Light Weapons PRODUCTS, PRODUCERS, AND PROLIFERATION

Light weapons pose serious threats to human security. A shoulder-launched surface-to-air missile—known as a man-portable air defence system, or MANPADS—can be used to shoot down a civilian airliner with hundreds of passengers on board. A lone gunman can kill a head of state with a 12.7 mm sniper rifle from a distance of a kilometre or more. Superior explosive power, technological sophistication, and range distinguish light weapons from small arms, and justify public concern over their illicit proliferation.

This chapter sheds light on the characteristics, development, and production of light weapons. It also looks at how they have been defined to date—specifically in the influential 1997 UN Panel of Governmental Experts report. The Panel generally defines light weapons to include: MANPADS, anti-tank guided weapons (ATGWs), heavy machine guns (including anti-aircraft guns), anti-materiel rifles, recoilless rifles and guns, hand-held, under-barrel, and automatic grenade launchers, unguided anti-tank rocket launchers, and mortars. In focusing on portability as the overarching criterion, this chapter has amended the Panel's listing to include mortars up to 120 mm and various craft-produced materiel such as improvised explosive devices (IEDs) and man-portable rail-launched rockets.

The chapter distinguishes between two categories of light weapons—guided and unguided weapons—in recognition of their important technological differences. Within each of these categories, the chapter profiles a range of specific weapons systems. It notes their producers, development, and important technological changes—whether indigenous or generated through licensing. It also presents information on pricing, distribution, and proliferation. It pays special attention to craft production of light weapons, as well as the possession by non-state actors—including terrorist groups—of guided light weapons.

Light weapon systems are widely held among non-state armed groups. Politicized reporting and the opaqueness of the black market make it difficult to ascertain the exact number of armed groups in possession of such materiel. But sufficient evidence



Bosnian soldiers and a bystander carry away the body of a casualty of a mortar shell attack on Sarajevo's main downtown marketplace in February 1994. © Laurent Rebours/AP Photo



exists to establish that dozens of such groups hold numerous guided light weapons. Many of these groups also produce their own light weapons, including mortars as well as grenade and rocket launchers. The sophistication of these weapons is growing, as is the threat they pose.

The chapter's main findings are as follows:

- At least 51 countries currently produce light weapons.
- Forty-five countries manufacture complete light weapons, while an additional five states manufacture components or upgrades for these systems.
- At least 31 countries produce light weapons under licence, but 26 additional countries produce weapons of foreign design without any licence, with an expired licence, or in an unclear licensing situation, underscoring the proliferation of risks inherent in intended and unintended technology transfer.
- Light weapons are becoming more lethal, more portable, less expensive, and more durable, increasing the prospect of their proliferation, especially to non-state armed groups.
- Armed groups have obtained numerous guided weapons and produce unguided weapons of increasing sophistication, including rocket-propelled grenades, mortars, grenade launchers, explosively formed projectiles, and man-portable rockets.
- Some light weapons—principally anti-materiel rifles—are legally sold to civilians in several countries, including Switzerland, the United Kingdom, and the United States.
- The value of the annual production of anti-tank guided weapons (just one of the eight types of light weapons described by the UN) from 2001 to 2005 was approximately USD 1.1 billion.

Light weapons deserve attention because of each weapon's lethality, the growing number of producers, and their proliferation in the hands of non-state armed groups. Relatively few countries possess the know-how and industrial capacity to develop and

Figure 1.1 Mean maximum ranges for 50 mm to 120 mm mortars with standard munitions



Source: Wilkinson (2008)

produce on their own the most technologically sophisticated systems, but this does not stop them from obtaining the necessary capabilities. Many guided weapons considered advanced in the 1980s are now widely produced through reverse engineering or licensed production. If history is any indication, then it is only a matter of time before many countries produce new technologies such as guided mortars, which would have serious security implications, especially if they fell into the hands of terrorist groups.

IEDs have proven effective against the most advanced armour. Man-portable rockets have increased in range, and it is only a matter of time before advances in the

design of their propellant will enable them to be fired in large numbers rather than in small batches.

The combination of increased lethality and portability, together with the risk of diversion to non-state actors, suggests that greater attention should be paid to light weapons.