More reading

"Water": Liquid Dynamics: Accessing Water and Sanitation in an Uncertain Age – Symposium Report, STEPS Working Paper 42 by Synne Movik and Lyla Mehta

"CLTS": The Dynamics and Sustainability of Community-led Total Sanitation (CLTS): Mapping Challenges and Pathways, STEPS Working Paper 37 by Synne Movik and Lyla Mehta

Film: Water and Justice: peri-urban pathways in Delhi. STEPS Centre, 2011, 20 min.

Jeremy Allouche, Alan Nicol & Lyla Mehta, "The human securitization of water", Whitehead Journal of Diplomacy and International Relations (*forthcoming*)

Lyla Mehta & Synne Movik (Eds.), Shit Matters: The Potential of Community-led Total Sanitation, Rugby: Practical Action Publishing, 2011.

Jeremy Allouche (2011), "The sustainability and resilience of global water and food systems: A political analysis of the interplay between security, resource scarcity, political systems and global trade", *Food Policy*, Volume 36, Supplement 1, Pages S3-S8.

Lyla Mehta (Ed) (2011), *The Limits to Scarcity*, London: Earthscan

All these resources are available at www.steps-centre.org/publications

Credits

This briefing was written by Lyla Mehta, Alan Nicol and Jeremy Allouche and edited by Nathan Oxley.

About the STEPS Centre

The STEPS Centre (Social, Technological and Environmental Pathways to Sustainability) is an interdisciplinary global research and policy engagement hub uniting development studies with science and technology studies. We aim to develop a new approach to understanding, action and communication on sustainability and development in an era of unprecedented dynamic change. The STEPS Centre is based at the Institute of Development Studies and SPRU Science and Technology Policy Research at the University of Sussex with a network of partners in Asia, Africa and Latin America and is funded by the Economic and Social Research Council. Find out more: www.steps-centre.org

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Liquid dynamics

The STEPS Centre Water domain, 2007-2011

STEPS domain briefing

Globally, billions lack access to safe water and sanitation. Despite widespread recognition that the situation is unacceptable, the tragedy of this failure persists. Increasingly, the development world is realising that a long series of pronouncements, declarations of principles and global conferences are as much a part of the problem as the solution: they aid in the persistence of myths, prop up half-truths and let politicians off the hook.

For over five years, researchers at the ECRS STEPS Centre have been asking why progress has not been swifter or more effective. Part of the answer is that the interplay between the social, technological and ecological dimensions of water and sanitation ("Liquid Dynamics") is not sufficiently recognised.



Collecting Water in Dhaka slum. Photo: un_photo on Flickr (creative commons)





The dominant framings of water, especially at the global level, are too reliant on using technical expertise to solve problems. Questions of power, politics and risk are sidelined. Technocratic debates often do not take account of vital issues like access, complexity, uncertainty, sustainability and governance in water and sanitation.

We have applied the Liquid Dynamics approach to a number of case studies during the first 5 years of our research.

"The dominant framings of water are too reliant on using technical expertise to solve problems"

The dynamics and sustainability of Community-led Total Sanitation (CLTS)

CLTS, which originated in rural Bangladesh in 2000, facilitates village dwellers in recognising unhygienic sanitation practices through mobilising collectively, and changing their behaviours. It has proven very successful and has spread to over 40 countries. Still, challenges regarding inclusivity and sustainability remain.

STEPS researchers have focussed on the social, technological and ecological dynamics of CLTS and wider questions of sustainability.

- **Social** dynamics (which include social, gender and power relations) influence how people perceive and adopt sanitation and the impact on long-lasting behaviour change.
- Neglected **technological** dimensions include the ability of technologies to respond to ecological shocks and stresses such as floods, droughts and collapsible soils and the overall ability of the household to climb up the so called 'sanitation ladder."
- The unknown **ecological** risks of CLTS include groundwater and surface water contamination due to switching from open defecation to site specific latrines.

These factors ultimately shape the overall resilience and sustainability of CLTS over time. Sustainable pathways in CLTS will involve making decisions that embrace diversity, equity and social justice. We are also exploring whether CLTS could usefully engage with other approaches such as ecological and sustainable sanitation, in order to enhance the overall durability and resilience of CLTS on the ground.

Pathways and politics in water and sanitation

Pathways – the ways complex systems evolve over time – are influenced by politics and power. Our Liquid Dynamics work has looked at the past three decades in water and sanitation as a way of charting how pathways have overlapped, reached dead ends in policy outcomes, or intertwined to create new constellations of interest (for instance, between private providers and the state, between civil society and global institutions). We have looked at path-dependencies and the global institutional 'vehicles' which create such dependencies, but also how parallel paths might (or might not) connect to form stronger routes that achieve more and better outcomes.



A woman walks home along a water pipe in Mumbai. Photo by meanestindian on Flickr (Creative Commons)

Only by looking back at history with a critical lens can the real story of access to water and sanitation and the complex determinants of where we are at now – a huge global failure of collective action – be correctly understood. To understand the complex, dynamic intersections between different technological, social and environmental processes, we need to look behind the facades of international action to the workings of actors and stakeholders.

Some for all? Progress since 1990

A two-day symposium at the Institute of Development Studies in 2011, entitled "Some for All? Pathways and Politics in Water and Sanitation since New Delhi, 1990", looked back at the New Delhi Statement and the political economy and politics of water and sanitation policy processes in the intervening 21 years.

Key points:

- The strength of global action now needs to be measured in terms of social, technical or financial sustainability as well as political embeddedness, including local political action as well as higher-level 'political will'.
- The water and sanitation sector needs new framings of value, cost, inclusivity and equality which must find their way into current political and policy responses to technical, physical and social challenges.
- These framings must draw on the views and experiences of the poorest and most marginalised and take on board the influence of political history and culture.

Future work

In the next phase of STEPS we will continue to uncover alternatives to the dominant paradigms and pathways as exemplified in 'big pronouncements' made over the past two decades. It is important to ensure that alternatives are grounded in local realities, are pro-poor and advance the interests of those hitherto excluded from dominant perspectives and interventions. In another 21 years the world will be fast approaching a 'peak population' of nine billion people. If the problem of access to water and sanitation is not successfully addressed, billions of people will continue to suffer. This is a situation we urgently need to avoid.

"The water and sanitation sector needs new framings of value, cost, inclusivity and equality"