# Virtual Water: Why we eat more water than we drink

**Take a moment to guess:**

**- how much water you use when you are taking a bath and how much you use when you are eating a hamburger?**

Most of us are not aware that vast amounts of water are used, and often polluted, in the production of our food and goods. Or did you know that it takes about 120 litres to fill a bath tub, but about 2400 litres to produce a single hamburger?

"Virtual" or "hidden water" is the water that is needed to produce the many different goods we use and consume every day. Only the smallest proportion of global water use is directly used by households while agriculture accounts for almost 70% of the global water use, mainly for irrigation, and industry for about 20%.

1 apple – 70 litres*
1 egg – 200 litres
1 cup of coffee – 140 litres
1 sheet of paper – 10 litres

1 cotton shirt – 2700 litres
1 kg of chicken meat – 3900 litres
1 kg of beef - 15500 litres
1 kg of soya beans – 1800 litres

## International trade and water flows

While the water we use directly for cooking, bathing, flushing the toilet and other domestic purposes usually stems from water sources in our home region, food and goods are often produced abroad and then imported. Try thinking about international trade flows as rivers of virtual water that are flowing between countries.

Trade and consumption patterns in one country can therefore be partly responsible for local water depletion and pollution in a completely different part of the world. For example, 70 per cent of the national water footprint of the United Kingdom falls outside of the country itself, thus impacting on other countries in the world. That is why we should think about where our food and other goods come from, and how they are produced there.

* The water footprint of a product may vary greatly depending on where it comes from (climatic conditions) and how it has been produced (production system and technologies). The figures given here are global averages as found on www.waterfootprint.org

## So what can I do?

The concept of virtual water can help governments to rethink their economic, trade, and environmental policies. Companies and public organizations as well as individuals can use it as a tool to make more conscious and responsible decisions about what to buy and consume.

You can start by calculating your own water footprint or that of your congregation, school, or other communities you belong to and then think of ways to reduce it. For example, by buying re-usable products, eating less meat and dairy foods, or buying less processed foods and beverages.

## More information

- A lot of further useful information, including a calculator for your individual and national water footprint, can be found at www.waterfootprint.org
- Instructions for an exhibition on virtual water which you can use to raise awareness of the links between consumption and water use in your community: http://www.oikoumene.org/?id=5566
- Resources and tools for understanding and improving our use of water: http://www.h2oconserve.org/?page_id=5&pd=information