data, use of questionnaire forms, interviewing skills, map reading and use of bearings, explanation of Quality Assurance, and safety standards and requirements. Training sessions were provided by Project RENEW and Hue University both in theory and practice, with technical assistance from Asian Landmine Solution experts. The training course took place from July 31 to August 4, 2002.

Field Survey

The survey sub-teams used a total of 1500 forms for two categories of interviewees: (1) all village chiefs and others who had historical knowledge; (2) all victims injured by landmine/UXO and/or their families.

Implementation steps

- a. Discussions with authorities, administrative procedures.
- b. Survey master plan based on detailed plans of surveyors and agreement from authorities, accounting for the working calendar and activities of the villages.
- c. Village by village collection of information from village chiefs and local people; identification of latitude and longitude of the area, and information related to contamination, soil features, weather, topography, vegetation, and other physical characteristics.
- d. Interviews with victims and dead victims' families to help determine exact numbers of victims district-wide and to allow surveyors to note areas where landmine/UXO incidents have occurred which may not have been reported by local chiefs.
- e. Supervision of the survey throughout the entire field survey process.
- f. Processing the output of the site survey including the following activities:
 - Integrate all site sketch maps and compile them into a master map, enter into computer software.
 - Construct database management software system and input survey findings into the database.
 - Write final report.

- Collect and check questionnaire forms and sketch maps of sites to insure that they meet requirements, keep in safe storage for later verification if required.

Survey results: post-war landmine/UXO problem in Trieu Phong District

Landmine/UXO contamination levels in Trieu Phong District

The surveyors found many different kinds of landmine/UXO in Trieu Phong District, including M-79 rifle grenades, mortar rounds, and artillery shells which still kill and injure people. A total of 428 pieces of ordnance were sighted by survey teams during five days of interviews and site visits. Out of the 298 villages visited during the survey, 124 were sites of heavy ground fighting, and 148 were bombed. Only 23 villages reported no battles or bombing, and residents of three villages could provide no information. Seventy-four villages were sites of former military bases. Annex A contains maps and statistical reports for each of the 19 communes.

Landmine/UXO victims

Trieu Phong District's 2002 population of 104,730 people represents 18.5 percent of the total provincial population. Population distribution is uneven, mainly concentrated along the coast and in the plains, with 86 percent of the population in the countryside. Female residents make up 53.6 percent. The working age population of the district in 1998 was 48,478 or 47.6 percent of the population. Most district people work in agriculture and forestry (86.4 percent). Of the total population of 104,730, since the end of the war 474 residents have been killed and 796 disabled by landmine/UXO accidents. Young victims in the age range of 16 to 30 years accounted for 559 cases out of 1,270 total cases, or 44 percent. This is a major loss of labor for families and society since most victims are no longer capable of working. Dead victims leave not only psychological pain for their families but also represent a loss to the labor force. The total number of landmine/UXO victims makes up 1.2 percent of the district population, with the ratio of men to women at 80 percent and 20 percent. Ages 1-15 made up 31 percent of all victims, ages 16-30 accounted for 44 percent, and the remaining victims were over 30 years old. Nearly half of all landmine/UXO incidents (46 percent) occurred while farming. Twenty-six percent occurred from daily activities such as playing with landmine/UXO or watching others dismantle a piece of scrap metal. Multiple injuries accounted for a very high percentage (45 percent) of all types of injuries. Victims who lost arms or eyes accounted for 10 percent, loss of legs accounted for three percent.

There has been a steady decline in the number of victims since 1975 and 1976, a two-year period when 175 persons were killed and another 338 injured by UXO. Since 1996 the number of fatalities each year has fallen to four or less, and injuries have dropped from a high of 16 in 1997 to seven in each of the past two years.

Mine Action

Landmine/UXO clearance

Early clearance activities after the war lasted a short time, mainly from 1975 to 1985. No conventional clearance was recorded. In 1998, some international cooperation began with NGOs and bilateral donors.

Scrap metal collection activity

A total of 148 villages, or 98 percent, reported scrap metal collection activity. Accident victims searching for scrap metal totaled 106 people, mainly from 1976 to 1985. In recent years, from 1998 to 2002, people have continued to participate in this kind of activity, with additional accidents and injuries.

Mine Risk Education

The survey indicates that 147 villages, or 98 percent, have benefitted from the MRE program. While communication province-wide is still limited, TV takes advantage of its attraction for people, especially in more remote regions. An impressive 95.3 percent of respondents answered that they had had seen MRE spots on QTV.

Victim assistance

Only a very small percentage of victims, ranging from one percent to a high of 27 percent in one commune, have received assistance from the government or NGO projects.

Annexes and Appendices

The survey report concludes with a detailed listing of levels of contamination found in each of the 19 communes of Trieu Phong District, as ANNEX A. That is followed by a list of references, and explanations of terminology and abbreviations. Finally, there are four appendices: (1) list of surveyors; (2) list of villages in Trieu Phong District; (3) list of landmine/UXO victims in Trieu Phong District; and (4) survey questionnaires.