

# VIRTUAL WATER

New Perspectives for Trade and  
its Sustainability

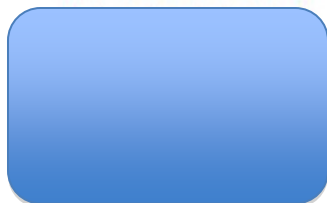




# VIRTUAL WATER



litres of water for  
one pound (500g) of  
**Wheat**



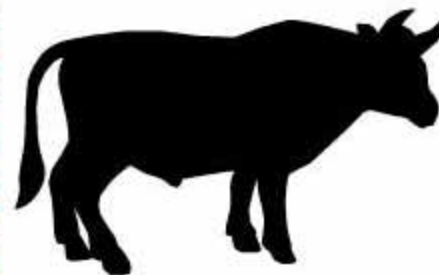
**1170**



litres of water for  
one breastfilet (300g) of  
**Chicken**



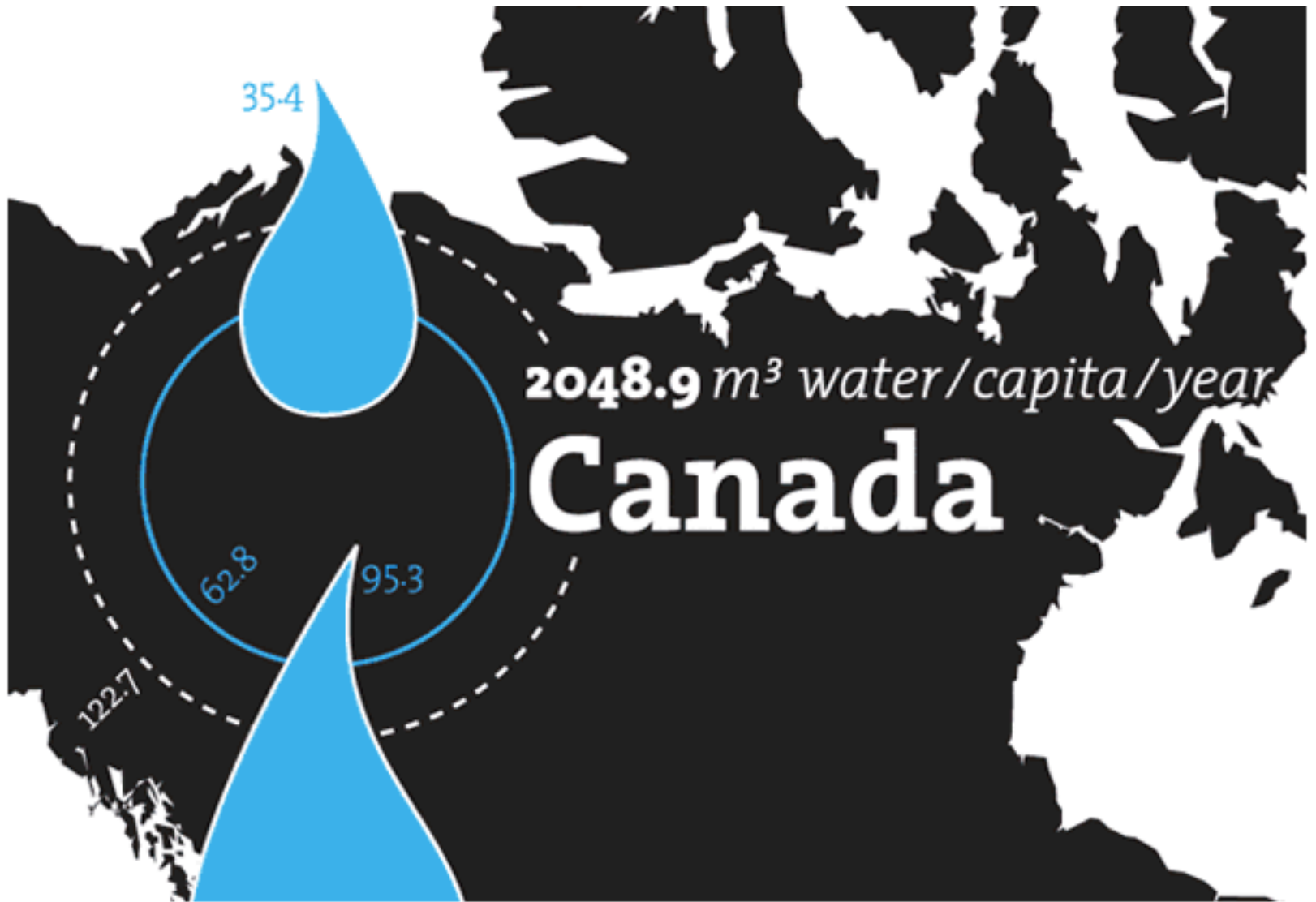
**4500**



litres of water for  
one steak (300g) of  
**Beef**



**70** litres of water for  
one single (100g)  
**Apple**

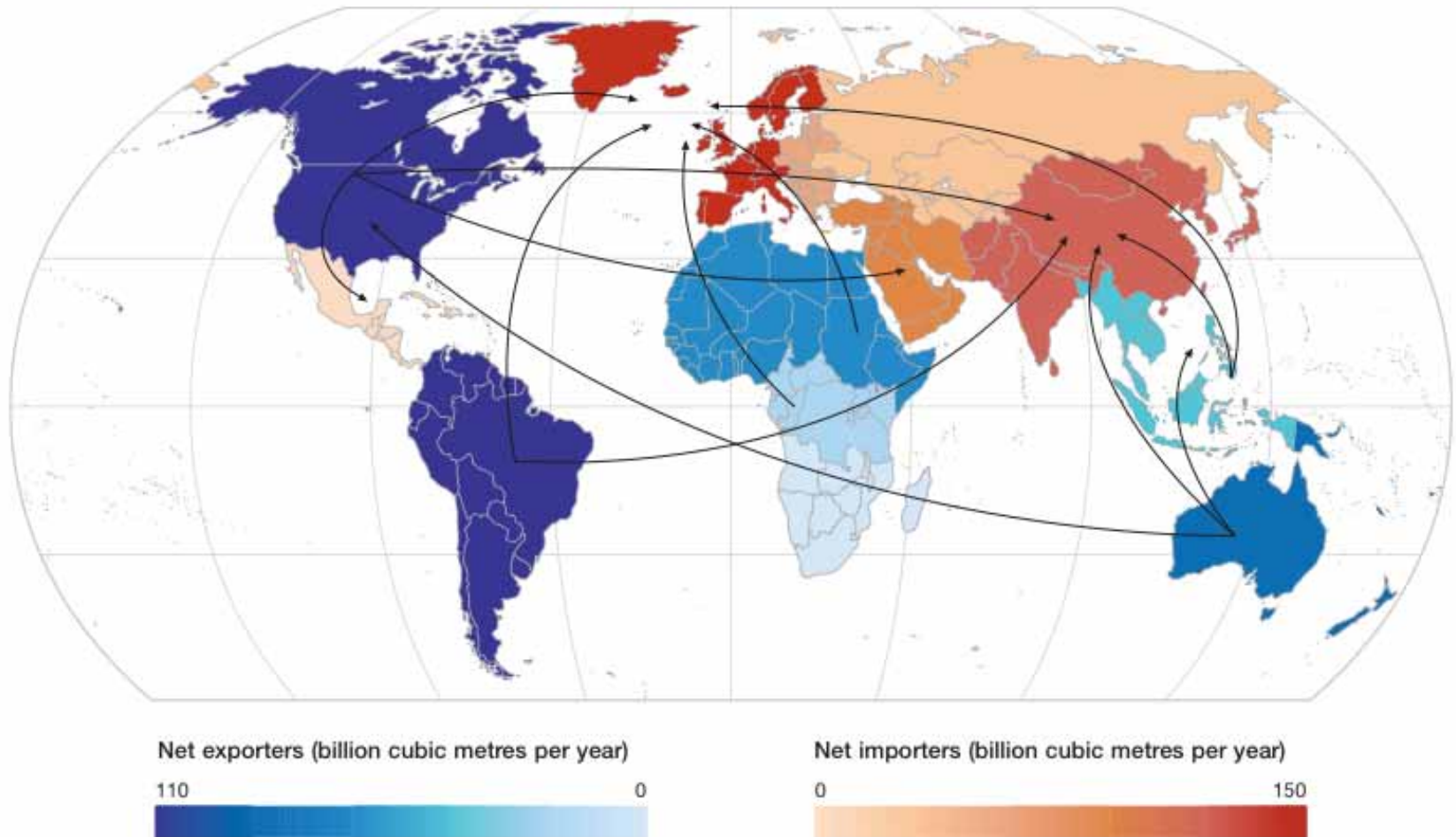


2048.9 m<sup>3</sup> water/capita/year

Canada



# Virtual Water Imports and Exports Around the World



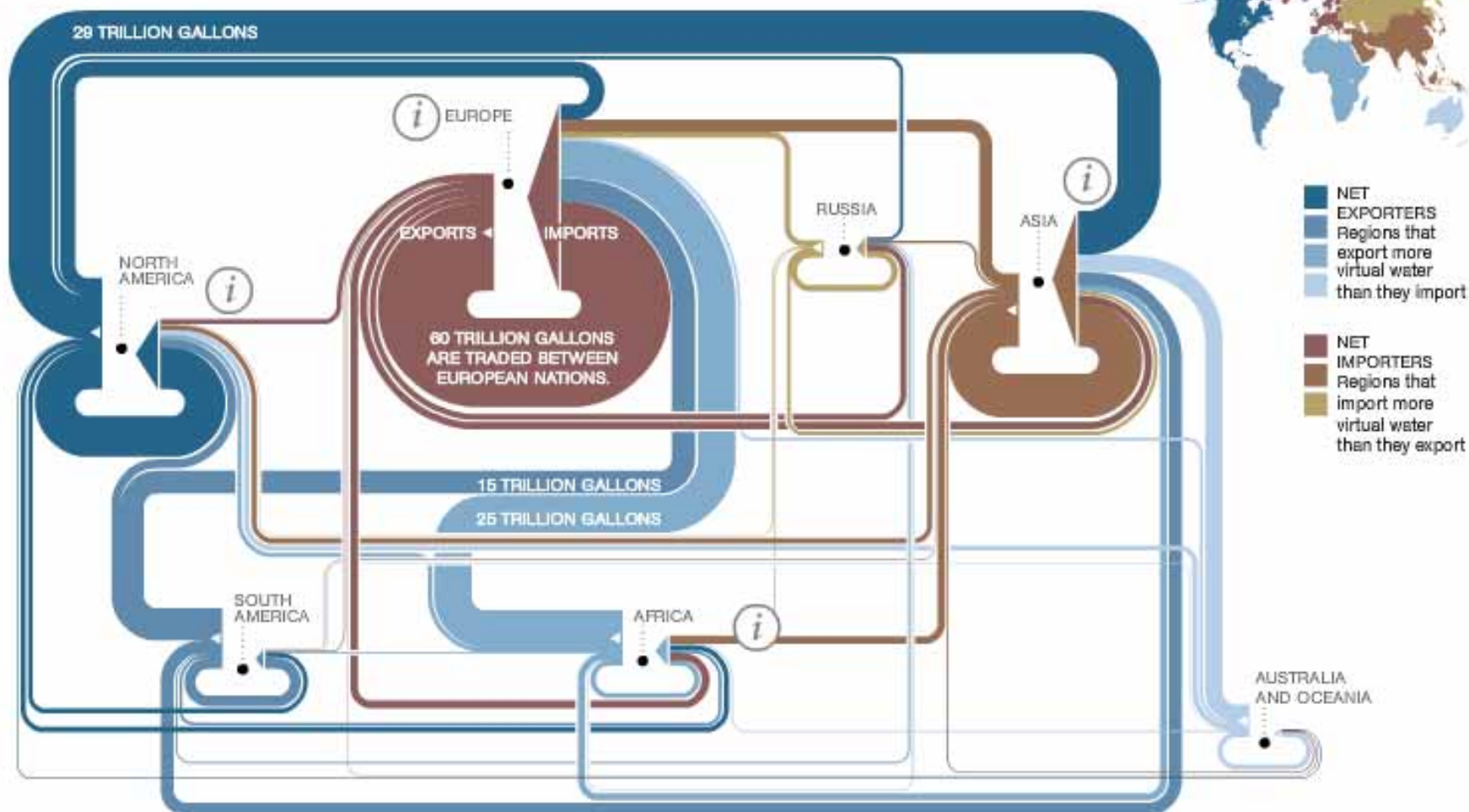
Source: Chapagain and Hoekstra, 2004 Water Footprints of Nations; UNWWAP 2006, UN World Water Development Report 2

# G E O G R A P H Y

## VIRTUAL-WATER FLOW

Virtual water is the amount of water used to create a product. For a pound of beef, that's 1,857 gallons on average. A cup of coffee? That's 37 gallons. In the global trade of agricultural products, trillions of gallons of virtual water are transferred between regions. Using virtual water calculations as a tool for water management, countries in the future may weigh the export value of a crop against its impact on local water supply, and perhaps charge more for that product to reflect the water's value.

Roll over the map to highlight water flow

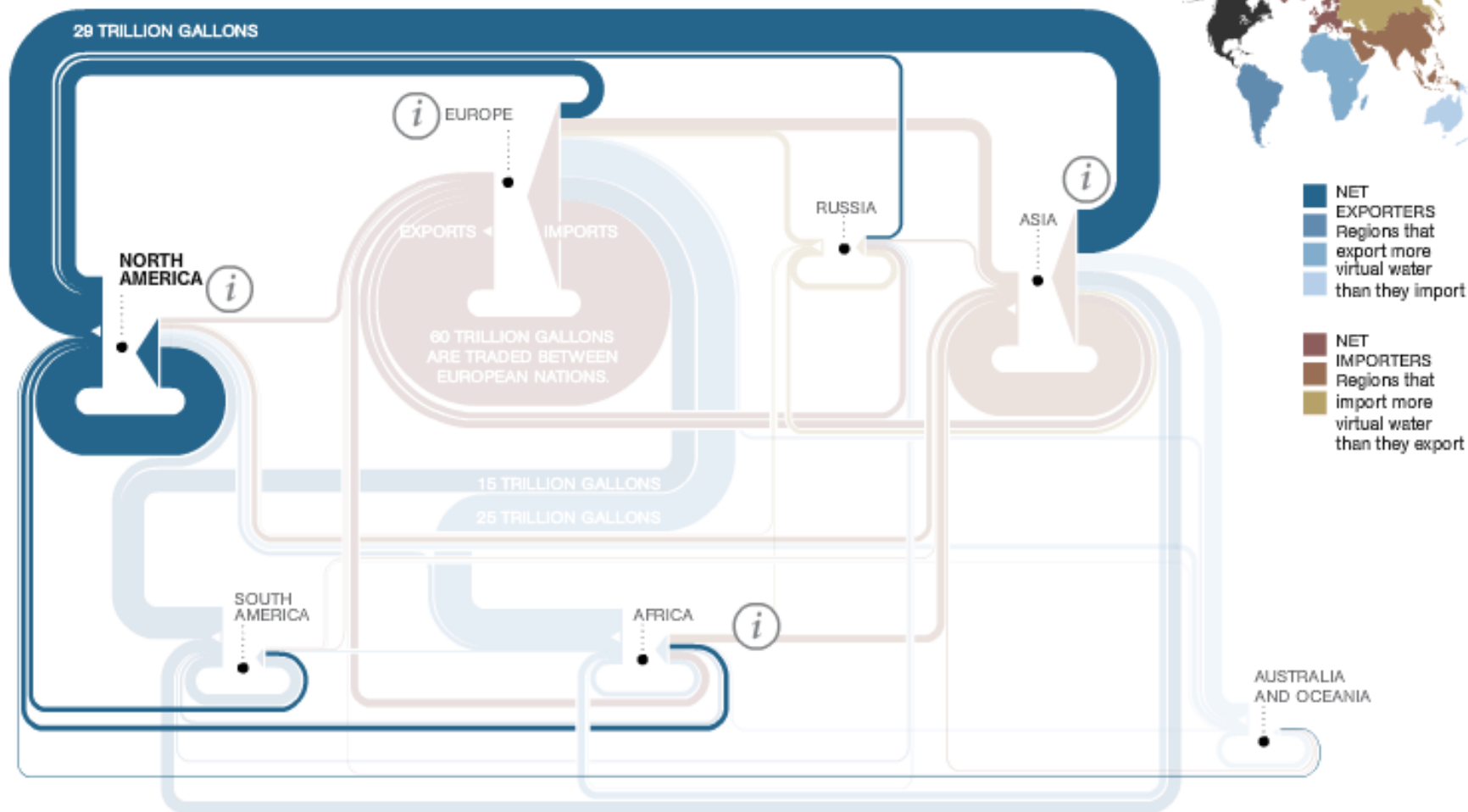


# G E O G R A P H Y

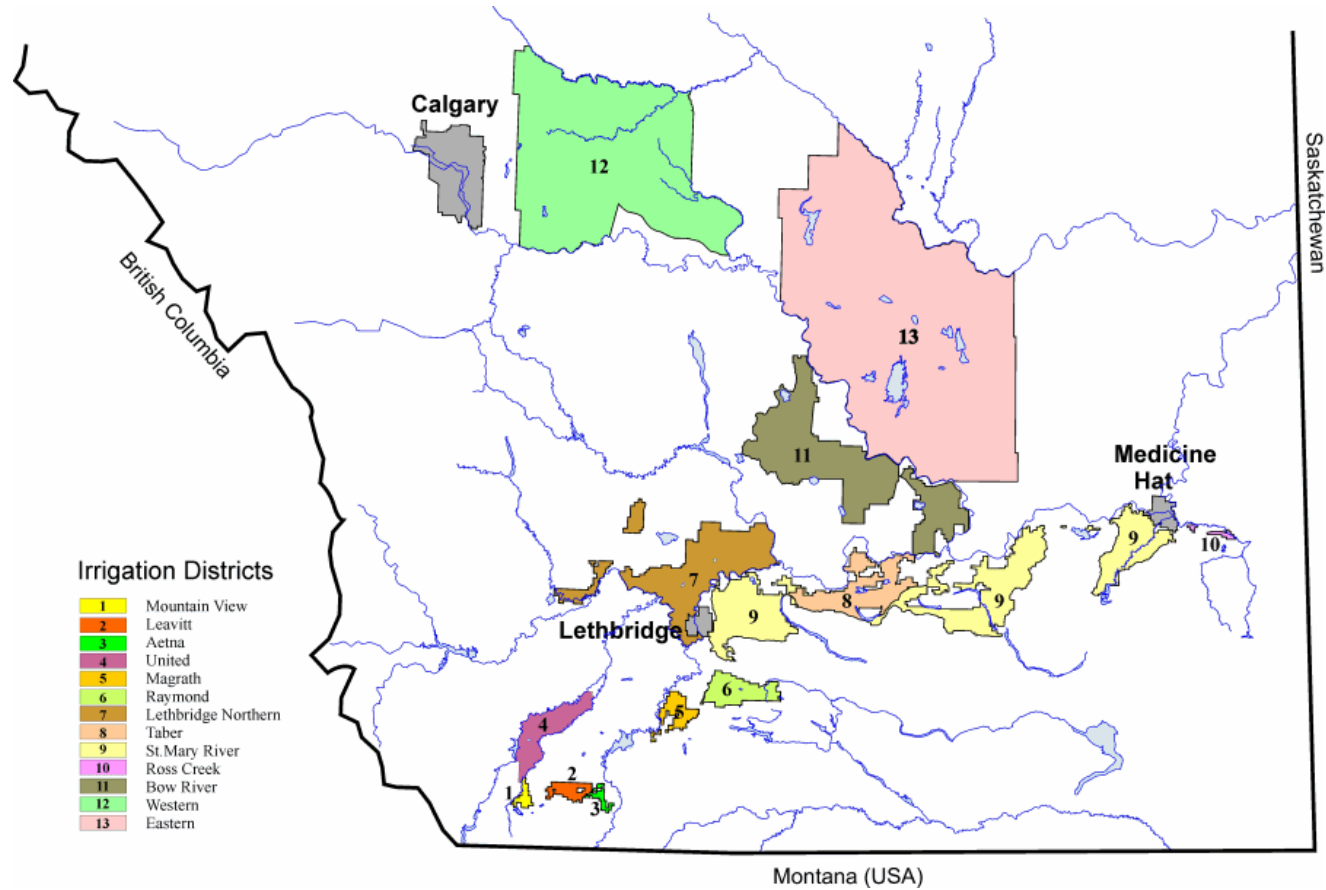
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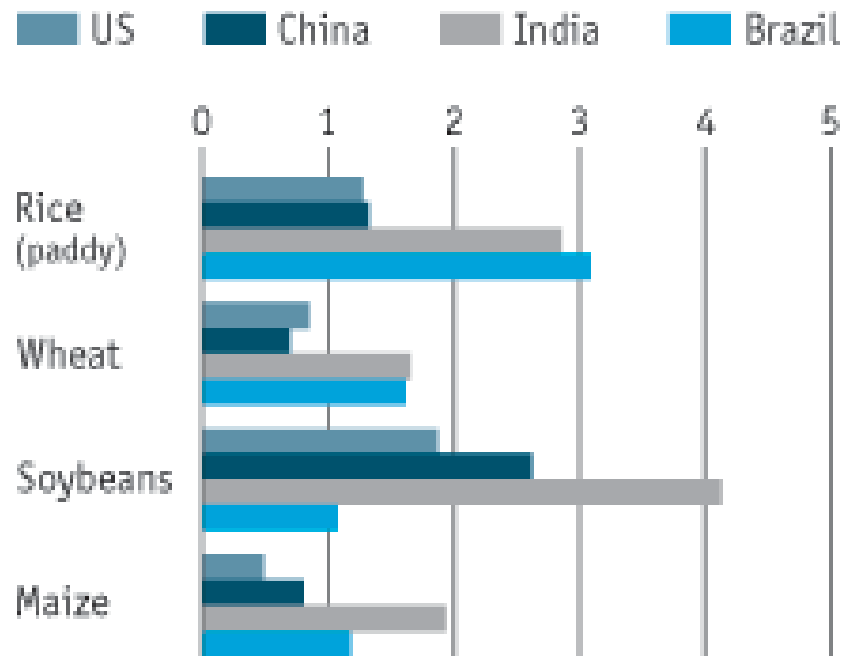


# Alberta's Irrigation Districts



## Fluid foods

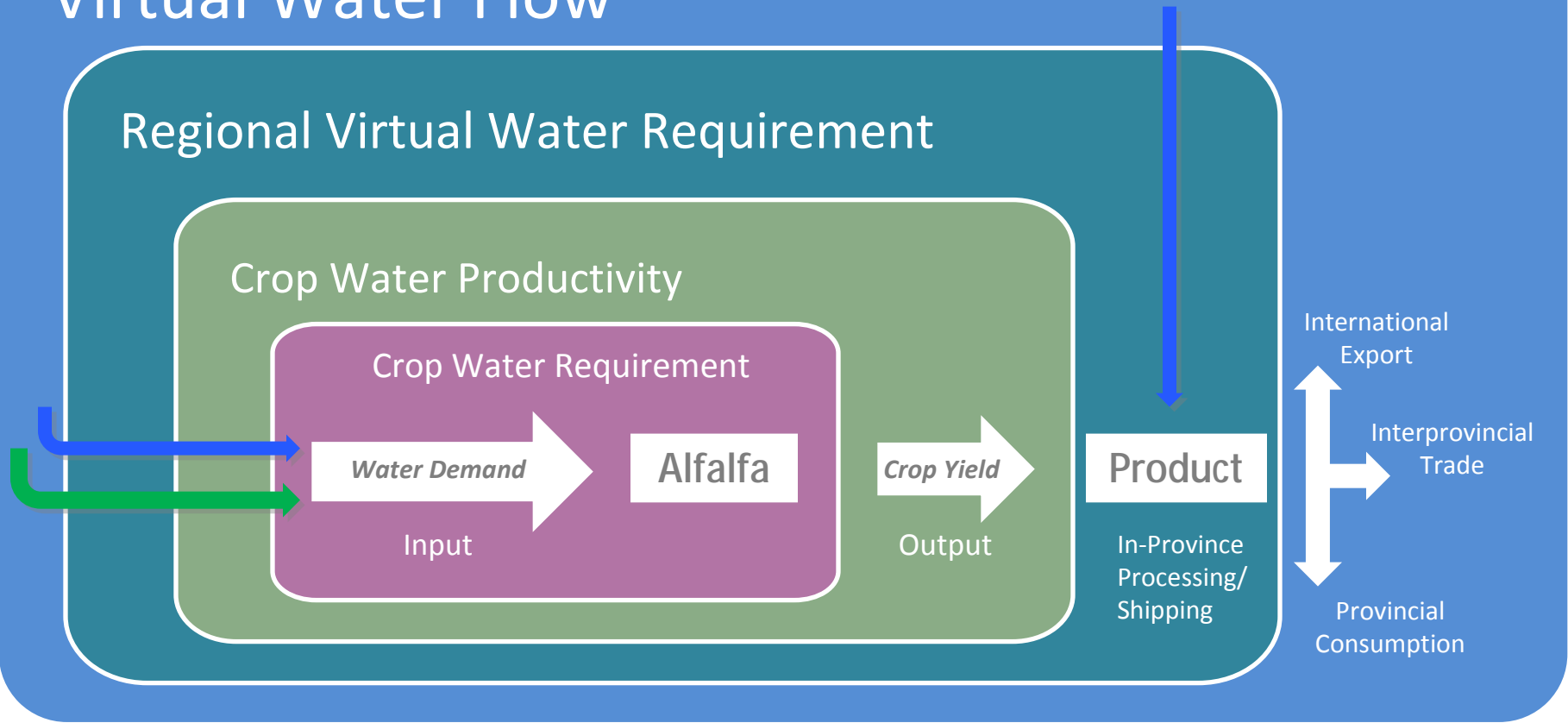
Average amount of water needed to grow crops in:  
Cubic metres '000 per tonne



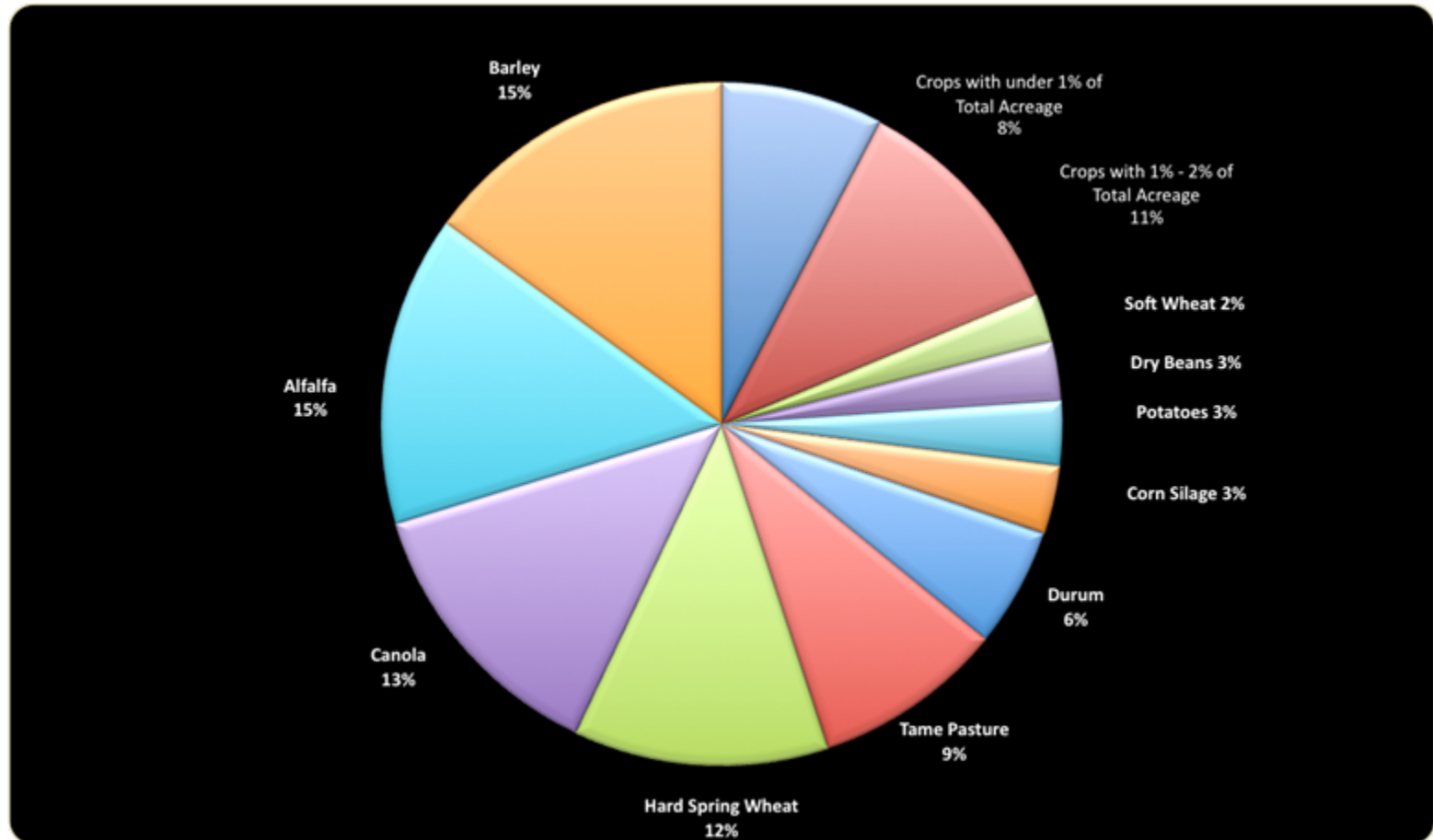
Source: Water Footprint

# Project Description

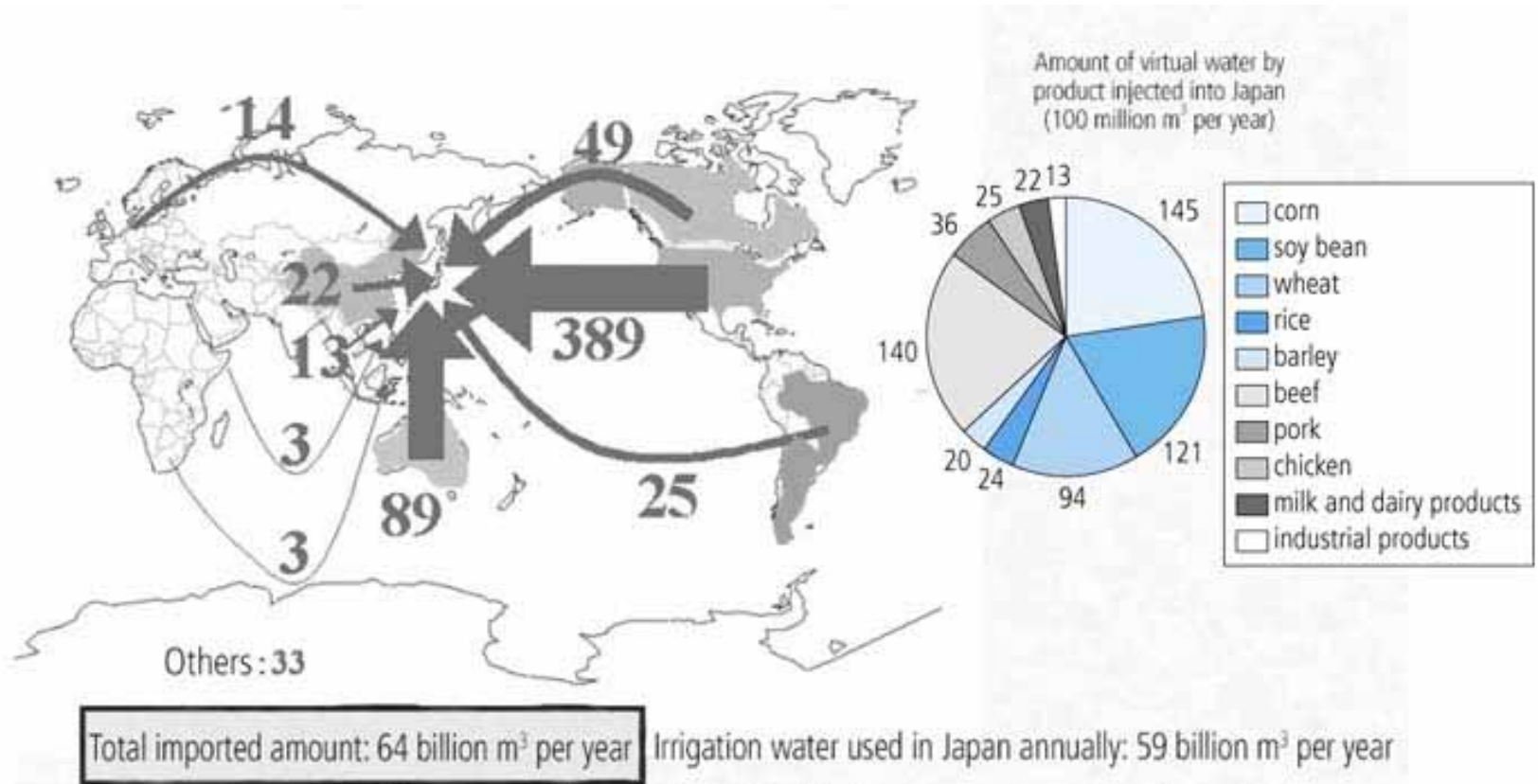
## Virtual Water Flow



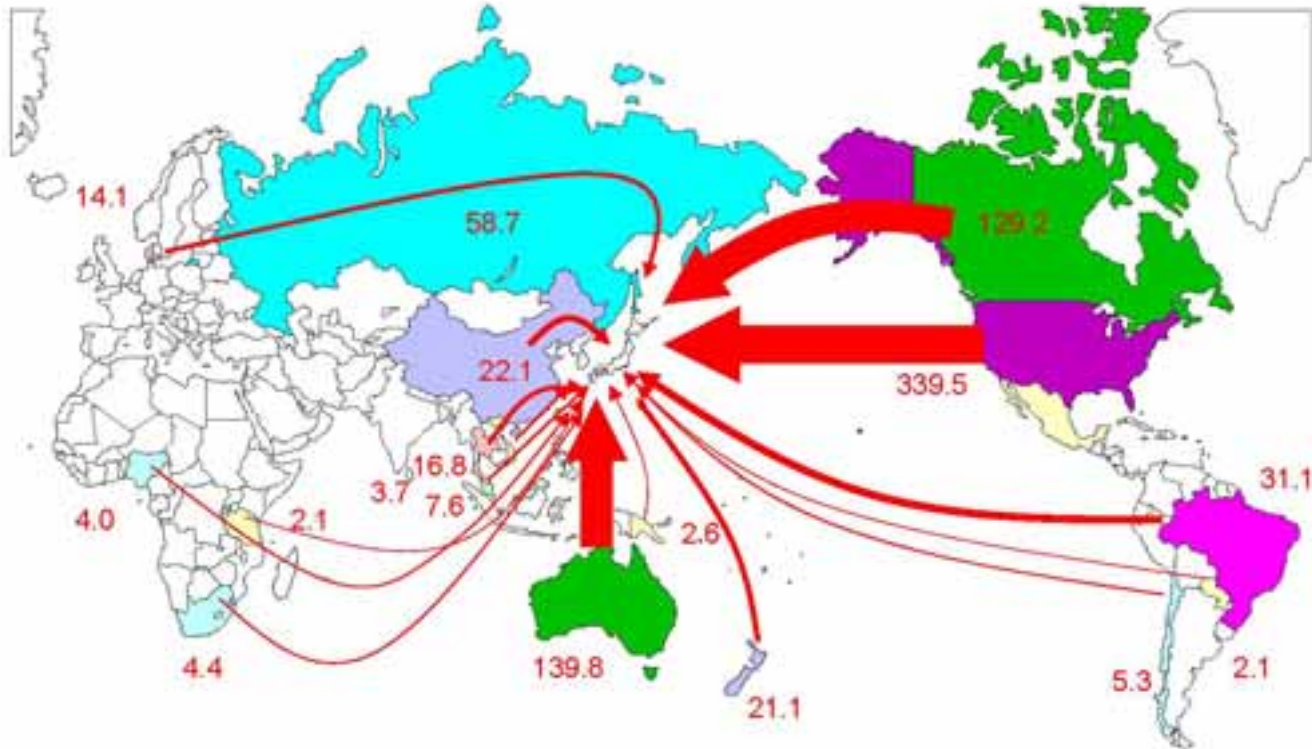
# Alberta's Irrigated Agriculture (2008)

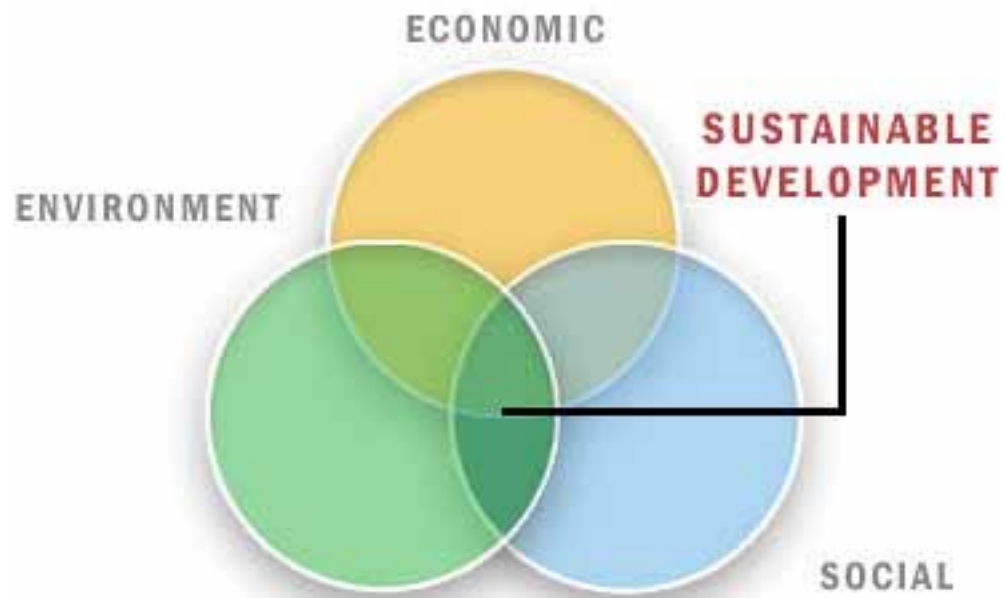


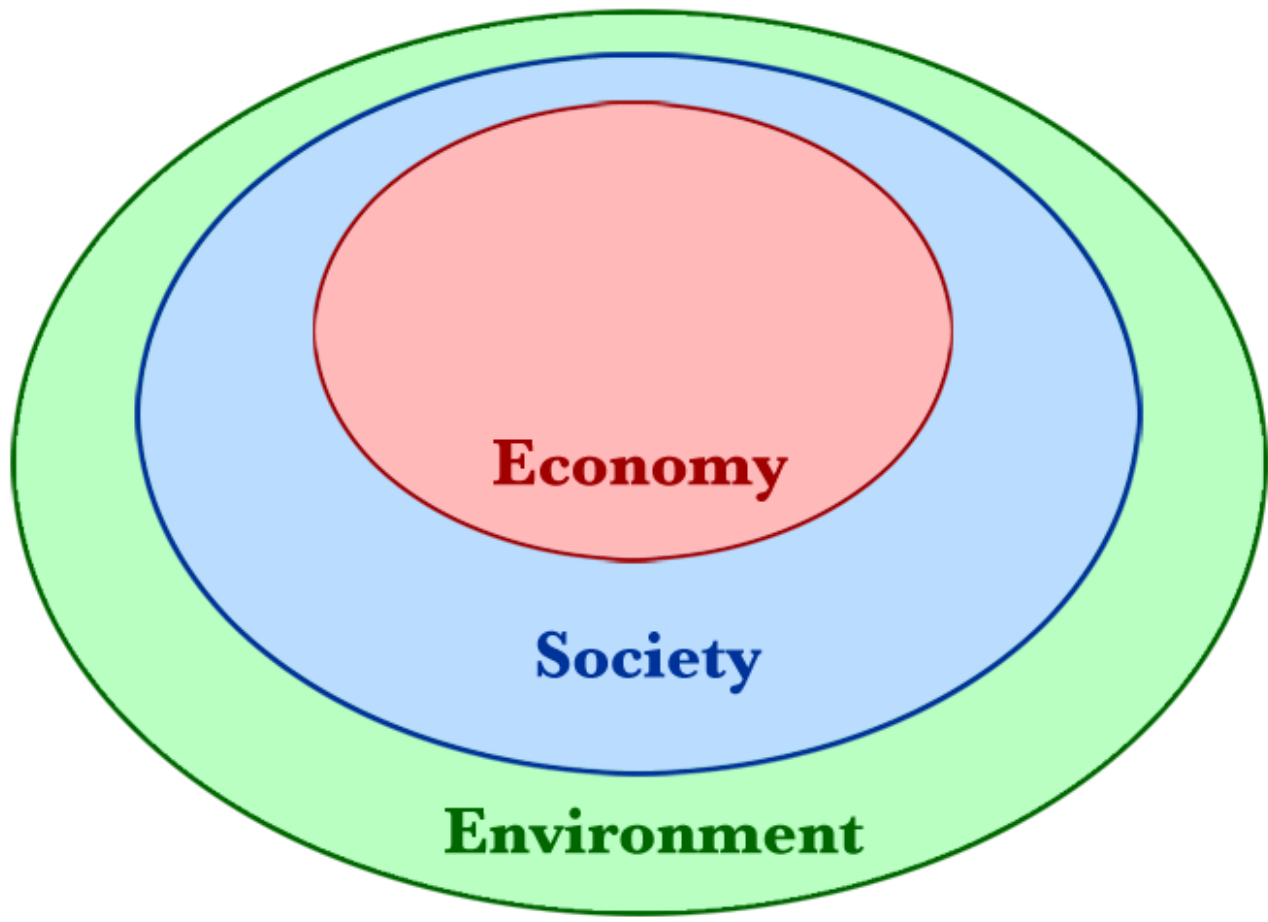
# Total Virtual Water Imports to Japan (2000)



# Virtual Water Imports to Japan due to Food Imports (2005)



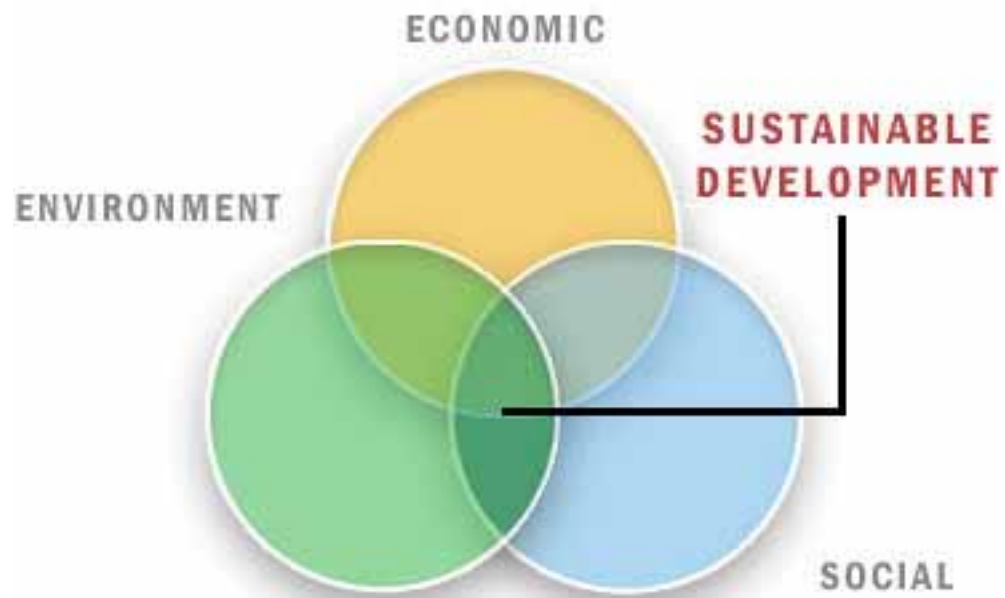




**Economy**

**Society**

**Environment**



Thanks for your attention 😊

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