

Navigating the Politics of Water and Sanitation Planning

11.475 – Spring 2019

Meeting times: Tuesdays 3pm – 5pm in Room 9-450A

Instructor: Dr. Gabriella Y. Carolini (carolini@mit.edu)

Office hours: By appointment, in my office (9-539).

Course Description

Water and sanitation services are increasingly inundated fields of both study and practice. From multi-level policy-makers, transnational corporations, international financial institutions, and specialized technical experts to advocacy groups, small-scale service providers, civil society organizations, and end-users, the portfolio of stakeholder interests in these basic services is a veritable mosaic – and some would say puzzle. This course aims to inform and prepare students to navigate the explicit and implicit power dynamics at play among (though also at times excluding) such stakeholders in decision-making processes that govern the planning and delivery of water and sanitation systems. Several polemical questions tend to mark the political and economic governance of water and sanitation systems, however cases often reveal hybrid forms of organization, regulation, financing, and physical delivery which complicate and challenge simplified answers. The course thus emphasizes the importance for planners to move beyond the limited dimensions of supply and demand studies and to gain fluency in the multiplicative political-economic and social factors driving choices in wat-san systems planning. By tracing the planning and provision of wat-san systems in mostly urban and peri-urban areas, students will follow the trajectory of decisions that shape the accessibility, affordability, and adequacy of water and sanitation services, particularly in vulnerable neighborhoods. In-depth, globally comparative readings will be used to fully investigate the intricate choices that expose “basic” services in water and sanitation as a misnomer.

Objectives

The overall course objectives are twofold:

1. To provide students with a depth of reference and breadth of knowledge that shadows the major component parts of a systems-wide political-economic analysis of water and sanitation planning, with particular emphasis on such systems within resource-poor contexts.
2. To engage students within an iterative process of argumentation and logic-construction through in-class dialogues, engagement with peers, and individual research papers.

Evaluation

60 % Term paper:

The major course assignment is a term paper on one of the six modules we cover. This is your chance to take the foundation of course materials and build upon it (with additional references) to reflect **your** specific interests, passions, and professional path. You may choose the specific module/issue, but will

need to secure my approval for the approach you will take on your paper, and the specific location you will focus on.

For example:

- A. You choose to write a paper concentrating on financing water delivery;
- B. You propose to me what issues or question within the financing of water delivery you will write on for your paper, and propose a geography or location of focus;
- C. We agree that you will concentrate on:
 - i. The potential challenges and opportunities of using micro-credit organizations to finance small-scale water operators in peri-urban parts of Kampala, Uganda;OR
 - ii. How to effectively mobilize fixed income (bond) financing to expand water infrastructure to address the growth of satellite cities outside Brasilia, Brazil.

For either example, you would of course have secondary and tertiary questions and issues to address in order to fully explore your topic. The challenges you face therein will be discussed in class during a “Paper Workshop” in Week 8’s meetings. For this workshop, you will prepare a draft paper to present in class. Please note that this is only a draft - I expect you to present a summary to your colleagues of what your research topic is, what is the major issue or question you are exploring in your paper, what are the difficulties you might be finding in conducting your research, what are some enlightening revelations you have found in your research, what you feel you need help with moving forward. In short, this is a stop-check to ensure things are moving in the right direction for your paper’s successful completion, and of course an opportunity to correct your course if things are not going well. Everyone will be assigned a “draft feedback partner” for their paper, based on my assessment of synergies between your paper topics or approach. Your assigned draft feedback partner will provide you (and me) with written comments on your work, due Week 9. You will turn your final paper in on Friday May 19th by 12pm.

Technical points:

- I expect your papers to range between 20-30 pages. Quality matters more than quantity; however, to adequately address a topic, the paper should be at least 20 pages. I ask that you NOT EXCEED 35 pages. All papers should be double-spaced, and in 12pt font, Times New Roman, with 1-inch margins.
- Draft paper partners will be assigned after Week 4 when you make your paper proposals. You are encouraged to exchange thoughts, difficulties, and successes of researching and writing your paper with your paper partner throughout the term, though there is also at least once during the semester where this exchange will be formally recorded (as noted above – in Week 9) and your experiences more widely discussed in the classroom.
- Written feedback to your draft paper partner should be sent electronically to me and your paper partner. You may use the “Commentary” or “Tracked changes” feature in Word, along with general written comments for this assignment.

Key dates for paper assignment:

1. **By Week 4**, you propose your paper topic to me. Prepare a brief ONE PAGE statement and outline– a paragraph or two indicating your major topic/question (and the secondary/tertiary

questions it evokes). Please also indicate geography/location of interest, followed by a few relevant references you have found.

2. **By Week 7**, you prepare a draft paper and present it in class.

3. **By Week 9**, you provide written feedback on your draft partner's paper (providing him/her AND me with the written feedback – in electronic form).

5. **FINAL PAPERS due Thursday May 16th** – by 6pm in electronic form.

25% Discussion Lead:

This is a group/partner assignment. Leading discussion means that you and your colleague(s) will come to class and provide a synopsis of the week's readings: what in the readings did you find most striking or unnerving, how well were arguments presented, what is the greater relevance (if any) of arguments presented, etc. You should write up a one to three page (maximum) synopsis/outline of the week's readings, suggesting specific questions for discussion in class. The synopsis will be due on **Monday nights by 6pm** – uploaded to Stellar for the class' review. Note that a sign-up sheet will be circulated in class during our first meeting so that you may choose which weeks to lead class discussion. You may partner with different colleagues for different weeks, if the number of students allows.

10% Class participation:

Your class participation grade will be assessed by your weekly contributions to classroom discussions, as well as your written feedback to your draft paper partner. *Please note that I place a great deal of emphasis on classroom discussion and debate. Your participation is ESSENTIAL to this class and FUNDAMENTAL to your education. If I suspect that you are not completing your readings for class or am, for any reason, unsatisfied with classroom discussion, I will request that you start bringing into class a one-page, single-spaced reaction memo on the readings.*

5% News submissions:

Students are expected to share three articles of relevance to the class discussions throughout the course of the term. You can decide when to share a news article (from reputed newspapers, magazines, online sources).

Semester Outline and Readings

Module 1: How Framing Challenges in Water and Sanitation Matters

Week 1 - Feb 5 Introduction to the Course and Framing the Issues

In what ways is a political economic perspective on the planning and delivery of water and sanitation systems useful and why? Which parts of planning such systems are largely technical and which are more political and/or economic? How do different answers to these basic questions frame contentions and opportunities of planning water and sanitation systems? Should or could “priorities” within wat-san systems be universal as well as universally defined? Finally – and centrally – how does the “governance” of such systems – and priorities therein – shape how we plan and deliver water and sanitation services (and vice versa)?

Gleick, P. (1998) The Human Right to Water, in *Water Policy*, Vol. 1, pp. 487-503

Rogers, Peter, Radhika de Silva, and Ramesh Bhatia. (2002) “Water Is an Economic Good: How to Use Prices to Promote Equity, Efficiency, and Sustainability.” *Water Policy* 4 (1): 1–17.

Bakker, K. (2007) “The ‘Commons’ Versus the ‘Commodity’: Alter-globalization, Anti-privatization and the Human Right to Water in the Global South”, in *Antipode*, Volume 39, Issue 3, pages 430–455, June.

Boelens, R. (2009) Politics of Disciplining Water Rights, in *Development and Change*, Vol. 40, No. 2, pp.307-331.

Week 2 – Feb 12 Accessibility: Citizenship and the Politics of Location

Chaplin, S. (1999) “Cities, Sewers and Poverty: India’s Politics of Sanitation”, in *Environment and Urbanization*, Vol. 11, No. 1, April.

Carolini, G. (2012) “Framing Water, Sanitation, and Hygiene Needs Among Female-Headed Households in Periurban Maputo, Mozambique”. *American Journal of Public Health*, Vol. 102, No. 2, pp. 256-261.

Ranganathan, M. (2014) Paying for Pipes, Claiming Citizenship: Political Agency and Water Reforms at the Urban Periphery, in *International Journal of Urban and Regional Research*, Vol. 38, Issue 2, pp.590-608.

Samuels, A. (2016). The American Neighborhoods Without Water, Sewers, or Building Codes. *The Atlantic*. March 3, 2016.

Graham, D. (2016) The Private Sector is Now Providing Basic Services to Flint, in *The Atlantic*, Jan 26, 2016.

Week 3 - Feb 26 Affordability 1: Pricing, Regulation, and Corruption

Shirley, Mary M. 2002. *Thirsting for Efficiency : The Economics and Politics of Urban Water System Reform*, Chapters 1 and 2, World Bank ; Amsterdam ; New York : Pergamon, 2002.

Davis, J. 2004. "Corruption in Public Service Delivery: Experience from South Asia's Water and Sanitation Sector," *World Development*, 32(1), January, pp. 53- 71(19).

Massarutto, A. (2007) Water pricing and full cost recovery of water services: economic incentive or instrument of public finance? *Water Policy*, 9: 591-613.

Week 4 – Affordability 2 – Full-Cost Recovery, and Equity

Smith, L. (2004) The murky waters of the second wave of neoliberalism: corporatization as a service delivery model in Cape Town, *GeoForum*, Vol. 35, pp. 375-393.

Marson, M. and Savin, I., (2015) Ensuring sustainable access to drinking water in Sub Saharan Africa: Conflict between financial and social objectives. *World Development*, 76, pp.26-39.

Renault, A. (2016) Assessing the impact of full cost recovery of water services on European households, *Water Resources and Economics*, Vol. 14: 65-78.

Rusca, M. et al (2017) The paradox of cost recovery in heterogeneous municipal water supply systems: Ensuring inclusiveness or exacerbating inequalities? *Habitat International*

Week 5 – Affordability 3 - Designing Water Tariffs and Subsidies

Nauges, C. and Whittington, D. (2017) Evaluating the Performance of Alternative Municipal Water Tariff Designs: Quantifying the Tradeoffs between Equity, Economic Efficiency, and Cost Recovery, *World Development*, Vol. 91, pp: 125-143.

Colton, R. (2017) Baltimore's Conundrum: Charging for Water / Wastewater Services that Community Residents Cannot Afford to Pay, Report prepared for Food and Water Watch.

Fuente, D., J. Gakii Gatua, M. Ikiara, J. Kabubo-Mariara, M. Mwaura, and D. Whittington (2016), Water and sanitation service delivery, pricing, and the poor: An empirical estimate of subsidy incidence in Nairobi, Kenya, *Water Resour. Res.*, 52, 4845–4862.

Supplemental

Banerjee, S. et al (2010) *Cost Recovery, Equity, and Efficiency in Water Tariffs: Evidence from African Utilities*, Policy Research Working Paper 5384, The World Bank, Africa Region, Sustainable Development Division

Week 6 – Adequacy: Scarcity and Sustainability as Real or Perceived

Millington, N., 2018. Producing water scarcity in São Paulo, Brazil: The 2014-2015 water crisis and the binding politics of infrastructure. *Political Geography*, 65, pp.26-34.

Mehta, L. 2013. *The limits to scarcity: Contesting the politics of allocation*. Routledge Milanez.

Module 2: Major thematic debates

Week 7 – Technological solutions across contexts

Nelson, K.L. and Murray, A., (2008). Sanitation for unserved populations: technologies, implementation challenges, and opportunities. *Annual Review of Environment and Resources*, 33, pp.119-151.

Pritchett, L. and Woolcock, M. (2002) *Solutions when the Solution is the Problem: Arraying the Disarray in Development*, Center for Global Development Working Paper, No. 10.

Zapata Campos, M. et al (2014) The travel of global ideas of waste management. The case of Managua and its informal settlements, in *Habitat International*, Vol. 41, pp.41-49.

Week 8 – Privatization in Practice: Is private capital bad for water and sanitation?

Budds, J. and McGranahan, G. (2003) "Are the Debates on Water Privatization Missing the Point? Experiences from Africa, Asia and Latin America." *Environment and Urbanization* 15, no. 2: 87-113.

Mustafa, D. and Reeder, P., 2009. 'People is all that is left to privatize': water supply privatization, globalization and social justice in Belize City, Belize. *International Journal of Urban and Regional Research*, 33(3), pp.789-808.

Prasad, N. (2006). Privatisation results: private sector participation in water services after 15 years. *Development Policy Review*, 24(6), 669-692.

Loftus, A.J. and McDonald, D.A., 2001. Of liquid dreams: a political ecology of water privatization in Buenos Aires. *Environment and Urbanization*, 13(2), pp.179-199.

Week 9 – From Privatization to Financialization: The evolution of an asset class

Bayliss, Kate. 2014. "The Financialization of Water." *Review of Radical Political Economics* 46 (3): 292–307. doi:10.1177/0486613413506076

Ahlers, R. and Merme, V.. 2016. "Financialization, Water Governance, and Uneven Development." *WIREs Water* 3 (6): 766–74. doi:10.1002/wat2.1166

Loftus, A. and March, H. (2016), Financializing Desalination: Rethinking the Returns of Big Infrastructure. *Int J Urban Regional*, 40: 46–61. doi:10.1111/1468-2427.12342

Bayliss, K. and Van Waeyenberge, E., 2018. Unpacking the public private partnership revival. *The Journal of Development Studies*, 54(4), pp.577-593.

Week 10 – Who does it best? Exploring the challenges faced by different providers

Wutich, A., Beresford, M. and Carvajal, C., (2016). Can informal water vendors deliver on the promise of a human right to water? Results from Cochabamba, Bolivia. *World Development*, 79, pp.14-24.

Ahlers, R., Schwartz, K., & Guida, V. P. (2013). The myth of 'healthy' competition in the water sector: the case of small-scale water providers. *Habitat international*, 38, 175-182.

Page, B. (2002) Communities as the agents of commodification: The Kumbo Water Authority in Northwest Cameroon, in *Geoforum*, Vol. 34, No.2, pp. 483-498.

Winters, M. S., A.G. Karim, and B. Martawardaya (2014) "Public Service Provision under Conditions of Insufficient Citizen Demand: Insights from the Urban Sanitation Sector in Indonesia." *World Development* 60.

Week 11 – What role for the international community in a local service sector?

Jennifer Franco, Lyla Mehta, and Gert Jan Veldwisch. (2013).The Global Politics of Water Grabbing, *Third World Quarterly*, Vol. 34 , Issue 9,2013

McGranahan, G. and Mitlin, D. (2016) Learning from Sustained Success: How Community-Driven Initiatives to Improve Urban Sanitation Can meet the Challenges. *World Development*, Vol. 87, pp.307-317.

Corporate Accountability International (2012). "Shutting the spigot on private water: The case for the World Bank to divest". (pages 1-17, 36-47)

Carolini, Gabriella Y., Daniel Gallagher, and Isadora Cruxên. "The promise of proximity: The politics of knowledge and learning in South-South cooperation between water operators." *Environment and Planning C: Politics and Space* 36, no. 7 (2018): 1157-1175.

Week 12 – Your draft paper presentations