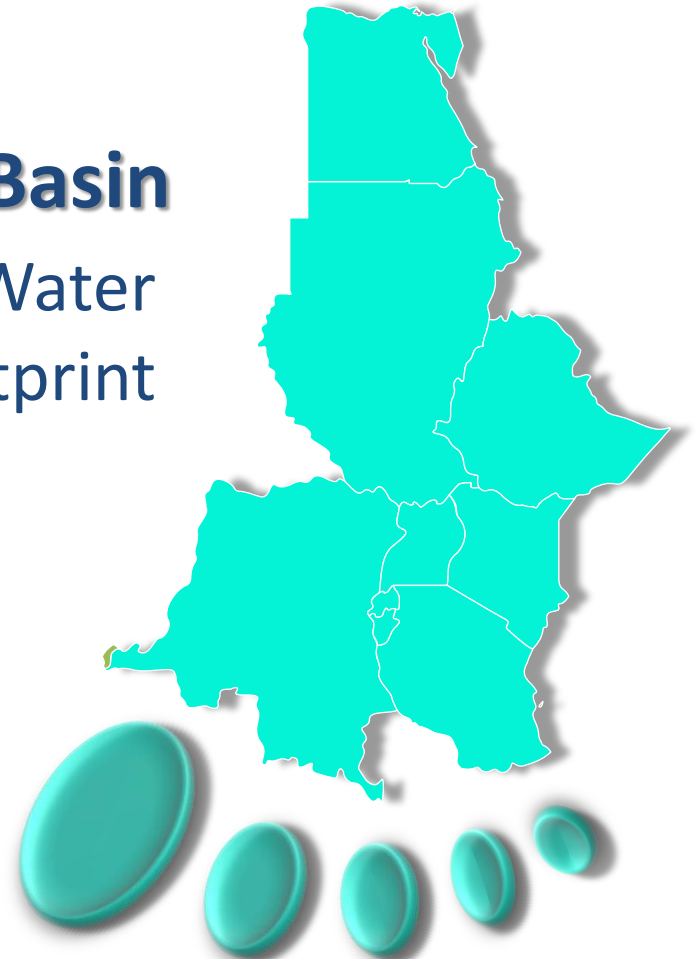


Water Footprint and the Nile Basin

Module 1: Introduction to Water Footprint



PEGASYS
Strategy and Development



1: Introduction to Water Footprint





Definition of Virtual Water



Production



Manufacturing



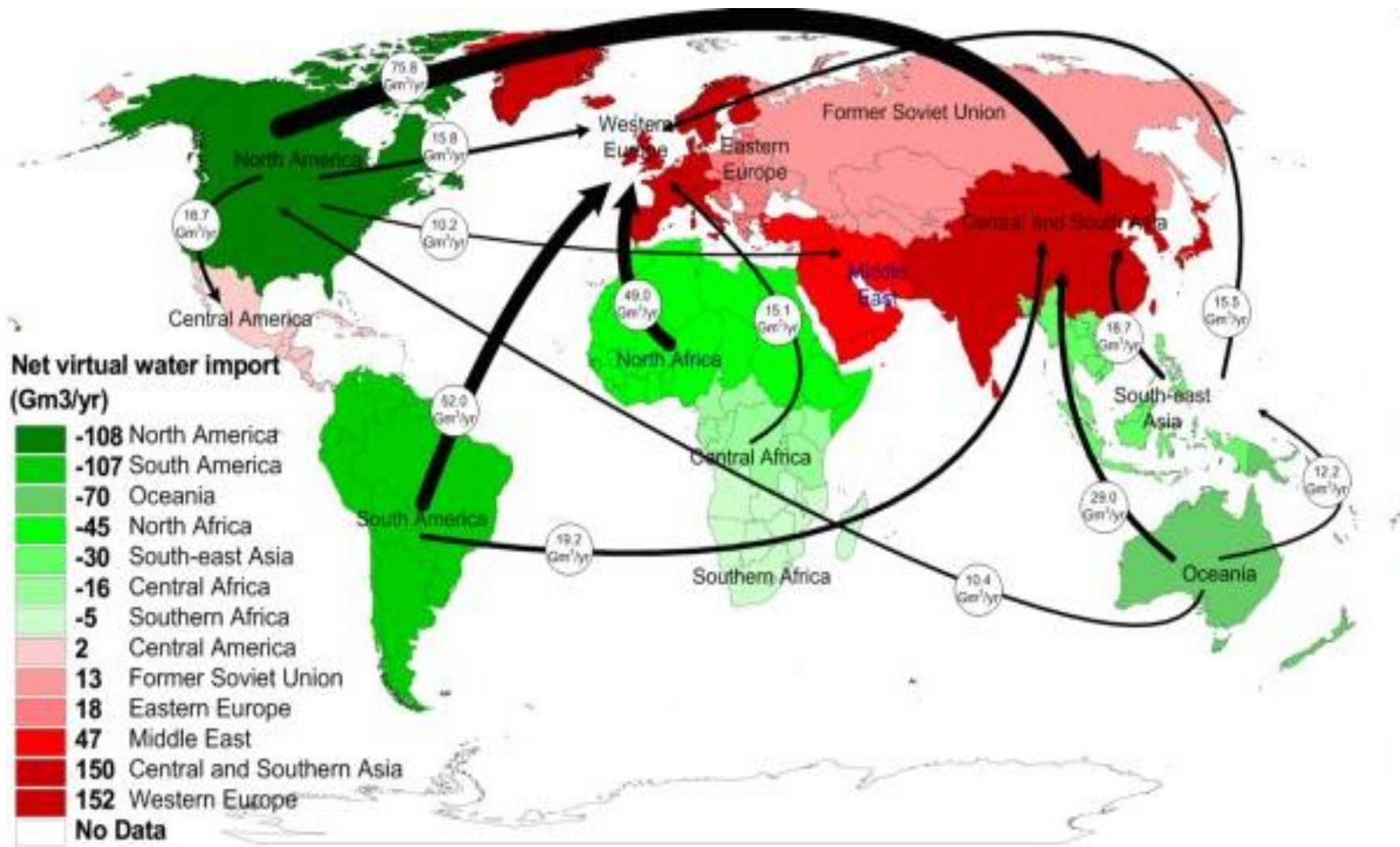
Consumption



Definition of Virtual Water

- The total volume of all water used in the production of any commodity along the entire supply chain
- When that product is traded you think about the volume of virtual water that is traded.
- Virtual water allows you to think about water 'moving' around the planet.
- It lends itself to theorising about water security and political economy

Concept of Virtual Water and Trade

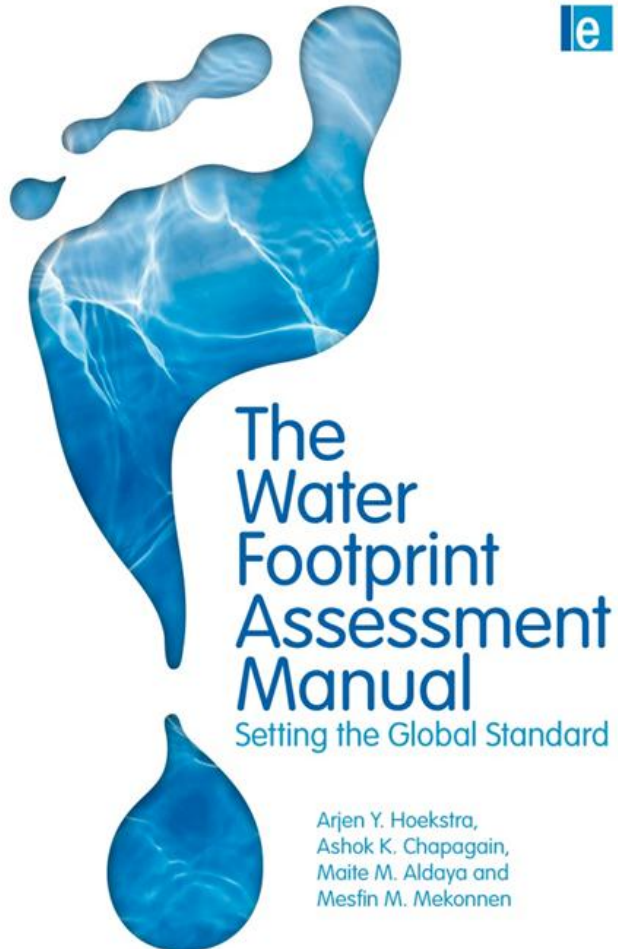




Definition of Water Footprint

e

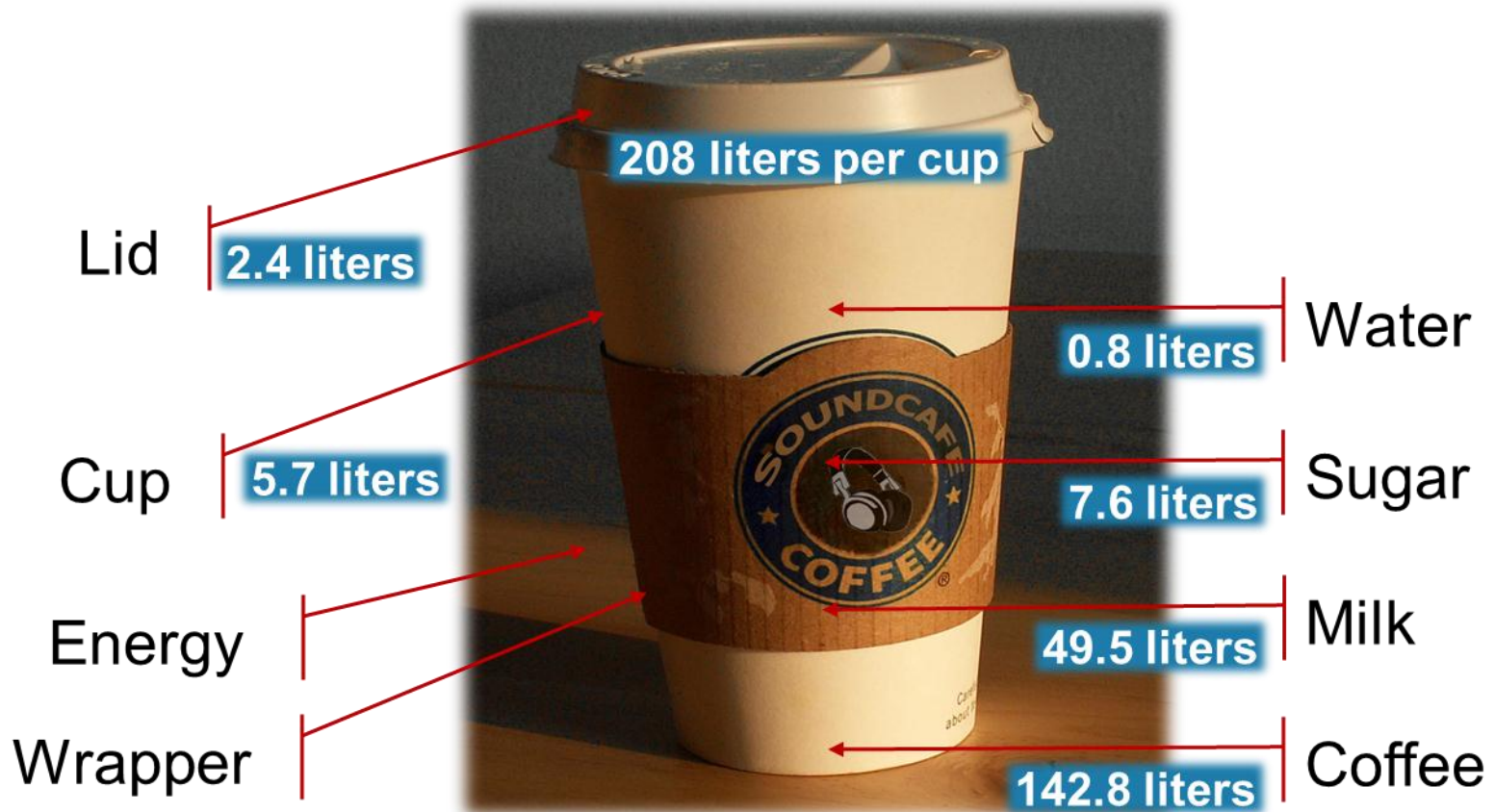
- The **volume** of water used to produce a product, summed over the various steps of the production chain.
- **Where and when** the water was used: a water footprint includes **geographical and seasonality considerations**.
- Reflects the notion of **direct** (internal) and **indirect** (external) water use of a consumer or a producer.
- Enables a discussion about **impact**, the type of water used (surface water, rain water & pollution)



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Example Water Footprint



Water Footprint asks “So What?”



From a water scarce area?

208 liters per cup

Sugar beet or cane?

0.8 liters

Water

Rain-fed or supplemental feed?

7.6 liters

Sugar

49.5 liters

Milk

Coffee





Elements of Water Footprint

Green water footprint – volume of rainwater evaporated or incorporated into a product

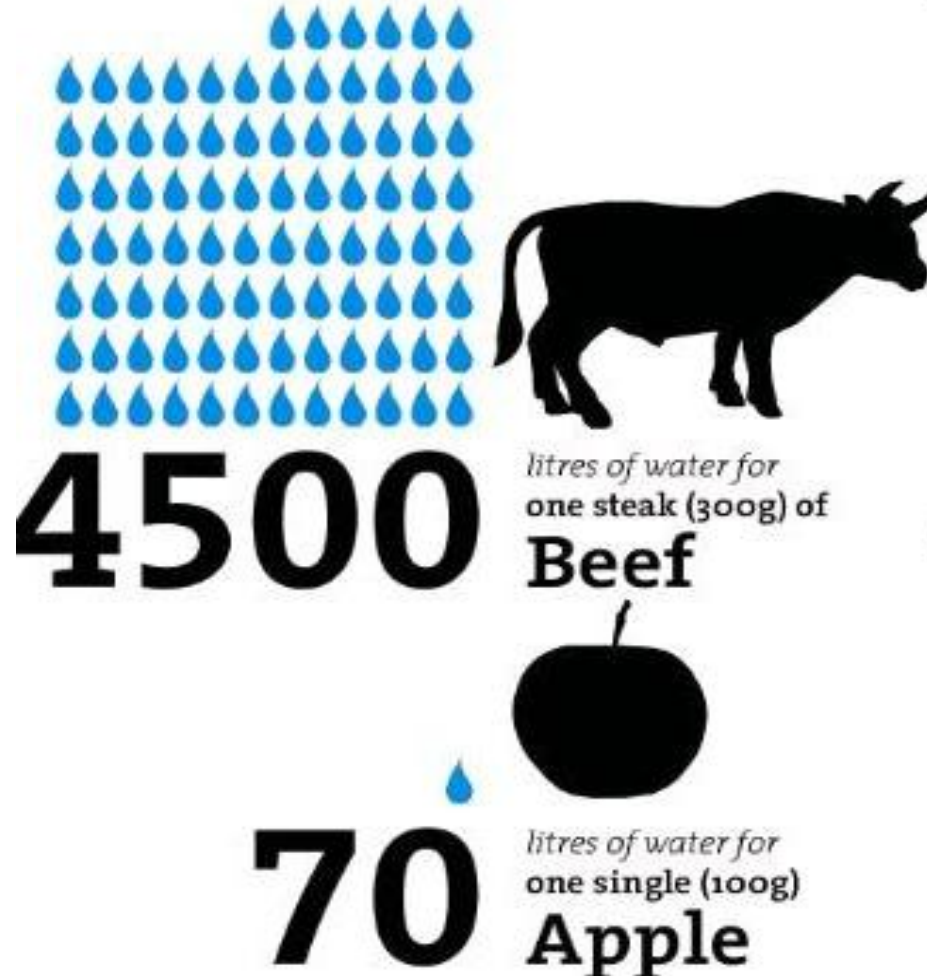
Blue water footprint – volume of surface or ground water evaporated or incorporated into a product (or returned to another catchment)

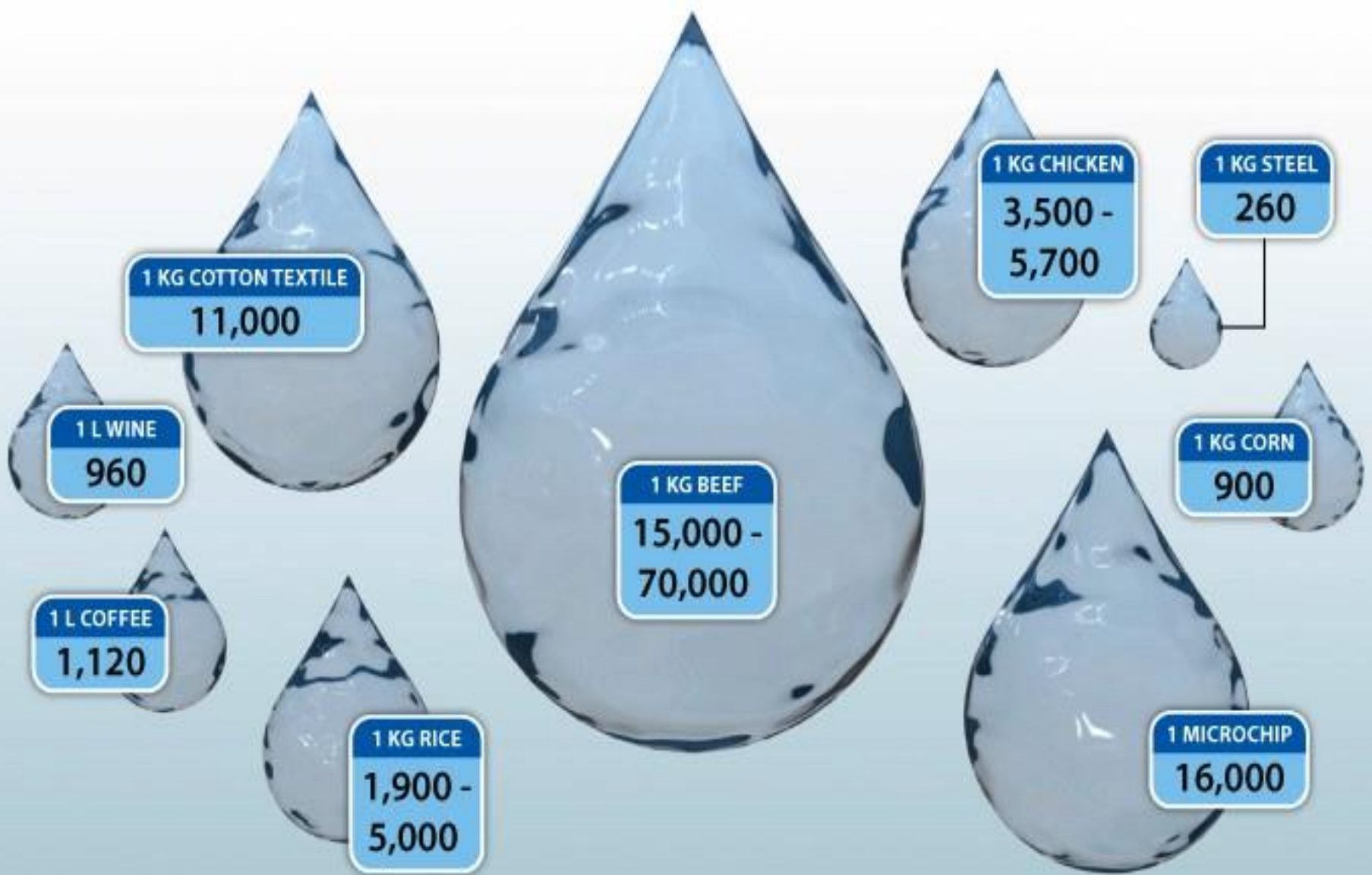
Grey water footprint – volume of water required to dilute contamination by waste discharge and return flow





Water Footprint

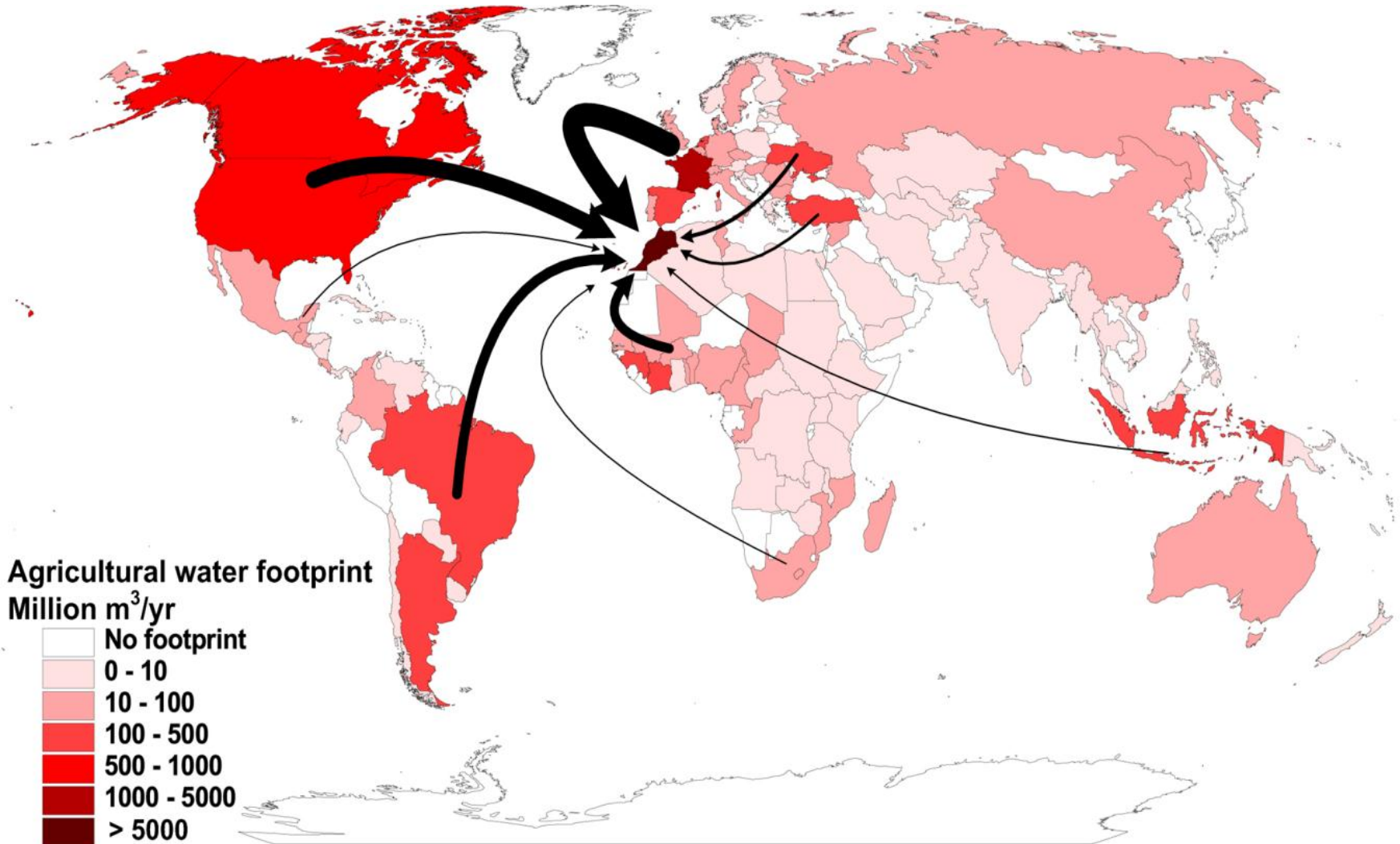




(Liters)



Water Footprint





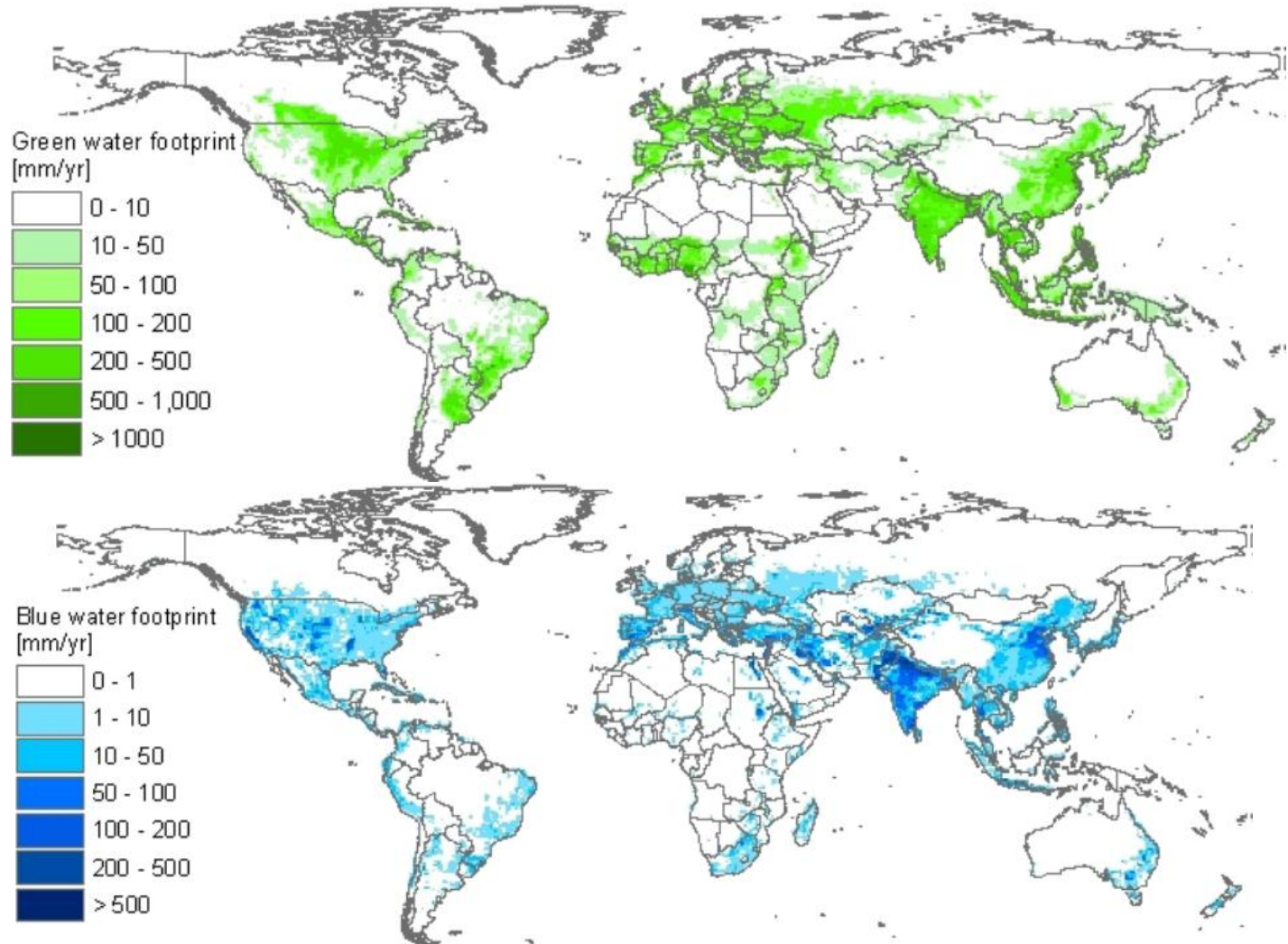
Water Footprint



- 102 Gm³ (billion cubic metres) per year
- 4,645 litres per person per day
 - Agricultural products: 3,400
 - Cotton products: 211
 - Industrial products: 1,095
 - Household water: 150
- UK is 38% self-sufficient in water - 62% dependent
 - 6th largest net importer of virtual water globally

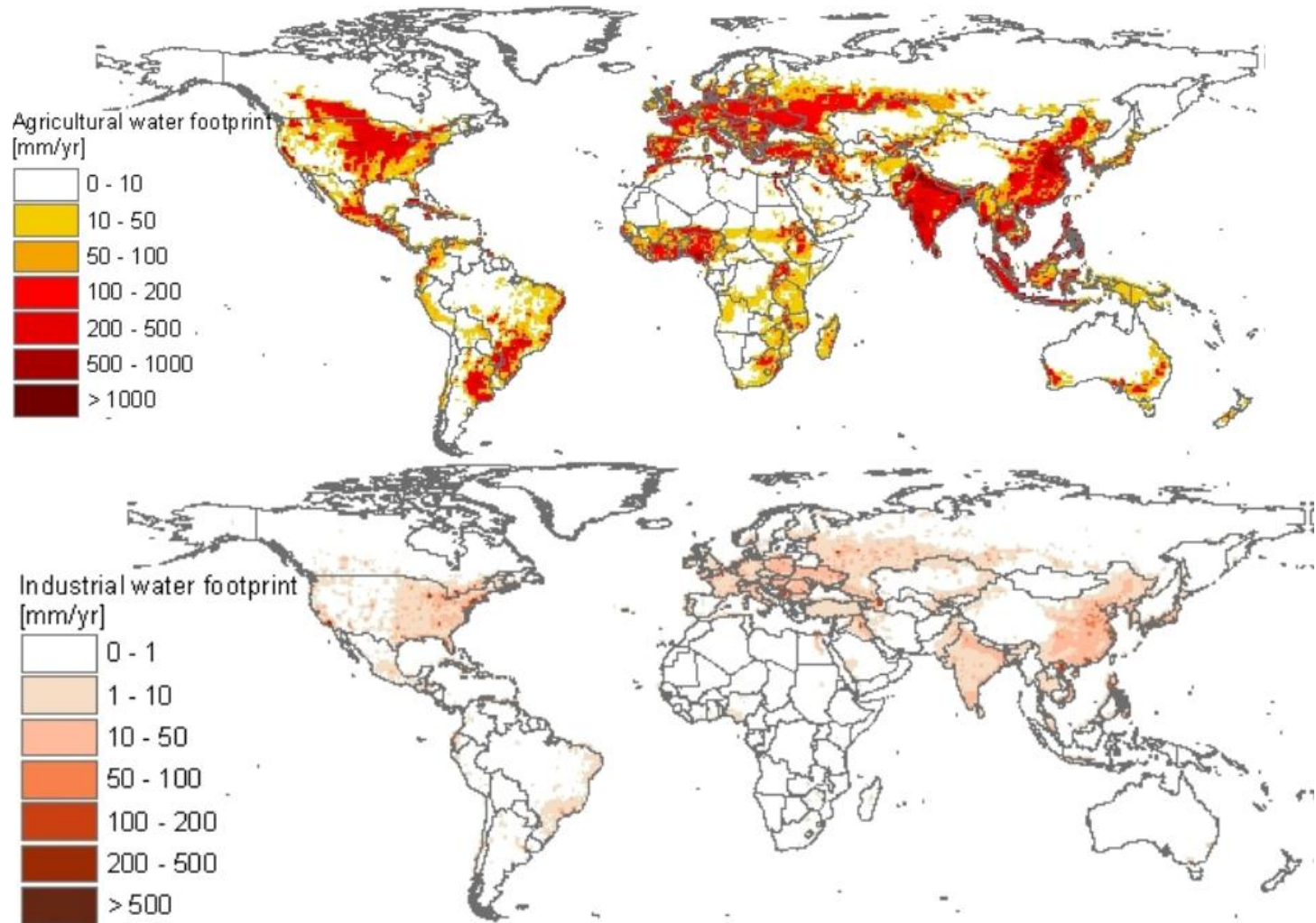


Water Footprint



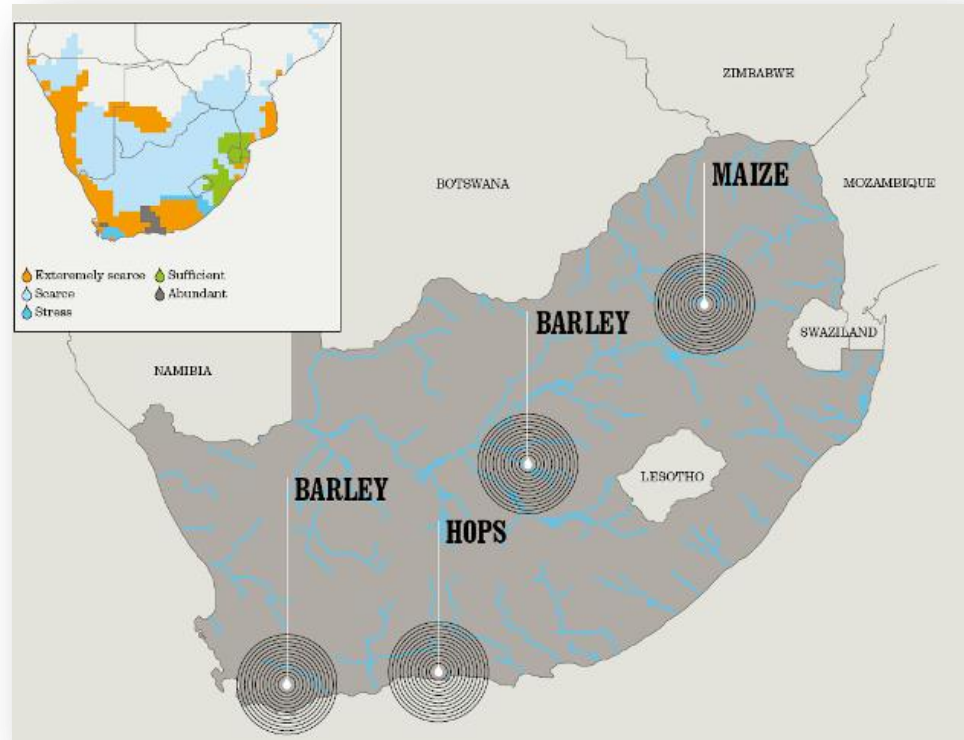
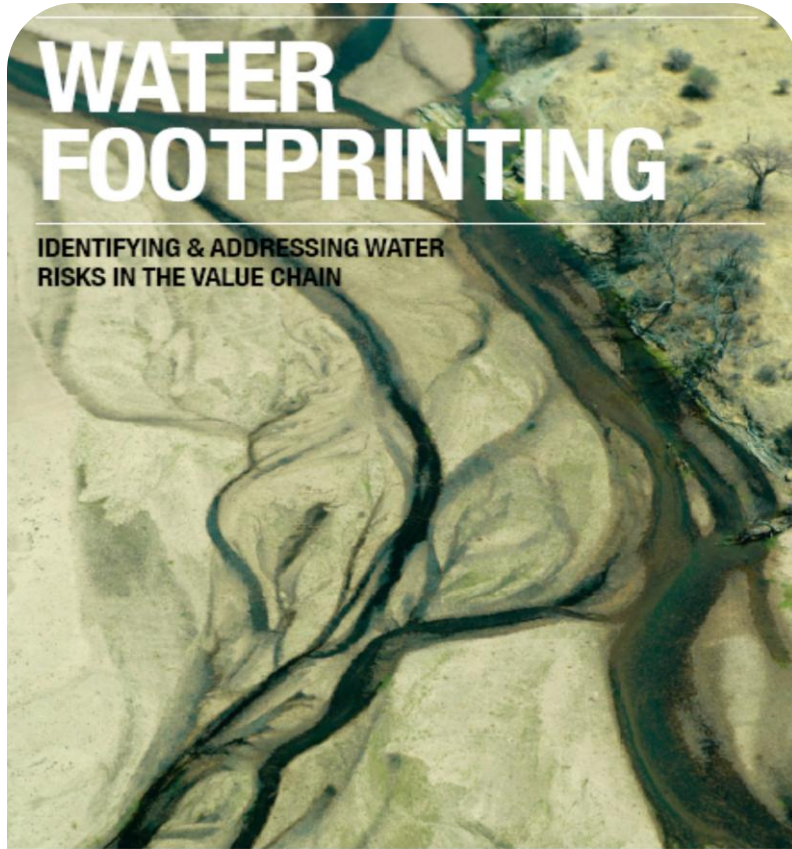


Water Footprint





Water Footprint

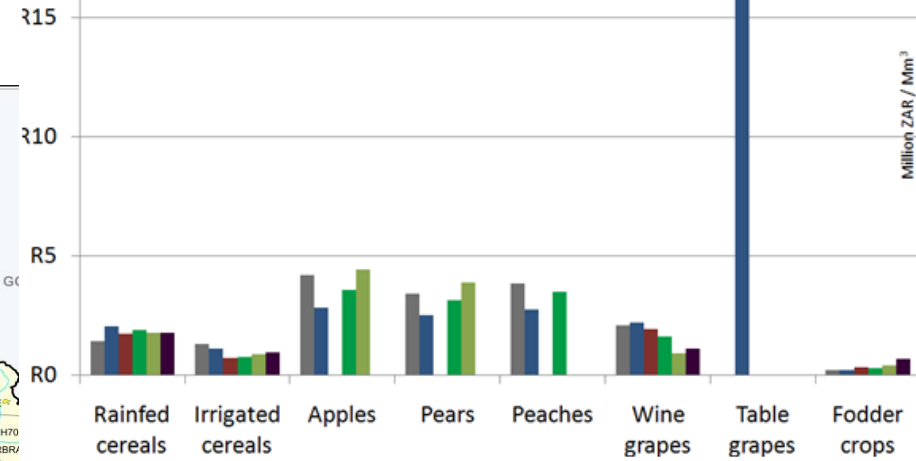




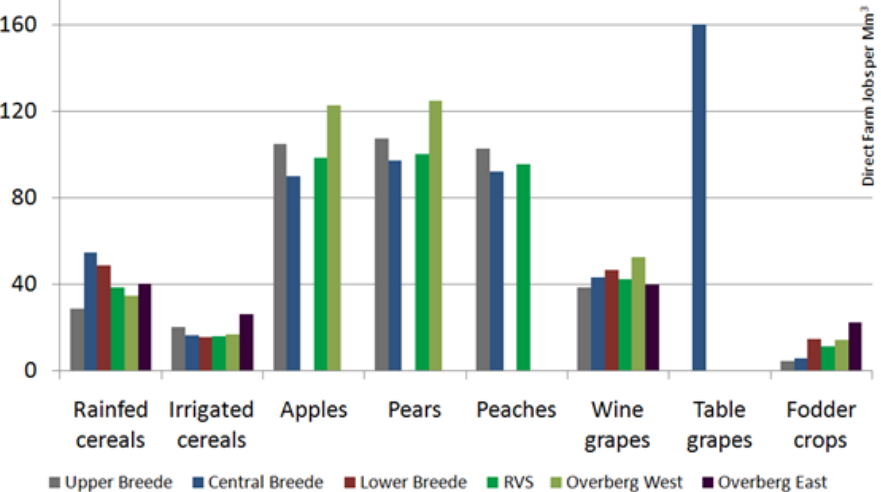
Water Footprint



Value per unit water



Direct jobs per unit water





Water Footprint – A Summary



- There are many ways to use the footprint message.
- It is a metaphor, a method and a metric.
- Opens a complex debate and makes connections.
- It creates a shared language.
- There can be a lot of kickback
- Not an end in itself, there are different interpretations.