

unusual than producing home made propellant, but it is still dangerous and only suitable for very small quantities of ammunition. Primers are small and many thousands can be moved in a small container. Commercial primers are usually sold in primer lots of 1,000 with prices for rifle cartridges ranging from US \$17 to \$24 per thousand. Again, like propellants, there are relatively few major primer producers; examples in North America are Cascade Cartridge Incorporated, Federal Primer, Winchester, and Remington. Primers, like powder, are subject to regulation in terms of production, sales, transport and storage (see Annex C). Research into how many countries produce primers for their own ammunition factories could indicate the viability of more stringent primer control on an international basis.

The Price of Ammunition

Prices vary from country to country and are susceptible to market conditions. Like any commodity, the more one buys at a given time, the cheaper it is. As well, quality has much to do with price. Old military ammunition, berdan primed, corrosive, will cost less than newer boxer primed, non-corrosive.⁴² The same applies to new ammunition and re-load ammunition. One government source indicated that ammunition from eastern Europe and some countries in Asia can be purchased in bulk very cheaply -- a few cents a round.⁴³ Pricing and sourcing of ammunition, particularly in conflict and post-conflict society, is an area that requires some study. However, it is worth noting that ammunition invoices for the Rwandan military for the years 1993 and 1994 indicate costs very similar to commercially available ammunition in the USA. The ammunition was delivered by air and the invoices show the purchase originating in South Africa, Israel and Albania. The cost of small arms ammunition on a per round basis in US dollars was: 5.56 mm @ \$0.21 to \$0.27; and, 7.62 mm x 39 mm @ \$0.25 to \$0.36.⁴⁴ There is no indication as to whether the price included delivery -- it would appear unlikely. Quantities ranged from .5 million to 2 million rounds per purchase. Below is a sample of mostly USA company prices advertised on the Internet and other source derived:⁴⁵

⁴²For details on the difference between berdan and boxer primers and other ammunition component definitions and descriptions see http://users.aol.com/vaquero760/a_index.htm. Also see <http://home.cdsnet.net/~martin13/primers.htm>

⁴³ Private correspondence with author.

⁴⁴ The ammunition prices and sources for Rwanda are courtesy Human Rights Watch. Special thanks to Massimo Alberizzi of Corriere della Sera who obtained the Mil-Tec documents in Goma. The ammunition prices obtained also included 12.7 mm [.50 cal], numerous rifle grenades, hand grenades and light anti-tank weapons or rocket propelled grenades (RPG-7).

⁴⁵ Canadian sources indicate that the Canadian military pays \$0.66 Cdn per rd of 9 mm, and \$0.55 per rd of 5.56 mm. The high cost is explained as reflecting the way the ammunition is packaged for shipment and storage. It is also quite probable that it is a case of economies of scale and a closed market. This is a good indication as to why poorer countries may choose to buy ammunition abroad, or, if they establish their own ammunition factory why they may seek additional markets in order to effect economies of scale and subsidize self-sufficiency.