# Landmines in Westhern Pakistan; Effectiveness of Multi Sector Mine Action Project and Its Alleviation

Muhammad Israr<sup>1</sup>, Dawood Jan<sup>2</sup>, Mrs. Nafees Ahmad<sup>3</sup>, Shamsher Ali<sup>4</sup>, Malik M. Shafi<sup>5</sup>, Farhad Ali<sup>6</sup> and M. Arshad<sup>7</sup>

### Abstract

This study examines the effectiveness of multi sector mine action project in the two purposively selected villages of Parachinar Kurram Agency. A total of 118 households were selected through simple random sampling. Primary data was collected with the help of a pretested questionnaire and was analysed by using descriptive statistics and non parametric tests. Findings of the study revealed that majority of the sampled respondents was literate and having joint families setup. The high literacy ratio played vital role in success of this project and this made very easy transformation of Mine Risk Education (MRE) in these remote rural communities. The strategies use by the MRE includes the demonstration of multisided mines models, instruction method and communicative material for dissemination. Majority of the sample respondents attended the MRE training sessions, which enabled them to protect themselves from incidents occurring due to Mines. Majority of the respondents reported that the incidents have reduced to minimum in the target areas as a result of MREs. The training made a significant contribution in alleviating the land mines problems in the area. Most of the respondents picked lake of awareness as the root causes of landmines incidents. The respondents faced problems due to the mines especially in farming, collection of firewood and using common routs and paths. It is recommended that more mine risk education particularly to farmers is necessary, clearance of landmines from the affected areas, physical rehabilitation of the victims on sustainable basis and adaptation of modern mines removal technology to the affected areas.

Key Words: Mines and its effects, land mines, mine risk education, southern Pakistan

### Introduction

Landmines are now a daily threat in Afghanistan, Angola, Bosnia, Cambodia, Chechnya, Croatia, Iraq, Mozambique, Nicaragua, Somalia, and dozens of other developing countries including Pakistan. Mines recognize no cease-fire and long after the fighting has stopped they continue to kill. Mines also render large tracts of agricultural land unusable, wreaking environmental and economic devastation (ICBL, 2003).

Land mine is a type of self-contained explosive device, which is placed onto or into the ground, explodes when triggered by a vehicle or a person. The name originates from the practice of sapping, where tunnels were dug under opposing forces or fortifications and filled

<sup>&</sup>lt;sup>1</sup> Assistant Professor, Department of Rural Development, AMKC, Mardan, The University of Agriculture, Peshawar- KP-Pakistan.

<sup>&</sup>lt;sup>2</sup> Associate Professor, Department of Agriculture and Applied Economics, The University of Agriculture, Peshawar KP-Pakistan.

<sup>&</sup>lt;sup>3</sup> Lecturer, Department of Economics, University of Malakand, Chakdara (Dir, Lower), Pakistan.

<sup>&</sup>lt;sup>4</sup> Assistant Professor, Department of Soil and Environmental Sciences, AMKC, Mardan, The University of Agriculture, Peshawar KP-Pakistan.

<sup>&</sup>lt;sup>5</sup> Lecturer, IDS, The University of Agriculture, Peshawar, KP-Pakistan

<sup>&</sup>lt;sup>6</sup> Graduate Student IDS, The University of Agriculture, Peshawar, KP-Pakistan

<sup>&</sup>lt;sup>7</sup> Examination section, AMKC, Mardan, The University of Agriculture, Peshawar KP-Pakistan.

with explosives. Land mines generally refer to devices specifically manufactured for purpose, as distinguished from improvised explosive devices. Land mines are used to secure disputed borders and to restrict enemy movement in times of war. Tactically they serve a purpose similar to barbed wire or concrete dragon's teeth vehicle barriers, channeling the movement of attacking troops in ways that permit the defenders to engage them more easily. From a military perspective, land mines serve as force multipliers, allowing an organized force to overcome a larger enemy. Anti-personnel land mines are widely considered to be ethically problematic weapons because their victims are commonly civilians, who are often killed long after a war has ended.

According to anti-land mine campaigners, in Cambodia alone, mines have resulted in 35,000 amputees after the cessation of hostilities. Removal of landmines is dangerous, slow and costly; however, some countries maintain that land mines are necessary to protect their soldiers in times of war (Wikipedia, 2012). Fayyaz and Faiz (2003), reported that more than 100 million antipersonnel landmines and unexploded ordnance lie dispersed and unmarked in fields, roadways, pasturelands, and near borders in 90 countries throughout the world. These indiscriminate weapons harm civilians to a much greater extent than soldiers and impede redevelopment and recovery from war. From 15,000 to 20,000 people are killed each year by these "weapons of mass destruction in slow motion," as landmines have been called and more than 70 percent of the reported victims are civilians. Women and children are common casualties in agrarian and subsistence-farming societies where landmines were deliberately placed in agricultural fields and along routes to water sources and markets (Geiger, 2000), to starve a people by killing its farmers. In Bajaur, Pakistan, thousands of landmines were scattered on the Pakistan-Afghanistan border by the Soviet military during their war against Afghanistan. Women and girls constitute almost 35 percent of mine victims there, injured while fetching fodder for animals, crossing agricultural fields, and carrying out their daily activities.

Yet mine awareness sessions in the conservative tribal society are provided in mosques and schools to men and boys who are then relied upon to educate women and girls at home. Maley (1994) reported that at a regional level, the diversion of scarce resources to the succor of mine victims reduces the potential for long term health improvement and promotion--whether immunization of infants, safe sex campaigns, malaria control programs, construction of safe water supplies, or training of village-level health. Common point of the studies cited reveals that it rooted socioeconomic problems and it disturbed as a whole, tangible and intangible infrastructure of different communities by entrenching people in the traps of poverty and hunger as when they may not be able to do anything for earning their income. This also rooted social evils in shape of unemployment, poverty and begging.

#### **Objectives of the Study**

I. To find changes, in the awareness level of locals about land mines and UXOs (Unexploded Ordnance).

II. To study the effects on incidents ratio before and after the project.

III.To suggests recommendations on the basis of study findings.

# **Hypothesis**

It is assumed under null hypothesis that the awareness level and the incidents ratio due to land mines in the selected villages are the same while under null hypothesis it is assumed that it is different among the village understudy.

### **Methods and Materials**

The universe of the study includes two Project areas i.e. Malana and Karman in Kurram Agency FATA of Western Pakistan were selected in order to evaluate its impacts and

draw accurate results. These areas as universe of the study were selected on the basis of high risky areas and due to border areas of Afghanistan and Pakistan, where chances of these incidents on the peak and have badly affected the socio-economic conditions of the local communities. There were a total of 5,340 households of which 679 and 506 households respectively. The sampled size in the universe was fixed at the rate of 10% so, 68 and 50 i.e. (118) respondents from the both the areas were taken. Sample selection simple random sampling method was used according to financial and time resources management according to the following table.

Distribution of Sample Size in the Area

Village Name	Total households	Sample size @of 10%
Malana	679	68
Karman	506	50
Total	5340	118

Data was collected with the help of detailed interview schedule after pre testing. Face to face interviews were conducted with the sample respondents. The data were analysed by using descriptive statistics and non parametric tests.

### **Results and Discussions**

# Literacy status and educational level

Education is a free-requisite for the development of any nation. Educational development has kept pace and progress in the world and also the educated people accept the modern changes and tanning easily as compared with the illiterate people. The data in table-I show the literacy status and level of the sample respondents in the area. The data shows that majority of the sample respondents (94%) were literate, while only 6% of the sample respondents were illiterate when taken through random method. The levels of education among the respondents were primary, middle and secondary. The data further shows that 39% of the sample respondents were having primary level of education while 33% of the sample respondents were having middle level of education. Twenty one percent of the sample respondents were having secondary level of education. The data raveled that majority of the sample respondents in the area were literate and were aware about the land mines in the area. The chi-square value explained that there is significant different between the two villages in the literacy status and in the level of education the different was not significant.

Table-I: Distribution of sample respondent on educational status and level

Village	Literacy status			Level of education				
name	Illiterate	Literate	Total	Primary	Middle	Secondary	Total	
Malana	5* {7%} (4.	63 {93%} (6	68	27 {39%}	23{33%} (22.	13 {19%}	63	
	03) [0.23]	3.97) [0.01]		(26.68) [0.00]	14) [0.03]	(14.19) [0.10]		
Karman	2 {4%} (2.9	48 {96%} (4	50	20 {40%} (20.	16 {32%} (16.	12 {24%}	48	
	7) [0.31]	7.03) [0.02]		32) [0.01]	86) [0.04]	(10.81) [0.13]		
Total	7{6%}	111{94%}	118	47{39%}	39{33%}	25{21%}	111	
Chi-s	quare = 0.8805	p-value = $0.44$	6122	Chi-square = $0.3177$ and p-value = $0.853108$ .				

<sup>\*</sup> figure without parenthesis is the frequency, {Percent distribution}, (expected cell totals), [Chi-square statistic for each cell].

Source: Field Survey.

# Knowledge regarding land mines and UXOs

The data in table-II explain the level of understanding which the sample respondents have gained through MRE. The data shows that majority of the sample respondents (91%)

have sufficient know how-about landmine/UXO. Some of the sample respondents (9%) were not aware due to absence in the area. This means that majority of the respondents having know-how about landmines and was very clear about the landmine concept. The table further explains the respondent's perception of the landmines and majority pointed that it is a bomb and is dangerous to human life. This was also explain by the chi-square statistic that in the two villages all the respondents having significant knowledge about the landmines in the area.

Table-II: Distribution of respondents on knowledge regarding land mines and UXOs

knowledge regarding land mines				If yes, is it;				
Village	Having	Having no	Total	Bomb	Edible thing	Don't know	Total	
name	Knowledge	Knowledge						
Malana	59* {86%} (61	9 {14%} (6.	68	56 {95%} (56.7	{00%}	3 {5%}	59	
	.66) [0.11]	34) [1.12]		3) [0.01]	(0.00) $[0.01]$	(2.18) [0.31]		
Karman	48 {96%} (45.	2 {4%} (4.6	50	48 {100%}	{00%}	{00%}	48	
	34) [0.16]	6) [1.52]		(47.27) [0.01]	(0.00) $[0.00]$	(0.00) $[0.00]$		
Totals	107{91%}	11{9%}	118	104{97%}	0{00%}	3{3%}	107	
Chi-square statistic for percent awareness= 2.9073			Chi-square statistic for percent explanation of "yes"					
and P-value= 0.088181,				=0.7122 and P-value=0.70041.				

<sup>\*</sup> figure without parenthesis is the frequency, {Percent distribution}, (expected cell totals), [Chi-square statistic for each cell].

Source: Field Survey.

# **Human beings incidents due to mines**

Data presented in table-III shows that majority (90%) of the sample respondents were of the view that the number of incidents was far greater before MRE than after the Mine Action Project. While after MRE only 02% chances of such incidents still exist, which need mine removal technology not only could be reduced through such type of education and trainings. The chi-square value explains that the percent of respondents was significant after the project and thus the project significantly contributing to the reduction in the human incidents after the project.

Table-III: Views regarding human beings incidents

Hu	man incident befor	Human incident after the project				
Village Name	Higher	Lower	Total	Higher	Lower	Total
Malana	60*{88%}(61.6	8{11%} (6.3	68	1 {1%} (1.7	67 {98%}	68
	6) [0.04]	4) [0.44]		3) [0.31]	(66.27) [0.01]	
Karman	47 {94%} (45.3	3 {6%} (4.66)	50	2 {4%} (1.2	48	50
	4) [0.06]	[0.59]		7) [0.42]	{96%} (48.73	
					) [0.01]	
Total	107{90%}	11{9%}	118	3{2%}	115 {98%}	118
Chi-square sta	tistic for percent hu	Chi-square statistic for percent human				
project= 1.1328 and P-value = 0.287187				incidents after the project=0.744 and P-		
		value=0.388378.				

<sup>\*</sup> figure without parenthesis is the frequency, {Percent distribution}, (expected cell totals), [Chi-square statistic for each cell].

Source: Field Survey.

# Livestock incidents ratio before and after the project

The data in table-IV shows the view of the sample respondents regarding the incidence of livestock the mine. The result indicates that majority (71%) of the sample respondents replied that before MRE Livestock incidents ratio were at peak and various

types of livestock incidents have occurred with them, while after 5% replied that it is greater even now but they are now very careful after identification the risky spots and now they are not carrying their animals to those spots. The significant value of the chi-square statistic explain the there was great reduction in the incidents of people productive assets and the lives of the people improved by earning more income from the sale of livestock.

Table-IV: Distribution of respondents on views regarding livestock incidents

Village	Incidence of live	stock before pro	ject	Incidence of livestock after project		
name	Higher	Lower	Total	Higher	Lower	Total
Malana	48* {70%} (48.	20{30%} (19.	68	2{3%} (3.4	66{97%}(64.5	68
	41) [0]	59) [0.01]		6) [0.61]	4) [0.03]	
Karman	36 {72%} (35.5	14{38%}(14.4	50	4 {8%}(2.54)	46 {92%}(47.	50
	9) [0]	1) [0.01]		[0.84]	46) [0.04]	
Total	84{71%}	34{29%}	118	6{5%}	112{95%}	118
Chi-square statistic for percent livestock incidents			Chi-square statistic for percent livestock			
before the project=0.028 and P-value =0.867113			incidents after the project= 1.5279 and P-			
			value= 0.21643.			

<sup>\*</sup> figure without parenthesis is the frequency, {Percent distribution}, (expected cell totals), [Chi-square statistic for each cell].

Source: Field Survey.

# **Conclusion and Recommendations**

Main findings of the study conclude that respondents had got the training what to do while seeing the mines like adopting protective measures, disposing it off and informing the other community members. The main reason of succession of the project was due to imparting training to literate respondents of the area. These trained literate then successfully transmitted these information/know-how to the illiterate, children and women fold in the existing traditional coverage. The success of the project was high as; the incidents rate had sharply declined due to its awareness and training campaigns. The study as a whole concludes that the project significantly contributed to the lives of the rural masses living in the area by reducing threat to them and their capital assets. On the basis of the findings of the study the following recommendations are forwarded for reductions in the landmines incidence in the area particular and the rest of the country and region in general;

- I. Maximum number of trainings should be arranged for those who did not attend landmine awareness training. The children who did not understand the training should make more simple and repetitive, because some of the children may not understand the concept just at one time.
- II. Practical demonstration plays an important role in knowledge seeking stage, as localities that are illiterate must show them, the models whom didn't see yet before, and to tell them about the types and preventive measures which they would adopt for their security.
- III. The people of those areas where there is the possibility of landmine incidents should properly be educated to remove their internal and external conflicts and they should motivate towards cooperation, integration and common action. This will reduce the chances of incidents.
- IV. Government should cease policies based on landmine production, transfer, stockpiling and installation of Mines on border, and an alternative strategy should adopt for border security. As these are the basic sources of causing incidents, in this way incidents ratio could be reduced.

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