

## Curriculum Vitae – David Nilsson

### David Nilsson (born 1968)

I am an engineer and historian passionate about water, innovation and global sustainable development. My 25 years of experience spans the private sector, government agencies and academia, with a professional focus on water, sanitation, and urban environmental policy in a global context, including postings in Zimbabwe and Kenya. Currently, I am the Director of the WaterCentre of KTH Royal Institute of Technology where I also hold a position as Associate Professor in history of science and technology. I constantly challenge myself, my colleagues and my collaborators to make a difference, in creating a more just and sustainable world.



### Academic degrees

2018	Associate Professor (docent), History of Technology, Science and Environment, KTH
2011	Ph D in History of Technology, Royal Institute of Technology (KTH), Sweden.
2006	Licentiate degree (Tekn Lic), Royal Institute of Technology (KTH), Sweden.
2002	Economic history, Stockholm University, Sweden, 30 credits.
1995	M. Sc. Environmental Engineering, Luleå Univ of Technology, Sweden.
1994	NORDTEK scholarship, Denmark Technical University, one semester.
1990	Human Ecology, Gothenburg University, 30 credits.

### Professional Background

**Deputy Head**, School of Architecture and Built Environment. KTH Royal Institute of Technology. March 2022 – present. Deputy to the head of school (700 employees), management position. Head of Communications and Collaboration.

**Director**, KTH Royal Institute of Technology. Feb 2017 – June 2022.

I have been responsible for building up and leading a new interdisciplinary centre for collaboration, innovation and research on water at KTH, the [WaterCentre@KTH](mailto:WaterCentre@KTH). In 2020 our activities directly involved 20 staff members at KTH, corresponding to around 8 full time staff equivalents.

**Research Fellow**, KTH Royal Institute of Technology. Jan 2013– 2017.

50% position as senior researcher with a focus on water, sanitation, and environment in developing regions, with a specifically geographic focus on Africa. Mobilised funding, led and collaborated in several externally funded research projects, with academic partners in Kenya, Uganda and also India.

**Consultant and CEO**, Hydropolis Consulting and Research AB. Sep 2009 – 2017.

Independent consultant through self-owned Limited Liability Company (aktiebolag) with focus on water, sanitation, environmental management and institutional development. Numerous assignments for global development organisations e.g. SIDA, UN Habitat, Embassy of Sweden (Nairobi), Volvo Research and Education Foundation, Water Aid Sweden, Stockholm International Water Institute (SIWI), Niras International.

**First Secretary and Deputy Head of Section**, Embassy of Sweden, Nairobi, Kenya. Jan 2007 – Sep 2009. Responsible for Swedish government-funded regional development programmes in water, natural resources and urban development in the East African Community (Kenya, Uganda, Tanzania, Rwanda and Burundi). Also coordinator for climate change in the Embassy's development work.

**Environmental Adviser**, Swedish International Development Co-operation Agency (Sida). Feb 2001 – Dec 2006. Project manager for a portfolio in WASH and urban environment in East and Southern Africa, and environmental adviser to Sida's department for infrastructure and economic development (INEC).

**Associate Expert**, Hifab International, Zimbabwe. May 1999 – July 2000. Assigned as Bilateral Associate Expert (BBE) to Hifab within the Sida-funded capacity building programme to the Ministry of Transport, Ministry of Local Government, and 12 Rural District Councils. Responsible for a small

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grants programme, and for technical assistance to the councils mainly within water, sanitation, planning, roads and foot bridges.

**Consulting engineer**, VBB VIAK AB, Sweden. Sep 1995 – Dec 2000 (leave of absence 99/05 - 00/07). Technical and hydrological investigations on water and sewerage, water resources and environment, to a wide range of customers, mainly Swedish municipalities and government authorities.

### **Publications**

I have currently around 40 scientific and policy publications (plus a good number of opinion pieces and popular publications) all in the field of water, environment, innovation and global sustainable development. For a full list see next page.

### **Language Skills**

English (excellent), Swedish (mother tongue), Danish (good), French (moderate), Kiswahili, Spanish, German (survival).

### **Other merits, awards, commissions of trust, expert assignments etc, past 10 years**

- 2020: member of national dialogue on Sweden's water governance framework, invited by the Swedish Agency for Marine and Water Management
- 2016: expert study "Research Aid Revisited", with Sverker Sörlin, for the Government's Expert Group for Aid Studies (EBA)
- 2016: member of KTH steering group for UN Habitat University Network Initiative
- 2016: commission for Sida's helpdesk for environment and climate change, GMV and SLU
- 2014-2016: senior adviser to Volvo Research and Education Foundation: Mobility and Access in African Cities
- 2014-2015: expert assignment for Sida Helpdesk on Environment and Climate Change, study of human rights to water in Burkina Faso (Francophone).
- 2014: short-term commission to UN Habitat to produce a background paper for the Habitat Global Report on the state of water and sanitation in the world's cities.
- 2013-2014: expert assignment for Stockholm International Water Institute: study on Results and Risks in Transboundary Water Resources Management.
- 2013: expert assignment for Stockholm International Water Institute, study on Political Economy and Governance Analysis for Water Resources Management in Euphrates and Tigris Region.
- 2013: commissioned to Expert Group Meeting for the UN Habitat Basic Services Trust Fund, Brussels.
- 2012: Expert to UN Habitat in collaboration with Institut Francais de Recherche en Afrique, Nairobi, to carry out a study on inequity and urban water in Nairobi.
- 2012: secretary for strategy development Volvo Research and Education Foundation
- 2011-2013: expert assignment for Embassy of Sweden, Nairobi, Adviser on Water Sector reforms in Kenya.
- 2011, Marie Nisser Award issued by Vattenfall Sweden
- 2010-2011: research review for Volvo Research and Education Foundation

**DAVID NILSSON - PUBLICATION LIST**

Peer-reviewed original articles

- Ernstson, H. and D. Nilsson, "Towards situated histories of heterogenous infrastructures : Oral history as method and meaning," *Geoforum*, vol. 134, s. 48-58, 2022.
- Nilsson, D. and P. Blomkvist, "Is the self-read water meter a pro-poor innovation? : Evidence from a low-income settlement in Nairobi," *Utilities Policy*, vol. 68, 2021.
- Bhattacharya et al., "Prevalence of SARS-CoV-2 in Communities Through Wastewater Surveillance—a Potential Approach for Estimation of Disease Burden," *Current Pollution Reports*, vol. 7, no. 2, s. 160-166, 2021.
- Blomkvist et al., "Bridging the critical interface : Ambidextrous innovation for water provision in Nairobi's informal settlements," *Technology in society*, vol. 60, 2020.
- Blomkvist, P., Nilsson D., Juma B. and Sitoki L. (2020). "[Bridging the critical interface: Ambidextrous innovation for water provision in Nairobi's informal settlements](https://doi.org/10.1016/j.techsoc.2019.101221)". *Technology in Society* (60), <https://doi.org/10.1016/j.techsoc.2019.101221>.
- Golzar, Farzin, David Nilsson and Viktoria Martin (2020). [Forecasting Wastewater Temperature Based on Artificial Neural Network \(ANN\) Technique and Monte Carlo Sensitivity Analysis](https://doi.org/10.3390/su12166386). *Sustainability* 2020, 12, 6386; doi:10.3390/su12166386
- Lawhon, Mary, David Nilsson, Jonathan Silver, Henrik Ernstson and Shuaib Lwasa (2018). "[Thinking through heterogeneous infrastructure configurations](https://doi.org/10.1177/0042098017720149)", *Urban Studies*, Online First August 2017, DOI: 10.1177/0042098017720149,
- Avango, D. P. Högselius och D. Nilsson (2018). "[Swedish Explorers. In-Situ Knowledge, and Resource-Based Business in the Age of Empire](https://doi.org/10.1080/03468755.2017.1380923)," *Scandinavian Journal of History*, 43:3, 324-347, DOI: 10.1080/03468755.2017.1380923
- Blomkvist, Pär, and David Nilsson (2017). "[On the Need for System Alignment in Large Water Infrastructure: Understanding Infrastructure Dynamics in Nairobi, Kenya](https://doi.org/10.1080/10704965.2017.1380923)", *Water Alternatives*, 10:2, 283-302.
- Gärdebo, Johan, David Nilsson and Kristoffer Soldal (2017). "The Travelling Scientist: Reflections on Aviated Knowledge Production in the Anthropocene", *Resilience: A Journal of the Environmental Humanities* Vol. 5, No. 1, Social Media in the Anthropocene (Winter 2017), pp. 71-99.
- Nilsson, David. (2016) "[The Unseeing State: How ideals of modernity have undermined innovation in Africa's urban water systems](https://doi.org/10.1080/00141801.2016.1191111)", *NTM Journal for the History of Science, Technology and Medicine*. 2016: 24, pp 481-510.
- Nilsson, David (2013). "[Sweden-Norway at the Berlin Conference 1884-85. History, national identity-making and Sweden's relations with Africa](https://doi.org/10.1080/00141801.2013.823111)", *Current African Issues*: 53, Nordic Africa Institute, Uppsala, 2013.
- Appelblad, Jenny and David Nilsson (2013). "[From 'All for some' to 'Some for all'? A historical geography of pro-poor water provision in Kampala](https://doi.org/10.1080/00141801.2013.823111)", *Journal of Eastern African Studies*, 7:1, pp. 40-57.
- Nilsson, David and Ezekiel Nyangeri Nyanchaga (2008). "[Pipes and politics: a century of change and continuity in Kenyan urban water supply](https://doi.org/10.1080/00141801.2008.2388888)", *Journal of Modern African studies*, 46:1, pp 133-158.
- Nilsson, David (2006). "[A heritage of un-sustainability? Reviewing the origin of the Large-Scale Water and Sanitation system in Kampala, Uganda](https://doi.org/10.1080/00141801.2006.2388888)", *Environment & Urbanization*, 18:2, pp

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369-385.

### Books and book chapters

- Nilsson, David (2015). "Vems är den hjälpande handen? : Om infrasystem och förtroende" in Thomas Kaiserfeld, and Nina Wormbs (eds), *Med varm hand: Texter tillägnade Arne Kaijser*, Stockholm: KTH Royal Institute of Technology, pp 87-104.
- Nilsson, David (2013). "Prisoners of a paradigm? What can water sector donors learn from history?" in Petri S. Juuti, Tapio S. Katko and Klaas Schwartz (eds) [Water Services Management and Governance: Lessons for a Sustainable Future](#), IWA Publishing, London, pp 169-178.
- Nilsson, David (2011). *Pipes, Progress, and Poverty. Social and Technological Change in Urban Water Provision in Kenya and Uganda 1895-2010*, Doctoral Thesis in History of Technology, Royal Institute of Technology, Stockholm.
- Nilsson, David and Ezekiel Nyangeri Nyanchaga (2009). "East African Water Regimes: The Case of Kenya" in J W Dellapenna and J Gupta (eds) [The Evolution of the Law and Politics of Water](#), Springer, pp 105-120.
- Nilsson, David and Arne Kaijser (2009). "Discrimination by Default: The Post-Colonial Heritage of Urban Water Provision in East Africa" in J E Castro and L Heller (eds) [Water and Sanitation Services: Public Policy and Management](#). Earthscan, London, pp 259-275.
- Nilsson, David (2006). [Water for few. A history of urban water and sanitation system in East Africa](#). Licentiate thesis, KTH Royal Institute of Technology, Stockholm.
- Nilsson, David (2005). "The Evolution of Urban Water and Sanitation in East Africa from a public goods perspective", in J W N Tempelhoff (ed), *African Water Histories. Transdisciplinary Discourses*, Coral Publishers, Vanderbijlpark, South Africa pp 317-345.

### Scientific reports

- Nilsson, David and Sverker Sörlin (2017). "[Research aid revisited – a historically grounded analysis of future prospects and policy options.](#)" Report to Expert Group for Aid Studies, Stockholm.
- Drakenberg, Olof and David Nilsson (2015). "[Human Rights to Water and Sanitation in Burkina Faso. Assessing human rights and use of human rights based approaches in theory and practice](#)", Sida Helpdesk on Environment and Climate Change, Report, Göteborgs Miljövetenskapliga Centrum GMV, Gothenburg.
- Nilsson, David (2014). "Reflections on past approaches and policies for water and sanitation in cities: transformative shifts and future perspectives", Background paper for UN Habitat Global Report on Water and Sanitation, UN Habitat, Nairobi, Kenya.
- Nilsson David (2014), "[Measuring Results in Transboundary Water Management](#)", Swedish Water House Background Report, Stockholm: Stockholm International Water Institute.
- Ledant, Martin, David Nilsson, Bernard Calas, Rosa Flores Fernandez (2013). "[Access to Water in Nairobi: mapping the inequities beyond the statistics](#)", UN-Habitat, Nairobi.
- Nilsson, David and Sida, "[Realising the human right to water and sanitation](#)", Sida Reference Paper, Stockholm 2013.

### Popular, debate etc

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Bivens, A. et al (2020). Wastewater-Based Epidemiology: Global Collaborative to Maximize Contributions in the Fight Against COVID-19. *Environmental Science and Technology*, <https://dx.doi.org/10.1021/acs.est.0c02388>

“[Forskning för global utveckling är inte en biståndsgrej](#)”, Dagens Nyheter, DN Global, 2017-06-02

”Dags för nytänk i forskningsbiståndet!”, *Bistandsdebatten.se*, 23/6/2016.

<http://www.bistandsdebatten.se/exkldebattartiklar/dags-for-nytank-i-forskningsbistandet/>

”Är vi redo för internationalisering utifrån den nya problemkartan?”, *RJ Debatt*, Riksbankens Jubileumsfond, 5/9/2016. <http://debatt.rj.se/2016/09/05/ar-vi-redo-for-internationalisering-utifran-den-nya-problemkartan/>

*Sweden and Kenya 50 years of friendship and cooperation (2014)*. Project leader / producer for anniversary book and jubilee project. Embassy of Sweden, Nairobi Kenya.

”Klimatforskarna förvärrar utsläpp” – SvD debatt, 3/12/2015. <http://www.svd.se/klimatforskarna-forvarrar-utslapp/om/klimatmotet-i-paris>

“Scandinavia in the ‘Scramble for Africa’ – Then and Now”

NAI Forum, <http://naiforum.org/2013/11/scandinavia-in-the-scramble-for-africa/>

“Hur Brännkyrka blev södra Stockholm – en historia om teknik.” i *Brännkyrka 1913-2013*, TNF-bok 146, Trafik-Nostalgiska förlaget, Stockholm, 2013, pp 42-47.

“Ljus och Kraft i de södra förstäderna.” (Light and power in the Southern suburbs), *Ledungen*, (No 1/2012), Stockholm, pp7-8.

”Enbart pengar löser inte bristen på dricksvatten”, *Newsmill* 18 Oct 2012,

<http://www.newsmill.se/artikel/2012/10/16/enbart-pengar-l-ser-inte-bristen-p-dricksvatten>

David Nilsson, “[Power sharing – a stumbling block for democracy in Africa?](#)”, *Nordic Africa Institute*, Policy and Analysis web-publication, 2008.

### Peer-reviewed conference papers

Bennich, Amelie, Mats Engwall and David Nilsson. “Windows of Opportunity for Transition of Water Infrastructure Systems” presented at *IST International Sustainable Transitions*, Austria, 18-21 August 2020.

Karpouzoglou, Timos et al, “Winners and Losers during transition: the case of urban water and energy systems in Sweden”, presented at *IST International Sustainable Transitions*, Austria, 18-21 August 2020.

Ernstson, Henrik and David Nilsson, “Histories of Heterogenous Infrastructures: Negotiating Colonial, Postcolonial and Oral Archives in Kampala, Uganda”, presented at *Royal Geographical Society*, 27-30 Aug 2019, London.

David Nilsson, Pär Blomkvist, Timos Karpouzoglou, and Mary Lawhon, “The city beyond the network”, *Annual conference of Swedish Anthropological Association (SANT)* in partnership with the Finnish Anthropological Society (FAS), Uppsala, 19-21 April, 2018.

Blomkvist, P. and D. Nilsson, “Understanding system alignment: Combining LTS and MLP to investigate urban water transitions in Kenya and Uganda”, *The 8th International Sustainability Transitions Conference*, 18-21 June 2017, Gothenburg, Sweden.

Nilsson, D. “[Built Environment as Performing Politics : Historicizing urban inequality in the global South.](#)” in *(Re)Imagining Future(s): Ecology, Emancipation and the Built Environment*, 22-23 September, 2016, Shiv Nadar University, Uttar Pradesh, India, 2016.

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Nilsson, D. and S. Sörlin, "[Research Aid Revisited : Understanding Swedish research aid in the current state of world development through a historically grounded analysis.](#)" in *Conference: Global Visions and Local Practices: Development Research in a Post-2015 World*, 22 August 2016, 24 August 2016, Venue: Stockholm University, Sweden, 2016.

Nilsson, D. "[Closure and Innovation in urban technologies in the age of Development Aid.](#)" in *7th Tensions of Europe Conference: Technology and Environment*, 3-6 September 2015, Stockholm, Sweden, 2015.

Nilsson, D. "[Beyond the Buzzwords : "Innovation" and the closing of equity gaps.](#)" in *World Water Week*, 31 Aug to 5 Sep, 2014, Stockholm, Sweden, 2014.

Avango, D., P. Högselius and D. Nilsson, "[Foreign Policy and Natural Resources : Swedish Neutrality from an Environmental History Perspective.](#)" in *World Congress on Environmental History*, 8-12 July 2014, Guimaraes, Portugal, 2014.

Nilsson, D. "[Modernization Ideals, Inertia and Change in Urban Water Development in the Decolonized Africa.](#)" in *World Congress on Environmental History*, 8-12 July 2014, Portugal, Guimaraes, 2014.

Avango, D., P. Högselius and D. Nilsson, "[Sweden and the Origins of Global Resource Colonialism : Exploring a Neutral Country's Natural Resource Interests in Africa, Caucasia and the Arctic.](#)" in *World Congress on Environmental History*, 8-12 July 2014, Guimaraes, Portugal, 2014.

Nilsson, D. "The construction of crisis. A socio-technical perspective on water management in Nairobi". Paper Presentation at *NAI Conference Water systems and urbanization in Africa and beyond*, Uppsala, Sweden, 1-2 March, 2012.

Nilsson, D. "Including the excluded: Institutional incentives for overcoming path dependencies of urban water supply in sub-Saharan Africa". Paper Presentation at *World Water Week*, Stockholm, Sweden, August 2011.

Nilsson, D. "Old Water, New Bottles. Managing socio-technical change; the case of Kenya's water sector". Paper presented at *Nordic Africa Days*, Åbo, Finland, September 2010.

Nilsson, D. "A paradigm of pipes in a society of slums. Techno-political regime dynamics in Kenya's water sector". Paper presented at *IWHA conference*, Delft, Holland, June 2010.