Water Footprint Assessment: Innovation tool in Brazilian Water Governance

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Introduction

• Global water crisis

• “More urgent than global warming”*¹

• Commodity of the Century

• May become the trigger for a next world war

*¹ Clark (2014)
Goals

- Water Footprint (WF) = Water efficiency indicator
- Discuss its applicability
- Suggest as a potential tool for Brazil’s Water Governance
Methodology

- Exploratory bibliographic survey
- Law No. 9433/97 and its tools was studied
- Comparison between law and Water Footprint tools

*NOTE: Not yet tested for practice*
Water Footprint

• It originated the idea of “Virtual Water”

• 2002 – Arjen Y. Hoekstra

• **DEFINITION:** *²

  “The total fresh water volume used during the production and consumption of goods and services, likewise the direct and indirect consumption in the production process-chain”

• Considers direct and indirect aspects

*² Hoekstra et al. (2011)
Water Footprint

- Sustainability – Regional and temporal factors
- Most popular methodology currently *³
- ISO 14.046 : 2014
- Recommended by FAO and UNESCO
- Spain – Became the first country in the EU to adopt (2008)

*³ Pina (2010)
Brazil’s Water Law

- Brazil has the largest water availability in the world

- Historical of negligence and wastage


- Brazilian water governance base
Brazil’s Water Law

**Tools**

- Water Resources Plan
- Framing of Water Bodies in Classes According to Prevailing Use
- Granting of Rights of Use of Water Resources
- Charge for the Use of Water Resources
- Information Systems on Water Resources
Relation and Applicability

- Both consider the river basin as territorial unit
- WF is compatible with all instruments
- CROPWAT + CLIMWAT – Developed by FAO:
  - Recommended for use on WF
  - Already used by ANA (Brazil’s National Water Agency)
- Easy understanding and appeal to the masses
Conclusions

- Law No. 9433/97 + Water Footprint are consistent

- The WF **can** help in decision-making

- WF can be applied to each of the 5 instruments of the Brazilian Water Law

- An internationally standardized method would give Brazil a position and highlight by innovation

- Accompanying international trends
Acknowledgement
THANK YOU!! ;D

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References


• **RECOMMENDED:**
  