

Daniel Ddiba

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PUBLICATIONS

Peer-reviewed articles

- Lambiasi, L., **Ddiba, D.**, Andersson, K., Parvage, M., & Dickin, S. (2024). Greenhouse gas emissions from sanitation and wastewater management systems: a review. *Journal of Water and Climate Change*. <https://doi.org/10.2166/wcc.2024.603>.
- Ntostoglou, E., **Ddiba, D.**, Khatiwada, D., Martin, V., Engström, R. E., Henrysson, M., & Lasaridi, K. (2024). Understanding the interactions between biowaste valorisation and the Sustainable Development Goals: insights from an early transition stage. *International Journal of Urban Sustainable Development*, 16:1, 53-72. <https://doi.org/10.1080/19463138.2024.2319795>.
- Ddiba, D.**, Andersson, K., Dickin, S., Ekener, E. & Finnveden, G. (2023). A review of how decision support tools address resource recovery in sanitation systems. *Journal of Environmental Management*, 342:118365. <https://doi.org/10.1016/j.jenvman.2023.118365>
- Ddiba, D.**, Ekener, E., Lindkvist, M. and Finnveden, G. (2022). Sustainability assessment of increased circularity of urban organic waste streams. *Sustainable Production and Consumption*, 34:114-129. <http://doi.org/10.1016/j.spc.2022.08.030>.
- Ddiba, D.**, Andersson, K., Rosemarin, A., Schulte-Herbrüggen, H., & Dickin, S. (2022). The circular economy potential of urban organic waste streams in low- and middle-income countries. *Environment, Development and Sustainability* 24, 1116-1144. <https://doi.org/10.1007/s10668-021-01487-w>
- Vanhuyse, F., Fejzić, E., **Ddiba, D.**, & Henrysson, M. (2021). The lack of social impact considerations in transitioning towards urban circular economies: A scoping review. *Sustainable Cities and Society* 75, 103394. <https://doi.org/10.1016/j.scs.2021.103394>
- Aguilar, M. G., Jaramillo, J. F., **Ddiba, D.**, Páez, D. C., Rueda, H., Andersson, K. and Dickin, S. (2021). Governance challenges and opportunities for implementing resource recovery from organic waste streams in urban areas of Latin America: insights from Chía, Colombia. *Sustainable Production and Consumption* 30, 53–63. <https://doi.org/10.1016/j.spc.2021.11.025>
- Ddiba, D.**, Andersson, K., Koop, S.H.A., Ekener, E., Finnveden, G. and Dickin, S. (2020). "Governing the circular economy: Assessing the capacity to implement resource-oriented sanitation and waste management systems in low- and middle-income countries." *Earth System Governance* 100063. <https://doi.org/10.1016/j.esg.2020.100063>
- Strande, L., Schöbitz, L., Bischoff, F., **Ddiba, D.**, Okello, F., Englund, M., Ward, B. J., & Niwagaba, C. B. (2018). Methods to reliably estimate faecal sludge quantities and qualities for the design of treatment technologies and management solutions. *Journal of Environmental Management* 223, 898–907. <https://doi.org/10.1016/j.jenvman.2018.06.100>

Oster, M., Reyer, H., Ball, E., Fornara, D., McKillen, J., Sørensen, K. K. U., Poulsen, H. D. H., Andersson, K., **Ddiba, D.**, Rosemarin, A., Arata, L., Sckokai, P., Magowan, E., & Wimmers, K. (2018). Bridging gaps in the agricultural phosphorus cycle from an animal husbandry perspective - The case of pigs and poultry. *Sustainability*, 10(6), 1825. <https://doi.org/10.3390/su10061825>

Gold, M., **Ddiba, D.**, Seck, A., Sekigongo, P., Diene, A., Diaw, S., Niang, S., Niwagaba, C., & Strande, L. (2017). Faecal sludge as a solid industrial fuel: a pilot-scale study. *Journal of Water Sanitation and Hygiene for Development*, 7(2), 243–251. <https://doi.org/10.2166/washdev.2017.089>

Books and edited volumes

United Nations Environment Programme (2023). Wastewater – Turning Problem to Solution. A UNEP Rapid Response Assessment. Nairobi. DOI: <https://doi.org/10.59117/20.500.11822/43142> (Several contributors including **Ddiba, D.**)

Ddiba, D. (2022). Energy from excreta: harnessing energy from one of the most abundant materials on the planet, in *Towards the Energy of the Future: the Invisible Revolution Behind the Electrical Socket*, Brounéus, F. & Duwig, C. (eds.), pp. 67-76. VA Report 2022:2. Stockholm: VA Public & Science and the KTH Energy Platform. ISBN 978-91-89039-14-8.

AfDB, UNEP and GRID-Arendal. (2020). *Sanitation and Wastewater Atlas of Africa*. AfDB, UNEP and GRID-Arendal. Abidjan, Nairobi and Arendal. (Several contributors including **Ddiba, D.**)

Conference proceedings and presentations

Ddiba, D. et al. (2023). Towards Guidance For More Reliable Measurement And Verification Of GHG Emissions From On-site Sanitation Systems at the IWA Water and Development Conference in Kigali, December 2023.

Ddiba, D. et al. (2023). Integrating Sanitation And Climate Change Policy And Action: Insights From Five Countries In Eastern And Southern Africa at the IWA Water and Development Conference in Kigali, December 2023.

Ddiba, D. & Dagerskog, L. (2023) Resource Recovery Toolbox - an online platform for making resource recovery tools more discoverable and accessible. At the 33rd SuSanA Meeting in Stockholm, August 2023.

Ddiba, D. (2023) An overview of decision support tools and how they address resource recovery in urban sanitation systems, at the AfWA Congress and FSM7 Conference in Abidjan, February 2023

Ddiba, D. (2019). The sanitation economy and climate change, at the Sanitation Economy Summit, Pune, 18th-21st November, 2019

Ddiba, D. (2019). REVAMP: Estimating the circular economy potential of sanitation at city scale, World Toilet Day Webinar by Sida & partners, 21st November, 2019

Ddiba, D. (2019). Assessing the governance capacity of cities to implement a circular economy: lessons from Naivasha, First Symposium on Circular Economy for Early Career Researchers, Stockholm, 27th November, 2019.

Ddiba, D. (2019). ITP SUWAS and its contribution to the WASH-related SDG targets, in ITP SUWAS City Seminar, Nakuru, 6th November, 2019.

- Ddiba, D.**, Andersson, K., Koop, S. H. A., Ekener, E., Finnveden, G. & Dickin, S. (2019). A diagnostic framework to assess the governance capacity of cities to implement a circular sanitation economy: lessons from Naivasha, Kenya Sanitation Conference, Nairobi, 28th-31st October, 2019.
- Ddiba, D.** (2019). Assessing the governance capacity of cities to implement the circular economy using a diagnostic indicator-based framework, in SEI Innovation and Policy Forum, Nairobi, 15th-17th October, 2019.
- Ddiba, D.** (2019). Lessons from the SEI Initiative on Sustainable Sanitation, in SEI Innovation and Policy Forum, Nairobi, 15th-17th October, 2019.
- Ddiba, D.** (2019). Reflections on the governance of waste management in Kenya, Breakfast seminar - From Trash to Cash, Stockholm, 1st October, 2019
- Ddiba, D.** (2019). Assessing the societal impacts of resource recovery from organic waste streams at city scale, in 2nd Interdisciplinary PhD expert course on Sustainability Assessments for the Low-Carbon Economy at University of Antwerp, 10th-12th September, 2019
- Ddiba, D.** (2019). Unlocking the circular economy in cities: the opportunity in organic waste streams, Research Seminar, World Agroforestry Centre - ICRAF, Nairobi, May 2nd, 2019.
- Ddiba, D.** (2019). How sustainable sanitation can unlock the circular economy and contribute to the SDG agenda, Research Exchange Seminar, Egerton University, Nakuru, April 23rd, 2019.
- Ddiba, D.** (2018). SEI's work at the nexus of sanitation, waste & resource management, World Toilet Day Seminar, Utvecklingscentrum för Vatten, Norrtälje, November 19th, 2018.
- Rosemarin, A., Andersson, K., Arata, L., Ball, E., **Ddiba, D.**, Magowan, E., Oster, M., Poulsen, H., Reyer, H., Fornara, D., McKillen, J., Sørensen, K., Sckokai, P., & Wimmers, K. (2018). Phosphorus efficiency in pigs & poultry: bridging the gaps in the phosphorus value chain, in European Sustainable Phosphorus Conference, Helsinki, June 11th, 2018.
- Ddiba, D.** (2018). Quantifying the resource recovery potential of organic waste streams in cities, in Life Cycle Assessment Modelling of Solid Waste Systems Course at DTU Technical University of Denmark, Copenhagen, June 4th - 10th, 2018.
- Andersson, K. & **Ddiba, D.** (2017). Estimating and visualizing the value of urban waste recovery – The Resource Value Mapping (REVAMP) Tool. In proceedings of the 2nd IWA International Resource Recovery Conference (IWARR2019), 5 – 9 August 2017, New York, USA.
- Niwagaba, B. C., **Ddiba, D.**, Sekigongo, P., Gold, M. & Strande, L. (2015). Faecal sludge as fuel in industrial kilns for brick production. In proceedings of the 3rd International Conference on Faecal Sludge Management (FSM3), 18 – 23 January 2015, Hanoi, Vietnam.
- Ddiba, D.**, (2013). Mentorship: a missing link in education in Sub-Saharan Africa. In proceedings of the 7th Education without Borders International Conference, 25 – 27 March 2013, Dubai, U.A.E.

Reports and briefs

- Lazzati, S., **Ddiba, D.**, Macura, B., & Sanitation and Water for All Secretariat. (2024). *Integrating sanitation and climate change in national level policy frameworks*. SEI Report. Stockholm Environment Institute. <https://doi.org/10.51414/sei2024.052>

- Ddiba, D.**, Rahmati-Abkenar, M., & Liera, C. (2024). *Methods for Measuring Greenhouse Gas Emissions from Sanitation and Wastewater Management Systems: A Review of Method Features, Past Applications and Facilitating Factors for Researchers, Practitioners and Other Stakeholders*. SEI Report. Stockholm Environment Institute. <https://doi.org/10.51414/sei2024.030>
- Dagerskog, L. & **Ddiba, D.** (2024). Återvinning och återanvändning av resurser från avloppsströmmar: Bästa tillgängliga kunskap och erfarenhet från praktiken - Delsyntes 4c: VERKTYG. Naturvårdsverket och Havs- och vattenmyndigheten. <https://sites.google.com/view/avloppsvatten-som-resurs/delsynteser/delsyntes-4c-verktyg?authuser=0#h.a0h0pejcb9cr>
- Nikam, J., **Ddiba, D.** and Njoroge, G. (2022). *Analysis of the Plastic Waste Value Chain in India: A Scoping Study*. SEI report. Stockholm Environment Institute. <http://doi.org/10.51414/sei2022.037>
- Njoroge, G., Nikam, J. and **Ddiba, D.** (2022). *Plastic waste management and recycling in Mombasa, Kenya: A scoping study of the value chain and its institutional, policy and regulatory frameworks*. SEI report. Stockholm Environment Institute, Stockholm. <http://doi.org/10.51414/sei2022.013>
- SuSanA (2021). WG1 Capacity Development: Capacity development for sustainable sanitation. SuSanA Factsheet for Working Group 1, Sustainable Sanitation Alliance. (Various contributors including **Ddiba, D.**)
- Mugambi, J. K., Windberg, C., **Ddiba, D.**, Ogot, T., Andersson, K., Gicheru, T. and Akinyi, E. (2020). Setting the stage for the circular economy: Waste resource recovery opportunities in Naivasha, Kenya. Stockholm Environment Institute, Stockholm.
- Ddiba, D.**, Andersson, K. & Ogot, T. (2018). "UrbanCircle: turning urban waste into circular economy benefits." Stockholm Environment Institute (SEI) Project Brief. Stockholm, Sweden.
- Schulte-Herbrüggen, H., **Ddiba, D.**, Bhattacharya, P., Kimanzu, N., Andersson, K., Dickin, S., Schulte-Herbrüggen, B. (2017). *Linking water–sanitation–agricultural sectors for food and nutrition security*. Swedish International Agricultural Network Initiative (SIANI) Discussion Brief. Stockholm, Sweden.
- Spuhler, D., Adams, M., **Ddiba, D.** and Tempel, A. (2016). SuSanA's Contribution to Agenda 2030 for sustainable development: Position paper of Working Group 1 on Capacity Development. Sustainable Sanitation Alliance (SuSanA).
- Ddiba, D.**, Andersson, K. & Rosemarin, A. (2016). *Resource Value Mapping (REVAMP): A tool for evaluating the resource recovery potential of urban waste streams*. Stockholm Environment Institute (SEI) Discussion Brief. Stockholm, Sweden.
- Ddiba, D.** (2016). Evaluating screening attributes to identify locally appropriate sanitation technology and system options for developing urban areas. Internship report for the GRASP project. Eawag: Swiss Federal Institute of Aquatic Science and Technology. Dübendorf, Switzerland.
- Schoebitz, L., Bischoff, F., **Ddiba, D.**, Okello, F., Nakazibwe, R., Niwagaba, C.B., Lohri, C.R. & Strande, L. (2016). Results of faecal sludge analyses in Kampala, Uganda: Pictures, characteristics and qualitative observations for 76 samples. Eawag: Swiss Federal Institute of Aquatic Science and Technology. Dübendorf, Switzerland.

Popular articles and media coverage

Advancing climate finance for climate-resilient sanitation <https://www.sei.org/perspectives/advancing-climate-finance-climate-resilient-sanitation/> (Perspective article by, among others, **Ddiba, D.** – 2024)

SEI voices: how updated NDCs can accelerate climate action – Sanitation key to cleaning up climate goals <https://www.sei.org/perspectives/sei-voices-next-round-ndcs/> (Perspective article by, among others, **Ddiba, D.** – 2024)

Why sanitation is critical for action towards the Global Methane Pledge <https://www.sei.org/perspectives/why-sanitation-is-critical-for-action-towards-the-global-methane-pledge/> (Article by **Ddiba, D.** and members of the Climate Resilient Sanitation Coalition and the Water Initiative for Net Zero – 2024)

SEI re-elected to the Sanitation and Water for All Steering Committee <https://www.sei.org/features/sei-reelected-to-steering-committee/> (Feature article with among others **Ddiba, D.** – 2023)

Innovative decision support tools for WASH services <https://www.sei.org/features/innovative-decision-support-tools-for-wash-services/> (Feature article with among others **Ddiba, D.** – 2023)

Six actionable strategies for World Toilet Day 2023 <https://www.sei.org/features/six-actionable-strategies-for-world-toilet-day-2023/> (Feature article with among others **Ddiba, D.** – 2023)

Avföring kan bli resurs – försök att källsortera avloppsvatten pågår (Sveriges Radio) <https://sverigesradio.se/artikel/avforing-kan-bli-resurs-forsok-att-kallsortera-avloppsvatten-pagar> (News story on Swedish Radio including interviews with among others **Ddiba, D.** – 2023)

Climate-resilient sanitation: three takeaways from World Water Week 2023 <https://www.sei.org/perspectives/climate-resilient-sanitation-water-week-2023/> (Perspective article by **Ddiba, D.** – 2023)

Linking the supply and demand aspects of resource recovery in Naivasha, Kenya <https://www.sei.org/featured/linking-the-supply-and-demand-aspects-of-resource-recovery-in-naivasha-kenya/> (Feature article with among others **Ddiba, D.** – 2022)

“Agents for change” for better water and sanitation in Africa and Asia <https://www.sei.org/featured/agents-for-change-for-better-water-and-sanitation/> (Feature article with among others **Ddiba, D.** – 2022)

Recovering resources from organic waste streams with the REVAMP tool <https://www.sei.org/featured/recovering-resources-from-organic-waste-streams-revamp-tool/> (Feature article by **Ddiba, D.** – 2021)

Exploring the circular economy potential of Naivasha’s organic waste. <https://www.sei.org/featured/exploring-the-circular-economy-potential-of-naivashas-organic-waste/> (Feature article by Andersson, K., **Ddiba, D.** and Nzuve, L. – 2021)

How else can we power the planet? <https://www.sei.org/featured/can-poop-power-the-planet/> (Podcast interview with among others **Ddiba, D.** on CBC – 2021)

The Kenya Sanitation Conference showed we know what to do – now it's time to do it <https://www.sei.org/perspectives/kenya-sanitation-conference/> (Perspective article by **Ddiba, D.** – 2019)

Three fresh perspectives on sanitation for all <https://www.sei.org/featured/three-fresh-perspectives-on-sanitation-for-all/> (Media feature by Liera, C., **Ddiba, D.** & Ekane, N. for World Toilet Day – 2019)

The Mad Science Plan To Power The World With Poop <https://www.sei.org/about-sei/press-room/media-coverage/the-mad-science-plan-to-power-the-world-with-poop/> (Media interview with Ddiba, D. on Gizmodo – 2019)

REVAMP: Bringing urban waste into the circular economy <https://www.sei.org/featured/revamp-urban-waste-circular-economy/> (Feature article by Andersson, K. & **Ddiba, D.** – 2019)

Der Schatz aus der Toilette [The treasure from the toilet], <https://www.welt-sichten.org/artikel/33466/der-schatz-aus-der-toilette> (Media interview with among others **Ddiba, D.** in the Welt-sichten Magazine – 2018)

Money from waste? Revamp your view on sanitation <https://www.sei.org/perspectives/money-waste-revamp-view-sanitation/> (Perspective article by **Ddiba, D.** on World Bank Water Blog – 2018)

Do you know the value of your city's sewage? <https://www.sei.org/perspectives/value-of-city-sewage/> (Perspective article by **Ddiba, D.**, Rosemarin, A. & Andersson, K. on Sustainable Cities Collective – 2016)

Theses

Ddiba, D. (2022). "Implementing resource recovery from urban organic waste in low- and middle-income countries: Tools to support planners and policy makers." PhD Thesis Stockholm, Sweden: KTH Royal Institute of Technology, TRITA-ABE-DLT, 2216, 2022

Ddiba, D. (2020). "Exploring the circular economy of urban organic waste in sub-Saharan Africa: opportunities and challenges." Licentiate Thesis Stockholm, Sweden: KTH Royal Institute of Technology, TRITA-ABE-DLT, 2016, 2020.

Ddiba, D. (2016). *Estimating the potential for resource recovery from productive sanitation in urban areas*. KTH Royal institute of Technology, TRITA-LWR Degree Project 2016:13, 86 pp.

Ddiba, D. & Namukwaya, B. D. (2013). *Design of a model irrigation scheme that utilises groundwater in the cattle corridor area of Uganda*. BSc thesis, Department of Civil and Environmental Engineering, Makerere University.

Further details about publications

For more details about the above publications, please check my scholarly profile at the links below;

ORCID ID: www.orcid.org/0000-0001-5908-6417

ResearcherID: <http://www.researcherid.com/rid/L-5913-2016>

ResearchGate Profile: www.researchgate.net/profile/Daniel_Ddiba

Google Scholar Profile: <https://scholar.google.se/citations?user=WFGdLKQAAAAJ&hl=en>