

Virtual Water Trade and International Trade Law

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May 30, 2012
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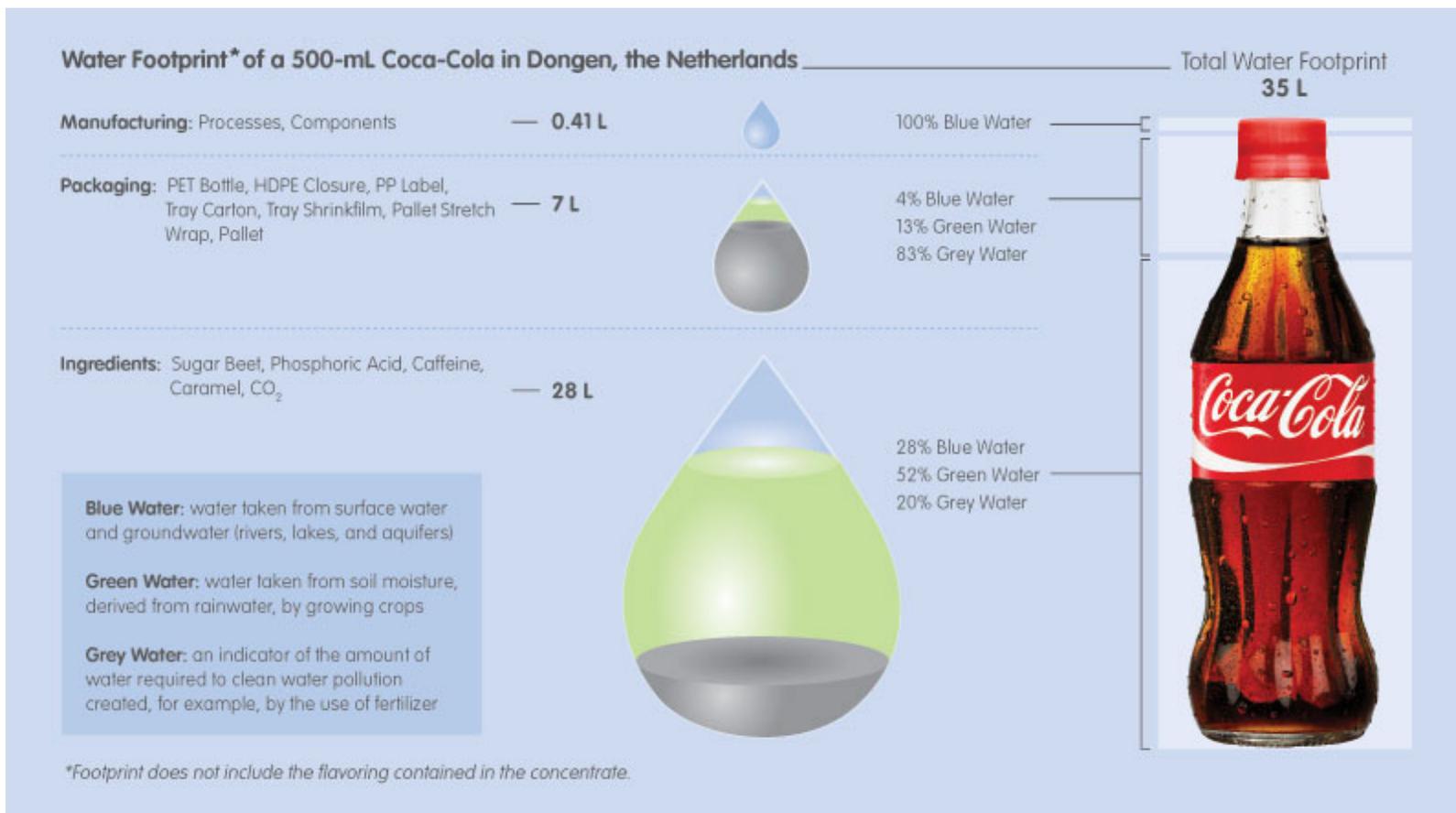
Basic concepts

- (1) The “virtual water trade” concept (T. Allan)
- (2) The “water footprint” concept (A. Hoekstra)
 - A consumer
 - A household
 - A business
 - A city
 - A nation
 - A product → international trade law

- Global average virtual water content of some selected products (Hoekstra & Chapagain 2005)
 - 1 cup of coffee (125 ml) 140 litres
 - 1 glass of beer (250 ml) 75
 - 1 glass of milk (200 ml) 200
 - 1 cotton T-shirt (250 g) 2000
 - 1 sheet of A4-paper (80 g/m²) 10
 - 1 hamburger (150 g) 2400
 - 1 microchip (2 g) 32
 - 1 kg of beef 16000

Basic concepts

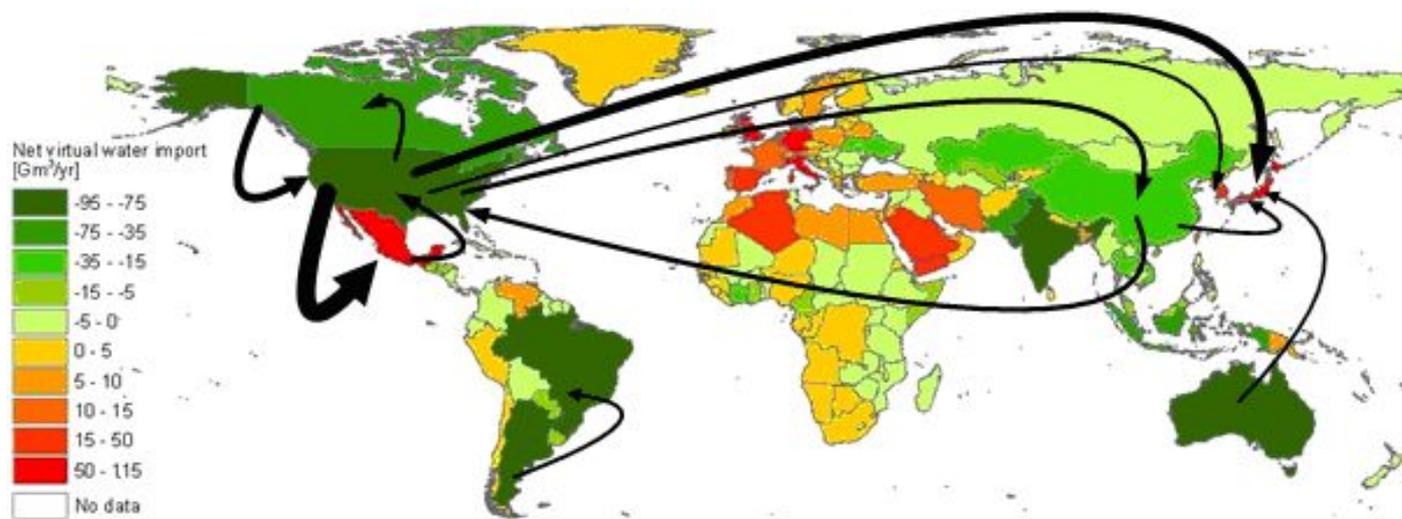
- (3) Blue, green and grey water footprint (M. Falkenmark)
 - Blue: non-saline surface water and groundwater
 - Light blue: surface water
 - Dark blue: renewable fossil water
 - Black: non-renewable fossil water
 - Green: rainwater
 - Grey: polluted water



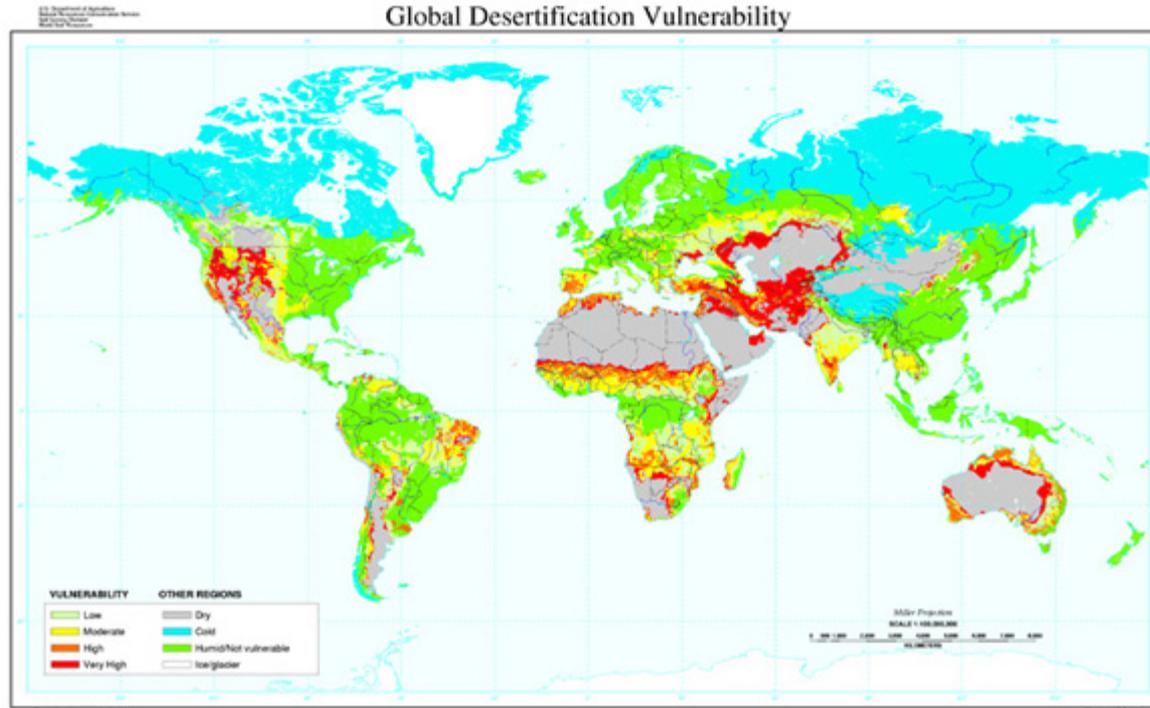
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Basic concepts

- (4.a) Link with the comparative advantage theory (D. Wichelns)
- (4.b) The “global water saving” concept (Oki & Kanae)
- The theory of “global water savings” through international trade law is not free from criticism:
 - Truncation problem
 - Water footprint of transport



Source: Mekonnen and Hoekstra, 2011



Source: United States Department of Agriculture

Overall research question

- How can WTO law contribute to “global water savings” in the context of “virtual water trade”?
- Link to United Nations MDG 7 - Target 7,C.
- An estimated 672 million people will suffer from a lack of access to safe drinking water in 2015. (WHO/UNICEF, Joint Monitoring Program (JMP) for Water and Sanitation, 2012)

Virtual Water Trade and International Trade Law – Outline

-Virtual Water Trade

- History, meaning of the concept and relation to international trade law

-International Trade Law Issues

- Irrigation subsidies
- Water efficiency, process and production methods (PPMs)
- Water footprint labelling

International trade law issues

-Chapter (1): Irrigation subsidies

- AG Annex 2.2(g) – “green box”
- What constitutes an irrigation subsidy?
- Only a small part of irrigation subsidies is notified to WTO.
- No sanctions foreseen.
- Question: What should be the legal treatment of environmentally-beneficial irrigation subsidies?

Recommendations

- (1) WTO should impose a common methodology for calculating irrigation subsidies.
- (2) WTO Members should start creating irrigation subsidy databases based upon the common calculation methodology.
- (3) A separate notification of irrigation subsidies to the WTO should be made obligatory.
- (4) Environmentally-beneficial irrigation subsidies (non-trade concern) should be “green boxed”.

-Chapter (2): Water efficiency and Process and Production Methods (PPMs)

- GATT – NPR-PPMs are still not accepted in case law but the door is still left open.
- Question: would it be recommendable to allow a distinction between otherwise “like” products on the basis of their water footprint?
- Benefits: potential contribution to global water saving – to what extent is uncertain.
- Downsides: explosion of tariff lines; difficult and costly to control – misuse for protectionist purposes; high compliance costs, especially for DCs and LDCs; loosing benefits of trade.

Recommendations

- (1) Apart from the fact that non-product related process and production methods are still not accepted as a criterion to distinguish between otherwise ‘like’ products (but also not formally excluded), making such distinction solely on the basis of the water footprint of products is not recommendable. The downsides of doing so would overshadow the benefits.

Chapter (3): water footprint labelling

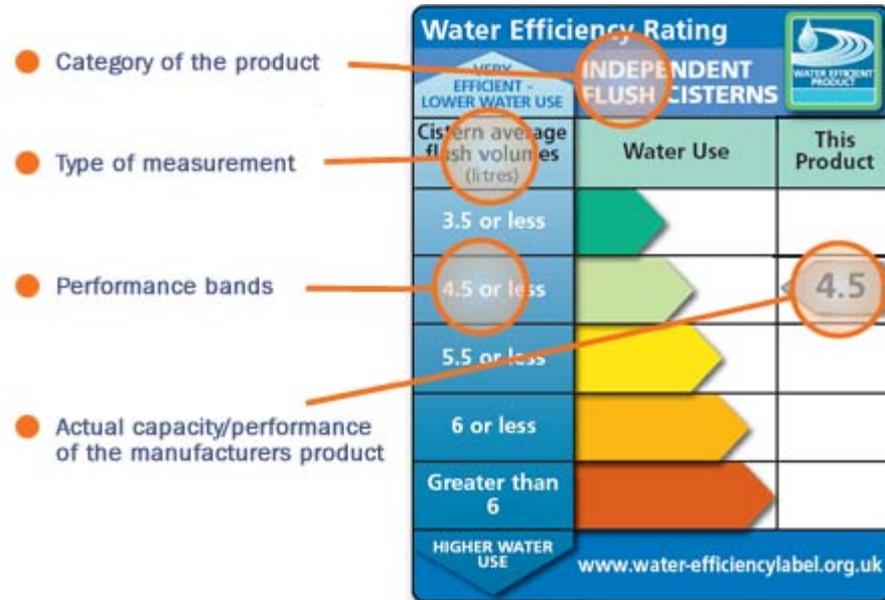
-TBT Agreement

- 2 types of labelling schemes → technical regulations (art. 2 and 3 TBT) and standards (art. 4 and Annex 3 TBT).
- 3 types of issuing bodies → central government bodies, local government bodies and non-governmental bodies.

Private voluntary water footprint labelling



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© Water Label

- Private voluntary water footprint labelling can initially make an important contribution to the common goal of “global water savings”.
- Question: does the TBT interfere with private voluntary labelling?
- Question: should the TBT interfere with private voluntary labelling?
- Def. of a non-governmental body (Annex I, 8 TBT): “*Body other than a central government body or a local government body, including a non-governmental body which has legal power to enforce a technical regulation.*”

Recommendations

- (1) Private voluntary labelling schemes should be carved out from the ambit of the TBT agreement (to the extent to which they cannot be considered to be “de facto” mandatory).

Thank you for your attention!