

Dr. Christoph Lüthi

EAWAG-Sandec, Swiss Federal Institute of Aquatic Science 8600 Dübendorf, Tel: 058-765 5614
Department Head: Sanitation, Water and Solid Waste for Development (Sandec)
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Born: 29 January 1964 in Zürich, Switzerland.

Research Interests

Interdisciplinary research on urban infrastructure delivery; appropriate technology development; urban strategic sanitation planning; servicing unplanned urban and peri-urban areas; multi-stakeholder planning and programming.

Current Position

- since 2015 **Eawag-Sandec:** Head of Department for Sanitation, Water & Solid Waste for Development at the Swiss Federal Institute of Aquatic Science and Technology.
- Since 2005 Eawag-Sandec: Group Leader at Department for Sanitation, Water & Solid Waste for Development at the Swiss Federal Institute of Aquatic Science and Technology.

Education

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| August 2012 | PhD (Dr. Ing.) awarded at TU Berlin, Germany
Title: Community-based environmental sanitation planning approaches for the South: the household-centred approach. | Germany |
| 09/91 – 12/92 | University College London (UCL), Development Planning Unit
Msc in Urban Development Planning | UK |
| 09/83 – 06/90 | TU Karlsruhe
Dipl Ing. Architecture & Planning | Germany |

Teaching

- Lecturer, EPF Lausanne, Sanitary Engineering in Developing Countries Engineering (ENAC EPFL).
- Lecturer ETH Zürich, Environmental Sanitation Planning and Infrastructure in Developing Countries (D-BAUG)
- Lecturer, Environmental Sanitation Planning and Infrastructure in Developing Countries (IHE Delft) MSc on Non-sewered sanitation.
- Lecturer, Module on Urbanization in the Developing World (ETHZ, D-GESS, Nadel)

Research Projects (selection)

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| 08/22-12/26 | Water, Behaviour Change and Environmental Sanitation (WABES). Interdisciplinary research project sponsored by SDC, Switzerland [Principle investigator]. |
| 06/18-06/21 | ConCaD: Consulting Capacity Development for city-wide inclusive sanitation in 6 countries in Africa and Asia. Project sponsored by the Gates Foundation [Principle investigator]. |
| 10/18-04/20 | QUISS: Quality Indicators of Shared Sanitation. Project sponsored by DFID, UK [Principle investigator] |

01/16-12/20	WINGS - Water and sanitation innovations for non-grid solutions – an inter- and trans-disciplinary research program. WINGS-Informal component [Principle investigator]
10/15-07/17	Evaluation of small-scale decentralized sanitation systems in South Asia. Project sponsored by the Gates Foundation [Principle investigator].
10/14-10/16	Genderized WASH provision in health facilities in India & Uganda. Sponsored by Swiss Network for International Studies (SNIS), Geneva [Principle investigator].
07/11-04/14	Re-inventing the Toilet Challenge. Project sponsored by the Gates Foundation (project co-lead)

PhD theses supervision

1_Dorothee Spuhler

(2014-on-going) “Systematic and generic methods to identify locally appropriate sanitation system options to support sustainable sanitation planning under uncertainty”, ETH Zürich.

2_Abishek Narayan

(2018 – ongoing) “Planning for city-wide inclusive sanitation in India”, ETH Zürich (with Max Maurer)

3_Jeremie Sanchez (2015-2019) “Exploring urban, political, and socio-ecological change in Myanmar”, UNIL Lausanne, Geography Dept.

Memberships and Committees

Associations

- Sustainable Sanitation Alliance (SuSanA)
- International Water Association (IWA)
- Commission for Research Partnerships with Developing Countries (SC-Nat)
- Steering Committee member of the FSM Alliance

Country experience

Africa:

Burkina Faso, Côte d'Ivoire, Egypt, Ethiopia, Kenya, Malawi, Mauritania, South Africa, Tanzania, Uganda, Zambia

Asia:

Bangladesh, India, Jordan, Laos, Nepal, Thailand, Vietnam

Participation in Selected High-Level Meetings

March 2022	Sanitation Village "Fab Lab" at the World Water Forum Dakar, 2022
Sept. 2019	Managing Sludge to achieve the SDGs. 3 day seminar by the Inter-American Development Bank, Washington D.C.
Nov. 2016	Decentralised sanitation in middle-income settings: challenges & opportunities. Journée Scientifique, Paris, Suez/AFD.

Website

Eawag <https://www.eawag.ch/en/aboutus/portrait/organisation/staff/profile/christoph-luethi/show>

Publications in international peer-reviewed journals

- 2021 Narayan, A. Marks, S., Meierhofer, R., Strande, L., Tilley, E., Zurbrügg, C. and Lüthi, C. Advancements in and Integration of Water, Sanitation, and Solid Waste for Low- and Middle-Income Countries; *Annual Review of Environment and Resources*, Vol. 46:1. doi: 10.1146/030620-042304
- 2021 Schelbert, V., Kriwanek, L., Sakthivel, R., Kristoferitsch, L., Gründl, H., Lüthi, C. How Women and Men Pee: Assessing Gender-Specific Urination Practices for a Comfortable Toilet Experience. *Ergonomics in Design*, doi: 10.1177/10648046211044008
- 2021 Suter F & Lüthi C. Delivering WASH education at scale: evidence from a global MOOC series. *Environment and Urbanization*, April 2021. doi: 10.1177/0956247820987759
- 2020 Editorial: City-Wide Sanitation: The Urban Sustainability Challenge; *Front. Environ. Sci.*, doi: 10.3389/fenvs.2020.585418
- 2020 Schelbert, V., Meili, D., Mahbub-UI Alam, Simiyu, S., Günther, I., Lüthi, C. When is shared sanitation acceptable in low-income urban settlements? A user perspective on shared sanitation quality in Kumasi, Kisumu, and Dhaka. *Journal of Water, Sanitation and Hygiene for Development*, 7(1).
- 2020 Narayan, A., Fischer, M. and Lüthi, C. Social Network Analysis for Water, Sanitation and Hygiene (WASH): Application in governance of decentralised wastewater treatment in India using a novel validation methodology. *Front. Environ. Sci. - Water and Wastewater Management*, 14pp.
- 2020 Spuhler, D., Germann, V., Kassa, K., Ketema, A.A., Sherpa, A., Sherpa, M., Maurer, M., Lüthi, C. and Langergraber, G. Developing sanitation planning options: a tool for systematic consideration of novel technologies and systems. *Journal of Environmental Management*, Vol. 271.
- 2020 Furlong, C., Singh, S., Shrestha, N., Sherpa, M., Lüthi, C., Brdjanovic, D. Evaluating Financial Sustainability across the Sanitation Value Chain using a Financial Flow Simulator. *Water, Science and Technology*, 50.
- 2020 Hoffmann, S., Feldmann, U., Bach, P., ... Lüthi, C., Maurer, M., Udert, K. A research agenda for the future of urban water management: exploring the potential of non-grid, small-grid, and hybrid solutions. *Environmental Science and Technology*, 54(9), 5312-5322.
- 2019 Cherunya, P., Truffer, B., Lüthi, C. and Samuel, E. The challenges of livelihoods reconstruction in the context of informal settlement upgrading. *Environment & Planning: Economy and Space*.
- 2018 Reymond, P., Moussa, M. and Lüthi, C. Scaling up small-scale wastewater treatment systems in low- and middle-income countries: an analysis of challenges and ways forward through the case of Egypt. Special Issue of *Utilities Policy* 52, 13-21.
- 2018 Ramoa, A., McConville, J., Lüthi, C., Matos, J.S. Use of process guides for comprehensive urban sanitation technology decision making: practice versus theory. *Water Policy* 20, 158-174.
- 2016 Larsen, T., Hoffmann, S., Lüthi, C., Truffer, B. and Maurer, M. Emerging solutions to the water challenges of an urbanizing world. *Science* Vol. 352, Issue 6288, Special Section – Urban Planet, 928-933.
- 2016 Ramôa A., Lüthi, C., McConville, J. and Matosa, J. Urban sanitation technology decision-making in developing countries: a critical analysis of process guides. *International Journal of Urban Sustainable Development* 8(2), 227-236.
- 2015 O’Keefe, M., Lüthi, C., Kamara, I., and Tobias, R. Opportunities and limits to market driven sanitation services; evidence from urban slum households in East Africa. *Environment and Urbanization*. 27(2), 421-440.
- 2015 O’Keefe, M., Messmer, U., Lüthi, C., and Tobias, R. Slum inhabitants’ perceptions and decision-making processes related to an innovative sanitation service: evaluating the Blue Diversion Toilet in Kampala (Uganda) *Intn. Journal of Environmental Health Research* 25(1), 670-684.
- 2015 Larsen, T., Gebauer, H., Gründl, H., Künzle, R., Lüthi, C. and Messmer, U. Blue Diversion: a new approach to sanitation in informal settlements. *Journal of Water, Sanitation and Hygiene for Development* 5(1), 64-71.
- 2015 Bright-Davies, L., Lüthi, C. and Jachnow, A. DEWATS for urban Nepal: a comparative assessment

for community wastewater management. *Waterlines* 33(3), 126-146.

- 2014 Tilley, E., Strande, L., Lüthi, C., Mosler, H.J., and Hering, J. Looking beyond Technology: An integrated approach to Water, Sanitation and Hygiene in Low Income Countries. *Environmental Science and Technology*, 48, 9965-9970.
- 2014 Parkinson, J., Lüthi, C. And Walther, D. Sanitation 21: tackling the urban sanitation challenge through effective planning. *Water21*, Feb. 2014, 22-24.
- 2013 Tumwebaze, I. and Lüthi, C. Households' access and use of water and sanitation facilities in poor urban areas of Kampala, Uganda. *Journal of Water, Sanitation and Hygiene for Development* 2(3), 96-105.
- 2013 Tumwebaze, I., Orach, C., Niwagaba, C., Lüthi, C., Mosler, H.J. Sanitation facilities in Kampala slums, Uganda: users' satisfaction and determinant factors, *Intr. Journal of Environmental Health Research* 23(3), 191-204.
- 2013 Mazeau, A., Tumwebaze, I., Lüthi, C., Sansom, K. Inclusion of shared sanitation in urban sanitation coverage? Evidence from Ghana and Uganda, *Waterlines* 32(4), 266-274.
- 2012 Tumwebaze, I., Orach, C., Niwagaba, C., Lüthi, C., Mosler, H.J. Access to sanitation facilities and users' satisfaction in Kampala slum communities, *Science of the Total Environment* (3).
- 2012 Lüthi, C. and Kraemer, S. User perceptions of participatory planning in urban environmental sanitation. *Journal of Water, Sanitation and Hygiene for Development* 2(3), 157-167.
- 2012 Sherpa, M., Lüthi, C. and Koottatep, T. Applying the Household-Centered Environmental Sanitation planning approach: a case study from Nepal. *Journal of Water, Sanitation and Hygiene for Development* 2(2), 124-132.
- 2011 Tumbewaze, I.K., Orach, C., Karamagi, C., Lüthi, C., Niwagaba, C. Ecological sanitation coverage and factors affecting its uptake in Kabale municipality, western Uganda. *International Journal of Environmental Health Research*, iFirst.

Monographs and Book Chapters

- 2021 Schertenleib, R., Lüthi, C., Panesar, A. A Sanitation Journey – Principles, Approaches and Tools for Urban Sanitation, Eawag/GIZ, pp. 80.
- 2018 Tilley, E., Ulrich, L., Lüthi, C., Reymond, P., Schertenleib, R., & Zurbrügg, C. Compendio de sistemas y tecnologías de saneamiento (2nd ed.). Dübendorf: Eawag.
- 2016 Reymond, P., Renggli, S. and Lüthi, C. Towards Sustainable Sanitation in an Urbanising World. In: Lehman, S. (Ed.) Sustainable Urbanisation, InTech Open (open access).
- 2016 Lüthi, C. Slum improvement lessons in Africa: Kibera. In: Bolay, J.C., Chenal, J. and Pedrazzini, Y. (Ed.) *Learning from the Slums for the Development of Emerging Cities*, Springer GeoJournal Library.
- 2014 Parkinson, J., Lüthi, C., Walther, D. Sanitation 21 – a planning framework for improving citywide sanitation services. IWA Publishing, London, UK
- 2012 Lüthi, C. and Panesar, A. Source separation in middle- and low-income countries in: Larsen, T, & Udert, K. *Source Separation and Decentralization for Wastewater Management*. IWA Publishing, London UK.
- 2011 Lüthi, C., Tilley, E., Morel, A, and Ulrich, L. *Community-led Urban Environmental Sanitation Planning (CLUES)*, Eawag/WSSCC/UN-Habitat, pp. 101.
- 2011 Lüthi, C., Panesar, A. and Schütze, T. (eds.). *Sustainable Sanitation in Cities- A framework for Action*, Papyroz Publishing House, The Netherlands, pp.148.

Other Publications

- 2020 Narayan, A. and Lüthi, C. Citywide Inclusive Sanitation – Solving Urban Sanitation Sustainably and Equitably. *World Water*, 43(4), 18-21
- 2020 Klinger, M., Ulrich, L., Ramprasad, C., Wolf, A.T., Reynaud, N., Narayan, A.S., Siemsen, P., Lüthi, C. & Philip, L. Technology, Implementation and Operation of Small-Scale Sanitation in India – Performance Analysis and Policy Recommendations. 4S Project Report Vol. I., Eawag & IIT Madras
- 2018 Lüthi, C. and Narayan, A. Citywide Inclusive Sanitation: Achieving the urban water SDGs. Rio+ “Urban waters policy brief”, UNDP Rio+Centre, pp. 4
- 2017 Sanitation Planning for Small Towns - Good data for good planning, Policy Brief 5, Eawag, pp.4.
- 2017 Sherpa, M.G., Manandhar, A., Thapa, B. and Lüthi, C. Situational assessment tools for citywide sanitation planning, *Journal of Environment and Public Health*, Kathmandu, Nepal.
- 2013 Lüthi, C. and Ingle, R. Sustainable Sanitation for Africa’s Growing Cities, Africa Infrastructure Investment Report, 2013
- 2012 Lüthi, C. “Community-based environmental sanitation planning approaches for the South: the household-centred approach”, PhD dissertation, TU-Berlin Habitat Unit.
- 2011 Lüthi, C., Morel, A., Sherpa, M. and Tilley, E. “Local Solutions for Sanitation”. *Evidence for Policy Series*, Global Edition, No. 5, Bern, Switzerland: NCCR North-South, pp. 4.
- 2011 Horst, A., Guenther, I., Lüthi, C. and Niwagaba, C. “Where do Kampala’s Poor “Go”? - An overview of urban sanitation conditions in Kampala’s informal settlement areas” *Policy Brief NCCR-SPLASH*

Conference Proceedings

- 08/17 Reaching millions – the new global eLearning agenda. Session keynote at the World Water Week 2017 in Stockholm.
- 10/13 3rd IWA Development Congress “Catalysing Urban Water Transitions”. “Stakeholder Engagement or window-dressing? – Experiences of programmes enhancing water and sanitation service delivery at scale”. October 2013, Nairobi, Kenya.
- 10/12 Faecal Sludge Management Conference, Durban South Africa, October 2012. “Diversion for safe sanitation: A new approach to sanitation in informal settlements”. Larsen, T., Gebauer, H., Gründl, H., Lüthi, C., Morgenroth, E.
- 08/11 Stockholm World Water Week 2011, Open Seminar co-organizer: “Getting the Five Year Drive on Track in Urban Settlements - From Intention to Implementation”, Stockholm Sweden (24.08.2011)

Invited key note presentations

- 08/20 Virtual Session on Citywide Inclusive Sanitation (CWIS), Distinguished Lecturer Series, Asian Development Bank Institute, Tokyo, Japan
- 11/16 Decentralised sanitation in middle-income settings: challenges & opportunities. Journée Scientifique - Paris, Suez/AFD
- 10/13 Stadtwasser – Wasserstadt, Hansgrohe Wassersymposium 2013. “Brennpunkt Megastadt”.

Zürich, 01 August 2020