

# small arms survey 2005

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weapons at war



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## FOREWORD

The twentieth century was the most violent in human history, killing more than 200 million people in hundreds of conflicts: wars of aggression, ideological wars, and genocidal massacres prominent among them. How will the new century compare? There has been an encouraging decline in the number of conflicts, but at the beginning of 2005 there were still at least 23 armed conflicts under way around the world, many of them long-standing, and with almost a dozen recently ended conflicts at particular risk of returning to open warfare.

In the new century, armed conflict is a particularly complex phenomenon. It is often fought between parties within a single nation, or across many states between non-state armed groups that share ideological, ethnic, or religious goals. Combatants are rarely enlisted soldiers beholden to international humanitarian law. We witness the frequent targeting of civilians—including women and children—and the use of terror against whole communities for strategic goals.

Despite their complexities, the vast majority of today's conflicts share at least one important feature: they are fought primarily with small arms and light weapons. Small arms are responsible for the majority of deaths inflicted in combat. They also facilitate the forced displacement that leads to even more death from disease and malnutrition.

The international community has made slow but steady progress in preventing the outbreak, escalation, and recurrence of conflict around the world. But informed policy responses are urgently needed and, in this context, a solid understanding of the role of small arms and light weapons is indispensable. Obtaining an accurate picture of the use, impact, sourcing, and trade—both legal and illicit—of these weapons is essential to our ability to understand and resolve current conflicts and prevent future ones from erupting.

The *Small Arms Survey 2005: Weapons at War* provides a detailed account of small arms in conflicts, including their production, transfer to war zones, use in conflicts, and efforts to reduce stockpiles and civilian possession when peace seems within reach. It is an invaluable resource for states and international organizations working to prevent suffering, encourage development, and improve human security.

**Gareth Evans**

President and CEO

International Crisis Group

April 2005

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## ABOUT THE SMALL ARMS SURVEY

The Small Arms Survey is an independent research project located at the Graduate Institute of International Studies in Geneva, Switzerland. Established in 1999 with the generous financial support of the Swiss Federal Department of Foreign Affairs, it currently receives additional funding from Australia, Canada, Denmark, Finland, France, the Netherlands, New Zealand, Norway, Sweden, and the United Kingdom.

The objectives of the Small Arms Survey are: to be the principal source of public information on all aspects of small arms; to serve as a resource centre for governments, policy-makers, researchers, and activists; to monitor national and international initiatives (governmental and non-governmental) on small arms; and to act as a clearing house for the sharing of information and the dissemination of best practices. The Survey also sponsors field research and information-gathering efforts, especially in affected states and regions. The project has an international staff with expertise in security studies, political science, law, economics, development studies, and sociology. It collaborates with a worldwide network of researchers, partner institutions, non-governmental organizations, and governments.

### Notes to readers

**Abbreviations:** Topic-specific lists of abbreviations are placed at the end of each chapter.

**Chapter cross-referencing:** Chapter cross-references appear capitalized in brackets throughout the text. For example, in Chapter 9: 'Small arms proliferation and misuse also continues to be a significant cause of direct deaths in post-conflict settings, where violence levels can linger at elevated levels after the fighting has stopped (POST-CONFLICT).'

**Exchange rates:** All monetary values are expressed in current US dollars (USD). When other currencies are additionally cited, unless otherwise indicated, they are converted to USD using the 365-day average exchange rate for the period 1 September 2003 to 31 August 2004.

**Small Arms Survey:** The plain text—Small Arms Survey—is used to indicate the overall project and its activities, while the italicized version—*Small Arms Survey*—refers to the publication itself. The *Survey*, appearing italicized, refers generally to past and future editions of the yearbook.

**Web site:** For more detailed information and current developments on small arms issues, readers are invited to visit the Small Arms Survey Web site at: <<http://www.smallarmssurvey.org>>

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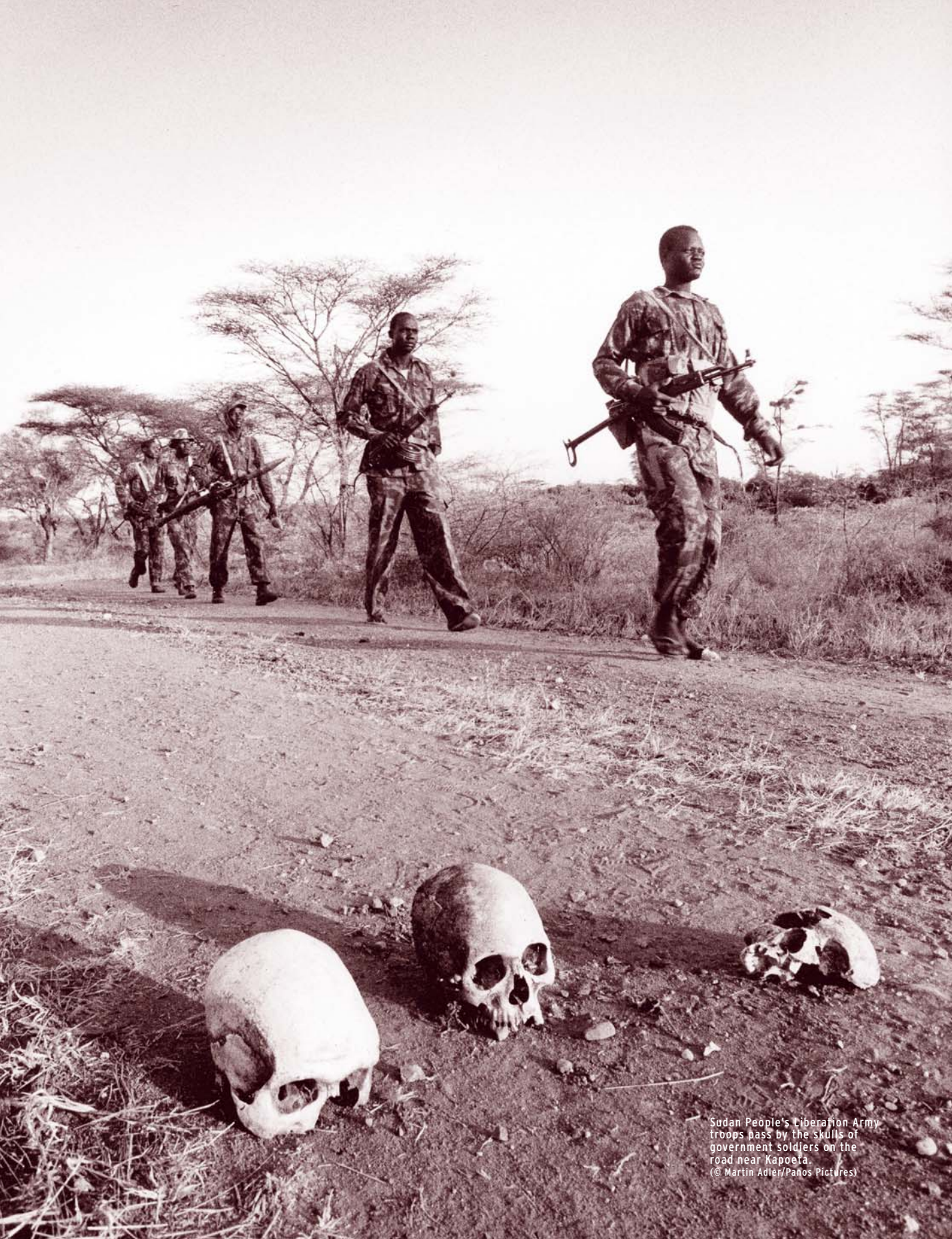
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Sudan People's Liberation Army troops pass by the skulls of government soldiers on the road near Kapoeta.  
(© Martin Adler/Panos Pictures)



# Introduction

One of the core motivating factors behind the creation of the Small Arms Survey in 1999 was the need for a better understanding of the use and impacts of small arms—including in armed conflict. In the first four editions of the annual *Small Arms Survey*, as well as in numerous other publications, the Survey has pursued this mandate by exploring many facets of small arms, from their production, trade, regulation, and misuse to their particular roles in different states and regions.

The fifth edition of the *Small Arms Survey* focuses on the direct and indirect role of small arms in contemporary violent conflicts. As such, this volume develops in depth one important strand of work begun at the project's inception. It describes the many ways in which small arms and light weapons threaten human life and well-being in collective violence, while also focusing how these weapons are implicated in the origins, exacerbation, and aftermath of violent conflict. The *Small Arms Survey: Weapons at War* explores these themes in places such as the Democratic Republic of the Congo (DRC), Indonesia, Rwanda, Sierra Leone, Sudan, and the former Yugoslavia—where armed conflicts have formed the backdrop against which efforts to combat the proliferation and misuse of weapons have unfolded.

The connections between small arms availability and violent conflicts are complex and multifaceted. Chapters in this *Small Arms Survey* show that there is no clear-cut relationship between the supply of weapons and the outbreak of conflict, no easy way to assess the number of deaths caused by small arms in conflict, and no simple solution to coping with weapons in the aftermath of conflict. But as various chapters point out, practical and cost-effective control measures can be designed to curb the misuse of weapons at different points in the chain that leads from the production of a weapon to its use in conflict.

Before any consideration of armed conflict—and the roles small arms play in conflict—can take place, three important issues must be addressed:

- What should count as armed conflict?
- What types of deaths should count as 'caused' by armed conflict?
- What are the ways in which small arms cause conflict deaths?

## Contemporary conflict dynamics

The dynamics of modern conflicts are complex, and often do not feature any of the traditional 'markers' of war. In many cases there are 'no fronts, no campaigns, no bases, no uniforms, no publicly displayed honors, no *points d'appui*, and no respect for the territorial limits of states' (Holsti, 1999, p. 36). Another feature of modern war is the preponderance of civilian casualties. From the Thirty Years War of the 17th century—which is estimated to have caused the deaths of one-third of the population of Central Europe (Limm, 1984)—to the two World Wars as well as numerous civil wars and humanitarian catastrophes throughout the 20th century, the civilian population has suffered mightily from violent conflict.

'War' is also a politically fraught term—is the political violence in places such as Colombia or the Philippines a 'war,' a 'violent conflict,' a 'rebel movement,' or something else? Is the 'war on terror' a war? These distinctions have political nuances and legal consequences (concerning the applicability of international humanitarian law and state responsibility, for example). The difficulty in capturing the shifting nature of contemporary war should not, however, prevent analysts from being precise about what is (or is not) being studied.

Although there are competing definitions of what constitutes 'war' or 'violent conflict' (CONFLICT DEATHS), the *Small Arms Survey* defines violent conflict as widely as possible, without regard for precise legal or political distinctions, for two reasons. First, because it is important to study differences or similarities in the ways small arms and light weapons are used in both large- and small-scale conflicts. Small arms are, of course, used in the most intense and violent conflicts, but they may be relatively more important (in terms of death, injury, and insecurity) in smaller or less intense violent conflicts. Indeed, from the point of view of small arms misuse, a clear delineation between 'violent conflict' and other forms of violence (large-scale criminal activity, for example) may not be possible.

Further, the human suffering caused by small arms and light weapons should not be disregarded because it fails to meet an arbitrary body-count threshold, or because one or more of the parties is not a state. Indeed, it is important to include low-level violence (such as in Nigeria), conflicts in which the state does not play a direct role (such as in Papua New Guinea), and those in which the state preys on its citizens without declaring war (such as in Guatemala between 1960 and 1996).

The *Small Arms Survey* thus follows the World Health Organization's definition of collective violence, amending it only to add the word 'armed'. Collective violence thus is:

the instrumental use of [armed] violence by people who identify themselves as members of a group—whether this group is transitory or has a more permanent identity—against another group or set of individuals, in order to achieve political, economic or social objectives (Krug et al., 2002, p. 215).

This definition takes armed conflict not as *sui generis*, but as a category of collective violence. In this way, the *Small Arms Survey* situates armed conflict within the context of a range of violent practices—armed and unarmed, collective and individual—all of which result in the loss of life.

### Measuring armed conflict deaths

Quantifying the human costs of conflict is one of the most important—and challenging—tasks for the researcher studying armed violence. At first glance, data abounds. But a clear understanding of what is being counted is essential to an accurate evaluation of data and sound policy recommendations. Recent reports have publicized figures such as 3.8 million deaths in DRC since 1998, 100,000 estimated excess deaths in Iraq since 2003, and 345,000–385,000 possible deaths in Darfur, Sudan, since February 2003. These numbers recognize that the human cost of violent conflict cannot merely reflect the number of people who are directly killed in fighting, but must include *indirect* mortality caused by conflict. Other, much lower, estimates, such as the 27,000–51,000 people who are estimated to have died in wars worldwide in 2002 and 2003, are based on tracking only *direct* victims of armed violence.

These numbers do not contradict each other, but they do count different things. As the chapter on death in conflict shows, indirect deaths make up the vast majority of victims in recent wars in such places as DRC and Sudan—

potentially up to 80 per cent (CONFLICT DEATHS). These people die from dysentery, malaria, or other preventable causes when they lose access to basic health care and essential services as they flee their towns and villages, and as violent conflict grinds down or eliminates the infrastructure of basic services. The failure to distinguish between direct and indirect conflict deaths sows confusion in many debates about the impacts and implications of current conflicts.

The distinction between direct and indirect deaths is, however, ultimately an academic one. To the people affected by violent conflict, it matters little whether the death of a child or partner was caused by a bullet, or by disease or starvation because the family was forced to flee its home. It is important—as epidemiological studies of conflict zones show—to count all deaths from violent conflict, and not simply to focus on those caused by the use of violent means, on combatants or civilians.

### **Capturing the role of small arms**

Small arms have been a feature of modern warfare for hundreds of years, but their role in modern conflict mortality has been difficult to measure. The *Small Arms Survey 2005* estimates that between 60 and 90 per cent of direct deaths in violent conflicts are caused by small arms. It is not possible to develop a more precise, or average, figure, since the variation depends on the nature and scope of the particular conflict. Conflicts in which civilians are directly targeted, or in which small arms and light weapons are more widely available than other arms, or in which the tactics of the combatants impose their use, are more likely to have a higher proportion of direct deaths from small arms (CONFLICT USE). Other major causes of direct conflict deaths include bombing, the use of informal explosive devices, and major conventional weapons systems.

The role of small arms in conflict deaths is not limited to direct deaths, however. A full assessment of the use of small arms in conflict finds that they are implicated in even more indirect deaths. While small arms cause direct conflict deaths in a straightforward way—through fatal wounds and injuries caused by bullets or other projectiles—they cause indirect conflict deaths in a different way. Just as a heat wave kills indirectly through heart failure, dehydration, or other factors (but seldom as a direct result of ‘heat’), small arms conflict contributes to deaths indirectly through disease, starvation, and the destruction of health infrastructure. Though people may not die from bullet wounds, weapons are ultimately responsible for their deaths.

In the case of small arms, it is practically impossible to test the counterfactual: ‘If the small arms were not present (or were present in lower numbers) but the conflict still occurred, how many people would have died?’ But the availability of weapons encourages some individuals and groups to resort to violence instead of relying on non-violent means of resolving conflicts or achieving their goals. As the quantity and quality of small arms diminish, the intensity and levels of violence associated with armed conflict is also reduced. Furthermore, it appears that the availability of ammunition, the lethality of the available weapons, and the possibilities for resupply can also affect violence levels, though this has yet to be demonstrated systematically. These points are discussed in various chapters of the *Small Arms Survey 2005*, and although it may not be possible to quantify the exact magnitude of the human tragedy caused by the proliferation and misuse of small arms and light weapons, it is possible to outline more precisely their role in contemporary armed conflicts.

### **Chapter highlights**

The *Small Arms Survey 2005* departs from the format of previous editions by being divided into two sections. The first consists of chapters that (as in previous years) provide new or updated information on global small arms production,

stockpiles, transfers, and international measures. This year, the *Survey* includes an introductory overview of small arms ammunition, an issue receiving growing international attention.

The second section is dedicated to issues surrounding armed conflict and its aftermath, including the sourcing of weapons to violent conflicts, weapons use, small arms and conflict deaths, and post-conflict disarmament, demobilization, and reintegration. This section is rounded out with two case studies: one exploring the concept of 'gun culture' in the illustrative case of Kosovo, and another focusing on the Central African Republic. Between the update and conflict sections is a survey of contemporary artistic representations of arms and armed violence.

### Update chapters

**Chapter 1 (Ammunition):** Small arms ammunition presents a range of problems of proliferation and misuse analogous to those of the arms themselves. There are legal and illicit users of ammunition, and diversion to conflict zones is common. Despite its critical role in violence in both conflict and armed crime, however, ammunition has been neglected in measures to address small arms proliferation and misuse. This chapter surveys the state of knowledge on a range of small arms ammunition issues, including production, trade, regulations, stockpiling, and disposal.

The chapter also explores the impact of ammunition availability on small arms use, particularly in conflict areas, and highlights the arguments for enhanced control measures. It finds that although ammunition is occasionally included in small arms measures, real control strategies have yet to be developed at the national, regional, and international levels.

**Chapter 2 (Production):** Unlike previous *Survey* chapters, this year's products and producers chapter investigates what constitutes the 'small arms industry', a label that covers a wide range of firms, some of which dedicate only a small part of their operations to weapons-related production. Based on information obtained from 349 firms, this study divides the industry into sectors based on product type, production method, capacity, target markets, and other factors. This sectoral approach is illustrated with descriptions of specific firms in the United States and elsewhere. It parallels studies of other industries and is a first step to more thorough analysis, policy-making, and research on the subject.

**Chapter 3 (Stockpiles):** Increasing international momentum to counter small arms proliferation and misuse helped bring to the fore state efforts to manage small arms stockpiles in 2004. The reductions from weapon collections and destruction, however, were overshadowed by new acquisitions, and some regions were only marginally engaged in reduction efforts.

Completing the *Small Arms Survey's* region-by-region analysis of national stockpiles begun in 2001, the chapter also estimates weapons holdings in two regions that have so far not been closely scrutinized: the Middle East and north-east Asia. The Middle East is thought to be home to 58 to 107 million small arms, the majority of which (45 million to 90 million) are owned by civilians. A preliminary assessment finds that military and police forces in north-east Asia have access to about 22 to 42 million small arms and light weapons, while numbers of civilian small arms in the region remain an enigma. Lack of transparency about holdings in countries in both regions means these estimates are only tentative.

**Chapter 4 (Transfers):** Poor state transparency in arms transfers continues to preclude a full understanding of the international authorized trade in small arms. This chapter updates the analysis of the global authorized small arms trade through UN Comtrade data, with a particular focus on major exporters and importers, types of small arms traded, and total values for the year 2002. The global trade in 2002 closely resembles the picture previously provided,

with the United States, Italy, Brazil, Germany, the Russian Federation, and China the most significant exporters, and the United States, Cyprus, Saudi Arabia, and South Korea topping the list of importers.

An analysis of available customs seizure data suggests that most illicit small arms trafficking takes the form of small-scale transfers. The spottiness of seizure information is surprising, however, given the international community's focus on the illicit trade. Finally, the chapter updates the Small Arms Trade Transparency Barometer, this year identifying the United States, Germany, and the United Kingdom as the most transparent exporters, and Israel as the least transparent. Two aspects of the small arms trade call out in particular for better transparency: government-to-government transactions and the identification of end users for exports.

**Chapter 5 (Measures):** Although most policy attention is focused on small arms, global and international measures also tend to cover light weapons, either explicitly or implicitly. One category of light weapons, man-portable air defence systems (MANPADS), has received considerable attention, and the Wassenaar Arrangement and Organization for Security and Co-operation in Europe have recently taken bold steps to curb MANPADS proliferation through the development of stringent control measures.

The emerging strong international framework to deal with MANPADS still requires national implementation of standards. The transfer control systems of key exporting states can readily support the implementation of these new measures and, encouragingly, these same systems can also be used to control strictly the transfer of a broader range of small arms and light weapons.

**Contemporary art section ('Shooting Gallery'):** This year the *Small Arms Survey* delves into the visual arts for the first time. Showcasing 17 recent works from a diverse group of artists—from the legendary Andy Warhol to today's emerging performance artists—'Shooting Gallery' explores how contemporary artists respond to the issue of small arms. Using a variety of media—from paint, photography, and sculpture to video and performance pieces—the artists scrutinize the gun itself, its components, the evidence of its presence, and the symbolism behind it. They consider how arms appear—or fail to be noticed—in the news media and film footage; the role of small arms in 'shoot'em-up' video games; how arms are employed by states and powerful actors; and the loss of life and ensuing grief due to routine armed violence. This section's exploration of the role of the gun in themes as diverse as murder, loss, militarization, empowerment, protection, insecurity, and the numbing of society to violence adds a cultural dimension to research on the impact of small arms on society.

## Armed conflict chapters

**Chapter 6 (Conflict Sourcing):** Because of its likelihood to contribute to death and suffering, conflict sourcing is a major concern for the international community. Examining selected recent and current internal conflicts in Africa, the Americas, Central Asia, and the Caucasus, this chapter identifies routine sourcing patterns. Through corruption, theft, and seizure, government stockpiles constitute an important source of arms in virtually all conflict zones; sometimes they represent the dominant source for all combatants. Conflict weapons are also commonly sourced by a steady cross-border trickle of weapons (the 'ant trade') that can generate large stocks over time. While less common, local production can also be a source of supply. Small arms procurement patterns often become more sophisticated and diversified over the course of a conflict. The chapter highlights the need to add issues such as border control and corruption to the international agenda.

**Chapter 7 (Conflict Use):** How exactly are small arms and light weapons used in armed conflicts? What factors affect combatants' choices of weapons and targets? While the use of small arms in conflict encompasses a broad range

of social phenomena—from group dynamics to masculine identities—this chapter focuses in particular on factors that facilitate or inhibit the most indiscriminate forms of armed violence. Factors affecting weapons use include material controls on where weapons can be used and for what purpose; availability factors, such as size, weight, and capacity of the weapons; and organizational factors, such as social constraints and shared understandings of acceptable limits to armed violence.

A better understanding of the primary factors affecting the use of weapons in conflict can aid efforts to prevent the worst forms of armed violence. Promising options include targeting the most destructive weapons first in disarmament, demobilization, and reintegration (DDR) programmes; limiting the production and transfer of particularly destructive light weapons; and enhancing stockpile and trafficking controls to cut off the sources of the most destructive weapons available to combatants.

**Chapter 8 (Gun Culture):** Permissive ‘gun cultures’ are sometimes assumed to contribute inexorably to armed violence. This chapter challenges this assumption through a case study of Kosovo in the 1990s, and brief studies of conflicts in El Salvador, Georgia, Kyrgyzstan, and Tajikistan. The term ‘gun culture’ is often used to denote different behaviours and activities, and unpacking this term in each of the cases examined is important for understanding the dynamics of each conflict.

The relationship between ‘gun cultures’ and conflict cannot be reduced to a direct contribution or cause. Social attitudes to the presence of guns interact with economic, political, and historical factors to shape how armed conflict erupts. In the Kosovo case, both militant and pacifist groups mobilized the same Albanian traditions of customary law and social attitudes to generate solidarity among fellow ethnic Albanians.

**Chapter 9 (Conflict Deaths):** One of the most important—but often unobtainable—indicators of armed conflict is the number of people killed. Since deaths during violent conflict are rarely systematically recorded, researchers rely on a variety of information sources and estimation techniques. This chapter examines how current conflict death estimates are generated, what they include and exclude, and how they likely underestimate the real number of deaths.

It finds that most recent estimates of direct conflict deaths underreport the magnitude of the death toll, mainly because they depend on media reports, which are inherently incomplete. The total number of direct conflict deaths is probably two to four times higher than currently reported, and direct deaths were probably between 80,000 and 108,000 in 2003. A complete assessment of the human toll must not only include *direct* deaths from armed violence, but also the *indirect* deaths arising from the consequences of armed violence. The number of indirect victims in recent violent conflicts (such as in Darfur or DRC) has been several times greater than the number of *direct* conflict deaths.

Small arms and light weapons are responsible for the majority—between 60 and 90 per cent, depending on the conflict—of *direct* conflict deaths. They also play a clear, but unquantifiable, role in causing indirect conflict deaths.

**Chapter 10 (Post-conflict):** The period that follows the declared end of fighting is often designated ‘post-conflict’, but this does not necessarily imply an end to violence or a return of stability and security. Post-conflict environments are commonly marked by ongoing social unrest, and the crucial early steps towards peace, if not properly administered, can tip back into violent conflict. Indeed, almost half of all countries emerging from conflict suffer a relapse within five years of signing a peace agreement. Even if open conflict does not resume, armed violence can remain above pre-conflict levels. In the light of this, and in recognition of the tenuous nature of many ceasefires, there is increasing focus on reducing weapons stockpiles as part of overall peace processes, and DDR programmes are proliferating in post-conflict settings. Yet available evaluations show widely different levels of success.

Current approaches to DDR and weapons reduction suffer from several weaknesses, including the lack of political will, confusion over objectives, a disproportionate focus on disarmament selection bias, inadequate financing, and coordination gaps. DDR and weapons reduction programmes also continue to substitute for political solutions, the reform of governance and judicial sectors, and sustainable development. Many of the initiatives instituted after a conflict ends fail to address the demand for firearms—an essential factor underlying persistent armed violence.

**Chapter 11 (Central African Republic):** Often overlooked in examinations of armed violence in Africa, the experiences of the Central African Republic (CAR) have relevance far beyond its borders, especially with regard to widely held assumptions about security-sector reform. This chapter focuses on the massive influx of arms in to CAR between 1996 and 2003, which has affected the state's ability to regulate weapons among civilians. The lack of effective regulation, coupled with increasing stockpiles, has created a clear threat to security. Evidence suggests that non-state actors in CAR are better armed than government forces (with the exception of the presidential guard). The government, which claims that 50,000 small arms are circulating nationally beyond its control, may also be underestimating the scale of the problem. While firearms-related death and injury levels in CAR are low, the country suffers from the economic and psychological effects of small arms use and availability. Arms recovery programmes in CAR have been poorly designed and badly implemented, have been less successful than claimed, and arguably have undermined rather than enhanced security.

## Towards 2006

The year 2004 witnessed an acceleration of international activity on small arms. Negotiations on an international instrument on the marking and tracing of weapons began, and a number of programmes for stockpile management, the destruction of surplus stocks, and post-conflict DDR were launched. Although progress on regulating arms brokering was slower, a UN expert group on this issue will probably be established in 2005 or 2006. And states are already gearing up for the 2006 UN review conference, perhaps the most important upcoming event on the small arms calendar. The next edition of the *Small Arms Survey* will focus on the key themes that will be on the agenda in 2006, including understanding the demand for arms, counting the cost of armed violence, providing victim assistance, regulating civilian weapons possession, as well as case studies drawn from ongoing research in Afghanistan, Brazil, Cambodia, Colombia, Haiti, Papua New Guinea, Tajikistan, and elsewhere.

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