Global food supply chains: their importance in understanding who manages the planet’s water security relying on water blind accounting systems

Tony Allan, King's College London & SOAS

IWRA 2015 Edinburgh
25 May 2015
Why are food supply chains important?
1. 92% of water consumed is embedded in food & fibre
2. Farmers ‘manage’ and ‘mis-manage’ over 90% of this water in very highly politicised market supply chains that privilege low food prices for consumers and returns to powerful players in supply chains

What do we need to do? Recognise:
1. The power relations in market supply chains
2. That farmers are the prime stewards of water resources
3. That consumers, investors and other players do not understand their dependence on farmers with secure livelihoods
4. The importance of installing reporting and accounting systems that enable secure farm livelihoods so that farmers can be good water stewards
Will there be enough water?

More people – 7 to 9 billion people by 2050

More calories & more meat, fish, milk

More food production – need to increase grain production by 2050 – 40%? 70%? 100%?

More water for food – via sustainable intensification

Pessimists are wrong but useful

Optimists are right but dangerous?
2. Previous and new development eras?

Water Use

Water Use in irrigation is a relevant indicator of the hydraulic mission's indicative trajectory.

Modernity inspired by the Enlightenment

the belief that nature could be controlled

the trajectory of industrial modernity

the trajectory of reflexive modernity in the North

2nd
Industrial modernity
hydraulic mission

Blue / Fresh / Surface plus Groundwater

Embedded in trade

Green movement in the North

contentious discourse


1st
Premodern

3rd
Reflexive modernity

4th
Economic

5th
Political & institutional
Food surpluses and deficits
Net intra-regional trade, tonnes, m

Source: Cargill

*Cereals, rice, oilseeds, meals, oils and feed equivalent of meat

OCSE Members

OCSE - 2015 Environmental Forum First Preparatory Meeting
Who will save the world?

Farmers
Operators of water infrastructures
The Big-Ag Seed, Fertilizer, Chemical Corporates
The Big-Food-Commodity Traders
The Big Food & Beverage Corporates
The Big Supermarkets
The Other Major Food Distributors
The State – including law & regulation
Accountants & Reporting Rules
Investors / Sustainable investment
The Food and Water NGOs – Local & International
The Multi- and Bi-Lateral Aid Agencies
Consumers
Society by adopting sound ideas and behaviour
Who has power in current supply chains

Farmers
Operators of water infrastructures
The Big-Ag Seed, Fertilizer, Chemical Corporates
The Big-Food-Commodity Traders
The Big Food & Beverage Corporates
The Big Supermarkets
The Other Major Food Distributors
Investors ???/Sustainable investment

The State including law & regulation

Accountants & Reporting Rules
The Food and Water NGOs – Local & International
The Multi- and Bi-Lateral Aid Agencies

Consumers
Society by adopting sound behaviour
Who will secure water and food for society?

Farmers

Operators of water infrastructures
The Big-Ag Seed, Fertilizer, Chemical Corporates
The Big-Food-Commodity Traders
The Big Food & Beverage Corporates
The Big Supermarkets
The Other Major Food Distributors

Investors ???/Sustainable investment

The State including law & regulation

Accountants & Reporting Rules
The Food and Water NGOs – Local & International
The Multi- and Bi-Lateral Aid Agencies

Consumers

Society by adopting sound behaviour
What do we need to do?

Recognise:
1. The power relations in market supply chains
2. That farmers are the prime stewards of water resources
3. That consumers, investors and other players do not understand their dependence on farmers with secure livelihoods
4. The importance of installing reporting and accounting systems that enable secure farm livelihoods so that farmers can be good water stewards

If we cannot - then we have to get the state to focus benefits on farmers so that they do what we need them to do in the existing supply chains
Thank you  
ta1@soas.ac.uk