

# Landmines, Human Conditions and International Businesses

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*Angola is plagued with millions of landmines, causing destructions to human conditions and businesses. This study has three purposes: highlight the problems associated with landmines and bring them to the attention of international business managers; analyze the human conditions relating to landmines in the context of businesses using political ecology theory; and finally, recommend strategies for business managers to improve the prevailing human conditions in Angola.*

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## INTRODUCTION

Consistent with the Ottawa treaty (i.e., ban the use of landmines), this study argues that landmines are not an acceptable form of warfare, and thus its use be banned. Given the dispute between governments and the loss of innocent civilian lives, it is surprising how little is known about creating awareness of the devastating impact of landmines on human conditions and business community. To achieve the purpose, this study focuses on the republic of Angola as it has the highest ratio of amputees per capita as a result of landmines.

## THE PROBLEM

One of the reasons for the lack of the awareness is the fact that previous African-based studies are either too socially oriented (Andersson et al. 1995; Gildestad 2001; Cain 2007) or too government policy oriented (Okoroafo and Kotabe 1993; Muuka 1997; Singh 2004) or too marketing activity oriented or practice oriented (Samli and Kaynak 1984; Dadzie et al. 1988; Appiah-Adu 2001). As a result, the topic of landmines received little or no attention in business literature, though programs to increase awareness about landmines are in place in affected communities (UNICEF 1993; UNHCR 1994). Therefore, the purpose of this study is to create awareness of the landmine-related problems among the business community and propose strategies to tackle them.

## WHAT IS A LANDMINE

A landmine is a destructive weapon, which is laid under the ground or surface and is detonated or exploded when tread upon by human beings or animals. Landmines are of two kinds: anti-personnel and anti-tank. Anti-personnel mines explode with a low pressure (7-100kg). So even if a child happens to tread on it, it explodes instantly. Thus, anti-personnel mines are the most dangerous lethal weapons as they are designed mainly to maim human beings. Due to the scare of landmines, 30 percent of the Angolan population is displaced from their homes and land (Zegeye et al. 1999).

## SIZE, SCOPE AND COSTS OF LANDMINES

Landmines are easy to make, cheap to buy, and easy to implement. As landmines are primarily designed to maim people, many armies operate by the theory that wounding enemy fighters causes the enemy more problems than killing them outright. A dead soldier will not halt an advance, but a wounded one, by tying up medical and logistical capabilities and rescuers, may hinder morale and demand evacuation (Pearn 1996). Using the theory, about 80 to 110 million landmines were planted around the world (Williams 1995). Although reliable figures do not exist, it shows the difficulty in assessing the gravity of the landmine problem (Purves 2001). On average, 150 people—the majority being civilians—were killed or injured by landmines each week. Globally, about 300,000 to 400,000 landmine survivors face terrible physical, psychological and socio-economic difficulties (Roberts and Williams 1995).

Landmines create ruinous effects on the human body. They drive dirt, bacteria, clothing, metal and plastic fragments into the tissue causing infections. The shock waves from exploding landmines can destroy blood vessels in the leg causing surgeons to amputate much more than the site of the primary wound. It is estimated that it may cost as little as \$3 to produce a landmine, but the average cost of removing a landmine ranges from \$300 to \$1,000 (Andersson et al. 1995). The high cost of landmine removal represents the immensity and complexity of the task. In fact, at the current rate of landmine removal, it would take up to 1100 years to remove all the existing landmines threatening thousands of communities across the world (Kakar 1995). Clearly, landmines are detrimental to land, lives, and economy.

## **BACKGROUND TO LANDMINES IN ANGOLA**

In 1961, Angola witnessed a conflict when hundreds of Africans attacked a prison in Luanda to free the militants. Three major militant groups were fighting against the Portuguese government, which occupied the country and controlled its vast natural resources. The three groups were the National Front for the Liberation of Angola (backed by China and Zaire), the Popular Movement for the Liberation of Angola (backed by Cuba, Russia), and the National Union for the Total Independence of Angola (backed by South Africa and USA). The support from these superpowers contributed to the mass production and distribution of arms, which turned Angola's conflict into a major civil war that destroyed the country and its people. In 1974, China, Cuba, Russia and the USA began shipping arms into Angola.

## **LITERATURE REVIEW**

A plethora of research has mainly focused on the impact of landmines on social issues such as health and disease (Oppong and Kalipeni 2006), local community adaptation (Benini et al. 2002), communities in general (Williams and Dunn 2003), social costs (Andersson et al. 1995), public health (Kakar et al. 1996), socio-economic impact of mines (Gildestad 2001; Cain 2007) and land degradation (Blaikie 1987), among others, whereas others have concentrated on the designing of a geographic information system for recording and mapping minefields (Sutherland 1996; Craig and Elwood 1998; Cinderby 1999). Yet another stream of research has devoted time and energy to banning landmines (Leahy 1997), educating about human rights (Owsley 1995) and getting rid of landmines (Economist 1997; LMR 2003). By contrast, some researchers have even advocated that banning is unnecessary (Chaloner and Mannion 1997) and that counting landmines do not accurately measure the problems caused by landmines (Georghiades 1998).

## **THE ISSUES**

The issues of this study are rooted in the concept of the political ecology theory which is defined "as an approach that combines the concerns of ecology and political ecology to represent an ever-changing dynamic tension between ecology and human change, and between diverse groups within society at scales from the local and individual to the earth as a whole" (Peterson 2000). This approach lends itself well to our study of landmines. Previously, several researchers have applied it to the study of conflict, landmines, and resources, among others and have found the approach reliable and valid (Le Billion 2001; Unruh et al. 2003). In fact, the political ecology theory has emerged as a research agenda in third-world studies (Bryant 1992).

## **THE POLITICAL ECOLOGY APPROACH**

Recognizing that environmental factors are shaped by political issues, we apply the theory of political ecology to study the relationship between society and power, particularly from the perspective of the political economy (Bryant 1992; Escobar 1996) and develop a framework of the political ecology in the context of businesses to adjust relations between governments, nongovernmental organizations (NGOs), civil society and other agencies (Giddens 1984). Orssatto and Clegg (1999) refer agency to "the capacity to act significantly." Thus, for the purpose of this study, we refer *other agencies* to business communities. The framework is applied to the study of the economic sector, most emblematic of modern times and of the devastating consequences of modernity—landmines.

The landmines are the focus of the study and a test on whether collaborative actions of business communities can create effective strategies by which ecology can inform and underpin the threat of landmines. For example, in the last couple of decades, governments and nongovernmental organizations have responded by adopting a mixed strategy such as education (UNICEF 1993), refugee settlement (UNHCR 1994) and banning the landmines (ICBL, 2008). Others—some businesses—have invested in developing safer technologies to clear landmine fields such as Hitachi (2005), MGM (2008), among others. Hence, the political ecology approach can help examine and explain the broader, nonmedical influences of landmine presence on recovery, particularly the impacts on agriculture, transportation and international investment for governments, NGOs, businesses within the economic, political, social, agricultural and ecological climate (Oppong and Kalipeni 2006). The political ecology represents an attempt to develop an integrated understanding of how environmental and political forces interact to mediate social and environment change (Bryant 1992).

### **IMPLICATIONS FOR MANAGERS**

Based on the political ecology perspective, we recommend the following three-pronged strategies to business managers to alleviate the problem of landmines: create landmine awareness in society and the business community; provide economic assistance to landmine victims for rehabilitation; and, donate landmine excavators.

#### **Landmine Awareness in Society and the Business Community**

The issue of creating landmine awareness is not at the forefront of global politics, though programs such as adopt-a-minefield is effective in raising funds in countries such as the USA, Canada and Sweden. The Campaign has hosted over 4000 benefit dinners in 50 countries in the last six years to raise four million dollars to donate to the cause. Given the cost of removing a landmine between \$300 and \$1,000 and with ten million landmines to remove, significantly more money is needed. We encourage managers to create awareness about the landmines in the country of their operations and among their employees and ask them to donate for the noble cause. It should be noted that even when these landmine fields get cleared, it takes years for the soil to be fertile. As a result, landmines are perceived as a major threat to the people and economy. Yet, others see it as a potential business venture with great financial gain through political control.

A non-profit group called LandminesBlow ([landminesblow.org](http://landminesblow.org)) focuses solely on raising awareness of landmines and their devastating effects by giving presentations to schools, organizations, business groups, clubs and associations, among others. As the group targets specific groups of people, it is too small to make a major impact on politics or on the removal of landmines. We ask managers to sponsor similar groups.

#### **Economic Assistance to Landmine Victims for Rehabilitation**

Le Billion (2001) asserts that armed conflict during the Cold war and the post-Cold-War period is increasingly characterized by a specific political ecology, closely linked to the geography and political economy of natural resources, which adversely affects people's livelihood and health. Several organizations have attempted to assist the people with the post-war struggle to lead normal lives. Over one-third of the population is displaced due to the destruction of land, property and hospitals. In many instances, even when patients reach medical facilities, they seldom receive proper care because blood supplies, surgical instruments, X-ray films, anesthesia, and antibiotics are unavailable. Approximately, one-third of surviving landmine victims requires amputations and a disproportionately large amount of healthcare resources (Coupland 1996). The surgeries required by landmine injuries are particularly traumatic to children. As a child grows, the bone at the amputation site grows more than surrounding tissue and frequently requires reamputation, often with severe psychological impact on the child and the child's kin (Roberts and William 1995). Thus, availability of medical facilities has to be increased.

Further, the standard of living needs be improved and approaches have to be formalized to meet the post-conflict needs and to mitigate the resurgence of conflicts (Berhe 2005). With the assistance from the World Bank and International Monetary Fund, the past decade has seen the systematic implementation of Staff Monitor Programs that has led Angola, to some extent, to sustainable development (Singh 2004). Certainly, political instabilities create constraints on the efforts of these international organizations (Cain 2007). Not surprisingly, landmine casualties frequently overwhelm existing medical and rehabilitation services, as they require lengthy stays in crowded hospitals, multiple major surgeries, and large quantities of blood. As political issues and economic status are interrelated, businesses can play a significant role in providing assistance to landmine victims in an effort to rehabilitate them.

### **Landmine Excavators**

Businesses need to invest in developing new efficient and effective technology to detect and destroy landmines. Some businesses have focused on excavation machineries, which dig up and blow up mines without any contact with human beings. Hitachi manufactures these excavators that act as huge front-end loaders with giant cutters attached to them. By remote control, an operator can maneuver and direct the excavator from a safe distance while the machine digs up and essentially blows up the mines. In fact, UN uses these machines to combat mines. Other companies such as De-Mining Systems and MGM Operations have developed similar tools to aid the fight against landmines. De-Mining, like Hitachi, uses a remote control system (DMS 2008), which is similar to a tractor in both appearance and function. It includes clearing attachments on both the front and back, yet it can also be used as a tractor. Similarly, MGM operations have developed the Wolf, Grader and Mulcher (MGM 2008). We ask managers to donate these machines to landmine clearing organizations.

### **CONCLUSION**

The purpose of this study was to create awareness among the business community of the gravity of the problem prevalent in Angola, and to recommend strategies to alleviate the problem. Using the political ecology perspective, we recommend businesses to: create landmine awareness in society and the business community; provide economic assistance to landmine victims for rehabilitation; and, donate landmine excavators. We believe that the issue of landmines in the world is underrated. Although the banning of landmines would be ideal, it may not be possible in the near future. However, if businesses work together and view this problem as a corporate social responsibility, the growth, development and prosperity can be achieved. We recommend that awareness about landmines be raised. By letting people know about the devastating effects of landmines on human conditions, support can be gathered to eliminate and outlaw landmines as an inhumane form of warfare. Another recommendation is to rehabilitate the landmine-affected people. Clearly, landmines endanger people and deprive them of livelihood. With no safe land to farm, these people are unable to make their livings, particularly if their income is solely dependent on farming. We suggest that businesses partner with non-for-profit organizations to create resources—time, money or food—to rehabilitate these people. Assisting these people should result in a better economy and standard of living. Finally, we recommend generating funding for the development of new technology that can eliminate existing landmines at a faster rate. By investing in new technology, safer and more effective means of landmine removal can be used. We ask managers to donate landmine removal machineries to land clearing agencies. Given Angola has the highest ratio of injured people to the general population, business managers cannot ignore the severity of the issue of landmines on human conditions. In fact, any study of African ecologies that ignores landmines as a critical factor is bound to be incomplete (Oppong and Kalipeni 2006).

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