









The Value(s) of Virtual water







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Contending narratives

‘Classical realism’; Water in crisis Virtual water - Liberal internationalism

-  Water is conflictive-prone
-  Malthusian
-  State centred interventionism
-  Scarcity => Water wars
-  'Blue water' counted only
-  Resource dependence creates vulnerability
-  Trade creates dependence
-  Stress drives up food prices

-  Don't worry
-  Cornucopian
-  Free-market internationalism
-  Water wars prevented by global food trade
-  Root-zone water incl.
-  Interdependence solves local shortages

Categorisation of VW approaches

- Liberal narrative; more trade
- Invisible hand
- Stop former lobby
- Softer path, politically invisible
- Problems: shocks to farmers bring constant stress
- Institutional engineering (regulation)
- Instruments: pricing, behavioural and technical incentives, and trade restriction, tradeable permits
- Virtual Water Trading Council, OPES with international controls
- Problem: macro engineering may lack micro relevance

Different schools

- What to do?
- Solution depends on problem analysis

- Localists: Reduce trade: environmental burden shift

- Local production

- Critique: reducing trade reduces Southern growth, cuibes net benefits too

- Realists: Reduce dependence on trade

- Postel: 'The real water wars will be played out through world trade'

- Leviathan needed

- Critique: violent water conflict is local, not interstate

World systems approach

- Structural global inequality
- VW shifts burden from global North to South
- Within states, farmers negatively affected

Blind macro spots

- Much of the analysis does not account for ‘... key considerations that determine international trade patterns, such as domestic macroeconomic policies, socioeconomic goals, exchange rate policies, and political relationships’ (Molden 2007: 123).
- Global food trade is not so global; regionalisation is the trend
- Global food system is not a level playing field

VW as peacemaker

- “Countries do not go to war over water, they solve their water shortages through trade and international agreements.’ (Barnaby 2009 in *Science*)
- Do they?

Food price crisis 2007-8

- Two game changers: non-food production (biofuels) and food price explosion
- ‘Regression’ to resource imperialism: FDI
- Land grab is water grab (Nestlé)
- Legitimised by lack of codified rights – but ‘unused’ land rarely really goes unused (Legal pluralism)

Three types of governance instruments

- Coercive: Illusion of control is illusory - even Egypt can't control everything
- Communicative: vs populist skepticism
- Economic: reallocation will trigger political contest as implementation of VW policies deeply intervenes in rights and livelihoods
 - Meinzen-Dick and Pradhan (2005: 178) foresee struggles, contestations and conflicts affecting such processes

So...Politically silent? (Allan)

- Once virtual water becomes a policy concept it can never be 'politically silent' anymore - policies create distinctions between beneficiaries and non-beneficiaries, winners and losers, included and excluded. This would not be any different for policies based on virtual water

Moral argument

- VW strategy appears to be a form of social engineering
- “water is far too important to its users to be the basis for socioeconomic experiments” (Perry *et al.* 1997).

But even if such engineering were possible, would it make a difference locally?

Anthropological research needed

- Water use is determined by ‘symbolic, individual and small-scale interactions’
- Attention to: everyday corruption, checkpoints impeding trade, producer and consumer price manipulation as interferences in trade flows
 - Lichtenthaeler: Farmers prefer independence from states or international systems
 - Boelens & Vos: Rationalisation can destroy collectively owned systems
 - Youkhana and Laube: Water research “fails to acknowledge the way in which local farming and livestock systems are adapted to water scarce environments and seems to overlook the seasonal nature of precipitation, agricultural production and many markets’
 - Barnett: Practices: real water does real work

General argument

- Implementation of virtual water policy is a conspicuous weakness of virtual water scholarship.
- ‘VW strategy’ suggests unrealistic degree of control and impact; ‘overstated capacity of markets or states to steer and control processes that are crucial for the ‘implementation’ of virtual water
- Understanding impact of VW strategy requires multidisciplinary approach