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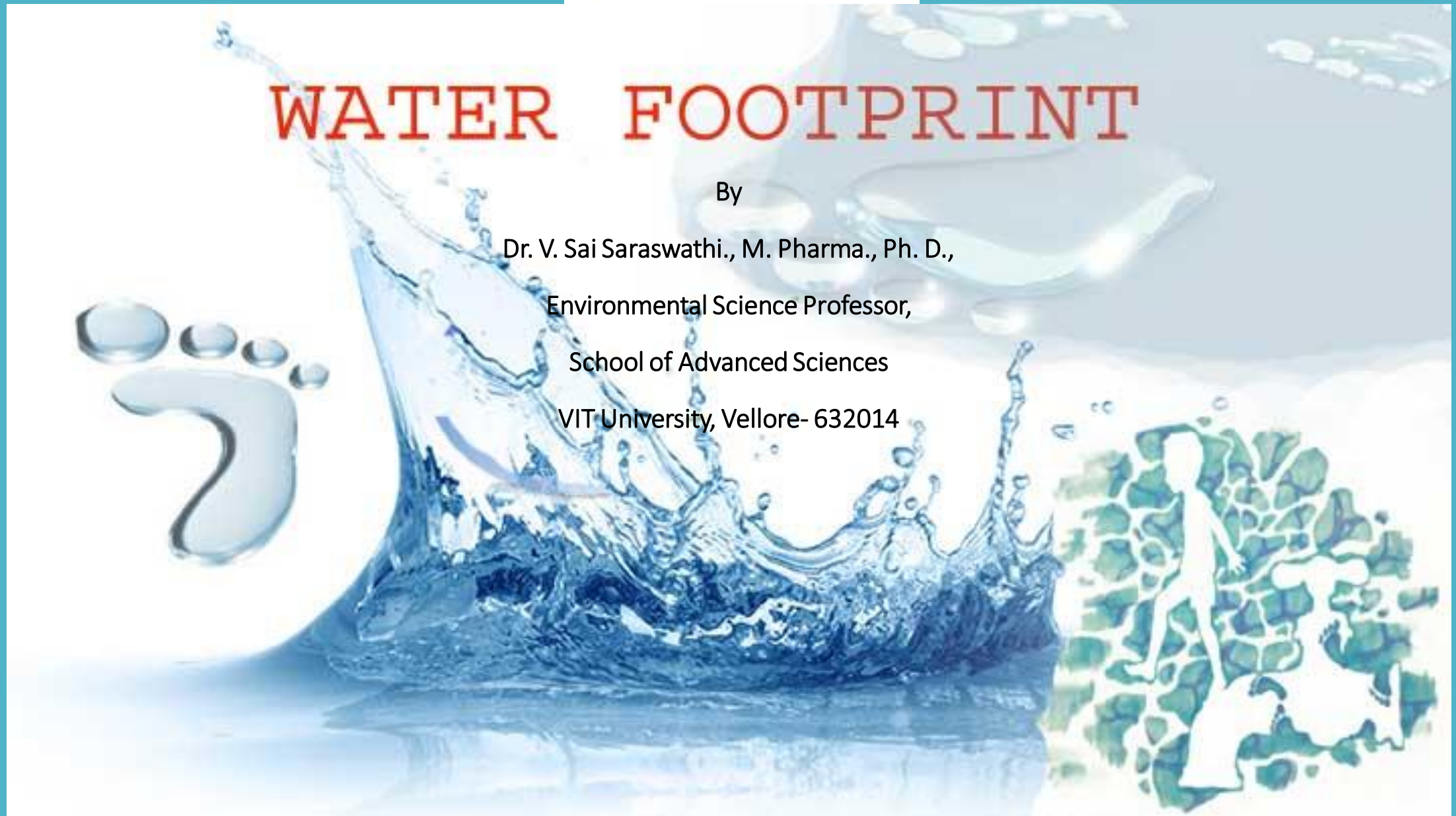


WATER FOOTPRINT

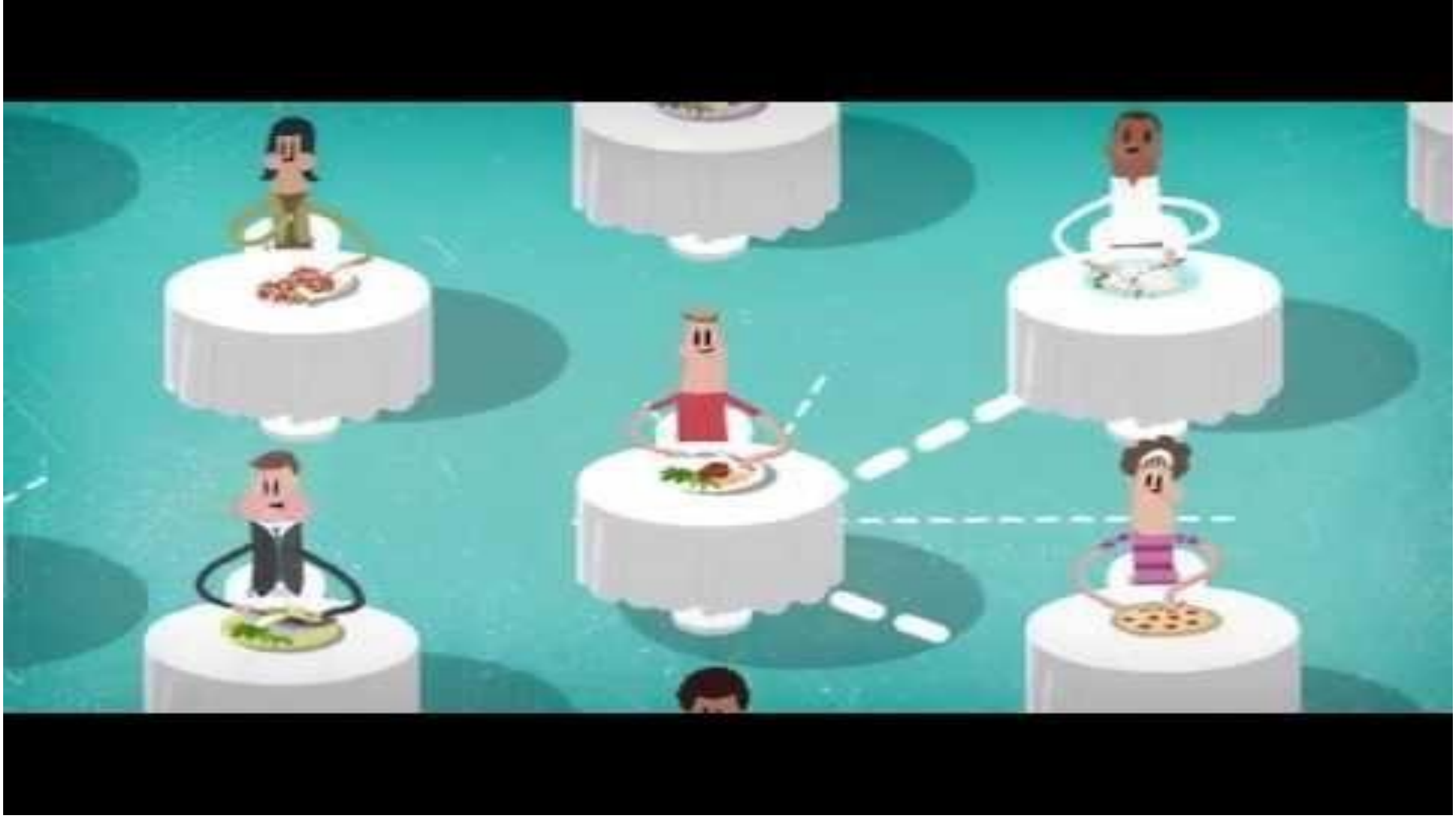
By

Dr. V. Sai Saraswathi., M. Pharma., Ph. D.,

Environmental Science Professor,

School of Advanced Sciences

VIT University, Vellore- 632014



What is a water footprint?

Everything we use, wear, buy, sell and eat takes water to make.

The water footprint measures the amount of water used to produce each of the goods and services we use.

It can be measured for a single process, such as growing rice, for a product, such as a pair of jeans, for the fuel we put in our car, or for an entire multi-national company.

The water footprint can also tell us how much water is being consumed by a particular country – or globally – in a specific river basin or from an aquifer.

The water footprint is a measure of humanity's appropriation of fresh water in volumes of water consumed and/or polluted.

Some facts and figures

The production of one kilogramme of beef requires approximately 15 thousand litres of water (93% green, 4% blue, 3% grey water footprint). There is a huge variation around this global average. The precise footprint of a piece of beef depends on factors such as the type of production system and the composition and origin of the feed of the cow.

The water footprint of a 150-gramme soy burger produced in the Netherlands is about 160 litres. A beef burger from the same country costs on average about 1000 litres.

The water footprint of Chinese consumption is about 1070 cubic metres per year per capita. About 10% of the Chinese water footprint falls outside China.

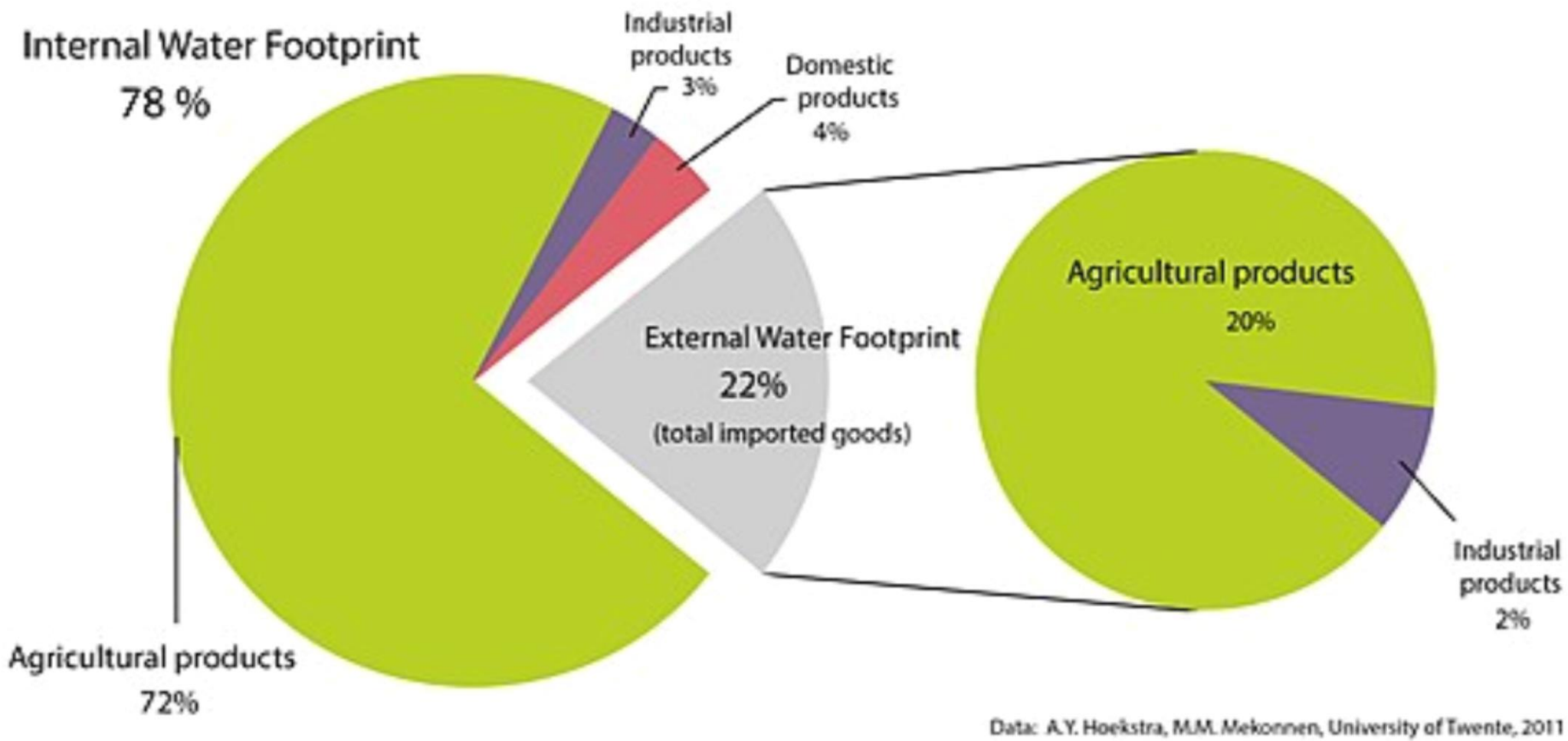
Japan with a footprint of 1380 cubic metres per year per capita, has about 77% of its total water footprint outside the borders of the country.

The water footprint of US citizens is 2840 cubic meter per year per capita. About 20% of this water footprint is external. The largest external water footprint of US consumption lies in the Yangtze River Basin, China.

The global water footprint of humanity in the period 1996-2005 was 9087 billions of cubic meters per year (74% green, 11% blue, 15% grey). Agricultural production contributes 92% to this total footprint.

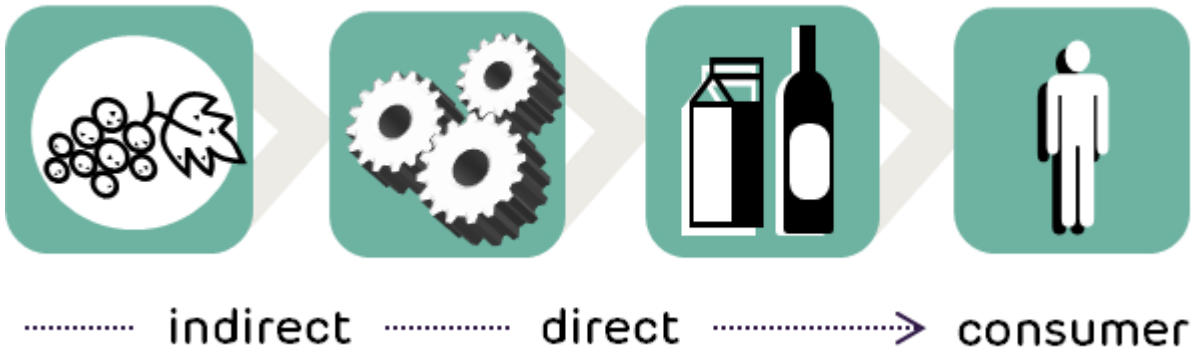
Water scarcity affects over 2.7 billion people for at least one month each year.

Global Water Footprint by sector



Direct and indirect water use

The water footprint looks at both direct and indirect water use of a process, product, company or sector and includes water consumption and pollution throughout the full production cycle from the supply chain to the end-user.



The three water footprints:

Green water footprint

Blue water footprint

Grey water footprint

Water Footprint

Green water footprint is water from precipitation that is stored in the root zone of the soil and evaporated, transpired or incorporated by plants. It is particularly relevant for agricultural, horticultural and forestry products.

Blue water footprint is water that has been sourced from surface or groundwater resources and is either evaporated, incorporated into a product or taken from one body of water and returned to another, or returned at a different time. Irrigated agriculture, industry and domestic water use can each have a blue water footprint.

Grey water footprint is the amount of fresh water required to assimilate pollutants to meet specific water quality standards. The grey water footprint considers point-source pollution discharged to a freshwater resource directly through a pipe or indirectly through runoff or leaching from the soil, impervious surfaces, or other diffuse sources.

Solutions

Individual Responsibility

Intergrated Rainwater Harvesting can involve Harvesting and storing rainwater for future use in pits, pools and ponds.

Updated rainwater harvesting systems collect water for future irrigation and store it in aquifers to protect it from evaporation loss – a system called water banking.

Dry Farming, or growing during the dry season where the crops rely on residual soil moisture, is regularly practiced for crops like wine grapes and olives, as well as other Crop like tomatoes

Some of the best ways to lower water footprints and facilitate water uptake is by taking care of the soil by using low or no-till practices, using crop rotations and planting cover crops to replenish soil naturally.

Agroecology is a promising approach that can help build healthy soils on farmland to store more carbon and water while requiring less polluting fertilizer and pesticides.

Thank You