

SPECIAL REPORT

GUN-RUNNING IN PAPUA NEW GUINEA: FROM ARROWS TO ASSAULT WEAPONS IN THE SOUTHERN HIGHLANDS

By Philip Alpers



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ACRONYMS AND ABBREVIATIONS

ABC	Australian Broadcasting Corporation
ACT	Australian Capital Territory
ADF	Australian Defence Force
AFP	Australian Federal Police
AUD	Australian dollar
AusAID	Australian Agency for International Development
CIS	Charter Industries Singapore, now ST Kinetics
EHP	Eastern Highlands Province, PNG
EPG	Eminent Persons Group
FN	<i>Fabrique Nationale</i>
HE	high explosive, also His or Her Excellency
H&K	Heckler & Koch
HQ	headquarters
ICRC	International Committee of the Red Cross
MANPADS	man-portable air defence system
MP	member of parliament
NATO	North Atlantic Treaty Organization
NCD	National Capital District (Port Moresby)
NGO	non-governmental organization
NISAT	Norwegian Initiative on Small Arms Transfers
NSW	New South Wales, Australia
OCO	Oceania Customs Organization
OIC	officer in charge
OPM	<i>Organisasi Papua Merdeka</i>
PGK	PNG kina (currency)
PNG	Papua New Guinea
PNGCS	Papua New Guinea Correctional Services
PNGDF	Papua New Guinea Defence Force
PRIO	Peace Research Institute, Oslo
QLD	Queensland, Australia
RPG	rocket-propelled grenade

RPNGC	Royal Papua New Guinea Constabulary
S&W	Smith & Wesson
SHP	Southern Highlands Province, PNG
SID	Solomon Islands dollar
SLR	self-loading rifle
SMLE	short-magazine Lee-Enfield
UN	United Nations
UNDP	United Nations Development Programme
UNIDIR	United Nations Institute for Disarmament Research
UNSECOORD	United Nations Security Coordination Office
USD	US dollar
WHP	Western Highlands Province, PNG
WHO	World Health Organization

ABOUT THE AUTHOR

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INDIVIDUALS AND ORGANIZATIONS CONSULTED

Field interviews were conducted during two visits to PNG in February and May 2004. Additional consultations were conducted by telephone, and in one case entirely by e-mail, between March 2004 and January 2005.

The politics of small arms in PNG can be delicate. A number of informants and interviewees, among them security, military, police, and intelligence personnel, diplomats, development workers, self-described tribal fighters, mercenary 'hiremen', and gun buyers, asked not to be identified.

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Maj. Bill Nende, PNGDF (retd.), village elder. Bela, SHP.
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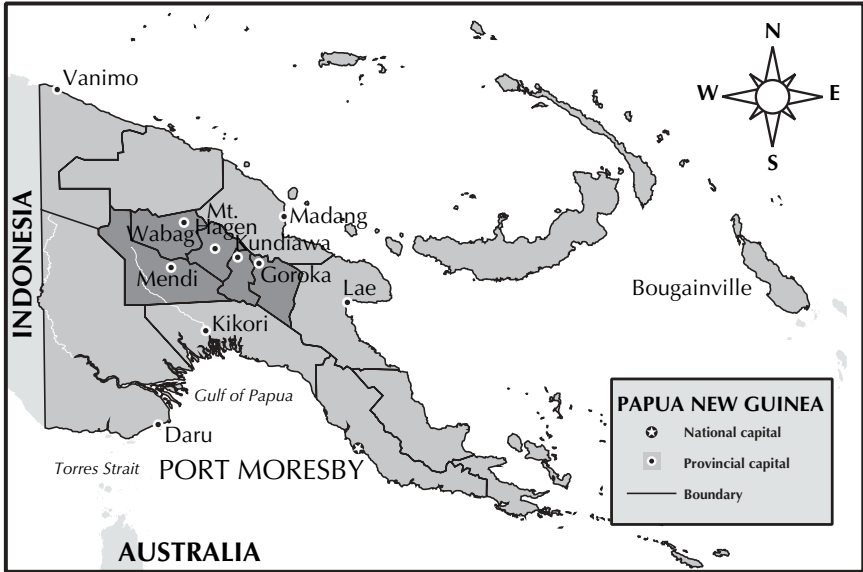
Mark Yangen, businessman and former Mendi police inspector. Mendi, SHP.

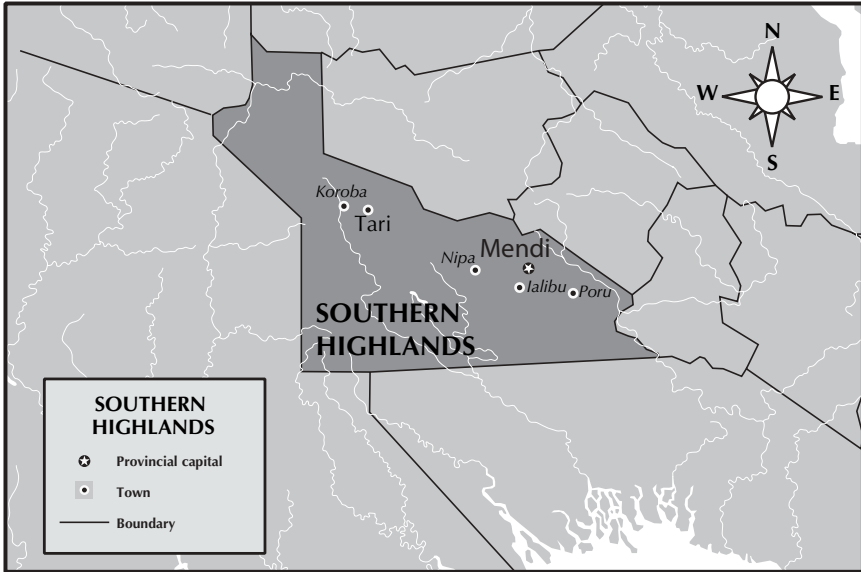
*Although most informants were interviewed while at the locations above, some travelled to meet the author. In these cases, the location listed is the community represented by the interviewee.

SOUTHERN HIGHLANDS COMMUNITIES REPRESENTED

Bela, Karints	Semberigi, Kagua/Erave
Det, Poroma	Sugu, Kagua
Kewabi, Ialibu/Pangia	Sumi, Kagua
Kuare, Kagua	Tamanda, Poroma
Lai Valley, Mendi	Tari
Margarima	Unjamap, Mendi
Mendi	Upper Mendi
Nipa	Wabi, Kagua
Poroma, Nembi Valley	Williame, Pangia
Pureni, Koroba	Wogia, Upper Mendi

For a synopsis of community interviews, see Alpers (2004); see also **Methodology and limitations**.





DEFINITIONS

Automatic: A firearm capable of automatic, 'machine gun' fire. Commonly only available to defence forces and specialist law enforcement agencies, these are most often fitted with a selective fire lever that allows the user to choose between single shot, semi-automatic, fully automatic, or burst-fire modes. With automatic fire selected, a single trigger pull can fire and reload repeatedly until released.

Firearm: In PNG legislation:

Firearm includes (a) an air rifle or other kind of rifle or gun from which a shot, bullet, or other missile, or irritant liquid, gas, or powder or other substance capable of causing bodily harm, can be discharged; and (b) a rifle or gun from which for the time being any such missile or substance cannot be discharged because of (i) the absence or defect of one or more of its parts; or (ii) some obstruction in the rifle or gun, but which, if the part or parts were replaced, renewed, or repaired, or the obstruction removed, would be capable of discharging (PNG, 1978).

Handgun: A firearm that can be easily aimed and fired with one hand, commonly a revolver or pistol.

High-powered: The term 'high-powered firearm' is in common usage across Melanesia to describe a long gun or sub-machine gun of the type normally issued to military and police. In Bougainville, peace monitors defined factory manufactured, military-style weapons (M16, AR15, SLR, FAMAS, SIG rifle, etc.) as 'high-powered'. In the Solomon Islands, the International Peace Monitoring Team defined a military weapon as 'any high-powered centre-fire semi-automatic, automatic, bolt-action, magazine fed shotgun, riot gun, or signal pistol issued to members of the Solomon Islands police.' In common usage, Eastern bloc SKS rifles, AK-47 assault weapons, and their look-alikes, although never issued to state forces in the Melanesian region, are also referred to as 'high-powered firearms', as are semi-automatic, centrefire hunting rifles. In short, this catch-all term is used to differentiate larger-calibre (centrefire), factory-made repeating long guns from single-shot shotguns, .22 calibre rimfire rifles, and home-made firearms.

Long gun: A firearm designed to be aimed and fired with both hands, commonly a rifle or shotgun.

Semi-automatic: A self-loading long gun or handgun that ejects each expended cartridge, then loads another from an ammunition magazine either built into or attached to the firearm. For each trigger pull, a single round is fired.

Small arm: Many publications, including the draft *Programme of Action* of the 2001 United Nations small arms conference (UN, 2001), have relied on the definition of small arms and light weapons developed for the 1997 report of the UN Panel of Governmental Experts on Small Arms. Here, small arms were defined as ‘revolvers and self-loading pistols, rifles and carbines, assault rifles, sub-machine guns, and light machine guns’ (UN, 1997). In practice, and particularly in military parlance, the term ‘small arms and light weapons’ covers not only firearms, but also explosive weapons designed to be carried and fired by a single person. These can include hand grenades, rocket-propelled grenades (RPGs), light mortars, and man-portable air defence systems (MANPADSs).

SUMMARY

In the volatile Southern Highlands Province (SHP) of Papua New Guinea (PNG), approximately 2,450 factory-made firearms are held by private owners. These include between 500 and 1,040 high-powered weapons, most of which are assault rifles. Very few of the guns in SHP were smuggled from foreign countries. Instead, police and soldiers within PNG supplied the most destructive firearms used in crime and conflict.

The most common illegal assault rifle is the Australian-made self-loading rifle (SLR), closely followed by the US-made M16, both of which come from PNG Defence Force (PNGDF) stocks. Most of the remainder are AR15s, obtained from PNG police. The Kalashnikov AK-47 and its variants are rare, with ammunition even more so.

Although Southern Highlanders own 30–50 times fewer factory-made firearms per capita than nearby Australians or New Zealanders, their high-powered weapons are obtained almost exclusively for use against humans. As a result, an illicit, factory-made firearm in SHP is several times more likely to be used in homicide than a similar gun in the world's highest-risk countries, namely Ecuador, Jamaica, Colombia, and South Africa. Although many adult males in SHP are also said to own crude home-made shotguns or pistols, these inaccurate, and often ineffective, weapons are involved in comparatively few fatalities.

Demand for military-style assault weapons in the Southern Highlands remains high, with buyers paying prices well above global market value. Despite this, neither ongoing tribal conflict nor criminal activity has generated sufficient demand to prompt an influx of arms from countries outside the region.

Gun-running from other parts of PNG to the Southern Highlands is financed and facilitated by politicians and civil servants up to the highest levels of the educated elite. Many, and perhaps most, illicit high-powered firearms in the Southern Highlands were deployed by political candidates, sitting MPs, and their supporters to impress and intimidate both rivals and voters. After winning the 2002 national election, Prime Minister Morauta conceded that 'every candidate' was involved. Politicians have also frequently used their own licensed guns to threaten and to wound.

At the other end of the scale, both firearms for rent and mercenary gunmen have become unpredictable 'wild cards' in Southern Highlands political and criminal violence. Skilled marksmen, known as 'hiremen', are paid in money, pigs, and women. This new tier of autocratic criminal leadership is said to be undermining traditional, more consultative decision making.



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Young warrior, Tamanda, SHP. With classmates at his school, 13-year-old Wesu Up carries the ubiquitous PNG 'bush knife' and wears a brass .223 bullet casing as a necklace.

For their supply of arms and ammunition, criminals in the Southern Highlands rely heavily on theft from government stocks. An ongoing national audit of remaining police small arms indicates that 1,440 police-issue guns (30 per cent) are likely to have leaked to criminals. Although some claim that outlaws are better armed than the law, PNG police still handily outgun any known group. Where police do face high-powered weapons, these were obtained from their own or military stocks, and so possess no superior attributes. Although police frequently seize crime guns, most of these are recirculated to criminals. Police ammunition is routinely sold to tribal fighters and criminals.

Known losses from police stocks are roughly equalled by the number of defence force small arms unaccounted for. An August 2004 audit of remaining PNGDF small arms showed 16 per cent, or 1,501, 'unaccounted for'. This was five times higher than any previous estimate of military losses, and included 907 assault rifles and 102 machine guns. Following an immediate request from the Office of the Minister of Defence to revise this audit, an October 2004 recount concluded that 694 PNGDF firearms had been 'reported missing'. Of the 7,664 M16 and SLR assault rifles delivered to the PNGDF since 1971, only 2,013 (26 per cent) remain in stock.

While leakage from PNGDF stocks has fallen dramatically in the wake of an Australian-funded armoury-rebuilding programme, no such measures apply to prison firearms. Often neglected in the small arms debate, the PNG Correctional Services (PNGCS) stocks as many as 3,000 firearms, or twice as many guns as it has staff. The number missing is unknown.

In the Southern Highlands, gun violence contributes markedly to social disadvantage. Vendors and buyers are kept away from markets, children from schools, and patients from health care. Development agencies, health workers, and public servants flee high-risk areas. Armed tribal fighters, criminals, and police commit human rights atrocities, for which they are rarely held accountable. Out of proportion to their role in armed violence, women and children are often hard hit by the wide variety of effects. In the Southern Highlands, 90 per cent of murders—or more—are not reported to authorities. Non-fatal gunshot wounds are similarly under-reported, yet the rate of admission to the provincial hospital for fire-arm-related injury is still several times higher than, for example, the rate in

neighbouring Australia. In the Southern Highlands' Tari Basin, the risk of violent death by any method is at least 100 times higher than in Australia.

At the national level, decades-old rumours of a large-scale 'guns for drugs' trade between Australia and PNG have been shown to lack basis in fact. PNG's fabled cannabis of the 1970s, 'Niugini Gold', is no longer sold in major Australian markets. Furthermore, although rumours persist of high-powered guns smuggled from abroad, evidence of this is absent. As the senior police officer responsible reports: 'I haven't seen any. No one has shown us the guns.' No interdiction authority, domestic or foreign, claims to know of an illicit small arms shipment of any size destined for PNG.

At the same time, in the legitimate arms trade, at least 26 nations have legally exported small arms and ammunition to PNG, whose major suppliers are Australia and the United States. Declared exports to PNG since 1980 totalled USD 15 million, while undeclared military and police small arms exports from Australia since the 1970s are likely to have added 30–50 per cent to that value.

Crime statistics, notoriously unreliable even in the cities, nevertheless show that the recorded murder rate in PNG has risen to six times that of its closest neighbour, Australia. The country's capital, Port Moresby, reports a murder rate 42 times that of Sydney. In addition to these homicides, perhaps an equal number—or more—go unreported. Although most gun homicides, armed robberies, and gang rapes at gunpoint go unpunished, the proportion of inmates imprisoned for gun crime, at least in the Southern Highlands, is high. Court-imposed penalties are in line with, or more stringent than, those imposed elsewhere in the Pacific region. While an instinctive reaction to PNG's gun violence problem is to call for even harsher penalties, there seems to be less need for new laws than for the enforcement of existing laws. By and large, the nation's firearm-related legislation already comes up to standard. In a comparison of 20 nations, PNG's gun laws show more points of compliance with UN global norms than any other developing nation in the Pacific.

One recent intervention to reduce gun violence has already produced measurable results. An Australian-led policy of severely limiting ammunition exports to PNG seems to have created a scarcity of bullets, followed by significant ammunition cost increases in the Southern Highlands. Any effect of this initiative specifically

on firearm-related injury and mortality has yet to be measured, while across the country, even basic firearm-related health and justice information is lacking.

Particularly in Melanesia, illicit guns are now seen as a serious impediment to the recovery and redevelopment of nations. In the Pacific, there is broad consensus among governments, donor agencies, and civil society that disarmament and the security or destruction of small arms are essential prerequisites for human security, good health, and prosperity. In recent months, the focus of this new urgency has moved to Papua New Guinea.

Recommendations

In the short term, restricting the flow of ammunition to PNG could remain the single most-effective tool to prevent gun death and injury. In the longer term, 'guns for development' schemes show promise, though these could be quickly corrupted if not carefully designed and monitored, and accompanied by justice and security reforms. Although widely favoured by policymakers as an instinctive and inexpensive option, gun surrenders and buy-backs rarely make an impact on injury and death rates. Any such initiatives should first consider the international experience, which includes many decades of failed gun amnesties.

In PNG, key measures will be to prevent the recirculation of crime guns by police, and to accurately trace all seized illicit firearms. If civilians are asked to disarm, the state must lead by example, with prompt and public destruction ceremonies for all surplus firearms. An immediate impact on the movement of illicit small arms could be achieved by effective surveillance of the nation's most obvious 'choke point', Port Moresby's airport terminals at Jackson Field.

Firearm legislation could be improved by adopting those provisions of the Pacific Islands Forum draft model *Weapons Control Bill* that are not already in force. However, no amount of legislative tweaking will substitute for effective enforcement of PNG's existing laws, the wording of which is already close to world standards. Nor can writing new laws improve the population's willingness to comply, in the absence of respect for those laws and for the justice system that administers them. As numerous commentators have remarked in a myriad of reports spanning several decades, before any meaningful improvement to human security for its citizens can occur, the Government of PNG must first reform the law and justice sector, and regain the trust of those who have turned to guns.

For firearm-related public health and crime control interventions to have any chance of success, basic evidence is badly needed. The urban criminal handgun market, untouched by research to date, deserves urgent attention. In high-risk Enga Province, levels of firearm-related violence and crime remain unquantified, and could yet equal or surpass that of neighbouring SHP. Before resources are poured into border control, at least some evidence should be presented that smuggled foreign guns comprise a significant proportion of PNG's illicit stocks.

From this report, and from a host of others published on PNG in recent years, a consensus does emerge. Restoring justice and security to the people could stand the best chance of reducing, or even removing, the demand for small arms. While centralising power and control in the state is likely to cause more conflict, local communities and NGOs should be supported to develop their own grass-roots initiatives. As is often the case, the only way to truly test these ideas might be to succeed.

INTRODUCTION

In the short time since their arrival in the Highlands of Papua New Guinea, small arms have slotted into and so loudly amplified aspects of the political culture that all those involved seem destined to spend years catching up with the implications. This report concentrates on PNG's Southern Highlands Province, a conspicuous hot spot for armed violence and gun-related injury. It provides a preliminary tally of illegal high-powered guns in parts of the province seen as particularly vulnerable to armed violence, and documents the profound disruption wrought by their misuse. Tribal fighters, mercenary gunmen, and criminals provide details of their illicit firearms and ammunition, trafficking routes, and prices paid.

Because SHP is landlocked within PNG, its factory-made firearms must arrive from other parts of the nation. Accordingly, this study also documents the wider PNG gun scene, wherever evidence is available. Research with a national scope traces small arms used in crime and conflict to their source, revealing a single prominent pattern of origin. The real arms dealers are shown to be much closer to home than the 'foreign gun-runners' so often blamed by public figures. Politicians and civil servants emerge as being deeply implicated in the small arms trade, with each election seen as an opportunity to seize votes, political influence, and resources at gunpoint.

This study highlights the responsibility of the state to secure guns, and so to protect the safety, health, and future prospects of its citizens. It emphasizes the oft-neglected potential of ammunition controls, which have already affected both supply and demand in PNG. It examines legislative and other interventions, perhaps pointing the way to future solutions. This report and its background paper (Alpers, 2004) are also designed as resources for justice, law enforcement,

and development agencies; NGOs; and other stakeholders soon to be involved in efforts to curb the proliferation of illicit small arms in PNG.

Above all, the aim is to show how the volatile Southern Highlands, presently a subject of concern to many in the region, may be assisted to recover from a precarious situation, inflamed as it is by the easy availability of lethal weapons.

Methodology and limitations

Interviews for the field-research section of this study were conducted with residents of 19 communities in SHP. After consultation with community leaders, government agencies, churches, NGOs, and journalists, most localities were selected for their perceived high risk of small-arm-related violence, based largely on a past history of armed conflict. Meetings ranged in size from a 160-strong crowd in Bela, to individual interviews with elders, leaders, and young men. The author and interpreter visited half the communities, and for the remainder arranged for nominated representatives to travel to a central point for individual interviews. All those nominated were men, and most spoke for their local peace, justice, or development committees. Several informants were already working to reduce armed violence as community workers for the largest organization in the Southern Highlands, the Catholic Church. To ensure accurate identification of small arms, photo recognition sheets were used to confirm descriptions. A synopsis of community meetings and group and individual interviews is separately available (Alpers, 2004). Field research in PNG totalled 30 days, 15 of which were spent in the Southern Highlands.

The most pronounced limitation of this study is its lack of women's voices. Equal gender representation was actively sought, but routinely denied. Although the author visited the majority of Southern Highlands locations said to be at high risk of armed violence, this study does not claim comprehensive coverage, particularly of the western arm of the province. Instead, it should be read as a preliminary survey of small arms availability, trafficking, use, and abuse in those parts of the province identified by both residents and observers as being of immediate concern.

SITUATION: REGION, NATION, AND PROVINCE

Guns and the Pacific

The 20 nations of the south-western Pacific are no strangers to small arms. During the Second World War, island states in the region were home to thousands of armed troops and suffered many bloody conflicts. More recently, small arms have reappeared as vectors of human-rights abuse, death, and injury in PNG, the Solomon Islands, Fiji, and even Australia. Unlike its neighbours in South-East and South Asia, the region is not afflicted with large-scale trafficking. Yet the Pacific experience demonstrates how deeply even a small number of small arms can damage small communities. Lawfully held civilian stockpiles of small arms in the Pacific include 3.1 million firearms, or one privately held gun for every ten people. This surpasses the global ratio of privately held firearms to population by more than 50 per cent. At least 26 nations legally export arms to the Pacific, with more than one half of sales coming from the United States. Small arms from China, Russia, and Eastern Europe are far less common than in other regions (Alpers and Twyford, 2003, p. 6).

Recently, a common approach has emerged to curbing the proliferation of small arms. The islands of Bougainville have successfully linked weapon disposal to aspirations for political autonomy and independence. In the widespread debate that surrounded the dispatch of the multinational armed intervention force to the Solomon Islands in July 2003, and without apparent dispute, illicit guns were seen as the most immediate impediment to that nation's recovery and redevelopment. Nothing was accorded more urgency than the drive to collect and destroy firearms and ammunition. Achieved with the conspicuous support of civil society, the Solomon Islands weapon-collection initiative is now seen as a rare and notable success. In the Pacific, there is broad consensus among governments,

donor agencies, and civil society that disarmament and the security or destruction of small arms are essential prerequisites for human security, future development, good health, and prosperity. In recent months, the focus of this new urgency has moved to the nation widely identified as the tinderbox of the Pacific—Papua New Guinea.

Papua New Guinea

Papua New Guinea, the eastern half of the world's second-largest island, was colonized by Germany and Great Britain in 1884. Administered by Australia from the early 1900s until independence in 1975, PNG is a Melanesian country of 836 indigenous languages (Waters et al., 1995, pp. 68, 70). Over 80 per cent of the population still live in rural areas, with Highlanders in particular meeting very few outsiders well into the 1950s. While PNG was mapped and named by colonists as a single country, clans and communities often continue to act with autonomy. For many, nationhood remains a notion under development.

Although PNG's 20 provinces include 600 islands spread over three million square kilometres of territorial sea, 85 per cent of the population of 5.2 million live on the mainland. A mile or so above the malarial coastal swamps, in the cool and fertile valleys of the island's spinal mountain range, Highlanders number two million, or 40 per cent of the country's people (AusAID, 2002a; PNG, 2002a). In recent years, local and international concern for the future of PNG has focused on the degeneration of law, justice, and the legitimacy of the state. The rapid proliferation of small arms; their revolutionary role in tribal warfare, crime, and political conflict; and the disruptive effect of illicit guns on the delivery of essential services now rank among the country's most acute problems.

Culture and politics

Anthropologists often notice how differently Papua New Guineans conduct their social life in comparison with ourselves PNG politics at the grandest level are not very far removed from such locally-engendered practices.

James Weiner, Australian National University (Weiner, 2002, p. 1)

From the smallest hillside community to the highest ranks of national government, the recently introduced gun culture seems to have meshed almost

seamlessly with long-standing traditions. Chief among these are local customs dealing with inter-group conflict, the seizure of advantage and assets from others by intimidation and force, claims for compensation, and the so-called *wantok* system of reciprocity. As described by the Australian National University's Sinclair Dinnen: "The term "*wantok*" (one talk) in Melanesian Pidgin literally means someone who speaks the same language. In popular usage it refers to the relations of obligation binding relatives, members of the same clan or tribe, as well as looser forms of association' (Dinnen, 1997, p. 13). In rural areas in particular, obligations to *wantoks* are at the core of an enduring, robust gift economy that links reciprocity, socio-economic obligation, status, and prestige often just as acceptably within criminal activity as in legitimate commerce (Goddard, 1995, p. 71).

Throughout the community interviews conducted for this study, the *wantok* system was seen as an ever-present obligation to obtain and share available means of influence—including firearms. In a community positioning for advantage, threat, or conflict, it was taken for granted that a member of the wider family, clan, or tribe with access to guns or ammunition should feel obliged to share them with *wantoks*. For those wishing to promote *wantoks* into civil service sinecures or electoral power, the strategic distribution of guns is also a widely accepted route to influence and votes—and, by extension, a means by which a community 'big man' attains respect and riches.

Although the demand for small arms in other societies may be equivalent, the actual supply of weapons is facilitated by dismissive attitudes to restrictions imposed by 'outsiders'. In PNG, this commonly includes laws imposed by a remote and 'foreign' system—such as national or even provincial government. Dinnen observes that in rural areas there is little sense of shared identity with the nation state, whose legal system remains culturally, and often geographically, distant: 'Allegiance to the tribe, clan and sub-clan remains stronger in most cases than to the abstract notions of citizenship, state and nation' (Dinnen, 1993, p. 2). In the span of only three five-year election cycles, these cultural factors, along with a steady supply of military- and police-issue small arms and ammunition, either gifted by or purchased from foreign powers, have combined to provide PNG—and the Highlands in particular—with sufficient guns to dramatically alter a traditionally combative, but previously less lethal, social landscape.

A slow, then sudden influx of guns

The destructive power and social impact of the gun is nowhere more apparent than in the Highlands. As well as being used for tribal, criminal, and political purposes, guns have been used to entrench further male dominance and control of women and children.

Sarah Garap, Meri Kirap Support Team, Goroka (Garap, 2004, p. 29)

Initially, firearms were slow to arrive in any number in the PNG Highlands. A few missionaries and settlers brought hunting rifles and shotguns for personal use, and in the early 1970s, Australia trained and comprehensively armed the new nation's security forces in preparation for independence in 1975. In the 1980s and 1990s, the Royal Papua New Guinea Constabulary (RPNGC) and PNGDF began importing their own small arms and ammunition from the United States, South Korea, Singapore, and Great Britain (see **Legal importation of small arms**). By the late 1980s, these stocks were already leaking out from state-controlled armouries. By 1986, home-made firearms were being deployed in organized tribal warfare in the Western Highlands (see **Tribal fighting: The effect of small arms**). In 1987 came the first report of a firearm-related death in tribal fighting in the Southern Highlands. Five years later, immediately following the 1992 national election, the province's newly installed politicians began to deliver high-powered, military-style rifles to their constituents, and the situation took a rapid turn for the worse. Today, the number, type, and source of small arms—but above all, the manner in which they are used—deserve the detailed attention that follows.

Southern Highlands Province

Control over parts of the Highlands is uncertain. Unless the legitimacy and authority of central government is restored, PNG risks degenerating into a patchwork of local fiefdoms contested by strongmen and criminals. This scenario is already being played out in the oil-rich Southern Highlands, where lawlessness and violence dominate.

Susan Windybank and Mike Manning, Centre for Independent Studies
(Windybank and Manning, 2003, p. 4)

The largest of five Highland provinces, and the most populous in PNG, Southern Highlands Province is home to more than half a million people. Hundreds of small, dispersed valley communities, undiscovered by outsiders until the 1930s,

and still only sparsely serviced by roads, rely on subsistence farming. Mendi, the only town of any size, and the nominal seat of provincial government, is home to 17,000 people. Most Southern Highlanders are very poor, and much of their land has limited agricultural potential (Hanson et al., 2001). Although many view poverty as a significant factor underlying law and order problems (PNG, 2004b, p. 1), some of the country's richest oil, gas, and mineral deposits are in the Southern Highlands. Instead of benefiting the majority, windfall mining revenues and generous aid payments are routinely diverted to a small political elite, at the expense of investment in roads, education, and health (Windybank and Manning, 2003). In this rich yet poor, predominantly peaceful yet sporadically violent rural setting, the rapid spread of high-powered firearms has promoted previously unimagined levels of social disruption and lethality.

STOCKPILES: GUN NUMBERS AND PRICES

Illicit small arms in the Southern Highlands today

There seems little doubt that every tribe in the Southern Highlands of PNG now has access to high-powered firearms (Yala, 2002, p. 10). Some claim that every village has one, while others doubt the proportion of these that are 'high-powered', centrefire rifles or pump-action shotguns. Tari District Administrator Philip Moya explains: 'Right across the SHP, every village has a factory made gun, but mainly not a high-powered gun. People are in fear of the next village having guns. They feel they must have a gun to protect themselves.' As for single-shot shotguns—a few of which are commercially manufactured, but the majority home-made—most males over the age of 18 are said to own their own (Goldman, 2003, p. 8). Inter-government Relations Minister Sir Peter Barter, the one man seen to have taken most responsibility for the Southern Highlands in recent times, says there are more guns in the province than ever there were on war-torn Bougainville (Palme, 2002).

This section describes the main types of illicit small arms found in the Southern Highlands.¹ To ensure accurate identification of firearms, photographic recognition sheets were used in all interviews.

Rifles

M16 and AR15: By wide consensus, the most desirable commercially manufactured illicit firearm in SHP is the military-issue M16 assault rifle.² Genuine M16s are most often sourced from PNGDF stocks, yet on closer inspection or questioning, an 'M16' often turns out to be its close cousin, the AR15. It is important to separate the fully automatic M16 military-issue 'machine gun' from the otherwise identical, but semi-automatic, police-issue AR15, as this single distinction can identify the

source from which the firearm was leaked. In an August 2004 national audit of small arms missing from defence stocks, the M16 came a very close second to the SLR as the most commonly lost firearm, with 433 unaccounted for. Of the 2,300–2,400 M16s delivered to the PNGDF in the 1980s and 1990s, only 1,034 (43–45 per cent) remain in state armouries (Alpers, 2004).

Preliminary results from an ongoing audit of missing police small arms show the AR15 to be the assault rifle most commonly stolen from police stocks. In 2004, seven PNGDF AR15s also remained unaccounted for. In the Southern Highlands, although the highest single estimate was 1,000, and all informants interviewed reported a combined total of only 120, the number of illicit M16s and AR15s combined is likely to be between 150 and 350.³ This represents 20–50 per cent of the combined total of these models unaccounted for in police and defence force armouries throughout the country's 20 provinces.

SLR: The Australian-made self-loading rifle, a semi-automatic version of the NATO FN-FAL military assault rifle, is older, heavier, and often more accurate than the M16 and AR15. Although ammunition for the SLR can be much more expensive, this long-barrelled rifle is valued for its range, which allows shooters to pick off targets at a safe distance. A firm favourite of experienced gunmen and mercenaries, the SLR commands the highest black-market price of any semi-automatic rifle. In the 2004 national audit of small arms missing from PNGDF armouries, the SLR was the most commonly lost firearm, with 439 examples unaccounted for. Nine examples of the fully automatic AR version were also listed. Of the 5,463 SLRs delivered by the Australian government to the PNGDF in the early 1970s, only 979 (18 per cent) remain in state armouries (Alpers, 2004).

In the Southern Highlands, community interviews and informants reported a high-end estimate of 58 known or rumoured SLRs. Among the areas reporting these rifles were Mendi, Upper Mendi, Wogia, Unjamap, Lai Valley, Tamanda, Tari, Nipa, and Kagua. This study estimates the number of SLRs in the province to be between 70 and 150. In August 2004, this represented 16–34 per cent of the SLRs unaccounted for in PNGDF armouries.

AK-47: Media reports and public statements often identify this Soviet-designed, 1947-vintage assault rifle by name, yet its spread in the Southern Highlands is more imagined than real. Across all the communities surveyed, the highest local estimates combine to suggest the presence of 15 of these weapons.

This study suggests that only 15 to 25 examples of the AK-47, or of its 160-plus variant models, exist in fireable condition in SHP. The AK-47s seen most often in the world's trouble spots are military-issue, fully automatic models capable of rapid 'machine gun' fire, of which more than 70 million were manufactured. Yet in the Southern Highlands, most versions identified during this study were restricted to slower, semi-automatic fire (Alpers, 2004). As AK-47s have always been prohibited in civilian possession in PNG, this suggests that many, if not most, of these 'AK clones' were sourced from nearby markets such as Australia and New Zealand. Until the mid-1990s, both countries allowed large-scale importation of semi-automatic versions of AK-47s for sale to private gun owners.

Gari Baki, deputy commissioner of police at national headquarters, says: 'To my knowledge, we have never confiscated an AK-47. It's an outlawed weapon.' Scepticism about the widespread presence of AK-47s in PNG is echoed by a wide range of police officers, civil servants, tribal fighters, and national security firms whose employees guard remote oilfields and city businesses alike. As two well-placed military personnel agreed: 'We've not seen any AK-47s. There's no evidence at all that they've been smuggled across the Indonesian border or on logging ships' (Alpers, 2004). One reason for the apparent scarcity in PNG of the world's most common assault rifle may be a lack of suitable ammunition. 'Lukas', a gunman for hire in Upper Mendi, remembers being given a selective-fire (automatic) AK-47 on approval for the Unjamap–Wogia tribal fights: 'I tried it, but we couldn't get bullets for it, so I sent it back.' After visiting SHP during the Mendi fights, New Zealand military adviser Lt.-Col. Andrew Morris wrote: 'The ammo for AK-47s just isn't around.' After filming a feature on weaponry in the Highlands, Australian broadcaster Shane McLeod recalled: 'This is the big issue with these guns. You can't get the ammunition for them' (see **Ammunition supply**). Despite this scarcity, the author did inspect an AK-47 variant—a smuggled, fully automatic Chinese Type 68 assault rifle—in Lai Valley (Alpers, 2004).

Other rifles: Over the years, both the military and police have trialed or purchased lesser-known rifles that remain in use, while often delaying the destruction of surplus firearms. A small number of Swiss SIG rifles have certainly leaked to illicit use. Says former Mendi police inspector Mark Yangen: 'Police give those to their relatives. If a guy runs the police armoury, and his tribe needs a gun, definitely they'll give one to them. There may be half a dozen in SHP.' The

Singaporean SR-88 assault rifle is used by both the PNGDF and police, and in 2004, the PNGDF small arms audit found 14 unaccounted for. In 2003, an elderly, ex-PNGDF German H&K G-3 assault rifle, long obsolete, turned up at a surrender ceremony near Tari. The once-ubiquitous Second World War-era .303 bolt-action rifle also survives in PNG as the short-magazine Lee-Enfield (SMLE), or Jungle Carbine. No longer in service with either the PNGDF or the RPNGC, and often identified by its distinctive sound, dozens of .303s are likely to remain in civilian, often illicit, use in the Southern Highlands. Gunmen confirm that several .303s have been hired out for inter-group fighting.

In the 2004 PNGDF small arms audit, 14 assorted Israeli Galil, British SA-80, French FAMAS, and German H&K 33E assault or sniper rifles were shown to be unaccounted for, along with two old .303s and 94 otherwise unidentified 'KP-36' rifles—a combined total of 110 'other rifles'. On the basis of field reports, in the light of police and military leakage figures, and allowing for some transfer of previously legal hunting rifles into unlawful possession over the years, this study estimates the number of illicit centrefire ('high-powered') rifles in the Southern Highlands, excluding M16s, AR15s, SLRs, and AK-47-pattern assault weapons, to be between 200 and 400.

Shotguns

The 12-gauge shotgun may be more common in SHP than any other commercially made firearm. Acquired most commonly for self-defence, kept permanently in villages and less often rented to others, shotguns are nevertheless invariably pressed into service at times of inter-group conflict. In organized fighting they seem to be deployed as noisy, short-range frighteners. As one Mt. Hagen gunman hired for tribal fights in SHP puts it: 'The boys go down with five-shots and home-mades, and they make a noise. When the enemy comes, I sit high and kill him at 300, maybe 400 metres.' In close combat, the shotgun comes into its own, especially the rapid-reloading 'five shot' pump-action weapon. Most are familiar brands: Mossberg, Winchester, Remington, Rossi, and Brazil, imported in large numbers by PNG police and defence forces, and more recently diverted to inter-group conflict and crime. In the 2004 PNGDF small arms audit, 180 shotguns remained unaccounted for. Police acknowledge that large numbers of their shotguns are missing, but have yet to complete their own audit.

Sub-machine guns

In the Southern Highlands, sub-machine guns are seen as impressive and frightening short-range weapons, but seem to lack the cachet accorded to them in urban settings—and in Hollywood. The 9 mm pistol ammunition required is scarce and expensive in SHP, and the gunmen interviewed for this study preferred more accurate assault rifles. Australia shipped several hundred of its locally designed and made F-1 sub-machine guns to PNG for jungle use during the nine-year Bougainville war. Two were later seized by SHP police in Wogia, one was discovered by a police mobile squad on the Highlands Highway, and another is said to be in illicit possession in Mendi. The F-1s were rarely used by state forces, and in 2003, 113 examples remaining in police stocks were destroyed. The 2004 audit of PNGDF stocks found a single F-1 unaccounted for. Police also stocked F-1s, but are presently unsure of the total lost. An illicit sub-machine gun is referred to in one SHP locality as '*Bulla*', which in the Semberigi tongue refers to a dog legend that is supposed to have spiritual attachments to the people. It was purchased for PGK 30,000, or USD 10,000 (Kolma, 2004). The standard RPNGC sub-machine gun is the H&K MP-5. Mendi police intelligence officer Sgt. Hosiah Perea confirms: 'We have one of those here, with Mobile Squad 8. There are five of them in SHP: three in Tari and another in Mendi. They have not leaked out.'

Machine guns

More than 100 light, medium, and heavy machine guns may be missing from PNGDF armouries alone (see Table 3b). Even mounted machine guns have gone missing from PNGDF possession. In August 2004, 12 examples of the M2 military .50-calibre heavy machine gun were unaccounted for, along with a double-barrelled, pedestal-mounted Oerlikon 20 mm anti-aircraft gun. Designed to be bolted to armoured vehicles and patrol boats, neither weapon can be safely fired without a secure mount, and ammunition for them is particularly rare. In the right hands, the firepower from just one machine gun could be devastating. Yet there is little real evidence of death and injury from such weapons, outside the nine-year war on Bougainville. On mainland PNG, and certainly in the Southern Highlands, machine guns are most commonly 'talked up', displayed as a deterrent, or fired in the air for effect. Many examples undoubtedly lack ammunition, and some are jammed beyond local repair.

Of all the illicit small arms in the Southern Highlands, the various models of machine gun are those that demand the highest level of knowledge and skilled maintenance to operate. In addition, the specialized link or belt ammunition needed to fire the heavier models is now almost impossible to obtain (Alpers, 2004). That said, there is no doubt that machine guns have been used in tribal fights, and that their potential to cause high levels of injury and mortality remains, to say the least, serious. To date, the main effect of machine guns in the Southern Highlands may be psychological. PNGDF-issue link ammunition belts, though scarce, contain tracer bullets, typically at a ratio of 1:20. When fired into the air at night, these incendiary tracers can make a highly visible and noisy pyrotechnic statement to neighbouring clans. According to one mercenary gunman, this was particularly true in the battles around Mendi, where MAG-58s or M-60s could be moved from one allied community to another by day, then fired for display at night—until the ammunition ran out. This practice, combined with the clan habit of ‘talking up’ machine guns, suggests that the real number of such weapons in fireable condition may be much lower than the grapevine would have us believe. At a community meeting in Nipa, one resident explained: ‘Sometimes, village men say they have a big machine gun when they have no gun. They want enemies to be fearful.’

Handguns

According to Supt. Simon Nigi, provincial police commander for the Southern Highlands: ‘Handguns are uncommon. Only “big men” carry handguns for protection. They’re less common here than in Port Moresby.’ Although tribal fighters said they had little use for pistols and revolvers, seeing them as toys of the elite, other informants reported that concealed handguns are carried to town in the Southern Highlands for protection. Pistols and revolvers are also used in hold-ups, kidnapping, and other crime. Photos of police-issue SIG semi-automatic pistols and older S&W police revolvers are commonly recognized by Highlands gunmen and villagers, as are PNGDF-issue Browning semi-automatic pistols supplied in a defence deal from Australia. In the 2004 PNGDF audit of small arms, 145 of these Brownings remained unaccounted for.

Hand grenades, grenade launchers, and RPGs

Hand grenades and grenade launchers have been used in tribal fights in the Highlands (Alphonse, 2001; Gumuno, 2004). One of the most popular police weapons is the CIS 40 mm grenade launcher, which officers sometimes even carry unloaded if they lack a firearm. These are said by RPNGC headquarters to be exclusively for use with CS 'tear gas' grenades. The M203 under-barrel-mounted 40 mm grenade launcher was also fitted to a number of military and police rifles, and although grenades for these are said to be scarce, there is little doubt that they too could be in illicit possession in the Highlands. James Pile, an American anthropologist working in Enga Province, was told of a weapon that has grown in the retelling to destroy houses, cars, and groups of warriors with a single shot. Called 'the 38', this is likely to be the original 38 mm CIS grenade launcher imported for police use. Loaded with a high explosive (HE) round, this is perhaps the only hand-held weapon in PNG capable of such explosive force. The dreaded '38' has not been sighted for some time, and once again, lack of ammunition seems a probable cause.

Rocket-propelled grenade launchers (RPGs) are almost as frequently recognized from media images as AK-47s, yet in reality they seem even less common. To date, no verifiable reports of the use of RPGs in the Highlands have been found. In the 2004 PNGDF small arms audit, 52 grenade launchers and ten RPG launcher tubes remained unaccounted for. An audit of RPNGC grenade launchers has yet to be completed.

Mortars

Although mortars were reported in battles around Mendi (Forbes, 2002), and six 81 mm mortar tubes were listed as unaccounted for in the 2004 PNGDF small arms audit, all police, military, and security sources interviewed doubted that illicit, usable mortars—and just as importantly, the ammunition and specialist skills needed to use them—are available in the Southern Highlands.

Surface-to-air missile launchers

The most prominent person to claim the presence of man-portable air defence systems (MANPADSs), such as the Stinger or SAM-7 shoulder-launched anti-aircraft missile, was Koroba/Kopiago Highlands District Administrator Stanley Kotange.

In a letter warning that aircraft would be shot down if they attempted to deliver ballot boxes on his patch during the 2002 election, Kotange said some locals had surface-to-air missile launchers (Haley, 2004, p. 19).⁴ This claim was widely discounted, and no sightings have been verified.

Table 1 Estimated number of illicit, commercially made, high-powered firearms in SHP

Type	Low estimate	High estimate
M16, AR15	150	300
SLR	70	150
AK-47 and variants	15	25
Other high-powered rifles	200	400
Pump-action shotgun	60	150
Sub-machine gun	2	3
Machine gun	3	12
Total	500	1,040

Source: Alpers (2004)

Factory-made firearms

In addition to the 'high-powered' firearms discussed above (see **Definitions**), an equivalent number of factory-made handguns; .22 rimfire rifles; and single-barrel, single-shot shotguns are undoubtedly kept among the same population. Typically, a village leader might keep a single rifle or shotgun for communal protection, while others retain a handgun to carry concealed, particularly when in town. This study estimates the total number of fireable, licensed and unlicensed, factory-made firearms in the Southern Highlands to be 2,450, for a rate of 4.9 commercially made firearms per 1,000 people. By comparison, New Zealanders are reported to own as many as 250 legal and illegal firearms per 1,000 people (Thorp, 1997, pp. 26, 32). However, given the focus of the Southern Highlands small arms debate on 'high-powered' weapons, their disproportionate capacity for serious and lethal injury, the recent surge in their use in tribal fights and other crime, and the difficulty of counting less-powerful firearms, this study concentrates on the narrow range of military-style long guns that are of most concern to Highlanders.

Home-made guns

Home-made firearms add significantly to the arsenal of criminals and combatants, primarily as a substitute for expensive or unobtainable commercial firearms. In PNG, a thriving market in these weapons has existed since the late 1980s. There is little doubt that home-made guns are now ubiquitous in the Southern Highlands. Some even claim that there is 'one for every man'. In Mendi, installing galvanized-steel water pipes above ground is seen as an invitation to theft. When building, some residents prefer plastic pipes, which are less useful for making gun barrels.

Yet the relative importance of home-made weapons in the Pacific has often been overstated. In reality, a length of untempered water pipe firing mismatched ammunition can be as dangerous to the user as it is to the target, and craft manufacture is seen as a last resort. Single-shot shotguns, smoothbore pistols, and long guns are the only home-made firearms discovered to date, and these cannot be compared in terms of range, accuracy, and firepower to mass-produced repeating firearms with rifled barrels and matched ammunition. Water-pipe pistols firing shotgun shells spray small pellets in an unfocused cone, and are unlikely to kill at more than a few metres. Fearing explosive blowback, few owners of home-made long guns will risk pressing an eye to the weapon in order to aim it. Reliability can also be a problem. Collecting his son from a Port Moresby sports ground, one expatriate businessman survived a carjacking when the home-made gun pressed to his head failed to fire—three times in succession (*Post-Courier*, 2004e).

There is no evidence of local production of rifled barrels, nor of multi-shot firing mechanisms such as pump-action or lever-action, semi-automatic or automatic firearms in the Southern Highlands, nor indeed in the south-western Pacific (Alpers, Twyford and Muggah, 2004, p. 288). Although ammunition salvaged from Second World War stockpiles did provide an incentive to build compatible home-made guns in the Bougainville and Solomon Islands conflicts, Japanese and Allied troops rarely ventured into the Highlands, and no such stockpiles are known there.

The limitations of home-made firearms combine to greatly reduce their relative lethality. In community interviews for this study, injuries from such weapons were said to be common, but rarely life-threatening. By consensus, home-made firearms are responsible for only a small minority of gun-related homicides.

Table 2 Black-market firearm prices*

Type/Model	Lowest	Highest	Average**
High-powered rifles	PGK (USD)	PGK (USD)	PGK (USD)
M16	4,000 (1,330)	16,000 (5,330)	9,500 (3,170)
AR15	4,000 (1,330)	15,000 (5,000)	9,000 (3,000)
SLR	8,000 (2,660)	25,000 (8,330)	12,150 (4,050)
SIG	8,500 (2,830)	12,000 (4,000)	10,250 (3,420)
AK-47	5,000 (1,670)	8,000 (2,660)	6,500 (2,170)
.303	4,500 (1,500)	10,000 (3,330)	6,400 (2,130)
Machine guns			
MAG	20,000 (6,660)	45,000 (15,000)	32,000 (10,670)
Ultimax	15,000 (5,000)	40,000 (13,330)	25,600 (8,530)
M-60	15,000 (5,000)	40,000 (13,330)	23,750 (7,920)
Sub-machine guns	22,000 (7,330)	30,000 (10,000)	21,700 (7,230)
Pump-action shotguns	5,000 (1,670)	15,000 (5,000)	8,200 (2,730)
Handguns			
Revolver	500 (165)	5,000 (1,670)	2,850 (950)
Semi-automatic pistol	2,000 (670)	15,000 (5,000)	6,600 (2,220)
Home-made guns	120 (40)	250 (80)	180 (60)

Source: Alpers (2004)

* Amounts paid and asked for black-market firearms were reported in each community meeting, and in all interviews with firearm users and other informants (Alpers, 2004). Gun prices were also quoted in various newspaper reports.

** These averages are calculated from all of the low and high prices collected, not just from the single lowest and highest prices cited in columns 2 and 3.

Global costs

For two of the firearms discussed above, international black-market prices are well known. Single, used M16s have sold in recent years for USD 100 in Somalia, USD 2,000 in Brazil, USD 3,000 in Colombia, and USD 10,000 in the Palestinian Territories. During the same period, AK-47s sold for USD 10 in Afghanistan, USD 40 in Cambodia, USD 100 in Nigeria, USD 250 in Pakistan, USD 800 in Colombia, and USD 3,000 in the Palestinian Territories (Small Arms Survey, 2002, pp. 66–7). By comparison, M16s and AK-47s in PNG sell in the middle-to-high range of global black-market prices. The Southern Highlands market may not prove sufficiently profitable to attract M16s smuggled from abroad, but should ammunition of the required type become available, much cheaper AK-47s sit ready and waiting in a

variety of Asian nations linked by shipping routes to PNG. Assuming that domestic small arms supply constricts as state armouries become more secure, and that demand remains high in the Highlands, both suppliers and middlemen could profit from current price differentials on the AK-47 and its many variants.

TRANSFERS: SOURCES AND ROUTES OF SUPPLY

Internal theft: the major source of illicit guns

The challenge for Pacific Island law enforcement officials is how to manage and control the weapons in our communities which are held for 'legitimate' reasons and prevent them from being converted and internally trafficked to illegitimate/unlawful uses.

Terry Allen, law enforcement training officer, Pacific Islands Forum
(Allen, 2004)

Very few commercially made, high-powered firearms are smuggled into PNG from foreign countries. Instead, the majority are stolen from fellow countrymen who own them legally, but fail to keep them securely. Most of these leak from state-owned stocks, although many are also taken from lawful owners during burglaries and in other crime. In recent years, soldiers and police provided the most destructive firearms used in crime and conflict in PNG.

Thefts from police

The Royal Papua New Guinea Constabulary employs just under 5,000 sworn police officers. In their day-to-day work, probably less than 10 per cent of officers on general duties carry firearms. The RPNGC also employs 1,703 reservists, who are even less likely to be lawfully armed. However, handguns (revolvers and pistols), pump-action shotguns, rifles, grenade launchers, sub-machine guns, and machine guns are all kept in police stations, including the Southern Highlands provincial police headquarters in Mendi. Although police sometimes claim to be less well armed than the criminals they face, this is not supported by the evidence (Alpers, 2004). RPNGC regulations supposedly limit police firearms to semi-automatic fire, reserving fully automatic 'machine guns' for military use. Despite this,

police use of automatic weapons has grown.⁵ In particular, members of the police Mobile Squads—paramilitary trouble-shooters who move around each province responding to violent crime, armed conflict, and political tensions—carry their own, more powerful armoury.

Over the years, thousands of small arms and tons of ammunition have been imported for police use. A large proportion of these have gone missing. Between January 1989 and September 1995, police acknowledged the disappearance of about 85 high-powered military firearms (Philemon, 1996, p. 1). In December 2000, almost 100 police firearms were reported missing, including ten machine guns, 32 M16 automatic assault rifles, 25 SIG Sauer pistols, and five semi-automatic shotguns, along with thousands of rounds of ammunition.⁶ An audit the following year estimated that as many as 600 firearms were missing from police armouries. In 2004, when asked if this was accurate, Deputy Commissioner of Police Gari Baki said there could be many more unaccounted for. The problem is, no one yet knows. Despite successive governments announcing that they had ordered a stock-take of state-owned small arms, no RPNGC figures emerged—nor, it appears, were they ever compiled. Then in 2003, Australian Federal Police (AFP) sponsored an audit of all PNG police armouries and ammunition magazines. It began badly, with an RPNGC quartermaster estimating that: ‘sixty per cent of RPNGC weapons are missing in East Sepik province.’ Said the officer in charge of the national audit, Supt. Vincent Kaian: ‘We’ve visited seven provinces, with 13 to go. The five Highlands provinces come next ... we won’t finish those this year [2004]. In one province, 50 per cent of weapons were missing, but we got that down to 35–40 per cent. We found some of them had been moved without authorization to other [police] locations.’

In October 2004, with two-thirds of the country’s provincial commands yet to be audited, police headquarters logistics adviser Mal Malikienas reported that ‘about 30 per cent’ of RPNGC small arms seem to be missing. Although years of ineffective record keeping mean that accurate starting figures ‘just aren’t known’, Malikienas recalls that, in the early stages of the audit: ‘I was looking for a total of 5,200 [police small arms]. About 400 of those were U/S [unserviceable]. We destroyed those.’ If the remaining 4,800 represent an accurate assessment of police-issue firearms that should still be in stock, at the current audited loss rate of 30 per cent, at least 1,440 RPNGC small arms are likely to have leaked into illicit possession.

The government minister responsible for police, Bire Kimisopa, has singled out the Mobile Squads as the 'problem area' of firearm and ammunition loss (*Post-Courier*, 2003h). Deputy Commissioner of Police Gari Baki doubts this. 'Ninety per cent go missing from general duties staff. We have no controls there. Shotguns, gas guns [grenade launchers], AR15s, .38 revolvers, all go missing. We bought gun safes for smaller stations, and now the safes have gone.'

Diversion of crime guns

In addition to their own police-issue firearms, RPNGC personnel are responsible for the safekeeping of weapons seized in crime, often as exhibits in future prosecutions. In the first half of 1996, for example, the *Post-Courier*, a national newspaper, contained 23 reports of firearms being confiscated by police (Ivarature, 2000, p. 16). RPNGC procedures require that crime guns, when no longer needed for a court case, must be sent to Port Moresby for forensic examination, then permanent disposal. Asked how many of these guns are actually delivered for destruction, an adviser at RPNGC HQ laughs: 'Oh, none of them get here. Procedures are totally ignored.' Jeffrey Lamb, the acting police quartermaster who should receive seized crime guns, concurs. Although he says an average of ten firearms are confiscated each month in the provinces and in Port Moresby, and despite many letters to provincial police commanders and prosecutors to remind them of their obligations, in the past two years, 'not more than five have been sent to us. It's crime and corruption, not laziness. The arresting or investigating police officers or the prosecutors sell the confiscated firearms. The weapons keep rotating back to the criminals.' There can be another explanation. Says Deputy Police Commissioner Gari Baki: 'Due to lack of resources, some police are armed with what they confiscate.'

Police officers have been caught committing armed crime and hiring out police guns to others for the same purpose (Alpers, 2004). The core motivation seems economic. Given the demand for weapons and the high prices offered, a confiscated crime gun may be the single most valuable, portable, and tempting object lying around a police station. On his weekly pay of PGK 82 (USD 27), a police officer in charge of a confiscated SLR rifle could be looking at nearly three years' wages.

Thefts from the military

It is easier for criminals to acquire service weapons from the Defence Force than to smuggle them in from overseas.

Classified PNGDF Defence Intelligence minute, February 1994 (*National*, 1999)

The PNGDF is an overstaffed, ineffective institution under siege. In March 2001, a Commonwealth Eminent Persons Group (EPG) review recommended slashing troop numbers from over 4,000 to just 1,900. Soldiers at Murray Barracks, near Port Moresby, raided the armoury and forced the prime minister to back down. The Commonwealth review noted ‘indiscipline, drunkenness and theft of arms ... [and] uninvestigated and unexplained losses [of small arms]’, and lamented the low penalty for loss of a weapon—PGK 40, or USD 13 (Commonwealth EPG, 2001). One defence diplomat commented that the PNGDF had ‘far too many weapons for the size of its force’.

It became clear that as far back as 1994, PNG defence officials had been aware of a serious problem with weapons theft. Leaked internal documents reported ‘non-enforcement of weapon accountability’ and ‘a booming black marketing of PNGDF weapons’. At least 42 high-powered military weapons had gone missing from defence force armouries since 1991 (*National*, 1999). In November 1996, after a bloody shootout between police and criminals using PNGDF-issue M16s and a grenade launcher, Defence Minister Mathias Ijape demanded a full small arms stock-take from the PNGDF within a fortnight (*Weekend Australian*, 1996). None eventuated. In 2002, defence force commander Brig. Peter Ilau announced that the total number of weapons stolen from PNGDF armouries around the country, including those lost during the nine-year war on Bougainville, totalled 300 (Sela, 2002b). Until recently, this was the only estimate available.

In August 2004, a complete audit of PNG’s military armouries was provided for inclusion in this study. Conducted by PNGDF staff with the help of Australian Defence Force (ADF) logistics advisers, it covered all locations in which small arms, light weapons, ammunition, and explosives are stored by defence forces. The officer responsible for the project, Col. Joe Fabila, Operations Support commander at PNGDF HQ, recalls: ‘To begin with, we had about 9,000 small arms on record. Almost all of them are firearms. The early figures could be incomplete, so

that figure may have actually been as high as 10,000. As of today, 1,501 small arms are known to be unaccounted for. We're sure these figures are accurate.'

Table 3a PNGDF audit: Small arms unaccounted for, August 2004*

Description	Model	Type	Calibre	Number unaccounted for	Origin
SLR	L1A1	Semi-automatic rifle	7.62 mm NATO	439	Australia
	M16A1	Automatic rifle	5.56 mm	69	USA
	M16A2	Automatic rifle	5.56 mm	273	USA
	M16A2	Automatic rifle (carbine)	5.56 mm	69	USA
Bushmaster	M16	Automatic rifle	5.56 mm	22	USA
Colt	AR15	Semi-automatic rifle	5.56 mm	7	USA
	SR-88	Automatic rifle	5.56 mm	5	Singapore
	SR-88	Automatic rifle + grenade launcher	5.56 mm + 40 mm	3	Singapore
	SR-88A	Automatic rifle (collapsible butt)	5.56 mm	5	Singapore
	SR-88A	Automatic rifle (carbine)	5.56 mm	1	Singapore
Enfield Sterling	SA-80	Automatic rifle (carbine)	5.56 mm	1	UK
FAMAS	F-1	Automatic rifle	5.56 mm	3	France
FAMAS	G-2	Automatic rifle	5.56 mm	8	France
H&K	H&K 33E + H&K 79	Automatic rifle + grenade launcher	5.56 mm + 40 mm	1	Germany
Galil		Sniper rifle	7.62 mm	1	Israel
Bolt-action rifle		Rifle	.303	2	UK
	KP-36	Rifle		94	
FN	P-90	Sub-machine gun	5.7 mm x 28 mm	2	Belgium
	F-1	Sub-machine gun	9 mm	1	Australia
Mossberg		Pump-action shotgun	12 ga	58	USA
		Pump-action shotgun	12 ga	4	
Rossi		Shotgun	12 ga	63	
Brazil		Shotgun	12 ga	27	Brazil
Winchester		Shotgun	12 ga	1	USA

Table 3a PNGDF audit: Small arms unaccounted for, August 2004*(con't)

Description	Model	Type	Calibre	Number unaccounted for	Origin
Assorted home-made		Shotgun	12 ga	27	PNG
Browning High-Power	L9A1/1935	Semi-automatic pistol	9 mm	116	Belgium
Colt		Semi-automatic pistol	.45	1	USA
SIG Sauer		Semi-automatic pistol	9 mm	9	Switzerland
SIG Sauer	P228	Semi-automatic pistol	9 mm	3	Switzerland
	SS1V1	Semi-automatic pistol	9 mm	15	Indonesia
Gecado	Boot pistol	Pistol		1	Germany
Bren		Light machine gun	7.62 mm NATO	43	Australia
Ultimax-100	Mk2	Light machine gun	5.56 mm	10	Singapore
AR		Machine gun	7.62 mm	9	
Russian Type MG		Machine gun	7.62 mm	10	
	M-60	General-purpose machine gun	7.62 mm NATO	9	USA
	MAG-58	General-purpose machine gun	7.62 mm NATO	8	Belgium
Machine gun, .50 cal		Heavy mounted machine gun	.50	12	USA
Oerlikon		Heavy deck-mounted machine gun	20 mm	1	Switzerland
	M203	Under-barrel grenade launcher	40 mm	25	USA
	M79	Grenade launcher	40 mm	27	USA
	RPG-7	Rocket-propelled grenade launcher		10	
	F-2	Mortar tube	81 mm	6	
Total				1,501	

* For more accurate weapon descriptions, and to fill gaps in this information, see Alpers (2004).

Table 3b PNGDF audit: Total weapons unaccounted for by type, August 2004

SLR	439	Sub-machine guns	3
M16	433	Machine guns	89
AR15	7	Heavy machine guns	13
SR-88	14	Total machine guns	105
FAMAS	11		
SA-80	1	Shotguns	180
Galil	1	Pistols	145
H&K 33E	1		
Total assault rifles	907	Grenade launchers	52
Other rifles	96	RPG tubes	10
Total rifles	1,003	Mortars	6

Source for Tables 3a & b: Col. Joe Fabila, Operations Support commander, Department of Defence, PNGDF HQ, Boroko, NCD

The missing weapons

In the tables above, the most common PNGDF firearm unaccounted for is the Australian-made SLR assault rifle, followed very closely by the US-made military assault rifle, the M16. These are also the two most popular rifles in armed conflict in the Southern Highlands. The firearm in third place is the Belgian-made Browning semi-automatic pistol, supplied by Australia. Unlike the rifles, few of the Browning pistols are seen or reported in the Southern Highlands. In this August 2004 audit, the total number of weapons unaccounted for, at 1,501, was five times the highest number previously estimated by the current administration or any of its predecessors (Sela, 2002b). The 102 machine guns unaccounted for may indicate a potential future risk, should their specialized link-belt ammunition become more widely available. Likewise, the ten missing launcher tubes for RPGs may be of concern only if an existing owner can obtain the scarce projectiles.

Of considerable international interest could be the two FN P-90 sub-machine guns currently unaccounted for. These exceedingly rare and powerful, next-generation firearms were developed for the exclusive use of military and police. According to the manufacturers, a round of specially designed SS-190 ammunition from the P-90 can penetrate 48 layers of Kevlar body armour at a range of 200 m (FN Herstal, 2004). Even if not accompanied by this equally restricted ammunition, the two P-90s could command the highest black-market price of any item on the list.

The 2004 PNGDF audit reassessed

Soon after the August 2004 PNGDF audit of ‘small arms unaccounted for’ (see Table 3a) reached the office of the minister of defence, an immediate recount was ordered. PNGDF personnel, aided by logistics advisers from the ADF, attempted once more to assemble an accurate list of small arms missing from military stocks. In October 2004, the PNGDF’s computerised small arms inventory was updated to show a total of 694 defence force firearms ‘reported missing’. The adjustments made between the August 2004 audit (1,501 small arms ‘unaccounted for’) and the October revision (694 small arms ‘reported missing’) were attributed to ‘human error and paperwork mistakes’ made in previous counts.⁷

Box 1 The pedestrian and the machine gun

On a suburban street near Port Moresby, around 6.30 a.m. one morning in September 2004, a sharp-eyed expatriate businesswoman spotted a pedestrian lugging a MAG-58 machine gun. A reserve police officer, she stopped at once, and persuaded the man to part with it. Although further cooperation was not forthcoming, the large, modern, Belgian-made weapon—minus its removable barrel—appeared so new that it had never been fired. Adding to the mystery, military and police advisers reported a total absence of serial numbers. Indeed, there was no sign that the general-purpose machine gun had ever been stamped with one. Describing the MAG-58 as their first-ever discovery of a genuinely untraceable, potentially smuggled high-powered firearm, police called this ‘very unsettling’ (Post-Courier, 2004r).⁸

Raids on military armouries

I’m the most powerful man in the country. I hold the key to the armoury.

A Pacific Island delegate, speaking at a small arms seminar in Tokyo⁹

The deep-seated problems that afflict the PNGDF are many and varied. For the country’s civilians, the lack both of armoury security and personal accountability for weapons may prove to be the two most disruptive and lethal. The flow of small arms from PNGDF stocks is now seen to have been staunched, in the main due to an Australian-funded armoury improvement programme (see Box 2).

Box 2 Building new armouries

In recent years, Australia and New Zealand have prioritized development assistance for armoury management in Pacific Island nations, providing training and funding to secure small arms held by military and police. Both nations see disarmament and weapon-destruction programmes as essential prerequisites for peace, human security, and development. In PNG, Australia's Defence Cooperation Programme has provided seven new armouries for the PNGDF: three in the Port Moresby area (Murray, Taurama, and Goldie River Barracks), Igam Barracks in Lae, Moem Barracks in Wewak, the Lombrun patrol boat base on Manus Island, and at Vanimo, near the border with Indonesia. The armouries were constructed over two years at a cost of more than PGK 7 million, or USD 2.3 million (*Post-Courier*, 2003f). Since the new facilities were handed over in 2002 and 2003, there has not been a single loss due to inadequate physical security arrangements (Crane, 2004).

The Defence Cooperation Programme has also facilitated the destruction of large quantities of surplus small arms and explosives, logistics training for PNGDF staff, and a 100 per cent physical stock-take of all military small arms. In August 2004, Australia committed itself to fund a PNGDF asset register over the next five years (*National*, 2004e).

Although the defence relationship between Australia and its Pacific neighbours permits the ADF to help build weapon armouries and ammunition magazines for defence forces—and where there is no defence force, to assist local police with physical security—the ADF is currently unable to help, for example, the RPNGC to rebuild police armouries, given its sole relationship in PNG with the defence force (Crane, 2004).

Although storage was undoubtedly improved, many weapons had already gone. Over the years, military and police small arms, pilfered one gun at a time, seem sure to have put more weapons onto the black market than any other method. Yet the largest headlines have been reserved for fully fledged mutinies, in which disaffected soldiers headed straight for the armoury. From 1998 to 2002, at least nine thefts of PNGDF small arms made it into the news, ranging in size from a single assault rifle to a minimum of 128 firearms in a single 'mutiny'. The author

was told by an officer who was present at the time that the two-week siege at Moem Barracks in 2002 was 'a gun theft which went wrong They were stealing to order for the Southern Highlands elections.' Many missing defence force weapons have surfaced in armed crime, often in the hands of serving or former PNGDF personnel (Alpers, 2004).

Thefts from prisons

The Papua New Guinea Correctional Services employ 1,279 uniformed staff, detaining approximately 3,000 inmates. Across 18 prisons, guards are issued with more than 100 firearms on each shift. On any given day, another 100 staff may draw firearms for 'duty travels', or escorts. Operational stocks greatly exceed the service's daily use of small arms. PNGCS Commissioner Richard Sikani reports that PNGCS armouries hold about 500 AR15 semi-automatic assault rifles, up to 100 sub-machine guns, 700–800 shotguns, and 280 S&W .38 revolvers. In addition, the central PNGCS armoury at Bomana contains an unknown quantity of Second World War and later small arms, many of them .22 rifles, some of which have been disabled for parade-ground use. The total firearm inventory is estimated at 3,000. All in all, the PNGCS stocks more than twice as many firearms as it employs staff to use them.

In 1989, at the start of the nine-year war on Bougainville, the PNGCS lost around 100 firearms when its provincial prison was over-run. In 2003, several correctional officers were charged with lending prison guns to criminals to commit offences. Said Correctional Services Minister Peter Oresi: 'In most cases it is officers in responsible positions such as commanding officers, armourers or security officers who abuse their positions to obtain [this] deadly equipment' (*Post-Courier*, 2003g). PNGCS Commissioner Sikani recalls: 'I charged about four officers and dismissed them. Twelve arms were lost, but we recovered eight.'

The number of small arms remaining in control of the prison service is unknown. In May 2004, the PNGCS began a full small arms stock-take, predicting it would be completed 'within 1–2 months'. Four months later, Commissioner Sikani reported the stock-take had stalled, 'due to lack of funding'. For more than a decade, the prison service has received neither the public scrutiny, audit demands, and security inspections, nor the development assistance accorded to police and defence small arms inventory control.

Other armed agencies

In June 2004, Internal Security Minister Bire Kimisopa announced his government's intention to coordinate the small arms inventory control of all armed agencies, including 'Airport Security, Department of Civil Aviation, PNG Harbours Board, PNGDF and police' (*Post-Courier*, 2004f).

Cross-border smuggling: myth or reality?

We don't have the ability to control our land borders.

Gari Baki, deputy commissioner of police

Politicians and journalists often repeat the assumption that foreign gun-runners are responsible for supplying PNG with small arms and ammunition. Yet allegations of cross-border smuggling are rarely supported by evidence. No interdiction authority, domestic or foreign, claims to know of an illicit small arms shipment of any size destined for PNG. When asked if he had seen any evidence of high-powered weapons smuggled from abroad, Gari Baki, deputy commissioner of police in charge of operations, replied: 'No, I don't know of any [of those being] smuggled. I haven't seen any. No one has shown us the guns.'

All the way up to the highest ranks, police and military officers and observers cite deficiencies in their forces that preclude effective border monitoring (Jeffrey, 2001; *National*, 2004c). Yet this seems to lead merely to an assumption that borders are the problem. In reality, as this study shows, firearms smuggled from foreign countries make up only a small proportion of those seized, sighted, and reported. Over the years, only isolated examples of firearms produced in illicit factories in the Philippines and ex-military weapons from Vietnam and other countries in South-East Asia have been discovered in PNG (Atkinson, 2000, p. 93). Several informants for this study also reported illicit semi-automatic look-alikes of military rifles in the Southern Highlands. From the late 1980s, 'clone' versions of M16s, AK-47s, and similar weapons—limited to fire only in semi-automatic or single-shot mode—were widely marketed to civilians in Australia and New Zealand by dealers who described them as 'assault rifles'. The most likely trafficking routes for these and other illegal small arms and ammunition are discussed below.

International sea lanes

PNG offers a variety of coastal entry points for illicit small arms. Cargo vessels from Asia regularly visit the mainland ports of Madang and Lae, on the north-east coast. From there, smuggled goods are easily moved inland on the Highlands Highway. Although the country's southern capital is not linked by road to the Highlands, Port Moresby is another entry point for international sea freight. Customs port inspections are rare, and often less than thorough. Much of PNG's coastline is unpatrolled, and small vessels have also been used for smuggling. In early 2003, police seized a Glock pistol and four small boxes of shotgun, rifle, and machine gun ammunition from a yacht near the north-eastern port of Alotau. The consignment was said to be destined for the Highlands, and although an Australian citizen was arrested, he refused to reveal the origin of the shipment.

Torres Strait

The Torres Strait, a shallow sea spanning the 100 km between PNG's Western Province town of Daru and Australia's northern tip at Cape York, is bounded by the Arafura Sea to the west and the Coral Sea to the east. Littered with more than 150 islands, only 17 of which are inhabited, the strait is recognized as a smuggling route for both commodities and people. In the early 1990s, local newspaper reports based almost entirely on conjecture coined a 'guns for drugs' trade across the Torres Strait. Concerned, and largely to establish the extent of any such trade, law enforcement, customs, and other officials from both countries created the annual Australia-Papua New Guinea Cross-border Crime Conference. AFP recall that when the conference was convened in 1993, 'the main problem that confronted law enforcement officials on the two sides of the border, or across the Torres Strait, was the issue of drugs and guns ... following considerable reporting in mass media in both countries regarding the so-called "Guns for Drugs" trade' (Ranmuthugala, 2003). As the stories of gun-running were amplified through political circles, Canberra set out to sort rumour from fact. In February 1995, AFP offered their PNG counterparts a free gun-tracing service 'to ascertain the amount of firearms that are arriving illegally in PNG and sourced back to Australia'.¹⁰ In the eight years that followed, AFP files reviewed for this study show that only a handful of illicit firearms seized in PNG were traced to cross-

border smuggling.¹¹ An AFP report concluded that the Australia/PNG gun trade was 'quite insignificant' (Keelty, 2000, p. 77).

On the Australian side of the sea border, and so not included in the AFP trace figures, was a cache connected to the *Organisasi Papua Merdeka* (OPM), a secessionist movement in West Papua. In August 1997, 'six military-style firearms were located on Boigu Island and an Australian of West Irianese origins, who had previously been convicted and imprisoned for conspiracy to traffic weapons to the OPM through PNG, was arrested' (McFarlane, 1998, p. 5). This man's gun-running seemed politically motivated, and although the firearms would surely have been walked through PNG's Western Province, they were destined for use across the border in Indonesia (Keelty, 2000, p. 77). Evidence more relevant to the PNG Highlands was also emerging, and in 1998, an Australian Institute of Criminology paper reported that:

... trafficking in cannabis and weapons in the Torres Strait/Gulf of Carpentaria region, using small boats, fishing vessels or light aircraft is of particular concern to the [PNG/Australia] bilateral relationship. These weapons are sold on to Highlanders who use them in tribal fighting, to raskol gangs, to the Organisasi Papua Merdeka (OPM—Free Papua Movement) in West Irian, and possibly even to the Bougainville Revolutionary Army, and they contribute to the serious law and order problems currently faced by PNG. The trade generally involves shotguns or .22 rifles, but have [*sic*] also involved handguns and military style weapons. The demand for firearms in PNG is increasing, particularly in the Highlands which is also the centre for the production of most of the 'Niugini gold,' that is high quality PNG cannabis, and Daru appears to have emerged as a centre for the purchase of illicit firearms. PNG does not have the resources or manpower to effectively police its extensive land and sea borders (McFarlane, 1998, p. 4).

In September 2000, the *Sydney Morning Herald* cited unnamed sources to claim that:

An elaborate network of Australian and Asian criminals is smuggling thousands of automatic and semi-automatic weapons, some of which were hidden during Australia's 1996 gun amnesty, into the Papua New Guinea Highlands in exchange

for top quality marijuana. The weapons—which include M16s, AK47s, SLRs and automatic shotguns—are being used extensively in murderous tribal fights ... increasingly large quantities of high quality marijuana, known as ‘PNG Gold’, are being shipped out of ports—including Daru and possibly Lae—for northern Australia in return for guns (Daley, 2000).

All four gun models named by the *Herald* reporter had long been scarce and prohibited firearms in Australia. But within PNG, M16s and SLRs were leaking in their hundreds from local military and police stocks.

Certainly there was evidence of some cross-border trade in drugs for arms. Various Australian authorities had intercepted small numbers of handguns, rifles, semi-automatic firearms, and shotguns *en route* to PNG. Seizures included an air rifle worth USD 80 being exchanged for three kilograms of cannabis worth USD 12,000; and two rifles, a magazine, ammunition, and USD 350 swapped for ten kilograms of cannabis. In 2000, an AFP submission to a parliamentary inquiry investigating Coastwatch, Australia’s customs border monitoring service, described PNG/Torres Strait drug-running operations as ‘ad hoc, opportunistic and unsophisticated, albeit effective’ (Saunders, 2000). Then in March 2001, a detailed presentation to a United Nations conference summarized the ‘guns for drugs’ evidence collected by all relevant authorities in both countries:

Over the last eight years, the Australia–PNG Cross Border Crime Conferences have noted a continuing low level of weapons smuggled into PNG from Australia across the Torres Strait, generally in exchange for cannabis from PNG. However, most of these weapons appear to have been handguns, .22 and higher calibre hunting rifles and shotguns, with no single consignment of sufficient size to attract specific law enforcement attention... There is no evidence of any significant consignments of weapons from Australia, prohibited under the ‘buy-back’ scheme, being smuggled into Papua New Guinea or other Pacific Islands states in preference to being surrendered to police in Australia (McFarlane, 2001, pp. 17–19).

In January 2002, PNG police busted a small arms smuggling ring in Daru, capturing a bolt-action rifle, a handful of .22 pistols, and two semi-automatic rifles.

But all the available evidence was now in, and the 2003 Cross-border Crime Conference was told:

The old story of drugs for guns is almost history now ... Other than handguns, the Australian underworld does not possess marketable quantities of firearms of the type in demand in PNG. Recent seizures indicate that the trade is limited largely to handguns, shotguns and sporting rifles of small calibre ... [in the Highlands] the demand appears to be for assault type weapons, like AK-47s, SLRs and similar military style firearms. Both anecdotal evidence and the evidence from seizures back this premise ... It is extremely unlikely that these guns came from Australia (Ranmuthugala, 2003, pp. 2–3).

In 2004, police forensic scientists and others discounted 30-year-old rumours of a significant cross-border trade in 'Niugini Gold'. Said Nerys Evans, drug squad intelligence coordinator for Australia's largest state: 'There isn't any PNG cannabis on the streets of New South Wales, and if there was, we'd know about it.' As in the second-largest state of Victoria, imported cannabis has been replaced by locally grown, more potent strains developed in the Netherlands.¹²

Yet the Torres Strait remains a shallow sea of uninhabited islands, waiting as stepping stones for smugglers moving in either direction. Each year, as many as 26,000 'qualifying residents' from PNG villages visit their relatives on Australia's Torres Strait Islands, armed not with visas, but with 'customary passes' signed by village elders under the provisions of an international Treaty Zone. This weekly average of 1,000 'borderless' border crossings, many of them in small boats, certainly opens the strait to small-scale smuggling. For this reason, the strait and its surrounds are monitored more closely than any other coastal area by an impressive array of 23 government agencies. These include locally based Australian quarantine, fisheries, customs, foreign affairs, Australian Agency for International Development (AusAID), Coastwatch, army, and navy personnel; two police forces; and a wide network of immigration agents, supported by patrol boats, planes, and helicopters. In recent years, extra resources have been devoted to the strait, largely to support Australia's aggressive deterrence of boat-borne illegal immigrants. Gun-runners may be as threatened by this extra scrutiny as people smugglers, and in recent years, small arms seizures have become even fewer in number and smaller in scale. From her base in the strait's administrative centre on Thursday

Island, Suzy Wilson, a Foreign Affairs official at the hub of the local intelligence network, voices the same opinion as a variety of local observers: 'The Torres Strait guns-for-drugs trade is opportunistic. It's not organized crime. It would surprise us if it was happening on a large scale.'

Box 3 Regional smuggling surveillance

Particularly in matters of transnational crime and border control, an unusually high level of cooperation and goodwill exists among the 23 nations of the south-western Pacific, which are served by a range of interlocking law enforcement organizations (Alpers and Twyford, 2003, pp. 109–10). One of these is the Oceania Customs Organization (OCO), which collects and exchanges small arms trafficking intelligence. In the nine years from 1995 to 2003, OCO noted 52 firearm-related interdictions in reports received from PNG. All involved seizures of single or small numbers of firearms, gun parts, airguns, or ammunition. Some seemed to represent inadvertent cross-border transportation of relatively minor items.¹³ Thirteen of the intercepted firearms are known to have originated in Australia (Capie, 2003, p. 77). However, the OCO reports are incomplete and inadequate. As a law enforcement official with the Pacific Islands Forum Secretariat noted: 'One of our problems is the lack of reporting in the Pacific. We know there are a lot more weapon seizures, but they're not reported. This is a significant problem' (Allen, 2004).

West Papua

Hand in hand with a recognized trade in cannabis, arms trafficking is also allegedly taking place along the rugged, rarely patrolled border between PNG and the Indonesian province of Irian Jaya, or West Papua. It is nevertheless difficult to be sure in which direction the arms are flowing, as both countries claim to be the target of local gun-runners. The PNG–West Papua border may not have been patrolled by the PNGDF for more than a decade (Jeffrey, 2001). A former PNG intelligence officer told *Time* magazine that 'our border control is 0.00 percent' (Ware, 2001). There is no PNGDF patrol of the adjacent coast, and the police presence in the area was crippled by the condemning for health reasons, in 2000, of both the barracks and the local police station (PNG, 2001, p. 5).

The PNG National Intelligence Organization believes that the PNG–Indonesian border is the main point of entry into the country for illegal arms (Bonsella, 2002). In Jayapura, the coastal capital of Irian Jaya, the going rate for a pistol can be as low as PGK 300 (USD 100). The town of Vanimo, the capital of PNG’s Sandaun Province, is just an hour’s drive away (Chin, 2002). On the other hand, there is evidence that high-powered firearms have also been brought into West Papua from PNG to supply the OPM independence movement (Keelty, 2000, p. 82). Any such activity has involved small numbers of weapons (McFarlane, 1998, p. 5; Capie, 2003, p. 81). The PNG–West Papua border region generates an abundance of unsubstantiated assertions about small arms smuggling. Yet in the absence of research from the area—let alone any evidence of the weapons in question—the most credible conclusion is that low-level gun-running occurs in both directions. Sgt. Hosiah Perea, intelligence officer at Southern Highlands police HQ in Mendi, says the West Papua gun-smuggling route is ‘not a big source’.

Logging sites

We know the loggers smuggle guns in, but we’ve never caught them.

Supt. Simon Nigi, provincial police commander, Southern Highlands

The coastal lowland areas of PNG continue to be a rich source of timber for foreign logging companies. Legally or otherwise, logging teams arrive from neighbouring countries by barge, receive their supplies by barge, and ship logs abroad in the same manner. Much of this occurs without scrutiny. In Mendi, police Supt. Simon Nigi confirms that on PNG’s south-western coast, within walking distance of the Highlands, the forested river delta region of Western Province ‘has no port controls. Surveillance is very poor.’ Several environmental and human-rights groups monitor loggers from Malaysia, Indonesia, the Philippines, and Singapore, but are hampered by remoteness, company hostility, and the reluctance of co-opted officials, police, and politicians to allow access and independent scrutiny. One local NGO cites Western Province police referring to logging camps as a ‘free trade zone’, while their regional commander confirms a ‘guns for drugs’ trade with the Southern Highlands (PNG Forest Watch, 2002).

Box 4 The Western Province submarine

Guns are coming in by submarine to the Kikori river mouth, then up through Erave.

Supt. Simon Nigi, provincial police commander, Southern Highlands

It's barely possible to discuss small arms in the Southern Highlands without being told about the submarine, whose crew is said to swap cannabis for guns on regular visits to the river deltas of PNG's Western Province. Most have heard the story, and many find it credible. One man told the author that he stood on the submarine's deck, carefully blindfolded by his hosts, as they discussed swapping smuggled goods for a sugar sack of cannabis.

The rumours began when a submerged pipeline was laid from the Lake Kutubu oil deposit, through the Kikori River, and 20 km out to sea. The offshore oil tanker mooring buoy is invisible from land, but the sounds of loading can be heard at night. First asked to respond to the submarine story by local police, an ADF spokesperson replied: 'It is not possible to get a submarine into the Kikori or Fly rivers from the sea.' The spokesperson added that the closest four navies with submarine capability would be Australia, Indonesia, Singapore, and the United States (based in the Philippines). No long-range private submarines are known to exist in the region.

Solomon Islands

During the nine-year secessionist conflict on the island province of Bougainville, small arms were smuggled in both directions over the narrow international sea border with the Solomon Islands (Capie, 2003, pp. 81–3). The Cross-border Crime Conference set up to monitor such movements heard 'at least one unconfirmed report of an SR-88 sourced to Solomon Islands being recovered in PNG' (Ranmuthgala, 2003, p. 3). In 2001, sources in Honiara and Port Moresby estimated that ten modern weapons may have been moved from the Solomon Islands to Bougainville (Capie, 2003, p. 83). Culminating in 2004, the sweeping Solomon Islands disarmament and weapons-destruction initiative seems to have greatly reduced the availability of small arms for similar transfers.

United States

Concentrating as it does on the rural Highlands, this study also recognizes that a substantial market exists in the urban centres of PNG for firearms intended for self-protection and street crime—in particular, easily concealable handguns for carrying, and shotguns for home and business use. Preliminary indications are that this largely separate, and very different, urban handgun market may be substantially sourced from the United States. Due to their size, handguns and component parts are more easily moved by air and by mail. In the United States, almost any handgun is readily obtainable, and may be quickly disassembled, separated into various packages, and described as spare parts. Given the high rate of firearm-related death and injury in the cities of PNG, it is perhaps surprising that these urban gun markets remain unresearched.

Internal smuggling

The Moresby run

Moving guns from the northern towns and ports of mainland PNG into the Highlands is relatively easy: there is a road. The Highlands Highway links the northern coast to the mountain provinces. But on the opposite coast, to the south-west, the nation's capital, Port Moresby, is unconnected by road to the rest of the country. As the site of most major defence and police armouries, and as the hub of air and sea traffic from island provinces such as Bougainville and foreign countries, Port Moresby is the nation's main centre of small arms supply. But the demand for high-powered long guns is mainly in the Highlands—and the choke point between supply and demand is clearly Jackson Field, or Port Moresby International Airport. Since the early missionary days, Highlanders have relied heavily on aircraft to get around. From Jackson Field, half a dozen scheduled airlines and a variety of charter services fan out over the country. Family shopping trips and gun-running operations alike often rely on a charter flight from an isolated mountain airstrip. A common story is that traffickers use bereavement as a cover. Says Greg Bill, manager of the largest air charter operation in the Southern Highlands: 'We've carried coffins with a lot of weight in them, but we sure aren't going to open them up.'

On 16 September 2003, soldiers at Murray Barracks, the PNG defence headquarters near Port Moresby, lined up at dawn to receive an SLR each. Retained

for ceremonial events, the Australian-made assault rifles are considered obsolete, but remain operational. On their return to barracks after an Independence Day parade, the soldiers' SLRs were collected, and recorded—falsely, as it turned out—as having been safely returned to the armoury (Wakus, 2004). Six of the weapons had been stolen. Yet in public, nothing was said. Four months later, on 22 January 2004, the SLRs turned up when an airport cargo handler at Jackson Field spotted a rifle barrel poking out of a carton of books and clothes. Cargo is not X-rayed at any of the country's airports, and for police, this was just a lucky break. The six SLRs, all with serial numbers tracking them back to a 1974 batch from the Australian government small arms factory, had been joined by a PNGDF-issue Browning semi-automatic pistol and 908 rounds of SLR and M16 ammunition. The consignment was on its way on an Air Niugini flight to Mendi, addressed to the headmaster of Pangia High School, in the Southern Highlands. He was later arrested (*Post-Courier*, 2004b; 2004c; John, 2004a).

In the months that followed, the headmaster was joined in court by a PNGDF warrant officer, a sergeant, four more soldiers, and a member of the police detective unit. All were charged in relation to the theft of the rifles. A year after the crime, in September 2004, no convictions had been entered. At least three of the suspects, including the headmaster, had been released for lack of evidence (*National*, 2004a; *Post-Courier*, 2004a; John, 2004c). In two differing reports, PNGDF sources later quoted the price paid for the six SLRs, pistol, and ammunition as being between PGK 90,000 and 200,000 (USD 30,000–67,000). This puts the price of a single SLR, with 150 rounds of ammunition at PGK 15,000–33,000 (USD 5,000–11,000). Southern Highlands police said the weapons and ammunition were destined for delivery to two local 'big men', one an Education Department officer, and the other a senior public servant, both from Lai Valley.

When asked for prices, Highlands informants often remark that guns and ammunition are much cheaper in Port Moresby. Moving small arms from the capital to the mountains is both expensive and risky. Given this, increased cargo inspection at Jackson Field could strengthen the country's most obvious choke point for traffickers of illicit small arms.

Guns for drugs

Around the world, small arms and narcotics often share both trafficking routes and traffickers. During the 1980s and 1990s, several researchers found that PNG's *raskol* gangs were heavily engaged in the illicit drug trade (Harris, 1988), and that traffickers in 'drugs and arms have proliferated and entrenched themselves in Papua New Guinea' (Ivarature, 2000, p. 2). By drugs, they meant '*spak brus*' (cannabis). Two studies went on to find illegal trafficking in 'hard drugs' to be relatively insignificant (Iamo, 1991; Ivarature, 2000, p. 2). Perhaps to the country's good fortune, no climate zone in PNG seems conducive to growing coca or opium. Nearly two decades on, cannabis remains the staple illicit crop.

In the Southern Highlands, the existence of a 'guns for drugs' trade, along with its most common trafficking routes, seem to be common knowledge. Former Mendi police inspector Mark Yangen says: 'I've been offered guns for drugs. It's happening all the time, [especially] through Erave to Semberigi.' These two Southern Highlands settlements are 50 and 70 km south-west of Mendi respectively. Semberigi is connected to the rest of the country only by walking tracks and by air. Says Mendi charter pilot Matt Dwyer: 'Erave and Semberigi are said to be key stops on the drug trade route. We don't land at Erave because we have social problems. They throw stones at our planes.' By walking another 80 km south from Semberigi, traffickers can reach the Gulf of Papua at the Kikori River delta, then move by land or by sea to PNG's closest settlement to Australia—Daru Island, on the Torres Strait. According to Southern Highlands provincial police commander Simon Nigi, this is the province's major 'guns for drugs' route. Gerry Kela, a senior detective with experience in undercover narcotics work, remembers Daru as the entry point for guns. At times, the trade also shifted to the northern port of Madang, and to Kimbe on the island of New Britain. Gerry recalls watching drug dealers evading police roadblocks in the Southern Highlands, then heading south to Kagua and Erave on their way to the Kikori River and to Western Province. In 1999, he was involved in a joint operation with AFP, when a light aircraft from Australia flew a group of hunters into Goroka. On its return, Australian police found 21.7 kg of marijuana. Gerry Kela sees illicit guns and drugs as inseparable, with whole villages involved in the business (Garap, 2004, pp. 35–7).

Dora Kegemo, whose husband was involved in the drug trade, recalls a trafficking route from the Eastern Highlands town of Henganofi, to Lufa, then south-west to

the Gulf port of Kikori. Madang and Daru were the rumoured entry points for guns, which were then hidden in bales of imported second-hand clothes, or in bags of betel nuts. Dora told of her husband wrapping a gun, then fastening it under a vehicle to get it from Lae, a northern coastal port, to Goroka, in the Highlands (Garap, 2004, p. 30). In July 2004, Port Moresby police discovered 16 kg of Highlands cannabis arriving at Jackson Field on flights from Goroka and Lae. After arresting three men, police said some of the cannabis, valued at PGK 60,000 (USD 20,000), was bound for Daru: 'They told us themselves, these drugs were supposed to have been traded for weapons, which would then be used for tribal fights in the Highlands.' One man was found to have a shopping list of firearms, which included AR15s (*National*, 2004b; *Post-Courier*, 2004i).

Bougainville⁴

Following conflict, former combatants commonly trade their weapons into black markets, which then transfer them to the next centre of demand. This has been most apparent between the islands of Bougainville and mainland PNG. When transport links reopened following nine years of conflict, PNG mainlanders began travelling to the port of Buka in search of firearms. The going rate for a self-loading military rifle was as high as PGK 750 (USD 250), and could make the trip worthwhile. Police and customs occasionally check ships, but only in a few ports. Further down the main island of Bougainville, residents working with ex-combatants reported a 'constant stream' of weapons out of Buka, particularly since the beginning of the 2002 peace-building and election period. Prices allegedly ranged from PGK 1,500 (USD 500) for an M16 assault rifle to PGK 7,500 (USD 2,500) for an M-60 machine gun (Alpers and Twyford, 2003, p. 27). In February 2002, PNG police making a routine check at Kimbe in New Britain seized one M16 assault rifle and ammunition from a ship travelling from Bougainville, but few other seizures had been made (AFP, 2002). A former senior police officer told Melbourne's *Age* newspaper that in April 2002, four Southern Highlands MPs had organized to ship 20 military weapons left over from the Bougainville conflict to Port Moresby. The guns were then driven to Berenia and flown by helicopter into the Highlands. 'I advised local police, but for some reason nothing was done,' he said (Forbes, 2002).

If price is any indication, the demand for ex-Bougainville firearms came most strongly from the PNG mainland. In May 2002, a machine gun could apparently be purchased in the Solomon Islands capital of Honiara for just SID 2,000, or about USD 300. At the same time, in the PNG Highlands, a machine gun was said to fetch almost ten times as much: PGK 10,000, or about USD 3,300 (Alpers and Twyford, 2003, p. 27). Nearly a year later, presumably after visiting buyers had stripped the Bougainville market of available post-conflict guns, police in the island province of East New Britain provided some evidence that prices had soared. When arrested in possession of a rifle in transit from Bougainville to the PNG Highlands, the culprit told police it had cost him PGK 40,000, or USD 13,300 (*Post-Courier*, 2003a).

Smuggling v. theft: the weight of evidence

PNG abounds with rumours, and very little reliable data. A common suspicion is that quantities of illegal firearms must have been smuggled into the Southern Highlands from elsewhere, perhaps from Asia and Australia. While it remains unsupported by any evidence of the guns allegedly smuggled, such guesswork continues to fuel a debate beyond resolution. Until adequate samples of crime guns have been traced back to their last lawful owners, whether domestic or foreign, the true extent of cross-border gun-running into PNG is unlikely to be known. In the interim, the weight of evidence clearly shows that criminals, politicians, and tribal fighters have made the most of abundant and slackly guarded stockpiles of state-owned small arms available within their own borders. Virtually every illicit, reliably identified high-powered weapon found and reported in PNG was originally issued to PNG military, police, and correctional services. Although to date these internal sources appear to have sufficed, there seems little doubt that recent efforts to lock up domestic stockpiles are likely to swing the focus of illicit demand to foreign shores.

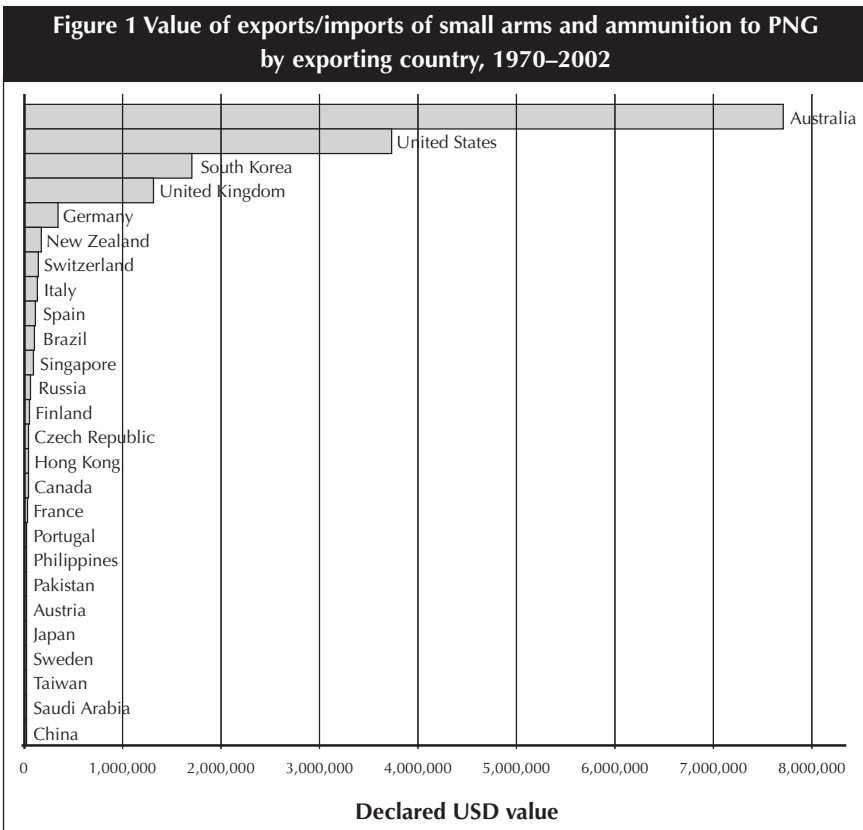
Legal importation of small arms

At least 26 nations legally export small arms and ammunition to PNG, with more than half arriving from the United States. Figures on state-to-state military arms transfers to the region are rarely published, though many legal weapon transfers from the US are openly documented.¹⁵ Small arms and ammunition from China

and Eastern Europe are far less common than in other regions of the world (Alpers and Twyford, 2003, p. 7).

Declared legal imports

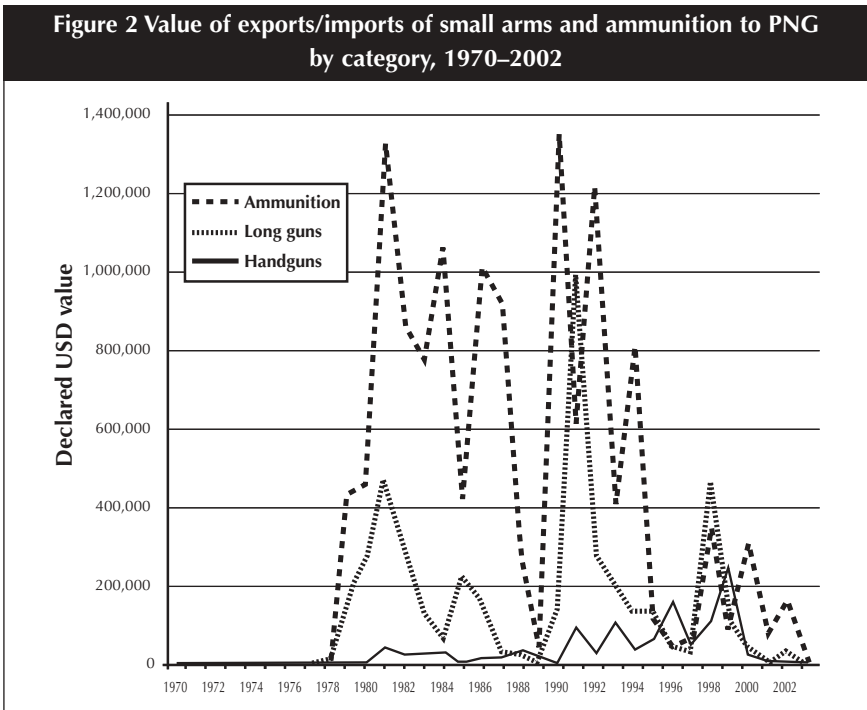
Figure 1 lists the 26 countries from which exports of small arms and ammunition to PNG were approved or declared to customs or other authorities at the port of export, at the port of destination, or both.¹⁶



Source: Nicholas Marsh, Norwegian Initiative on Small Arms Transfers (NISAT), International Peace Research Institute, Oslo (PRIO), September 2004

In the 33 years from 1970 to 2002, declared small arms and ammunition shipments to PNG were valued at USD 15.8 million (PGK 47.4 million).¹⁷ Of these, USD 7.6 million (PGK 22.8 million), or 48 per cent of the total value, was imported from Australia, while USD 3.7 million (PGK 11.1 million), or 23 per cent, arrived from the United States. Only three per cent of these imports were delivered prior to 1980, and in recent years Australia's share has declined. In most cases, the exporting countries listed in Figure 1 were also the manufacturers. The exception is Australia, where only a narrow range of ammunition and small arms are manufactured for sale. In its declared arms trade with PNG, Australia is more a re-exporter than a producer.

Figure 2 shows declared import/exports to PNG fluctuating widely, both in time and by type of firearm.



Source: Nicholas Marsh, NISAT, PRIO, September 2004

Commercial importation of long guns (rifles and shotguns) peaked in 1991, with lesser spikes in 1981 and 1998. Ammunition imports followed broadly similar trends. Declared imports of handguns (revolvers and pistols) peaked in 1999. A marked decrease in all import categories is apparent since 2000, the year PNG stopped issuing new firearm licences, and Australia stepped up its scrutiny of all firearm and ammunition exports. The 1991 spike in long-gun imports and ammunition coincides with declared US exports to PNG of about 1,500 units of the customs category 'military weapons'. These shipments, which included US-made M16s and machine guns for the PNGDF, along with AR15s for police armouries, were valued at USD 788,259, or PGK 2.4 million. Subsequent imports of 687 additional 'military weapons' from the United States in the years 1996–2002 were valued at USD 111,694 (PGK 335,000).¹⁸ According to a separate US report, which largely corroborates the figures above, 1,800 US-made M16 assault rifles, eight carbines, six machine guns, 3,575 'non-military' rifles, and 457,120 rounds of small arms ammunition were shipped to PNG from the United States in 1991–92 alone (USA, 2003).

Undeclared legal imports

The apparent gap in imports from 1970 to 1978 in Figure 2 could be misleading. These commercial export/import figures, sourced only from customs data, omit several large state-to-state weapon and ammunition transfers. In preparation for PNG's move to independence in 1975, Australia in particular gave large quantities of small arms and ammunition to equip PNG's newly fledged police and military forces, and correctional and other services. As is common, such state-to-state transfers seem to have escaped declaration to, or publication by, customs authorities. They include 5,463 Australian SLR semi-automatic assault rifles, plus many hundreds of L2A1 Automatic Rifles, Bren light machine guns, F-1 sub-machine guns, Browning semi-automatic pistols, mortar tubes, and other small arms donated to the PNGDF in the early 1970s. RPNGC armouries also received .38 S&W revolvers and F-1 sub-machine guns from Australia, none of which are apparent in the export/import customs data above. These weapons were also supplied with ammunition (Alpers, 2004). If added to the customs data above, the undeclared Australian state-to-state exports could increase by 30–50 per cent the value of small arms and ammunition imported into PNG in the past three decades.

Trade within the region

Australia and New Zealand are the only significant arms-exporting countries in the south-west Pacific. Given their relative political and economic prominence, it might be expected that both could play a larger export role in the region. Broadly, though, their part in the regional arms trade is declining. In recent years, both countries have become increasingly wary of fuelling armed conflict on their own doorsteps, and consequently more cautious about granting export licences. Both nations now try, as states, to contribute more to arms control than to arms proliferation.

Ammunition supply

The early years of the small arms dialogue were dominated by discussion of illicit guns; their origins, routes of supply, and regulatory systems; and to a lesser degree the demand factors that draw firearms to trouble spots. Only recently have the same factors as they apply to ammunition begun to attract the equal attention they deserve. PNG presents clear evidence of the importance of ammunition, not only to gauge supply and demand, and to trace illicit trafficking routes for each weapon system, but also to support existing interventions and to suggest new solutions. At least for now, curbing the flow of ammunition could prove the single most promising intervention to reduce gun death and injury in PNG.

The guns are already in the country. As demonstrated by the continuing use of even Second World War .303 rifles, commercially made firearms enjoy a lengthy decay curve in the cool Highlands climate. If cared for, guns can even remain fireable for many generations in the humid tropical conditions of PNG's coastal lowlands. The thousands of assault rifles, pump-action shotguns, and machine guns already liberated from police and defence force stocks, along with countless handguns and shotguns kept and carried in towns for crime and self-defence, are likely to remain in private hands until they are passed on by sale or by theft. Even if confiscated by police, most firearms and ammunition seem likely to be recirculated. Each weapon will be used, for good or for bad, whenever its current owner chooses—or perhaps never used at all.

Ammunition, on the other hand, must be renewed. Not only does the reliability of each round follow a slow decay curve of its own, but three of its four critical components must be replaced entirely when fired. Ammunition is not commer-

cially manufactured in PNG. Although it is possible to reload used cartridge casings and to cast replacement lead projectiles by hand, the specialized explosive powders, the mechanical presses needed to fill the casings, and in particular the non re-usable primers required to ignite each round are expensive. Individual components of ammunition are rarely imported into PNG, and are almost always consigned to the country's single gun club. Their arrival in increasing quantities should prove both conspicuous and alarming.

It is notable that considerable standardization of ammunition has occurred in PNG, albeit driven more by theft and availability than by consumer choice. Presented as they have been to date with ample supplies of Western military-pattern firearms and NATO-calibre ammunition leaked from local police stations, military barracks, licensed gun owners, and arms dealers, PNG's firearm owners have had little incentive to use Eastern bloc military calibres, whose legal importation should be nigh on impossible. It is for this reason, and perhaps this reason alone, that the AK-47 assault rifle and its variants, while cheap and plentiful in nearby Asian countries, but requiring Soviet-pattern ammunition not common in these parts, has failed to dominate the Pacific market as it has others.

Table 4 Black-market ammunition prices*

Calibre	Weapon	Lowest PGK (USD)	Highest PGK (USD)	Average** PGK (USD)
5.56 x 45 mm NATO (.223) RPNGC & PNGDF issue	M16, AR15, SIG 540, SR-88, SAR-80, SA-80, FAMAS, Steyr, Ultimax, Minimi	5 (1.70)	25 (8.30)	12 (4.00)
7.62 x 51 mm NATO (.308) PNGDF issue	SLR, G-3, MAG-58, M-60, Bren	5 (1.70)	25 (8.30)	15 (5.00)
7.62 x 39 mm Soviet	AK-47, AKM, Type 68 and many other variants, SKS	12 (4.00)	25 (8.30)	19 (6.30)
.303 British	SMLE etc.	15 (5.00)	25 (8.30)	22 (7.30)
9 mm Parabellum RPNGC & PNGDF issue	Pistols and sub-machine guns, most models	2 (0.70)	10 (3.30)	6 (2.00)
.38 S&W Special RPNGC issue	RPNGC S&W revolvers	1 (0.30)	8 (2.70)	5 (1.70)
12-gauge shotgun shell RPNGC & PNGDF issue	All 12-gauge shotguns	5 (1.70)	5 (8.30)	12 (4.00)

Source: Alpers (2004)

* Amounts paid and asked for black-market ammunition were reported in each community meeting, and in all interviews with firearm users and other informants (Alpers, 2004).

** These averages are calculated from the many low and high prices quoted in all interviews, not from the single lowest and highest prices cited in columns 3 and 4.

Sources of ammunition

Eriko's husband has a licensed firearm. He gets his ammunition from the policemen who sell him 20 bullets for PGK 100 [USD 33].

Sarah Garap, Meri Kirap Support Team, Goroka (Garap, 2004, p. 30)

In the Highlands, this is by no means an isolated tale. Tamanda residents say that for years, unlicensed Karints fighters obtained most of their ammunition 'from police and defence'. US anthropologist James Pile reports that in Enga, eight years of warfare in Ambulyini territory were fuelled 'with bullets purchased from police and security guards'.¹⁹ Even Bire Kimisopa MP, the cabinet minister responsible for the police force, confirms that its officers are engaged in the 'indiscriminate sale of ammunition to the public at considerable cost to society' (*Post-Courier*, 2004i). In addition, licensed gun owners and arms dealers are alleged to fuel the illicit trade by way of both lawful and unlawful transfers of ammunition: as one community spokesman in Kagua put it: 'People in Port Moresby use their gun licence to buy bullets to kill animals, then they sell the bullets to *raskols* [from 'rascals'; i.e. criminal gang members].'

Former Mendi police inspector Mark Yangen suspects another source of leakage: 'I have a licensed pump-action shotgun. Licensed dealers sell me ammo without sighting a licence. [I get the impression that] they'll do anything for money.' Const. Joseph Tuhu, the police officer in charge of firearm licensing in Mendi, describes other stages of ammunition leakage: 'Many licensed owners sell ammunition to unlicensed gun owners. Every time a licensed owner wants to buy ammo, I have to sign an authorization form. I've reduced the number of boxes allowed per purchase from two to one, but I still can't tell if they're going to sell it to someone else.'

PNG legislation provides for a method of ammunition control that is common by international standards, but by no means universal. By allowing licensed gun owners to obtain only the ammunition needed for the type of gun(s) registered at licensing time with police, the owner of a lawfully held .22 rifle cannot legally buy ammunition for an unregistered 9 mm pistol or a high-powered assault rifle—nor for someone else's. But as Const. Tuhu observes, a sizeable problem remains: 'We don't know if the dealers stick to this. Only dealers can sell ammo, and they're

in Lae and Port Moresby. We hear that politicians and business people also bribe dealers to provide illicit ammunition.'

PNG's wild game also attracts foreign hunters, their foreign exchange, and their ammunition. Charter flights from North Queensland drop hunters into remote airfields, sometimes with more bullets than they need. In November 2003, police confiscated more than 4,000 rounds of ammunition from a hunting lodge in Western Province. Regional police commander John Marru believed the ammunition and some firearms were for selling (*Post-Courier*, 2003i).

Military small arms ammunition seems to be subject to tighter restrictions than police supplies. As the military officer in charge, Col. Joe Fabila, puts it: 'All PNGDF 7.62 mm and 5.56 mm small arms ammunition is known to be safely held, almost all at Goldie River Barracks. It's difficult to steal, as I have to sign it all out.'

Ammunition import/export controls

As the country has no capacity for domestic manufacture, all pre-assembled ammunition and all new ammunition components used in PNG must be imported. In addition to the destination government's ability to restrict or prohibit imports under customs law, a less common method currently acts as the most effective barrier to large-scale ammunition transfers to PNG. In a move that severely limits opportunities for special pleading, neglect, or corruption at the PNG border, the Australian government has in past years taken it upon itself to tightly restrict ammunition *exports* to PNG. At the Defence Control and Compliance Section within the Department of Defence, Canberra, all licence applications to export firearms and ammunition are carefully examined. If flags are raised by the applicant, the quantity, or the type of goods, or if any doubt remains as to their true end-user, applications are often denied—or negotiated downwards, to smaller quantities. This procedure is governed by the country's long-established export rules (Australia, 2002), as catalogued in its *Defence and Strategic Goods List* (Australia, 2003).

Historically, Australia has been PNG's major supplier of firearms and ammunition (see Figures 1 and 3). Then in 2002, two large export applications to PNG were denied completely. Since that time, quantities applied for have been reduced by negotiation. In several heated debates in the PNG Parliament, MPs energetically

put the case for arms dealers, gun club members, armed businessmen—and politicians themselves—demanding the relaxation of what they imagined to be a ‘government ban’ on ammunition imports. When the blame swung to an Australian limit on *exports*, the focus changed, nationalism flared, but the frustration remained. MPs and provincial governors claimed the worsening shortage of ammunition handicapped those who ‘depended on their hunting guns for their livelihood’ (*Post-Courier*, 2003d). Sporting shooters’ representatives and the PNG Sports Federation appealed directly to Canberra, citing the deterioration of target shooters’ performance in overseas competitions (AAP, 2003). Port Moresby is home to the country’s one and only gun club. The commissioner of police fielded complaints, saying there was little the police or the government could do if the exporting country did not approve shipments of ammunition to PNG (*Post-Courier*, 2003e). Around the world, the ‘subsistence hunting’ and ‘legitimate sporting purpose’ arguments invariably surface in such debates. Yet community interviews conducted for this study showed that in the Southern Highlands, high-powered firearms are rarely owned for hunting. Instead, almost all such weapons are obtained for use against humans (Alpers, 2004).

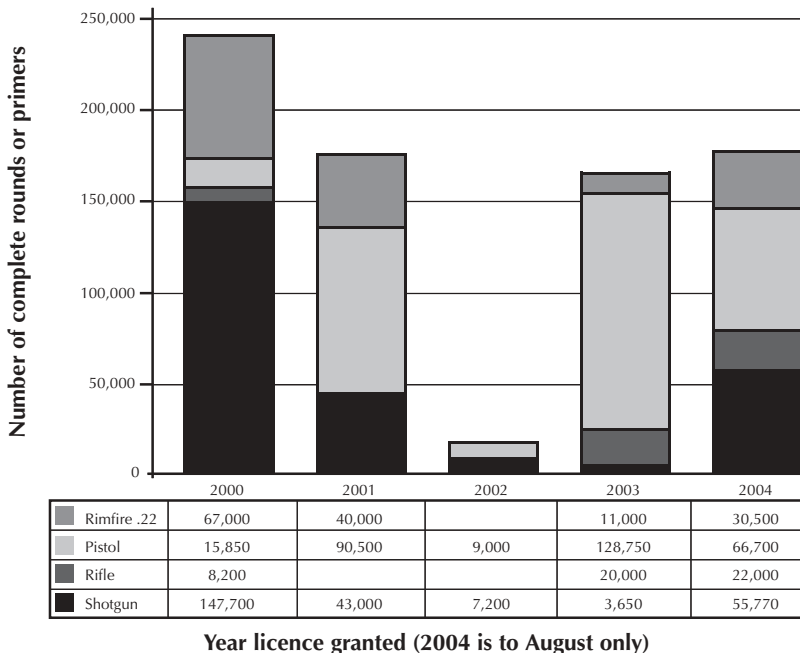
Australia and New Zealand, in their role as neighbours and donors to the region, have historically also been the largest local suppliers of small arms to PNG. Following recent armed violence in Bougainville, the Solomon Islands, and Fiji, and abruptly more aware of the proliferation and misuse of firearms in the region, both governments have become increasingly wary of fuelling armed conflict on their own doorsteps. With nearly 300 AFP agents and Australian civil servants progressively taking up posts in PNG to assist with law enforcement, and military and governance reform under the Enhanced Cooperation Programme, Australia now has even more incentive to reduce the flow of guns and bullets to PNG. Although it was Australia that took the heat in Port Moresby for its increasing scrutiny of ammunition and firearm exports, New Zealand’s reluctance to approve any such transfers to PNG closely parallels that of its larger neighbour.

Deputy Commissioner of Police Gari Baki is surely right when he says: ‘The ones feeling the pinch [of ammunition controls] are the law-abiding gun owners.’ But these are just the people making a noise in public. In the Highlands and coastal regions of PNG, in shanty-town settlements and in *raskol* gang headquarters, the shortage of ammunition is having an identical effect. The current market price for

a commodity should be as reliable an indicator of scarcity in these settings as anywhere else. In 2004, after a two-year choke on export licences to PNG, the cost of ammunition in the Southern Highlands was reported to have doubled (Alpers, 2004). Those who wish to load their guns and fire them with an illicit round, no matter what their intent, must all now pay a similar price—in many cases, as much as a month's rural per capita income for each cartridge (see Table 4). This effect has been simply achieved by two regional neighbours recognizing their part in a shared problem and deciding not to be complicit in gun death and injury in PNG.

As always in a market economy where there is so much at stake—especially at election time—and given a shrinking supply of ammunition with no apparent reduction in demand, the race is presumably well under way among arms dealers, gun club members, politicians, 'big men', *raskols*, and tribal fighters alike to find new ways to move ammunition into PNG.

Figure 3 Ammunition export licences granted, Australia to PNG, Jan. 2000–Aug. 2004



Source: Defence Trade Control and Compliance, Australian Department of Defence, Canberra, 1 September 2004

Military calibres not coming from Australia

In the period from January 2000 to August 2004, no applications were received to export 7.62 mm x 39 mm Soviet-pattern rifle ammunition from Australia to PNG. During that same period, only 200 rounds of .223 (5.56 mm) NATO/US-pattern rifle ammunition were approved for export to PNG. This indicates that if ammunition is being acquired from foreign sources for rifles that fire military and law enforcement calibres (M16, AR15, SLR, etc.), then that ammunition is not being legally exported from Australia.

EFFECTS: THE HUMAN COST OF ARMED VIOLENCE

Direct effects

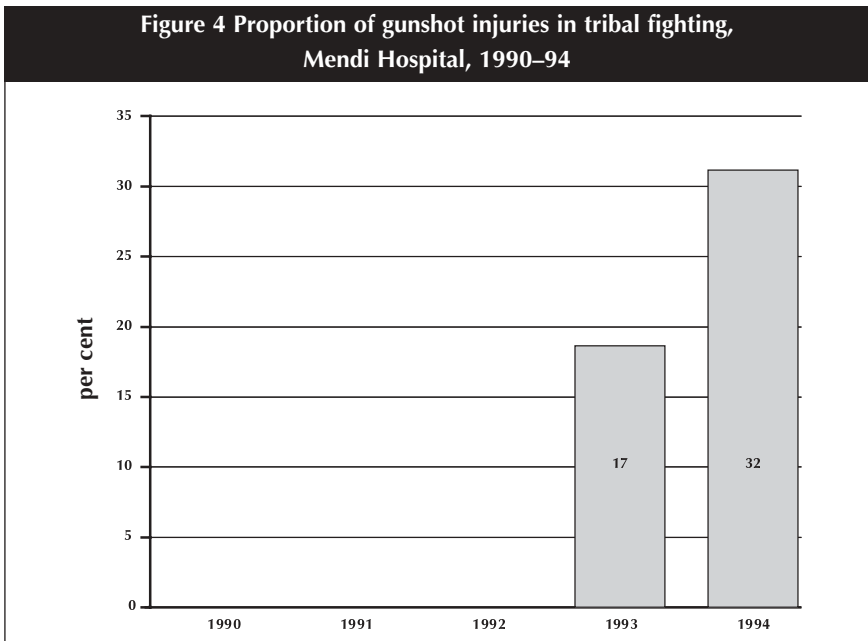
Gun-related death and injury

Researchers expecting to find baseline death and injury data from the Southern Highlands should speak first with Sister Gaudentia Meier, Mendi's Catholic health secretary: 'More than 90 per cent of all deaths in SHP are not reported. It costs money to register a death, so people don't. There's no reason to.' Even this figure, drawn from Sr. Gaudentia's 40 years of experience tending to the district's wounded, seems too optimistic for her boss. Reckons Bishop Stephen Reichert: 'It's a lot worse than that.' The National Research Institute's James Laki concurs: 'In SHP, I'd say 98 per cent of all deaths would not be reported.' Given this extraordinary lack of knowledge—let alone disaggregated data to separate gun-related injury from other trauma, or even to separate injury from disease—plus the danger of relying on grossly inflated census figures and electoral rolls (see **Elections: gun-point democracy**), no reader should be surprised that this study fails to divine province-wide, population-based rates of firearm-related mortality and morbidity. Instead, it relies on smaller samples.

Mendi Hospital

Serving a population of around 375,000, Mendi Hospital is the only health-care facility of any size in the Southern Highlands. Despite decades of effort to curb inter-group conflict, tribal fights cause more—and more serious—hospital trauma admissions than in any previous recorded period. Fortunately, the commitment of a single physician shines light on an otherwise dark data landscape. For the first half of the 1990s—a crucial period in Highlands gun violence—Mendi Hospital surgeon P K Mathew volunteered to study the problem, and to publish the country's

one and only peer-reviewed report of gun-related death and injury. The impact of guns on serious trauma is graphically illustrated in Mathew's five-year review of tribal-fight-related hospital admissions in Mendi. Warning of the 'devastating results' of the proliferation of firearms in the Southern Highlands, Mathew writes: 'Up to 1992, only bows and arrows were used for shooting in tribal warfare The introduction of guns in tribal fights in 1993 has led to a very high mortality' (Mathew, 1996).



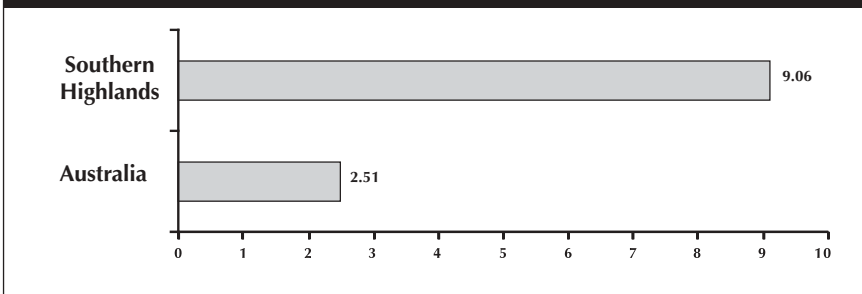
Source: Mathew (1996)

In 1990–94, more than 20 per cent of all trauma admissions to Mendi Hospital followed tribal fights. In 1990–92, no gunshot wounds were treated. Then in 1993 (a few months after a newly elected politician delivered the first shipment of high-powered weapons to his village), gunshot wounds made up almost 18 per cent of tribal-fight injuries admitted to the province's central health facility. In the following year, 1994, this proportion had almost doubled again, to almost 33 per cent (Mathew, 1996).

The risk of violent injury is much higher in PNG than in most other countries (see Box 5). In Port Moresby, fully 30 per cent of surgical admissions to hospital are due to trauma (Watters, Dyke and Maihua, 1996). Yet in Mendi, at 43 per cent of all surgical cases, the proportion of traumatic injury is almost half as high again. In the Southern Highlands, the most common cause of injury admissions (24 per cent) is tribal fighting. Of these, 18 per cent are gunshot wounds, which tend to cause more severe injuries (Matthew et al., 1996).²⁰ By contrast, and as a reminder of the consequences of tribal fighting in days gone by, a surgeon in the Western Highlands recalls 63 patients with arrow wounds to the chest and abdomen—only two of whom died (Jacob, 1995).

In the Southern Highlands, non-fatal small-arm-related injury fills a very high proportion of hospital beds. In the years 1998–2004, 3.5 per cent of all in-patients at Mendi Hospital were admitted for treatment of gunshot wounds, yielding a rate of 9.06 per 100,000 population (Muggah and Alpers, 2004). Given that the great majority of gun-related injuries in the Southern Highlands go untreated and unreported, the true rate is likely to be several times higher. While the scarcity of comparable non-fatal injury data makes comparisons with other developing countries impracticable, Figure 5 compares the Southern Highlands to PNG's immediate neighbour, Australia.

Figure 5 Rate of firearm-related hospital admissions in SHP and Australia, per 100,000 population



Sources: Mouzos (2001); AIHW (2004); Muggah and Alpers (2004)

Tari Basin

From the western end of SHP, although without separating firearm-related deaths from other fatal injuries, anthropologist Stephen Flew also reported the rate of trauma death to be considerably higher than the national average. Once again, most injury deaths occurred outside Tari Hospital, and most were due to clan fighting and domestic violence. In the Tari Basin, trauma was the most common cause of death in the 15–44-year-old age group, at a rate of 4,029 deaths per 100,000 population, per year (Watters and Dyke, 1996; Flew, 2002). At this rate, the risk of violent death for most adults in the Tari Basin is more than 100 times higher than it is in Australia (ABS, 2004).

Gun homicide and tribal fighting

A 1997 report suggested that over a five-year period, tribal fighting had resulted in an average of 200 deaths a year in the Highland provinces (Young, 1997, p. 42). Near Mendi in 2001–02, the so-called ‘Wogia/Unjamap’ battles were better documented than most, costing 120 lives. In recent community interviews conducted in 19 Southern Highlands communities, 340 fatal shootings were reported for the period 1993–2003. Covering local government areas that are home to as many as 353,000 (70 per cent) of the estimated 500,000 residents of SHP, this partial tally suggests a minimum of 31 gun homicides per annum, and should be regarded as a conservative figure for the entire province (Alpers, 2004). In neighbouring Enga Province (pop. 300,000), a Law and Order Summit found that 501 people had been killed in armed clashes between ethnic groups in the 12 months to August 2003 (Amnesty International, 2004). Given grave difficulties with the accuracy of death and injury reporting in PNG, the real toll is unlikely ever to be known.

Relative individual firearm lethality

Although Southern Highlanders own 30–50 times fewer factory-made firearms per capita than nearby Australians or New Zealanders, their high-powered weapons are obtained almost exclusively for use against humans (Alpers, 2004). This, coupled with PNG’s much higher rates of gun-related death and injury as detailed above, shows that commercially manufactured guns in SHP possess very high ‘relative individual firearm lethality’. As Table 5 shows, the rate of gun homicide per 100,000 factory-made firearms in civilian possession is two to five

times higher in the Southern Highlands of PNG than in Ecuador, the country with the world's highest known rate. In short, a privately held factory-made firearm in SHP is several times more likely to be used to commit homicide than a similar gun in five of the world's most dangerous countries. This suggests that the removal and destruction of even a small number of commercially made firearms from the province might significantly lower the risk of fatal shootings.

Table 5 The deadliest gun use: Firearm lethality in SHP and five high-risk nations²¹

Country or province (population)	Factory-made firearms in civilian possession	Reported annual gun homicides	Annual gun homicides per 100,000 people	Factory-made civilian guns per gun homicide	Annual gun homicides per 100,000 firearms
Southern Highlands, PNG (500,000)	2,450	31	6.2	79	1,265
Ecuador (13,000,000)	200,000–540,000	1,321	10.16	150–380	260–660
Jamaica (2,600,000)	80,000–200,000	450	16.97	180–440	250–560
Colombia (42,000,000)	4,170,000–10,200,000	21,898	49.54	190–470	220–520
South Africa (43,000,000)	4,500,000	13,572	30.17	330	302
USA (290,000,000)	243,000,000–281,000,000	10,310	3.45	24,000–28,000	3.67–4.2

Source for SHP: Alpers (2004); for comparison countries: Small Arms Survey (2004, pp. 51–3)

Gun suicide and unintentional shootings

As reported by all informants for this study, firearms are rarely used as instruments of suicide (Mathew, 1996). Neither Mendi's Bishop Stephen Reichert, nor the district's Catholic health secretary, Sr. Gaudentia, had heard of a single gun suicide in SHP during the past 40 years. Civil servant, journalist, and Southern Highlander Joe Kanekane explains that, at least for males: 'Suicide is a very bad

move. It shows you up as chicken—a coward. It reflects badly on the tribe, and people hide suicides.’ Unintentional fatal shootings also seem less common than in much of the rest of the world. One case was reported in December 2002, when a young Nipa man died after his friend toyed with a home-made gun (*Post-Courier*, 2002h).

Box 5 Violent injury in PNG

In the 1980s, a patient in a PNG surgical ward was most probably being treated for malignant disease. By 1993, the largest single cause of surgical admissions and hospital death was violent, traumatic injury. In the 15–44-year-old age group—the country’s most productive and economically important population sector—and despite soaring numbers of HIV/AIDS-related patients, injury is now the most common cause of death. Instead of motor-vehicle accidents heading the injury list, the major cause of trauma is assault. Up to 50 per cent of the surgical beds in PNG’s hospitals are filled—often for many weeks—with trauma patients whose injuries are the direct result of violence. In addition, perhaps 70 per cent of all trauma deaths occur before the patient reaches hospital. In the *Papua New Guinea Medical Journal*, violent injury is called ‘an epidemic out of control’.²²

Indirect effects

The fear of guns can keep children away from school, farmers from their land, traders from markets, patients from doctors and voters from polling booths.

John Balavu, Department of Foreign Affairs, PNG (Balavu, 2004)

As other studies have shown, small-arm-related crime and violence can deeply affect the well-being and productivity of societies, generating a range of immediate and long-term effects (WHO, 2001). Direct effects of armed crime and conflict include death and injury, violations of human rights and international humanitarian law, and forced displacement. While indirect effects are rarely as clear-cut, many can be attributed to the ready availability and misuse of lethal weapons. They include declining access to basic entitlements such as health and education, long-term trauma and disruption—in particular to the prospects of an entire

generation of young people—damage to social and economic infrastructure, and declining levels of investment, economic productivity, and self sufficiency. PNG, which ranks alongside Myanmar and Swaziland in the global Human Development Index (UNDP, 2004), already lacks the resources or capacity to deliver basic services such as health and education adequately to its citizens. In such a context, perceived or real levels of inequality, lack of economic opportunity, and long-standing conflicts over resources become intensified, adding to existing social pressures. Factors such as these have contributed markedly to both the emergence and the effects of armed conflict in the Southern Highlands.

The introduction of small arms has also made conflicts more protracted and much more difficult to resolve. As the 1998 *United Nations International Study on Firearm Regulation* commented, the proliferation of small arms ‘affects the intensity and duration of violence’, encouraging militancy and fuelling the demand for powerful firearms (UN, 1998). Cultures of violence threaten to become a way of life, undermining democratic institutions. Clearly, small arms alone do not cause states to fail. But the emergence of crime and conflict using small arms may push already weak states to the edge of collapse and spark a humanitarian crisis. The availability and presence of small arms ‘translates the landscape of struggle from the political to the military realm’, creating complex emergencies that may involve ‘huge population shifts, long-term agricultural insufficiency, general economic collapse, and civil population decimation from disease, starvation, and direct conflict’ (Stohl and Smith, 1999, p. 1).

When hearing Highlanders speak, close behind their warriors’ bravado follows the distress of parents. They see another generation swapping education for killing skills, as the rise of the youthful gunman weakens customary systems of encouragement, control, and learning. As is common in such shifts, women and children are also hard hit by the wide variety of effects that follow.

Crime with guns

In PNG, it is not possible to accurately gauge levels of firearm-related crime. Even for serious offences of violence, statistics commonly go unrecorded or uncollected in all but the most organized urban settings, where less than 15 per cent of the total population live.²³ Common criminality with guns can be passed off as ‘tribal fighting’, and published rates of crime detection, arrest, and conviction are ‘grossly

wrong and misleading' (PNG, 2002b, p. 123). Across the country, police statistics fail to record the type of weapon used. Among the rudimentary police figures that are made available, 'firearm offences' cover only breaches of the *Firearms Act*—such as possession of a prohibited firearm or licensing infringements—and not offences such as robbery and homicide in which firearms were involved. Even if accurate gun-crime figures were recorded, a 2002 government study estimates the real level of crime in PNG to be two to three times higher than comes to the attention of police (PNG, 2002b, p. 8). In the Southern Highlands, even most gun murders go undocumented. Mendi police commander Simon Nigi estimates that the proportion of homicides not reported to police is 'about 60 per cent'. District Administrator Philip Moya recalls that, according to hearsay: 'There've been 162 murders in the Tari area in the past three years. We've never arrested one suspect. They [the locals] will *not* talk to us, or about this.' At police headquarters in Port Moresby, Deputy Commissioner Gari Baki confirms that, across the country, 'about 75 per cent' of gun-related crime, death, and injury is not reported to police.

Despite such a fundamental lack of knowledge, there is clear consensus that gun crime is now more common. Says National Court Justice Nicholas Kirriwom: 'Crimes of violence against persons and properties using high-powered military issue weapons and home-made guns are endemic throughout the country' (*Post-Courier*, 2002g). In August 2004, Internal Security [Police] Minister Bire Kimisopa told a reporter: 'Guns were used in nearly all serious crimes committed in Papua New Guinea over the past ten years ... among the three top categories of crime—robbery, break and enter and murder—at least 90 percent of reported cases were gun related' (*Post-Courier*, 2004m). Police were unable to confirm or refute these figures, and the source of the minister's estimate remains uncertain.

In March, 2004, public concern about gun crime soared when Alan Mourilyan, an Australian pilot, was shot dead on a busy shopping day in the main street of Mt. Hagen (*Herald Sun*, 2004). For months on end, the *Post-Courier*, a national newspaper, ran a front-page anti-gun campaign, its journalists hounding authorities for comment and action. Editor Oseah Philemon, himself twice a victim of armed car hijackers, said 80 per cent of the *Post-Courier's* 200 employees had been attacked or robbed by armed *raskols*. 'We average about three armed hold-ups of paper sellers a week, which police are not interested in,' he said. 'Our editorial bus, which delivers reporters on jobs around Port Moresby, has been hijacked at

gunpoint three times in the past 18 months, and some of my staff have been held up more than half a dozen times' (*Pacific Media Watch*, 2004). By September 2004, senior cabinet ministers had joined in, with Internal Security Minister Bire Kimisopa announcing a national 'Gun Summit' for 2005 (*Post-Courier*, 2004q).

PUBLIC NOTICE

IN MEMORY OF
CAPTAIN ALAN MOURILYAN
 (DOB: 18/01/47)

THE PEOPLE OF WESTERN HIGHLANDS
 DEDICATE THIS MONUMENT IN HONOR OF
CAPTAIN ALAN MOURILYAN
 WHO WAS KILLED HERE ON
 14 MARCH 2004.
 WE ARE DEEPLY SADDENED OVER HIS
 UNTIMELY DEATH.

THIS MONUMENT WAS OFFICIALLY
 UNVEILED BY HIS EXCELLENCY
 MICHAEL POTTIS,
 AUSTRALIAN HIGH COMMISSIONER,
 PORT MUGIL ON 20TH MAY 2004.

**How many more
 memorials like this must we see
 before guns are
 eliminated from our
 communities?**

A Post-Courier Community Service Campaign

© Papua New Guinea Post-Courier

A front-page advertisement from the Post-Courier's 2004 'anti-gun campaign'. The fatal shooting of pilot Alan Mourilyan in a busy Mt Hagen street sparked a sustained public outcry, and led eventually to a 'PNG Gun Summit' in 2005.

Box 6 Overall violent crime in PNG

According to the World Bank, serious crime in PNG rose 65 per cent in the 1990s and ‘is now so severe that it is the single biggest deterrent to business and investment’ (Callick, 2000). A UN survey found violent crime rates in PNG cities to be among the highest in the world—higher even than Johannesburg and Rio de Janeiro—with a 20-fold increase in crime victimization from 1970 to 1990.²⁴ In Port Moresby, 14.8 per cent of people in the workforce relied on crime as their principal source of income (Levantis, 1997, p. 73; 2000b, pp. 7–8). A report of the PNG Law and Justice Sector Programme concludes: ‘It is clear that increasing levels of social and economic marginalization and inequality are contributing to escalating lawlessness’ (PNG, 2004b, pp. 18–19, 22).²⁵

In the eight years to May 2004, RPNGC statistics show 4,176 cases of murder nationwide (*Post-Courier*, 2004m). This yields a rate of 10.4 per 100,000 population—more than six times Australia’s national homicide rate of 1.6 (Mouzos and Segrave, 2004). As both RPNGC and government sources estimate that 60–75 per cent of criminal deaths go unreported to police, the country’s true rate of homicide is likely to be two to three times higher. In Port Moresby, where crimes seem to be more often reported, police dealt with 148 cases of murder in 2003 (Faiparik, 2004; RPNGC, 2004). Thus in its most recent calendar year, the nation’s capital endured a murder rate of 58.6 per 100,000 population—more than five times the reported national rate, and 42 times that of Sydney, Australia (BOCSAR, 2004).

Guns, rape, and gender-related crime

In Highlands tribal fighting and city gun crime alike, subjugation by violence and humiliation of the victim play a central role. In one of many such incidents during the 2002 fighting, a Mendi church worker recalls a woman being dragged out of her house in the mission compound, then gang-raped by gun-wielding men while her husband and male relatives were held at gunpoint (*Post-Courier*, 2002a). A few weeks later in Mendi, two women, one the young daughter of a former national parliamentarian, and the other a breast-feeding mother, were gang-raped at gunpoint (Poiya, 2002). In March 2000, a peace campaign led by Southern Highlands women presented a 3,000-signature petition to Parliament. Speaking for

seven local NGOs, church leader Grace Sui described ‘physical, sexual, emotional, economical and political violence ... many killings, numerous rapes ... kidnappings, torturing.’ Crimes often involved a sexual or gender-related motive, with women and children violated to intimidate others: ‘The women and children said their once peaceful town had turned into an evil place.’ One of the most serious crimes was the introduction of high-powered weapons, with the result that ‘Southern Highlands has been consumed by a circle of violence and abuse that is quickly becoming a sorrowful human tragedy’ (*Post-Courier*, 2002c; 2002d).

Guns also feature in rape by police. In August 2004, two Northern Province police officers were charged with raping a young girl at gunpoint while searching a house for stolen lawnmowers (*National*, 2004d). The most recent and comprehensive governmental report on gender equity in PNG relays the pessimistic view: ‘Gender violence continues to be accepted as normal, part of culture and religion and is inevitable and unchangeable’ (PNG, 2004a, p. 16). Domestic violence is rampant across PNG, but occurs most commonly in the Highlands. Of all violent assaults, 74 per cent are perpetrated by family members. Wife beating is regarded as acceptable practice by 65 per cent of rural men, and 18 per cent of urban wives report receiving hospital treatment for injuries inflicted by their husbands. At Port Moresby General Hospital, domestic violence is responsible for 90 per cent of hospital casualty attendances, while at Mendi Hospital, it accounts for 44 per cent of female injuries.²⁶ In particular, violence perpetrated with firearms commonly causes more severe injury, exerts a disproportionate effect on women and children, exacerbates unequal power relationships between the sexes, and highlights the damaging effects of linking guns with masculinity (Tagicakibau, 2004).

Violations of human rights and humanitarian law

Allegations of brutality, excessive use of lethal force and cover-ups involving members of the RPNGC have surfaced repeatedly over the past five years. Criminal suspects, including those not carrying guns and only suspected of non-violent crimes, are frequently shot dead by police, sometimes in disputed circumstances.

(Amnesty International, 2001)

Armed police units continued to use excessive force with impunity.

(Amnesty International, 2002)

Despite persistent Red Cross and other efforts to encourage PNG police and military compliance with the norms of international human rights and humanitarian law (ICRC, 2003, pp. 191–2; 2004, p. 173), members of both forces continue to abuse firearms in violation of civil liberties. As one journalist noted in 1999: ‘There have been scores of police shootings in Port Moresby this year, although it is difficult to obtain accurate figures from the police’ (Lagan, 1999). As many as 800 formal complaints from the public are received in a given year, the majority of which involve violent acts by police, often with guns. Typically, less than half these complaints are processed and finalized (PNG, 2004a, p. 66).

Tribal fighting: the effect of small arms

Tribal fighting was effectively suppressed throughout much of the colonial period. The success of the colonial peace—Pax Australiana—was as much a consequence of the material and other positive inducements offered local communities under the colonial administration, as it was a result of the repressive impact of colonial controls. The revival of this practice in parts of the Highlands since the early 1970s broadly parallels the decline in government services, including official procedures of conflict resolution, during the post-Independence period. In this sense, the re-emergence of tribal fighting represents a growing withdrawal from state and reversion to older strategies of conflict resolution in the areas concerned.

Sinclair Dinnen, Australian National University (Dinnen, 1997, p. 8)

Tribal fighting was a way of life in PNG long before guns arrived. In the Highland province of Enga, one observer alone reported 86 tribal fights between 1900 and 1950. Only arrows, spears, and blades were used, with the main causes said to be land disputes (58 per cent), theft and title to trees (24 per cent), and homicide, or the compensation demands that follow (15 per cent) (Meggitt, 1977, p. 13). In the Tsak-Wapenamanda area of the same province, 300 were reported to have died in tribal fights from 1988 to 1996 (*National*, 1997). During a tribal fight, it is common practice to burn houses, schools, hospitals, and farms in the enemy territory (Mathew, 1996).

In the 1980s, the easy availability of 12-gauge shotgun shells ‘for hunting’, the obliging measurements of galvanized-iron water pipes—plus a combination of ingenuity and foolhardiness—gave birth to the home-made shotgun. In a land of bows and arrows, the effect of the ‘home-made’ was both immediate and

devastating. John Burton, then an anthropologist with the University of Papua New Guinea, reported perhaps the first organized use of home-made guns in Highlands tribal warfare. In the latter half of 1986, they were deployed in fighting between the Jika Komb-Akelemb and Jika Komapi near Mt. Hagen, Western Highlands.²⁷ In 1989, after witnessing a tribal fight at nearby Minj, Burton wrote that home-made shotguns had ‘swept the bowmen off the battlefields as surely as the Panzers brushed aside the valiant Polish cavalrymen on the North European Plain in September 1939’ (Burton, 1990, p. 234).

Also in the late 1980s came the occasional Second World War bolt-action .303 rifle, factory-made single-shot shotguns, and .22 rifles, followed by more modern self-loading firearms as they became available from police and military imports. In June 1986, in the Western Highlands near Mt. Hagen, M16 and SLR assault rifles were reported in tribal fighting (Burton, 1990, pp. 232–3). Of the Southern Highlands localities surveyed for this study, Kagua reported the first firearm-related fatality in a tribal fight in 1987, followed by Bela, Nipa, and Tamanda in 1993, and Det in 1994. By the middle of the 1990s, most communities seem to have had access to high-powered weapons if required. One effect of small arms proliferation during this period is graphically illustrated in the five-year review of tribal fight admissions to the Southern Highlands provincial hospital at Mendi referred to earlier, which indicates a dramatic increase in gunshot wounds in 1993–94 (Mathew, 1996; see Figure 4).

While firearms increased the likelihood of fatal outcomes, they also appear to have slotted almost seamlessly into traditional battle tactics, often replacing arrows and spears. Blades and home-made shotguns remained in use for close-quarter combat, but the high-powered rifle made it possible to kill from concealment, at a great distance. Some observers reported few changes to the traditional rules of tribal fighting and engagement (Goldman, 2003, pp. 8, 13), while others pointed to significant shifts in the level of decision making. Now the most experienced, consensus leader could lose power to a youthful sniper with captured guns to bestow on fellow tribesmen. Increasingly, the named fighter decided when to shoot, who to shoot, and when to stop: ‘Gunmen have emerged as a new tier of autocratic and criminal leaders in many Highlands communities and, in the process, have undermined the positions of older, traditional leaders’ (Garap, 2004, p. 29). Policing became even more hazardous. The late David Tasion, in his time

as commissioner of police both respected and feared, told ABC reporter Sean Dorney: 'More and more the police force is being regarded as a third tribe' (Dorney, 2000, p. 316). Warriors, too, noticed the wider effects of increased firepower and long-distance accuracy. At a community meeting of Karints warriors in Tamanda, the consensus was that: 'No police will ever try to stop a tribal fight. When we have a fight, there is no sign of a blue uniform. No government men come in. They're scared.'

When all this was laid on top of age-old compensation and payback traditions, it became clear that guns had upped the ante. As firearms did more damage, the escalating cost of compensation, retaliation, and trauma made the cycle even more difficult to break (Dinnen, 1997, p. 7). And yet there was another side to the story. Amid all the news of conflict and injury, the role that guns are said to play in preventing violence can be readily overlooked. As Joe Kanekane, a Highlander with the National Planning Office, recalls: 'Guns have stopped tribal fights. They can act as a deterrent.'

Box 7 Tribal warfare: Testimony from the past

A researcher records:

The old men and women stated it was not like that in the past. Fighting then was more like a rough game where they fought to wound but not to kill. They spoke about how conflicts were resolved in the past and where human lives were respected and in fighting it was to wound rather than to kill. In those days women and children were not harmed or else the men who attack women and children would be called 'women' for attacking those who are not able to fight back. Traditional laws on tribal fights demand fighting to be done only at the battlefield by strong young men. Old men, women, and children were not attacked, however, if anyone enters the battlefield while fighting is going on, then she/he is considered being involved and therefore can be wounded. This rule has no longer been observed in the last twenty years or so. Today people use guns and kill with ease. There is no remorse. There is mass destruction of property (Garap, 2004, p. 33).

Mercenaries, hired guns, and gunmen

Most firearms used in tribal fighting in the Highlands region are unlicensed and are on hire to warring tribesmen. Police Commissioner Sam Inguba said ... police believe the firearms used are making the rounds of tribal hotspots, meaning they are being hired out to tribesmen who pay for the services of being armed.

Sam Inguba, commissioner of police (*Post-Courier*, 2004o)

This study confirms that, at least in the Southern Highlands, rental guns and mercenary gunmen have become unpredictable ‘wild cards’ in both political and criminal violence. Skilled marksmen, often with their own high-powered firearms, ammunition, and even trusted fellow fighters to form a team, can be retained for money, pigs, and women. Some self-styled ‘hiremen’ once served in the military, police, or correctional services; others have simply demonstrated calm, good aim, and tactics in a fire fight. Although reportedly well paid, lead gunmen in tribal fights also risk becoming the single most-prized scalp on the battlefield—largely for their weapons. Guns are also commonly rented on their own, with assault rifles and shotguns readily available for hire in group or individual conflict. Machine guns appear to have been moved around for display and deterrence, as in loosing off a burst of tracer fire at night, to impress an entire valley. But perhaps the most important variable injected by the rent-a-gun phenomenon is unpredictability. Given the wherewithal, even a group seemingly vanquished in a previous battle, with few skilled fighters remaining, can now ‘hire in’ both the weapons and the talent required to mount a credible counter-attack.

Among the gunmen interviewed, Kondup/Konjop fighter ‘Michael’ seems to have been one of the earliest renters: ‘I was the tribe’s gun buyer, and one of the best shooters. I travelled to Port Moresby and other places for my clan, buying and renting guns. I hired M16s and AR15s in 1994 and 1997. I hired two M16s in 1997 from their owner in SHP. In the battles, I shot at least four men.’ By early 2002, Police Commissioner Sam Inguba was making it known that warring tribesmen had been hiring weapons for the Mendi battles (Sela, 2002a). A New Zealand military attaché who visited Mendi during the conflict wrote in his report that fighters on one side ‘have access to about six or seven M16s, and to get more they “hire” weapons in. To hire a weapon the clan would pay between PGK 500–1,000 “and a pig”’ (USD 170–330, with a pig valued at USD 170) (Morris, 2002, p. 2).

In Bela, Menpo-Humsem fighter 'Paul' recalls: 'We hired a .303 from Western Highlands for three months. It cost us five pigs' (PGK 2,550, or USD 850).

Wogia gunman 'Lukas', who fought around Mendi from 1999 to 2002, recalled: 'I used an M16, an AR15, and a .303 jungle carbine in the tribal fights. We brought those in on three months' hire, for two pigs and PGK 1,000 [USD 330] cash each. I remember shooting one man at 200 metres. I got him in the head, "poof!" I'm sure he was dead. Many others I hit, but not confirmed kills' (his term). Some time later, when other fights broke out nearby, Lukas remembers: 'Two tribes tried to hire me because I'm a good shooter. They offered me PGK 1,500 [USD 500] for openers, but my chief said no. They offered me pigs, young women' Charles Yala, an economist from Enga Province, confirms that mercenary gunmen 'are usually paid with women, pigs and money' (Yala, 2002, p. 10). Of all the notions likely to be remarked upon by Western readers, perhaps none is more notable than that of trading young women for guns. Yet in the Highlands of Papua New Guinea, paying 'bride price' for an eligible young woman is common practice. Such deals frequently include livestock, and even a vehicle might come into the bargain. In this context, guns could be seen as just another trading commodity.

To Tari District Administrator Philip Moya, unaccompanied firearms have been for hire in the Southern Highlands for more than a decade, but mercenary gunmen seem more recent: 'Never before the Mendi fight. They became common in the Mendi, Poroma/Parita, Nembi Plateau and Utupia fights, and then in the Hela region.' Then, since the three-year Mendi conflict subsided in early 2002, Moya noted: 'Guns are being hired *from* Mendi, to be used in tribal fights in Tagali, Pureni, Hides/Nogoli, and Fugwa.' In this case, a familiar routine is playing out. In conflict areas around the world, peace is followed not so often by the destruction of surplus small arms, as by their redistribution to the next market for armed violence.

Box 8 Mark, the mercenary gunman

In a tiny hillside community a short way from the Southern Highlands capital of Mendi, 'Mark' carefully unwraps the tool that makes him so valuable to his clan, and to the Wogia people. It's a battered, but carefully maintained, self-loading army rifle, or SLR. Like his father before him, Mark has earned

renown as a tribal fighter. Rarest of all, he is said to be a cool-headed marksman. In 1999, Mark was up-skilled from bow and arrow to sniper rifle. In the fierce battles that followed around Mendi, he and fellow gunmen led the Wogia people into the warfare of another century. The SLR was very expensive, and well beyond the resources of a single villager. It was the clan that raised PGK 11,000 (USD 3,700) to buy this gun from a Port Moresby gunrunner. Mark was told the SLR came from Bougainville—like hundreds of others, a PNGDF weapon leaked from the nine-year island war. Its plastic carry handle is broken, and although model markings clearly identify the weapon as having been made for the ADF, the gun's shallow-stamped serial number, never more than a surface scratch, seems to have been easily filed away. Ammunition is relatively easy to obtain, but at PGK 10–20 (USD 3.30–6.60) for a single round, it's more costly than most.

In the three-year war between Wogia and Unjamap, Mark's role was central. He and other clan marksmen sifted from a 1,800-strong fighting force were carefully placed in battle, then protected at all costs. A typical tribal fight involved three Wogia skirmish groups of 15–20 young men aged 18–22. Each team of 'community boys' included three 'high-power shooters'—marksmen armed with factory-made SLRs or M16s taken from the army, or with AR15s from the police. Spotting with binoculars, the sharpshooters relied on younger men to flush out the enemy, then picked off their targets at ranges of several hundred metres, with single shots if possible, to avoid wasting ammunition. Few people from any society can maintain accurate aim, calm, and discipline in a gunfight. In the Highlands, as elsewhere, marksmen and their often individually named guns are prized, feared, and admired. In the Mendi wars from 1999 to 2002, Mark counts 34 fellow Wogia warriors killed in battle.²⁸ To the inevitable question, and without the slightest hesitation, he claims to have shot dead seven enemy men, all with bullets to the head, and wounded five more for sure. Three of Mark's own team were killed in gun battles, and a 15-year-old squad member was disabled when an Unjamap bullet shattered his thigh.

Like many Highlands men of reputation, Mark, who is educated, multi-lingual, and still in his early thirties, claims several wives and a dozen children. A keen rugby league fan, Mark talks of tribal warfare as he would a big match. Recalling trips to town to watch televised games, he says: 'War is like rugby to us. A big tackle is a man wounded. We count one death equals one try.' In the current absence of fighting at home, Mark offers his skills as a mercenary gunman. 'I'll go with 4–5 boys to fight for any other tribe for PGK 10,000 to 20,000 [USD 3,300–6,700] a month. Which tribe doesn't matter. I have skills. I'm looking for money now.'



© Philip Alpers

'Mark', a Wogia gunman, holds his clan's Australian-made, ex-PNGDF self-loading rifle, or SLR.

Transnational crime

Almost invariably, illicit small arms turn up in investigations of transnational crime. Law-enforcement agencies frequently use the identifying features of seized crime guns to trace criminal activity and to prosecute offenders. In the Pacific, drug-, firearm-, and people-smuggling operations are seen to share both trafficking

routes and traffickers. In the final communiqué of its 2001 annual meeting in Nauru, the 16-nation Pacific Islands Forum declared: 'There is clear evidence of serious transnational crime moving into the region' (Pacific Islands Forum, 2001, p. 6). Despite such warnings, no evidence exists of any sizeable shipment of illicit small arms reaching the Pacific since 1988.²⁹

Guns and terrorism

For terrorists, too, close connections to the illicit small arms and explosives trade are essential. Although to date no firm links have been revealed in island nations of the Pacific, there is concern that terrorists might find haven in impoverished, corrupt, and under-policed states. Among the various agencies involved, keeping tabs on gun-running is seen as an important component of the anti-terror toolbox.

Elections: gunpoint democracy

Elections are contests between the clans and tribes, a poorly sublimated manifestation of traditional rivalries.

Bill Standish, election observer (Standish, 1983, p. 117)

As early as the 1992 national election, a polling clerk in the Kagua district of the Southern Highlands tells of seeing an M16 being used to intimidate voters. Camillus Wambopa also remembers a local candidate for office holding him up with a .38 revolver, then firing a Glock semi-automatic pistol around his polling station. Yet in his assessment of political turbulence in PNG, veteran observer Ron May reminds us, against all the headlines, that 'Papua New Guinea is one of the few post-colonial states that has managed to maintain an unbroken record of democratic government' (May, 2003, p. 1).

One man, a police inspector at the time of the 1992 election, supported a local politician who became a cabinet minister: 'As soon as he was elected, he brought ten to twelve M16s and SLRs to a local tribal fight. His first gift to his village was guns. After he started it all, villagers in other places felt threatened. The whole village would get all boiled up and collect money for guns.' Two of the minister's constituents at the time confirm this story: 'The very first government service we received when our MP got elected in 1992, we had a helicopter land at our public

meeting place and boxes of guns were taken out of the helicopter and into the MP's village. They have many guns.' The next year, in neighbouring Simbu Province, candidates intimidated polling officers and voters with firearms, corrupting the 1993 provincial election results (Standish, 1996, pp. 315–16). This was a trend.

SHP has nine seated MPs, one of whom is governor. There are eight open electorates, and the governor represents SHP in Port Moresby at the provincial assembly. Since independence in 1975, no national government has lasted a full term. By the time of the 2002 national election, firearms and the willingness to use them were firmly enmeshed in the politics of the province. In mid-May, during a dispute over political turf, police brutality, and guns, supporters of one Southern Highlands MP shot dead a policeman, captured the rival candidate he was escorting, and held the politician for ransom in a cage with two surviving police officers.³⁰ Concerned that electoral officials planned to protect ballot boxes by collecting them directly from villages by helicopter, the district administrator for Koroba-Kopiago wrote to charter operators. On official letterhead, senior civil servant Stanley Kotange warned that any aircraft flying into his electoral area during the polling period 'will be shot down accordingly We are fully equipped with high-powered firearms.'³¹

Anticipating widespread violence, the national government deployed 13,000 sworn police, reservists, and auxiliaries to cover the elections, and placed 700 members of the PNGDF on standby (Sela, 2002c). Cities and towns were to vote in a single day, while rural polling would extend over two weeks. Day One, 18 June, saw polling places in turmoil. After waiting for nearly five hours to cast his vote, Prime Minister Sir Mekere Morauta fumed: 'This is more than a bungle. Someone should be hung for this' (*Post-Courier*, 2002e). Around the country, guns were used to intimidate and to kill at a wide variety of polling places (Alpers, 2004; McLeod A, 2004, p. 28).

In SHP, election observer Nicole Haley reported:

Ballot boxes were impounded, stolen or diverted to other areas and completed ballot papers were confiscated and destroyed. Candidates and their supporters throughout the region took control of ballot papers and boxes ensuring block votes ... No one I interviewed in the Kopiago area actually got to vote on polling day and few if any

sighted, let alone touched, their ballot papers ... while over 100 ballot boxes were distributed throughout the electorate, only three were actually counted (Haley, 2004, p. 20).

Another team of observers noted: 'A gun culture and climate of fear prevailed, encouraged to a certain degree by a number of candidates in the Highland provinces' (Commonwealth Secretariat, 2002, pp. 2–3).

On 10 July, four people were shot and chopped up in broad daylight in Mendi town and Tari district. Anderson Agiru, a former governor, said the majority of people did not vote in fear of gunmen who raided ballot papers and boxes and illegally filled them in. Armed supporters of one candidate stormed the Mendi police station, overpowered police, and removed ballot boxes containing about 30,000 marked ballot papers. In Tari, gunmen also entered the police station and removed 40 ballot boxes containing about 50,000 marked ballot papers (Kone, 2002c). Despite being confined to barracks, armed PNGDF soldiers, some of them senior ranking officers, illegally assisted political candidates in the Southern Highlands. Mendi police detained eight soldiers, some of whom were implicated in the ballot box raid on Tari police station (Sela, 2002d; May, 2003, p. 6). Announcing that ballot boxes had 'all been tampered with', Highlands Electoral Commission manager Boki Raga called for fresh elections. 'There is no form of democracy being shown here, and we have been controlled under the barrel of the gun' (*Post-Courier*, 2002f).

In six of the nine Southern Highlands electorates, the 2002 national election was deemed to have failed. Melanesian Institute director Philip Gibbs wrote: 'Firearms are now a significant factor. We are witnessing new kinds of tribalism with a new type of leader who has access to guns and the ability to open or obstruct access to money and resources' (Gibbs, 2004, p. 13). Prime Minister Sir Mekere Morauta conceded that MPs from his own party and others had supplied guns and fomented election violence. 'Where disruption took place the participation was universal, it became a survival game for every candidate', he said, 'so you can't really blame any particular candidate—it became a modus operandi' (Forbes, 2002).

Small arms, as always, were not the cause of this lethal violence, merely its enabler. At the root of the polling failure was a hopelessly corrupted electoral roll. In a country with five million people of all ages, the roll contains perhaps a

million more names than there are potential adult voters (Standish, 2002). In one Southern Highlands electorate, there were 2 ¹/₂ times as many enrolled voters as eligible voters (Haley, 2004, p. 20). In April 2003, aided this time by a fleet of helicopters and watched over by the massed police and military forces of the nation, supplementary elections to fill the six Southern Highlands seats were predominantly peaceful (*Post-Courier*, 2003c). In August 2004, Tari town mayor George Tagobe said it was an open secret that Southern Highlands political leaders are once more amassing illegal weapons to use in the 2007 elections (*National*, 2004f).

Guns and the elite

On the Twin Otter one day, we had 18 passengers. Our pilot asked if any of them had loaded guns, please remove the magazines. Sixteen had handguns, and one of them had two. That was a planeload of politicians.

Greg Bill, general manager, South West Airlines, Mendi, SHP

On 3 August 2004, Parliament was adjourned for three months 'for the safety of members'. Prime Minister Sir Michael Somare accused the opposition of using guns to forcibly detain MPs in the lead-up to a vote of no confidence in his government (*Post-Courier*, 2004k). One cabinet minister, explaining his defection to the opposition, followed by his return to the government a few hours later, claimed his actions were the result of armed coercion (Ginua, 2004). Parliament security guards confirmed seeing high-powered guns, but would not say who had them (*Post-Courier*, 2004l). Police Commissioner Sam Inguba later agreed that five or six firearms had been sighted in the final session (*Post-Courier*, 2004p). Finding an excuse to abruptly adjourn Parliament, thus avoiding the next no confidence vote, is a common tool of successive governments in PNG. But so are guns. At the commencement of an earlier sitting, police (unusually) forced MPs to leave their personal firearms at the gate. The result was a massive armoury at the entrance, bemusing international journalists covering the formation of the government (*Australian*, 2002).

Police Commissioner Sam Inguba says police have long suspected that 'PNG elite' may be involved in the gun trade, but have been unable to prove this in any investigations (*Post-Courier*, 2004n). Yet Anderson Agiru, a former Southern Highlands governor, once photographed carrying an assault rifle as he passed through

the terminal at Mendi airport, has candidly admitted the involvement of politicians and senior civil servants in gun-running (Taimbari, 2002). Sensing a Western visitor's bemusement at this apparent role reversal in criminal trafficking, a foreign diplomat in Port Moresby is emphatic: 'It's the *educated* nationals who are the key to corruption and guns.' Charles Yala, an economist from Enga Province, explains:

Educated elites from warring tribes are influential in the decision making process because they are the main suppliers of guns and ammunition. They supply arms in response to social pressure, expectations, and obligations to their tribesmen. An educated person who fails to support their tribe during tribal warfare loses face and should they harbour political ambitions, their prospects for political success are diminished. People listen to and respect such educated people largely because their tribes depend upon them for arms Because there is a strong underlying demand for arms, this problem is similar to the global drug trade problem (Yala, 2002, pp. 9–10).

For Westerners, the parallel may be to see privileged children growing up to steal from the stock market and deal in recreational narcotics. In the Highlands, the topmost strata of society embrace gun-running to maintain their prestige and to seize a larger share from the pot. These are the 'conflict entrepreneurs' of PNG, and currently they seem to be thriving.

In the cities, the dynamics can be different. Portable personal protection drives the market, and concealable handguns are *de rigueur* among the affluent. The Royal Papua Yacht Club, sometimes described as the country's last bastion of colonialism, has seen more than a few guns fall out of holsters at the bar. When applying for an executive position in a PNG enterprise, the employment package is likely to include a house, a car—and a handgun, complete with a licence to carry, both of which may be legally transferred from the previous incumbent. Says one expatriate in Port Moresby: 'My husband gets a handgun and a licence with his job.'

Prohibited by law in every other member state of the Pacific Islands Forum, the possession of a private firearm for the purpose of self-defence—in particular 'concealed carry'—is both permitted and commonplace among licensed gun owners in PNG. Expatriates (the local word for European residents) and members of

PNG's sizeable, ethnically Asian business community, are said to be the most frequent handgun carriers. Deputy Commissioner of Police Gari Baki says this is not a major concern: 'Asians tend to be law-abiding, licensed gun owners. Not much gun abuse. Most prominent Asians would have a handgun. Lots of them carry in their cars, and concealed. Quite a number of expats also carry.'

Not all legal gun owners are law-abiding. A variety of court cases and media reports bear witness to politicians, sometimes inebriated, using lawfully held guns to threaten and to wound (Alpers, 2004). In September 2004, East Sepik Province alone saw three separate cases in which licensed gun owners were charged with firearm-related murder (NauFM, 2004). A year earlier, four men attempted to hijack a car outside the Koki Big Rooster restaurant near Port Moresby. Seeing the struggle, a passing licensed gun owner drew his pistol and opened fire. He missed all four men, and instead shot two year-old Tinoi Samuel, who had been sitting nearby in his parents' vehicle. The boy died before reaching hospital (John, 2003). The expatriate shooter, an executive with a well-known company, was allowed to leave the country. Presumably, his licensed handgun remained in Port Moresby, and was passed to his successor.

Access to basic services

Areas are reverting to violent tribalism, self-styled warlords are heavily armed and rampant corruption diverts practically all funding from essential services such as education and medical care.

Mark Forbes, reporting from Mendi for the *Sydney Morning Herald* (Forbes, 2004)

Much of the argument about guns, and the damage wrought with them, revolves around old notions of national security. In PNG, as elsewhere, these discussions are dominated by the military, police, and the elite—many of whom carry, and often misuse, guns themselves. In recent years, driven largely by development-oriented governments and humanitarian NGOs worldwide, a more people-centred theme has emerged. The growing 'Human Security' movement reminds each state of its responsibility to guarantee the safety, health, and welfare of its citizens, not as privileges, but as fundamental human rights. In PNG, guns, and the privilege seized by those who misuse them, deny such rights to many—simply by obstructing access to essential services.

Health

One of the most serious consequences of armed conflict in the Highlands is its effect on peoples' access to basic health services. Unwilling to risk its personnel, the World Health Organization (WHO) was unable to send assessment teams into many parts of the province to determine measles immunization needs. Although the province relies heavily on Mendi Hospital as its only centre for treatment of serious illness and injury, gun violence forced staff to flee, leaving the hospital abandoned for the better part of a year—a telling sign, given that health personnel are usually the last to vacate. In the remote villages where most Highlanders live, prevention and treatment programmes for HIV/AIDS, malaria, tuberculosis, measles, whooping cough, and other diseases all suffered setbacks. Wrote one surgeon: 'Many villagers fail to attend the hospital because of lack of transport, fear of traversing enemy territory or unwillingness to share a hospital with the enemy.' As a result, most trauma deaths occur before the patient reaches hospital (Matthew et al., 1996). In late 2004, nearly three years after fighting began, Mendi's School of Nursing had not been reopened. Here it is important to note that, while armed violence is often blamed, underlying government neglect and non-delivery of resources remain as persistent barriers to health care.

Education

An important goal of Highlands tribal fighting remains the conspicuous destruction of enemy homes, crops, property, and facilities. With defeat often not conceded until pillage leaves no doubt, schools can be no exception. In the 2001–02 wars, Mendi High School was gutted by fire, largely because it was perceived by one faction as an asset of the tribe whose land adjoins it. With each school and town perceived as enemy territory for some, with public transport regularly harassed at armed roadblocks—at which free passage can be granted or denied on the basis of clan allegiance—education in the Highlands has suffered badly. Now, less than half the country's school-age children are in education. Perhaps nowhere in the midst of poverty and armed violence are the effects more profoundly felt, nor more costly for all, than in the spoiled future of youth.

Damage to the economy

It's the business environment from hell. Interest rates 23 per cent. Inflation 14 per cent. Unemployment 36 per cent. Corruption endemic. Only a third of children is at primary school and only half the population is literate Top of the world table in violent crime

Rowan Callick, citing a World Bank report in the *Australian Financial Review* (Callick, 2000)

In 2004, with armed violence and personal safety high among its key indicators, the *Economist Intelligence Unit's* annual 'Global Hardship Survey' once again rated Port Moresby as the most uncomfortable, and the most dangerous, of 130 world cities. Branded the 'worst place to live', where existence for expatriates entails 'extreme hardship', PNG's capital city was ranked below Lagos, Dhaka, and Karachi (EIU, 2004). As they are in many other developing countries, poverty and armed violence are seen to go hand in hand. In PNG, 2003 marked the ninth year of negative or zero per capita income growth (Hughes, 2004, pp. 1–2). National income per capita halved in five years (AusAID, 2002b, p. 1), and less than 10 per cent of the population is employed in the formal sector.

Tribal fighting and gun violence also impose long-term economic effects on individual communities. The elders of Det, near Poroma, recall the immediate costs of battle: 'We gave away two girls, pigs, a store, a car, and many thousands of kina to get guns.' For the Det side alone, the 1997 battles may have cost as much as PGK 3 million (USD 1 million) (Alpers, 2004).

In the 2002 UN Development Programme (UNDP) *Human Development Report*, the nation ranked 133rd out of 173 nations (UNDP, 2003). PNG now has the lowest human development index and the highest human poverty index of 12 Pacific countries (PNG, 2004b, pp. 7, 11). Perhaps nowhere in the Pacific region is the need to curb gun violence, and the poverty it helps to aggravate, more insistent.

Development and aid

Australia and New Zealand, the largest development donors in the Pacific region, both reflect international policy thinking in regard to guns and development. An AusAID document identifies the links as follows:

The pervasive influence of small arms on core development objectives is as evident in the Pacific as it is in many other parts of the world. The widespread availability and misuse of these weapons not only represents a security threat, but is also a crucial retarding factor on socio-economic development. Development practitioners are increasingly focusing on the concept of the 'security-development nexus'—that is, the need to merge security and development agendas to ensure sustainable development outcomes. After all, even low levels of insecurity (such as are sustained by small arms proliferation and misuse) can rapidly reverse development achievements, and create an environment in which recovery from major conflicts and disasters can be protracted (Moore and Darvill, 2004).

Foreign grants to PNG totalling PGK 849.7 million (USD 283 million) increased by 6.8 per cent in 2003–04, and represent 22 per cent of total PNG government revenue and grants. Of this, 82 per cent came from Australia (PNG, 2004c, p. 2), which contributed more than AUD 300 million (USD 220 million) annually to PNG between 2000–01 and 2003–04. In 2004–05, Australian aid is expected to rise to well over AUD 400 million, or USD 294 million (Hughes, 2004, p. 10). Poverty reduction is the central integrating factor of Australia's aid programme, which aims to strengthen law and justice, human rights, and democratic institutions; develop civil society; and reduce vulnerability (AusAID, 2001; 2002b; PNG, 2004b, pp. 2–3).

Under its five-year Enhanced Cooperation Programme announced in December 2003, Australia will station 230 of its own federal police across PNG, along with specialists in administration, accounting, law, and justice (McLeod S, 2004; *Post-Courier*, 2004h). Hailing this decision, *The Australian* (2003) editorialized:

The next stage in the federal Government's abandonment of the longstanding 'hands off' policy towards our South Pacific neighbours has begun, with last week's announcement of an [AUD] 800 million rescue package for Papua New Guinea. As the largest source of aid in the region, and a former colonial power, we no longer enjoy the option of sitting back and watching South Pacific states fall over and become fronts for drug and gun-running, money-laundering or even terrorism.

Integral to the PNG development programmes of Australia, New Zealand, the European Union, and Japan, among others, is implementation of the UN *Programme of Action* to curb the proliferation of illicit small arms (UN, 2001).

Effects on aid programmes and personnel

Development agencies are often reluctant to risk personnel in environments where illicit small arms have proliferated (Beasley, Buchanan and Muggah, 2003). In 2003, a UN Habitat team fled PNG when they felt their security was compromised. The UN Security Coordination Office (UNSECOORD) raised PNG's risk ranking for UN personnel to a 'war' footing, similar to that in Iraq. In addition to the disruption of aid programmes, the cost of post-conflict recovery and weapon collection and destruction can divert resources from more productive, long-term development goals.

Other effects

For as long as PNG is seen as one of the most dangerous places on Earth to visit, its considerable potential for tourism seems unlikely to be realized. Potential investors in this and other sectors are also deterred by PNG's faltering economy, rampant corruption, and chronic lack of transparency in business and other dealings. Above all, the cost of opportunities lost due to PNG's entrenched culture of violence seems incalculable.

Although this study focuses on the effects of the proliferation and misuse of firearms, cause and effect at other levels are rarely clear-cut. As an earlier Small Arms Survey study has commented: 'The broad economic and social impacts of conflict could not be narrowly interpreted as a proxy for small arms' (Muggah and Berman, 2001, p. 6). Yet there is a range of indirect effects that can be attributed, perhaps not solely, but certainly primarily, to the prevalence of armed conflict or the unregulated availability of firearms. These include individual and psycho-social trauma, and increasing levels of criminality. In many cases of forced displacement in the Southern Highlands, particularly during the Mendi battles, the presence of an armed threat was clearly the key factor obliging people to leave their homes and communities. Criminals, tribal fighters, and police also committed human rights atrocities, for which they are yet to be held accountable.

Small-arm-related violence can also lead to lasting trauma at both the individual and social level. Violence may become culturally endemic, so that even where genuine disarmament efforts are being made, individuals continue to respond to problems by resorting to armed force (IPPNW/SAFER-Net, 2001, p. 11). Those with access to illicit firearms may also make a personal investment in criminal or combatant skills, rather than in education and training. Long-term cultural shifts might occur where the availability of guns challenges customary systems, perhaps putting young men out of the control of village elders. As this report shows, women and young people are also deeply affected by the adverse effects linked to small arms.

MEASURES: ATTEMPTING TO CURB ARMED VIOLENCE

Legislation³²

Comprehensive firearm legislation, though not sufficient in itself, forms the foundation of effective small arms control, both domestically and regionally. Stringent rules on firearm ownership and use, limits on access to ammunition, careful background checks of licence applicants, and regularly updated firearm registers are just some of the components of such legislation, underpinning both national and human security and sustaining effective law enforcement. Like most transnational crime, illicit small arms trafficking thrives on the ability to exploit differences between and inefficiencies in jurisdictions. For this reason, countries seeking to combat small arms proliferation should focus not only on improving local and national laws, but also on harmonizing key components of firearm laws across states. Uniform import-export laws and penalties for illegal trafficking are particularly important, as are common rules on marking, tracing, and record keeping for arms and ammunition.

In PNG, as elsewhere, a reflexive response to gun violence is always to call for tougher penalties, or retribution (John, 2004b; *Post-Courier*, 2004d). Ironically, PNG already has some of the most comprehensive small arms legislation in the Pacific, and is almost alone in having extensively revised and adapted its gun laws in recent years. As the high-powered guns responsible for most deaths and injuries in the Southern Highlands are already comprehensively prohibited in civilian possession, there seems less need for new laws than for the enforcement of existing laws. In a worldwide process that began in 2001, all UN member states agreed to bring their small arms legislation, regulations, and administrative practices up to a common standard; to combat transnational crime; and to curb the proliferation of illicit small arms (UN, 2001). In a comparison of Pacific states conducted for

the UN in 2003, PNG's existing gun laws show more points of compliance with this global standard than any other developing nation in the southern Pacific (IANSA, 2003). Nevertheless, there are some notable points of difference in PNG gun laws.

Of all the developing nations in the Pacific Islands Forum, only PNG permits the private ownership of handguns (pistols and revolvers), and only PNG allows private firearms to be kept and carried for self-defence.³³ The *Firearms Act* (PNG, 1978) falls short of current UN recommendations on firearm marking and tracing, arms brokers, export and import licensing, and the destruction of surplus small arms (IANSA, 2003). Oddly, the *Firearms Act* does not appear to specify a penalty for illegally importing or exporting firearms. With regard to other firearm-related offences, PNG gun laws are widely variable, providing a much lower maximum penalty than 10 out of 15 fellow Pacific Islands Forum countries for unlawful possession of a firearm, but a much higher penalty than most for unlicensed dealing in firearms (Alpers and Twyford, 2003, p. 71). Unlike other countries, PNG does not specify requirements for secure storage of firearms (UN, 1998).

Even where legislation is in place, existing systems sometimes do not provide the necessary support. In PNG, where background checks of applicants for firearm licences are required by law, ineffective intelligence systems mean that criminal-record checks will not turn up individuals who have been charged but not convicted in domestic violence cases, or who have a history of mental illness. Despite rampant domestic violence, and unlike neighbouring countries, PNG does not require a spousal reference to complete a firearm-licence application.

All of this presupposes that resources can be made available for the necessary improvements. But no amount of legislative tweaking can substitute for effective enforcement of existing laws, which in many cases are already close to world standards. Nor can writing new laws improve the population's willingness to comply, in the absence of respect for those laws and for the justice system that administers them. As numerous commentators have remarked in a myriad of reports spanning several decades, before any meaningful improvement to human security for its citizens can occur, the Government of PNG must first reform the law and justice sector, and regain the trust of those who have turned to guns.

Box 9 Pacific model legislation

Recognizing that domestic and regional controls are crucial to any international effort to curb the illicit trade in firearms, the 16 member states of the Pacific Islands Forum have worked since 1996 to develop a common regional approach to weapons control. In March 2000, this culminated in the *Nadi Framework* agreement (SPCPC & OCO, 2000), which seeks to encourage cross-border cooperation and harmonize legislation throughout the region. The *Nadi Framework* is premised on two basic ideas: that the possession and use of firearms, ammunition, other related material, and prohibited weapons is a privilege that is conditional on the over-riding need to ensure public safety, and that public safety will be enhanced by imposing harmonized controls on the importation, possession, and use of these commodities. If uniformly adopted, these would significantly improve the firearm laws of many states, and provide a common regional deterrent to small arms traffickers. In August 2003, the *Nadi Framework's* draft model *Weapons Control Bill* for the Pacific was unanimously accepted for consideration by all 16 member states of the Pacific Islands Forum. If PNG were to adopt the provisions of the *Nadi Framework*, many penalties for firearm-related offences would be increased, systems for storing and monitoring state-owned small arms would improve, and the country's gun laws would move closer to the international standards recommended in the UN *Programme of Action* (Alpers and Twyford, 2003, pp. 108–16).

Lawful civilian gun ownership

In PNG, each lawful private gun owner is licensed, and each legal firearm is also registered with police (PNG, 1978).³⁴ In August 2000, police declared a moratorium on new firearm licences. The effect was to freeze the number of existing licences, but to allow their renewal, or transfer from one lawful gun owner to another. In August 2004, according to Police Commissioner Sam Inguba, there were 27,043 licensed firearms in private possession in PNG. Of these, 23,310 are shotguns, 2,446 pistols, and 1,287 rifles (Balavu, 2004). Included are firearms licensed to individuals; shooting clubs; and businesses, such as security companies, but not firearms held by police, defence, and other state agencies. In SHP, police know of fewer than 300 licensed firearms: 250 shotguns, 20 rifles, and less than 30 hand-

guns. But the licensing scheme is a national one, so gun owners both living in and visiting the province could be licensed, for example, in Port Moresby. In the Southern Highlands, most guns are illegal.

Shooting Association of PNG president Mel Donald estimates that nationally, 85 per cent of lawfully held private firearms are registered for subsistence hunting, 12 per cent for self-protection or security, 2 per cent for club use, and the remaining 1 per cent for veterinary, scientific, or destruction of livestock purposes (Donald, 2004). In 2003, Parliament was told that the current government would maintain the freeze on new firearm licences until all illegal weapons were brought in (Kenneth, 2003). Since the 2000 moratorium, although Commissioner of Police Sam Inguba says 'I have not issued any [new] firearms licence' (*National*, 2004c), existing licences can still be renewed, or lawfully transferred (along with the firearm named on the licence) from owner to owner. In September 2004, reacting to an anti-gun campaign launched by the national *Post-Courier* newspaper, the government minister responsible for police, Bire Kimisopa, called the firearm issue 'very scary'. 'Most of our law and order problems in this country are gun related ... It is my firm belief as the Minister for Internal Security that firearms should be banned completely in this country' (*Post-Courier*, 2004g). If the minister gets his way, police coffers may suffer. Firearm licence fees were recently increased, and in 2003, the total national revenue of the RPNGC leapt to almost five times that of the previous year, due largely to an almost eightfold increase in arms-permit receipts (PNG, 2004c, p. 3).

This study is limited to unlawfully held firearms and their illicit trafficking, with fieldwork concentrated in the Southern Highlands. Yet in Port Moresby, rumours abound concerning the police firearm-licensing section. Individuals, businesses, and security companies complain that it can cost PGK 10,000–17,000 (USD 3,300–5,600) to transfer a legal handgun from one owner to another. By contrast, an identical illegal pistol can be had for one-fifth of that price on the black market. If citizens are to be assured that all is well with the official firearm-licensing system, more transparency may be required.

Enforcement and imprisonment

As with other crime in PNG, firearm-related offences most often go unpunished. One report noted: 'The legal system seems incapable of bringing either

small or large crooks to justice' (Windybank and Manning, 2003, p. 1). In its recent review of the law and justice sector, the Department of the Prime Minister and National Executive Council concluded: 'The probability of being arrested for serious crime is less than one in two ... if arrested, the probability of not being convicted is one in four or better; a person, charged with a serious or major crime, is unlikely to appear to face trial in over half of all cases, and the rate of success in recapturing [prison] escapees is about one in four' (PNG, 2002b, p. 39). Despite this, PNG's prisons hold 140 inmates per 100,000 population—a rate more than double that of Australia, which incarcerates 60 prisoners per 100,000 people (PNG, 2002b, p. 39).

A few kilometres south-east of Mendi, the Bui Iebi Correctional Institution is the main prison for the Southern Highlands. Snr. Insp. Felixie Namane, the provincial gaol's commanding officer, reports that between 1 January 2002 and 30 April 2004, 399 prisoners, all of them men, were admitted from every district of SHP. Of these prisoners, 59 (16 per cent) were charged with firearm-related offences. Of these, 27 had been sentenced, 31 were held on remand, and one had escaped. Nine of the 59 prisoners were aged 15–20, 33 aged 21–30, and 17 aged 31–50.³⁵ Within the 28 months covered by these figures, from July to December 2002, the process of imprisonment in SHP was effectively suspended for the election period. During these six months, a time in which violent crime was reported to have soared, any form of police arrest in the province was judged 'too risky, politically', and the provincial gaol received no new inmates.³⁶ For those 59 men who were admitted to Bui Iebi for gun crime before or after this period, the charges laid and penalties imposed are shown in Table 6.

Table 6 Firearm-related charges laid against and sentences imposed on 59 male prisoners, Bui Iebi Correctional Institution, SHP, Jan. 2002–April 2004

Firearm-related offence	Charges	Penalty range, or remand
Murder committed with a firearm	10	7–34 years, and 3 x life
Armed robbery (mainly at roadblocks)	21	6.5 years, or remand
Gross bodily harm with a firearm	1	5 years
Gang rape at gunpoint	5	All five prisoners on remand
Theft or robbery of a firearm from police	5	9 years, or remand
Unlawful possession of a firearm	23	2 months to 2 years

Although no one is arrested in the Southern Highlands for the great majority of gun homicides and other firearm-related crimes, in comparison with the prison populations of other nations, the percentage of inmates held primarily for firearm-related crime is nevertheless still high. Court-imposed penalties are in line with or more stringent than those imposed in other Pacific Islands Forum nations.

Gun amnesties

When guns are surrendered to the police, the gesture is largely symbolic, with tribal groups surrendering only a portion of their armoury and typically only those weapons that are not powerful.

Charles Yala, economist, Australian National University (Yala, 2002, p. 9)

Many attempts have been made in PNG to encourage the voluntary surrender of firearms (*Post-Courier*, 2002b; Albaniel, 2004). These usually follow the announcement of an amnesty from prosecution. In recent times, almost all firearms surrendered in the Southern Highlands have come from the Hela people in the western part of the province, around Tari (Alpers, 2004). Although such events are widely hailed in media reports, Deputy Commissioner of Police Gari Baki admits their limitations: 'Almost all firearms recovered in surrender ceremonies are home-made. They keep the guns they want to keep.'

When relied on as major components of development programmes, amnesties risk showing more style than substance. Particularly in nations not at war, a growing body of evidence suggests that amnesties rarely succeed in removing targeted weapons from circulation (Plotkin, 1996; Sherman, 2001). Although widely favoured by policymakers as an instinctive and inexpensive option, gun surrenders and buy-backs yield better results in public relations and community building than in preventing future gun injury (Romero, Wintemute and Vernick, 1998; Wintemute, 1999). Two leading researchers have referred to gun amnesty and buy-back initiatives as 'a triumph of wishful thinking over all the available evidence', and 'the programme that is best-known to be ineffective' in reducing firearm violence (Dorning, 2000). Although authorities periodically promote gun amnesties, in reality unwanted firearms will be accepted for disposal (or recirculation) by RPNGC personnel at any time. The effect is a year-round amnesty.

Weapons for cash or development

Regardless of past experience and research, gun buy-backs are proposed with enthusiasm by owners of illegal small arms throughout the Southern Highlands, always with full market value in mind—or more. As the people of Tamanda suggest: ‘The guns have to be brought back with interest, and destroyed.’ The men of Nipa agree: ‘Tell AusAID and UNDP we’d burn all our guns [in return] for development in Nipa.’ In 2002, just such an initiative was announced by the governor of an adjoining province: ‘Enga Provincial Government has allocated PGK 100,000 [USD 33,300] to buy back unlicensed firearms ... owners needed to understand that if they surrendered their weapons to police, there was money waiting for them and they would not be prosecuted and charged’ (Taime, 2002). The scheme has not been heard of since.

Given non-delivery of previous promises, deep distrust of authority, fear of rival armed clans, and acknowledged recirculation of previously surrendered firearms, any ‘weapons for development’ scheme in PNG faces a legacy of mistrust—not to mention entrenched methods of cash diversion. The challenge is to find communities willing to trust their neighbours to comply equally, agencies within the community (probably faith-based) committed to transparency and accountability, and an accepted verification process. To overcome a major potential for imbalance, disarming participants should also pledge to forego rental guns and mercenaries. Incentives should provide a demonstrable improvement to infrastructure for the benefit of all, but never cash. Arguably, no such scheme is likely to succeed in the absence of parallel law and justice reform, including demonstrable enforcement of gun laws, in particular to prevent trafficking and recirculation. Prompt and public weapon-destruction ceremonies are recommended.

Even when guns are retrieved and destroyed, the reintegration into peaceful society of former armed combatants is likely to require more than the mere absence of high-powered firearms. As one commentator has put it, disarmament will need to be both physical and psychological, ‘getting rid of not only the guns in people’s hands, but also the guns in their heads’ (Chevalier, 2000).

Public destruction of state-owned weapons

If civilians are asked to disarm, the state could lead by example. The RPNGC does occasionally destroy seized crime guns and other weapons (*Post-Courier*, 2003b).

AFP also helped dispose of more than 100 firearms from the RPNGC evidence room at Bomana police college. Under the Australian-led Defence Cooperation Programme, nearly 4,000 military small arms and explosives were destroyed in 2003. As ongoing audits of police, defence, and prison stockpiles throw up more weapons for destruction, the public relations potential of destruction ceremonies should not be overlooked.

Ammunition interventions: proven and promising

Recent experience in PNG shows that several ammunition-related interventions have been successful, and could be even more so in future by:

- encouraging and reinforcing limits on ammunition imports;
- closely investigating all transfers of military-calibre ammunition;
- upgrading controls at airport choke points, and freight and baggage inspection;
- increasing scrutiny of cargo on chartered planes and helicopters; and
- increasing accountability for ammunition issued to police, defence, and corrections personnel; security firms; arms dealers; and private gun owners.

Reducing demand

Perhaps not all of Melanesia has been subject to the demand forces that prevail in the Southern Highlands. According to UNDP, the recent and predominantly successful disarmament process in the Solomon Islands may have been assisted by a 'pre-existing aversion to conflict and the use of weapons'.³⁷ In PNG's Highlands, some have posited the opposite: that a predilection for violence and tribal warfare has created a 'deep preference for conflict' less amenable to successful intervention, accompanied by a 'persistent and inelastic' demand for factory-made firearms (Muggah, 2004). Certainly, the convergence of 'greed, grievance and opportunity', as described by Paul Collier and colleagues in the World Bank Policy Report *Breaking the Conflict Trap*, seems clear and present among the conflict entrepreneurs of the Southern Highlands (Collier et al., 2003).

In a recent survey in the Southern Highlands, 75 per cent of respondents said their motivation for firearm ownership was self-protection from enemies, while 25 per cent cited payback (i.e. retaliation, or extracting compensation, or both). Four per cent reported personal gun possession for criminal use. Over 60 per cent would buy firearms if they could, while 66 per cent said guns made them safer

(Muggah, 2004). In remote parts of the Southern Highlands, wild pigs, cassowaries, and other game are shot for food and adornment. Yet in the present study, which covered high-population rural areas, no person interviewed gave hunting as a tertiary, let alone a primary, reason for gun ownership. Without exception, informants made it clear that they acquired high-powered firearms for the sole purpose of intimidating, injuring, or killing human beings (Alpers, 2004).

At a recent UN seminar on illicit small arms in the Pacific, AusAID encapsulated current consensus themes on demand:

Obtaining small arms is not an end in itself, but merely a means to attain and sustain influence. Without reducing the demand for small arms, interrupting supply will be insufficient to achieve long-term stability. Measures are needed to redress the deep-seated grievances that drive individuals to acquire weapons. In parts of the Pacific, and particularly in post-conflict societies, these grievances sit within entrenched cultures of violence and impunity which fuel the demand for small arms (Moore and Darvill, 2004).

Demand issues in Melanesia are examined in more depth in a parallel Small Arms Survey publication (Muggah, 2004). From a range of interviews conducted in the Southern Highlands for the present study, and in response to the question 'why do you have guns?', the following views express the most common demand themes:

- 'If the justice and police system worked, we wouldn't need guns' – Bill Nende.
- 'We buy guns to protect ourselves against tribal enemies' – Wenol Topa.
- 'We brought in M16s for our tribal fight, then we sent them back. We had no need for them after that' – Christopher Tos.
- 'If we have a gun, we feel we are somebody. We are a big name. We feel more secure, and we protect our community. If we had police here, making us feel more safe, we wouldn't need guns' – Tamanda resident.

From this, and from a host of other observations published in recent years on PNG, a consensus emerges: restoring justice and security to the people of the Southern Highlands would reduce, or even remove, the demand for small arms. The only way to test this theory may be to succeed.

FUTURE DIRECTIONS

No one has yet figured out what to do about the gun problem. It is almost inconceivable that law and order can be restored in any permanent way while so many sophisticated weapons are in the hands of criminals and others. We need some really creative thinking to find a solution to this dilemma.

Bishop Steve Reichert, Catholic Diocese, Mendi (Reichert, 2002)

The year 2005 is a good one in which to map out a creative a strategy for the removal and destruction of illicit small arms from the Southern Highlands. Recent years have seen a surge of research into what works and what doesn't, and several international evaluation projects have recently become available. The UN Institute for Disarmament Research (UNIDIR) has presented the results of its Weapons for Development Programme Evaluation from Albania, Cambodia, and Mali. This discusses participatory design and planning of weapon collection, incentives, assessment criteria, funding, and resource mobilization, and refines approaches to weapon-collection programmes. The report of the UN Group of Governmental Experts on the relationship between disarmament and development is contained in presentations to the 59th session of the UN General Assembly (Vignard, 2004). From nearby Bougainville and the Solomon Islands, analyses are now available of the contrasting results of major weapon-collection and -destruction programmes (Alpers and Twyford, 2003, pp. 81–105; Nelson and Muggah, 2004; LeBrun and Muggah, 2005).

With the addition of the present study, the Government of PNG and its development partners now have to hand much of the baseline information with which to make informed decisions and to plot a future course. But as always in this nation, where traditional cultures and attitudes can be far more potent and

influential than anything imposed from 'outside' (a term that often includes Port Moresby), the wholehearted and willing participation—and trust—of the people and NGOs of the Southern Highlands will be a prerequisite for any successful initiative.

CONCLUSION

Neither the recent tribal conflicts in the Southern Highlands nor criminal activity has generated sufficient demand to prompt an influx of arms from countries outside the region. Combatant groups and criminals alike seem satisfied with the rich and easily available domestic supply of firearms within PNG, while the leakage of weapons and ammunition from state-owned stocks remains a major hazard. It must be emphasized that existing local stockpiles, and not cross-border trafficking and smuggling, are the primary source of firearms misused in crime, conflict, and intentional and unintentional death and injury in the Highlands.

In the Southern Highlands, as elsewhere, the injection of high-powered weapons into fragile, combative communities has sparked widespread instability. Stakeholders whose first concerns range from development, human security, and stability to justice, health care, and education rightly see the proliferation of firearms as a stumbling block to their own success. Although legislative improvements may be on the horizon in the wake of the *Nadi Framework*, these are unlikely to exert much influence in a country where the rule of law—no matter how well drafted—is widely ignored.

Worryingly, even basic firearm-related health and justice information is lacking. Accurate data is the lifeblood of informed policy making. Without base knowledge of the effects of firearm-related violence in affected communities, the actual sources of weapons, and the routes they travel from harmless to harmful, the small arms problem could become much worse before it improves. To avoid any new influx of weapons, along with the gloomy pattern of small arms contagion so common in less fortunate regions, donor partners have an important role to play in prevention. The trust and involvement of community actors will be essential, and grass-roots community involvement—in particular, empowering partnerships

among governments, donors, churches, and women's groups—will be essential if weapons are to be collected and destroyed, and peace returned to strife-torn communities.

A pessimistic view is that we might only expect to temporarily disrupt the supply of small arms to the area—that unless demand is lessened and the gun culture is reversed, new trafficking routes are likely to replace the old ones. On the other hand, of all regions on the globe, Melanesia has more cause than most to be optimistic. Recent initiatives in Bougainville and the Solomon Islands have shown widely acknowledged success. These islands already possess their own skill base with which to design yet another productive Pacific solution to the clear and pressing problem of small arms misuse in the PNG Highlands.

Endnotes

- 1 For a more comprehensive discussion of firearm models, serial numbers, and ammunition types, along with quantities imported to PNG, see Alpers (2004).
- 2 The findings of this study are supported by a 70 per cent preference for M16s in another, parallel-structured survey: see Muggah (2004).
- 3 For a synopsis of interviews conducted for this survey, including summaries of firearm availability, death, and injury in 19 Southern Highland communities, see Alpers (2004).
- 4 Undated letter from Stanley Kotange to major helicopter operators in PNG: 'Complete Cessation Usage of Choppers during Election Period within Koroba Kopiago Districts of Southern Highlands Province.'
- 5 RPNGC stocks include selective-fire (automatic) H&K MP-5 sub-machine guns, six selective-fire SIG 540 rifles, 12 M16s, and Ultimax-100 light machine guns.
- 6 The weapons, allegedly delivered to police by licensed arms dealer ZD Industries in Port Moresby, were 'missing' from RPNGC records, whereabouts unknown (*Australian*, 2000).
- 7 Interviews with Lt.-Col. Joe Ben, director Supply, PNGDF HQ, Murray Barracks, Boroko, NCD, 8 & 11 February 2005.
- 8 Interview with Mal Malikienas, logistics adviser, RPNGC HQ, Konedobu, NCD, 12 October 2004.
- 9 Comment made at the Pacific Islands Countries Regional Seminar on the Illicit Trade in Small Arms and Light Weapons in All Its Aspects held in Tokyo, 20–22 January 2003. The delegate, who shall remain nameless, was reflecting on the responsibility he feels at holding the key to his nation's armoury—and expresses the power that weapons have to influence societies in the Pacific—and any other—region.
- 10 Internal cable from Det. Supt. Bill Taylor, police liaison officer, PNG post to OIC International Division, AFP, 16 February 1995.
- 11 With the assistance of Paul McFawn, federal agent and team leader, Firearms and Ballistics, AFP Weston, the author reviewed firearm traces performed on behalf of the RPNGC at the AFP Forensic Services unit from 1995 to 2002.
- 12 Interviews that reveal the lack of an Australian market for PNG cannabis are detailed in Alpers (2004).
- 13 Personal correspondence from Marc Jannier, head of Secretariat, Oceania Customs Organization, Noumea, New Caledonia, 24 May 2004; and Allen (2004), Alpers and Twyford (2003, p. 23), and Capie (2003, pp. 76–8).
- 14 Officially the North Solomons Province of PNG, this island group is commonly known as Bougainville.

- 15 The US government produces a range of reports on military and commercial small arms transfers, including the Pentagon Defense Security Assistance Agency's *Foreign Military Sales (FMS) Report*; the State Department's *Section 655 Report*, which contains a country-by-country listing of the value of all direct commercial sales (DCS) approvals, FMS export approvals, and excess defence article (EDA) agreements; and the Department of Treasury's *Export Commodity Reports* (Lumpe and Donarski, 1998). The high threshold for compulsory dollar-value reporting and the immunity from reporting enjoyed by smaller, but significant, commercial arms sales from independent US dealers mean that many transactions are not captured by either DCS or export commodity reporting. Thus the data in Figure 1 is likely to represent only a proportion of small arms exported from the United States into the Pacific.
- 16 For a discussion of the limitations of this data, see <<http://www.nisat.org>>.
- 17 Calculated at 2004 foreign exchange rates, this figure could overstate the PGK value of small arms imported in past years, when the kina was stronger. On the other hand, declared export/import figures commonly understate the value of actual imports, due to the high value thresholds and reporting exemptions for dealer-to-dealer shipments allowed by exporting countries.
- 18 Personal communication from Nicholas Marsh, project leader, NISAT, PRIO, 9 September 2004.
- 19 Interview and correspondence with James Pile, anthropologist, Princeton University, July and August 2004. A summary of this interview can be found in Alpers (2004).
- 20 Although the 'Matthew' in this reference is the same P K Mathew referred to elsewhere, this journal added an extra 't' to his name. As this is a key search term, the incorrect spelling is retained here.
- 21 In Table 5, the figures for SHP suffer from important limitations. The gun homicide count, gathered from representatives of local government areas covering only 70 per cent of the population of the province, is undoubtedly conservative. On the other hand, far less lethal home-made shotguns, excluded from these figures due to counting difficulties, undoubtedly figure in a minority of homicides. It should also be noted that, even if the people of SHP were to own three times as many factory-made firearms as were counted by the author, the province's rate of firearm-related homicide per 100,000 guns would still be equivalent to that of Ecuador. The surprisingly high comparative lethality results for factory-made guns in SHP might best be regarded as an indicator of the need for further research.
- 22 Trauma/violent-injury sources consulted: Flew (2002), Mathew (1996), Matthew et al. (1996), Ponifasio and Poki (2001), Watters and Dyke (1996), Watters, Dyke and Maihua (1996), and Watters and Lourie (1996).
- 23 In one *RPNGC Data Validation Report* dated July 2001, of 103 firearm offences recorded in the Highlands, only 27 of these had been centrally recorded at police national headquarters (PNG, 2002b, p. 84).

- 24 Conclusions reached in Levantis (2000a, pp. 131–4), based on data from Zvekcic and Weatherburn (1994) and Zvekcic and Alvazzi del Frate (1995).
- 25 Crime, law, and justice sources also consulted: Clifford, Morauta and Stuart (1984), Dinnen (1992; 2000; 2001; 2002), and Sikani (2000, pp. 40–1).
- 26 Domestic violence sources consulted: Bradley (1988), Law Reform Commission of Papua New Guinea (1992), Matthew et al. (1996), PNG (2004a, p. 5), PNG (2004b, p. 28), Toft (1985; 1986), Toft and Bonnell (1985), Watters and Dyke (1996), Watters, Dyke and Maihua (1996), and Watters and Lourie (1996).
- 27 Personal correspondence from John Burton, Australian National University, Canberra, 9 September 2004.
- 28 For a chronology of these and other battles in the Southern Highlands, their background, and effects, see Alpers (2004). For participants' views of the Mendi battles, see LeBrun and Muggah (2005).
- 29 In May 1988, a container of illicit small arms was found in Sydney, en route from North Yemen to Fiji (Alpers and Twyford, 2003, p. 26).
- 30 Sources: Kone (2002a; 2002b), Baynes (2002), Haley (2004, p. 19).
- 31 See en. 4, above.
- 32 For a comprehensive overview and comparison of firearm-related legislation in 20 nations of the south-west Pacific, including sources for much of the information in this section, refer to Alpers and Twyford (2003, pp. 57–80).
- 33 Australia and New Zealand allow a very restricted number of handguns in civilian possession, but not for the purpose of self-defence. In the main, only licensed security guards in Australia and police and military in both countries are permitted to carry a handgun for self-protection.
- 34 For a summary of firearm-related legislation in PNG with comparisons to 19 other Pacific nations, see Alpers and Twyford (2003, pp. 57–80).
- 35 Personal correspondence with Snr. Insp. Felixie Namane, commanding officer, Southern Highlands Provincial Gaol and Bui Iebi Correctional Institution, PNGCS, Bui Iebi, SHP, 10 May 2004.
- 36 Interview with Supt. Simon Nigi, provincial police commander, RPNGC, Mendi, SHP, 11 October 2004.
- 37 Intervention by Dr Peter Batchelor, Small Arms and Demobilization Unit, UNDP, Geneva at the UN Regional Seminar on Small Arms and Light Weapons for the South Pacific, Nadi, Fiji, 19 August 2004.

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