

# Geography In The News™



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## BOTTLED WATER'S TRUE COSTS

Americans spend \$10,000 a minute on something that is usually available free from the tap—drinking water. Collectively, the world spends \$100 billion a year on bottled water. The result is a waste of resources and little or no health benefits to consumers.

Sales of bottled water in the United States have grown rapidly since the early 1990s. By 2003, bottled water was the second-largest commercial beverage consumed by volume. In 2007, the total volume of bottled water consumed in the United States surpassed 8.8 billion gallons (33.3 billion liters), a 6.9 percent increase from 2006. That volume translates to more than 29 gallons (110 liters) of bottled water consumed each year by every person in the United States. Americans now drink more bottled water annually than any other beverage except carbonated soft drinks.

Globally, the volume of consumed bottled water is also growing. Worldwide, bottled water consumption surged to 49 billion gallons (185 billion liters) in 2007, up from 25 billion gallons (98 billion liters) in 1999.

The loss of normal sources of potable (safe) drinking water is one force in the growth of the bottled water in the world market. Another, however, is the growing perception that tap water might not be pure or safe. Lastly, consumers view bottled water as a conveniently packaged commodity easily carried to events and meetings.

There is no guarantee that bottled water is any healthier than tap water. The U.S. Environmental Protection Agency

sets higher quality standards for tap water than does the Food and Drug Administration for bottled water. Some 40 percent of bottled water begins as tap water. Sometimes minerals, with no proven health benefit, are added to the bottled product. A recent study of ten leading samples of bottled water found a variety of contaminants often found in tap water.

The Earth Policy Institute, an environmental think tank, argues that while affordable drinking water is essential to the health of the global community, bottled water is not the answer in developing countries. For several reasons, bottled water cannot solve the problem of drinking water for the 1.1 billion people in the world who lack a secure water supply.

While consumers spend \$100 billion on bottled water annually, the United Nations spends only about \$30 billion on im-

ported long distances by truck, boat, train or airplane using huge amounts of fossil fuels. One-fourth of the world's bottled water is transported across national borders. In one example, a company in Helsinki, Finland, shipped 1.4 million bottles of Finnish tap water 2,700 miles (4,300 km) to Saudi Arabia.

Producing the packaging for bottled water also consumes fossil fuels. Polyethylene terephthalate, derived from crude oil, is the main component of plastic water bottles. In fact, it takes one quarter of an individual-sized water bottle filled with oil to produce the water bottle itself. Just for the bottled water consumed in the United States, that equals more than 1.5 million barrels of oil annually or enough oil to fuel 100,000 U.S. cars for a year. The bottled water industry worldwide uses some 2.7 million tons of plastic yearly.

An estimated 86 percent of all plastic water bottles in the United States becomes trash or litter after a single use, destined for incineration, landfills or elsewhere. Incinerating plastic bottles produces toxic byproducts, such as chlorine gas and ash containing heavy metals, linked to a host of human and animal health problems. It can take up to 1,000 years for a plastic bottle to biodegrade in the natural environment or in a landfill.

In 2004, the United States exported 40 percent of its recycled plastic water bottles to destinations as far away as China. In this case, transport after disposal consumes even more fossil fuels.

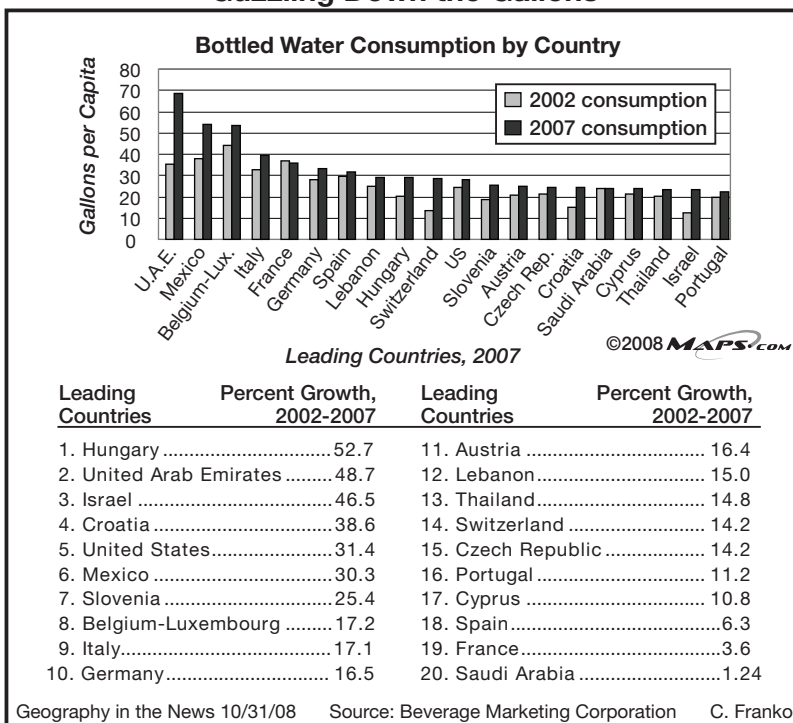
Even though bottled water is often no healthier than urban tap water in the developed world, it can cost between 250 and 10,000 times more per gallon. Some bottled water in the

United States is more costly than gasoline. Perhaps consumers will realize that drinking bottled water is just pouring money down the drain.

And that is *Geography in the News*™. October 31, 2008. #961.

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### Guzzling Down the Gallons



**Sources:** GITN #679, "Ubiquitous Bottled Water," June 6, 2003;  
[http://news.yahoo.com/s/ap/20081015/ap\\_on\\_sc/impure\\_bottled\\_water](http://news.yahoo.com/s/ap/20081015/ap_on_sc/impure_bottled_water);  
and [http://www.bottledwater.org/public/statistics\\_main.htm](http://www.bottledwater.org/public/statistics_main.htm)

proving and expanding water treatment and sanitation systems in the developing world.

With demand for bottled water increasing worldwide, researchers are becoming aware of the plastic garbage created by its consumption and the vast quantities of energy used to package and transport it.

Energy efficient public water systems bring urban tap water into our homes. On the other hand, bottled water must be