

Experiencing everyday sanitation governance

A critical inquiry into the governance of community-managed sanitation services in Indonesia and whether it could be otherwise.

Thesis submitted for the degree of
Doctor of Philosophy

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February 2018

Certificate of original authorship

I certify that this thesis has not previously been submitted for a degree, nor has it been submitted as part of the requirements for a degree.

I also certify that this thesis has been written by me. Any help that I have received as part of the research and the preparation of the thesis itself has been acknowledged. In addition, I certify that all information sources and literature used are indicated in the thesis.

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Tanja Rosenqvist

February 2018

To

*Indonesia's many
sanitation governors*

Acknowledgement

Most adventures are best experienced in good company — a PhD is no different. The work presented here would not have been possible without the assistance, guidance, support, friendship and love of many remarkable individuals whom I have had the pleasure of meeting throughout my research and life.

The biggest thanks goes to the people of Indonesia from whom I have learned so much, not just about Indonesian culture, hospitality and language, but also about community, citizenship and independence. A special thanks goes to the people I met in my case study city, who opened their homes and hearts to me. It has been a privilege working with you, listening to your stories and together challenging our perceptions of societal governance. Without you this thesis or its purpose would not exist. This thesis is for you. I hope it will be of some, if only minuscule, assistance with improving health and well-being in Indonesia. I hope our paths will cross again, until then: Assalamu alaikum. Terima kasih banyak.

A special thanks goes to the AKSANSI, BORDA and IUWASH teams. Thank you for your help and guidance throughout. I am particularly humbled by the vital on-the-ground support, mentorship and friendship I received from Pak Husein, Pak Doni, Ibu Prast and Ibu Nindah before, during and after my many visits to Indonesia.

A heartfelt thanks goes to my supervisors, Professor Cynthia Mitchell and Professor Juliet Willetts, with whom I have shared many stories, reflections and laughs. I cannot thank you enough for your belief in my ability to take this on, for generously sharing your knowledge and for the continuous support and words of encouragement. Although I can never repay what you have given me, I will strive to do justice to the wisdom you shared with me and, to the best of my ability, passionately join your admirable venture to make the future more sustainable.

To Katie, without whom this adventure would have been far less enjoyable — thank you for listening, for laughing, for sharing your thoughts and for simply just being you. I eagerly await the day we again can work together.

Thank you also to all the ISF PhD students and staff for their good company, interesting discussions, encouragement and ongoing support.

Thank you to my family, both my Danish and Australian one. Thank you to my four parents who have been amazingly supportive and who have given me the courage and space to explore my passions, regardless of where in the world they took me. Thank you to my brother. Your drive and courage has been, and continues to be, a true inspiration. To my Australian family, Jenell, Noel and all the big (and less big) Heslop kids — thank you for inviting me into your loving family, for the many wonderful meals at Coal Point, for beating me in endless board game sessions and for playing ‘big dangerous dragon’ — in other words, for making Australia a place I proudly call home.

Thanks also go to my friends near and far, the ones I see often and the ones I see less often. Without knowing it, your friendship has been invaluable throughout this journey. By simply being there, Skyping, cooking dinner, playing games, going for a walk, a swim, a drink or providing me a bed for the night, you have all helped me keep my sanity and sense of reality during these past four years.

To Ebony - thank you for believing in me and in us, despite the hard days, weeks and sometimes months. Thank you for dealing with my physical and mental absence, time and time again. Thank you for listening, even though I more often than not did not make any sense, for hugging me when everything was a bit too hard and for freely giving me the last piece of chocolate when I really needed it. I do not have words to explain how essential you have been throughout all this, but I can honestly say that I would never have started or finished this without you.

Funding

The doctoral research presented in this thesis has been generously funded by the Australian Department for Foreign Affairs and Trade (DFAT) through the Australian Aid Development Research Awards Scheme (ADRAS) and by the University of Technology Sydney (UTS) through an International Research Scholarship (IRS). I have furthermore received funds from the UTS Vice-Chancellor Postgraduate Conference Scheme to support conference attendance. I am grateful for this invaluable support, which made the research possible.

Publications

Four papers have been published as part of the doctoral research presented in this thesis. Parts of all four papers have been integrated into relevant thesis sections, and the papers are found, in full, in Appendix 12 (Paper I), 13 (Paper II), 14 (Paper III) and 15 (Paper IV).

Paper I:

Rosenqvist, T. & Mitchell, C. 2016, 'Re-designing governance — a call for design across three orders of governance', paper presented at the DRS Conference, Brighton, UK, 27–28 June, 2016.

Paper II:

Rosenqvist, T. (forthcoming), 'Redirecting a scattered public towards alternative matters of concern: shifting perceptions on urban wastewater governance in Indonesia', *Design Issues*, The MIT Press,

Paper III:

Rosenqvist, T. 2017, 'Governance design and why we need a new field of design', paper presented at the Cumulus REDO Conference, Kolding, Denmark, May 30–June 2, 2017.

Paper IV:

Rosenqvist, T., Mitchell, C. & Willetts, J. 2016, 'A short history of how we think and talk about sanitation services and why it matters', *Journal of Water, Sanitation and Hygiene for Development*, vol. 6, no. 2, pp. 298–312.

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List of Names

| Name | Community | Role |
|------------------|------------------|--------------------|
| Pak Ajj | Selatan | Landowner |
| Ibu Putri | Selatan | Community member |
| Ibu Rina | Selatan | Community member |
| Pak Agus | Selatan | Community member |
| Pak Cahya | Selatan | Community member |
| Pak Puntadewa | Selatan | Community member |
| Pak RT | Selatan | Community leader |
| Pak RW | Selatan | Community leader |
| Paman Ahmad | Barat | System implementer |
| Pak Ustad Anuwar | Barat | Religious leader |
| Pak Muhammad | Barat | Community member |
| Pak RT | Barat | Community leader |
| Pak RW | Barat | Community leader |
| Adik Linda | Utara | Fee collector |
| Ibu Amisha | Utara | Community member |
| Ibu Diann | Utara | Community member |
| Pak Adi | Utara | Community member |
| Pak Matius | Utara | Community member |
| Pak RT | Utara | Community leader |

| Name | Organisation | Role |
|-------------|---------------------|---------------------------------|
| Pak Rafi | FKS | Head of Kota Maju FKS |
| Pak Indra | AKSANSI | Head of Kota Maju AKSANSI |
| Ibu Sukma | AKSANSI | Head of AKSANSI |
| Pak Akmal | Wasbangkim | Head of Kota Maju Wasbangkim |
| Pak Bayu | Wasbangkim | Head of Kota Maju SAMAL |
| Ibu Sari | UPTD PAL | Head of Kota Maju UPTD PAL |
| Pak Fajar | BPKAD | Head of Kota Maju BPKAD |
| Ibu Nurul | BAPPEDA | Kota Maju BAPPEDA staff |
| Ibu Vina | BAPPEDA | Kota Maju BAPPEDA staff |
| Ibu Erna | BAPPEDA | Kota Maju BAPPEDA staff |
| Ibu Farah | IUWASH | Kota Maju IUWASH representative |
| Ibu Siti | IUWASH | IUWASH headquarter staff |

Acronyms and Glossary

| | |
|----------------------|--|
| ABPD | Local Government Budget (Anggaran Pendapatan dan Belanja Daerah) |
| ADRAS | Australian Development Research Awards Scheme. In this thesis, ADRAS refers to a research project led by the Institute for Sustainable Futures (see Preface) |
| Angkot | Small Public Bus in Indonesia |
| AKSANSI | National Association of Community-Based Organizations in Indonesia (Asosiasi KSM Sanitasi Seluruh Indonesia) |
| BAPPEDA | Local Government Development Planning Agency (Badan Perencanaan dan Pembangunan Daerah) |
| Barat | South. In this thesis, it refers to one of the three case study communities. |
| BPKAD | Local Government Finance Department (Badan Pengelolaan Keuangan dan Aset Daerah) |
| BPLH | Local Environmental Management Agency (Badan Pengelolaan Lingkungan Hidup) |
| CBO | Community-Based Organisation |
| CSR | Corporate Social Responsibility |
| DAK | Special Allocation Fund (Dana Alokasi Khusus) |
| DFAT | Department of Foreign Affairs and Trade (Australia) |
| Dinas | Local Government Department |
| Dinkes | Local Government Health Agency (Dinas Kesehatan) |
| DKP | Local Government Cleaning and Landscaping Agency (Dinas Kebersihan dan Pertamanan) |
| DPRD | Local Legislative/Parliament (Dewan Perwakilan Rakyat Daerah) |
| FKS | Healthy City Forum (Forum Kota Sehat) |
| GDP | Gross Domestic Product |
| GoI | Government of Indonesia |
| Gotong royong | Mutual Assistance/Carrying Together. |
| Ibu | Mother |
| IDB | Islamic Development Bank |
| IDR | Indonesian Rupiah |
| IndII | Indonesia Infrastructure Initiative. A collaboration between Government of Indonesia and Government of Australia. In this thesis, IndII refers to a research project led by the Institute for Sustainable Futures (see Preface). |
| IPAL | Wastewater Treatment Plant (Instalasi Pengolahan Air Limbah) |

| | |
|-----------------------|--|
| IPLT | Faecal Sludge Treatment Plant (Instalasi Pengolahan Limbah Tinja) |
| IUWASH | Indonesia Urban Water Sanitation and Hygiene Programme — Funded by USAID |
| Kelurahan | Urban Billage |
| Kota | Local City Government |
| KSM | Kelompok Swadaya Masyarakat (Community-Based Organisation) |
| Lurah | Head of Kelurahan (see Kelurahan) |
| Maju | Progressive. In this thesis, Kota Maju refers to the case study city – the progressive city. |
| Masyarakat | Community/Society/People |
| MCK | Public Washing & Sanitation Facilities (Mandi, Cuci, Kakus) |
| MDG | Millennium Development Goal |
| MoHA | Ministry of Home Affairs |
| Musyawarah | Traditional Decision–Making Process That Leads to Unanimous Decisions |
| New Order | Suharto Regime (see Suharto) (1966–1998) |
| NGO | Nongovernment Organisation |
| ODI | Overseas Development Institute |
| O&M | Operation & Maintenance |
| Old Order | Sukarno Regime (see Sukarno) (1949–1966) |
| Pak | From ‘Bapak’, Which Means ‘Father’ |
| Pancasila | The Five Principle (the philosophical foundation of the Indonesian state since independence) |
| PDAM | Local Government Drinking Water Enterprise (Perusahaan Daerah Air Minum) |
| Pelangi | Rainbow. In this thesis, it refers to a community in Kota Maju. |
| Pemda | Local Government (Pemerintah Daerah) |
| Perda | Local Government Regulation/Decree (Peraturan Daerah) |
| PNPM | National Program for Community Empowerment (Program Nasional Pemberdayaan Masyarakat) |
| Pokja Sanitasi | Working Group (Kelompok Kerja) for Sanitation |
| Provinsi | Provincial Government |
| PU | Ministry of Public Works (Menteri Pekerjaan Umum) |
| Rukun | A State of Social Harmony |

| | |
|-------------------|--|
| RW / RT | Sub-Village Levels of Organisation: Community Groups (Rukun Warga) Are Further Divided into Neighbourhood Groups (Rukun Tetangga) |
| SANIMAS | Community-Based Sanitation (Sanitasi Berbasis Masyarakat) |
| SDG | Sustainable Development Goal |
| SE660 | Circular of the Minister of Home Affairs No. 660/4919/SJ on Guidelines for PPSP Management |
| Sekda | Regional Secretary (Sekretaris Daerah) |
| Selatan | South. In this thesis, it refers to one of the three case study communities. |
| SKPD | Local Government Work Unit (Satuan Kerja Perangkat Daerah) |
| STS | Science and Technology Studies |
| Suharto | Indonesia's Second President after Independence (1966–1998) |
| Sukarno | Indonesia's First President after Independence (1949–1966) |
| Swadaya | Self-Help |
| UPTD | Local Government Technical Implementation Unit (Unit Pelaksanaan Teknis Daerah) |
| UPTD-IPAL | Local Government Technical Implementation Unit for Wastewater Treatment Plant (Unit Pelaksanaan Teknis Daerah – Instalasi Pengolahan Air Limbah) |
| UPTD-PAL | Local Government Technical Implementation Unit for Wastewater Treatment (Unit Pelaksanaan Teknis Daerah – Pengelolaan Air Limbah) |
| USD | United States Dollar |
| Ustad | Islamic Scholar |
| Utara | North. In this thesis, it refers to one of the three case study communities. |
| Wasbangkim | Department of Building and Settlement Supervision (Dinas Pengawasan Bangunan dan Permukiman) |
| WSP | Water and Sanitation Program |
| WHO | World Health Organisation |

Abstract

Urban sanitation services have significant ramifications for public health and well-being, as well as environmental outcomes, and it remains a complex societal challenge in many developing countries. Although access to toilets is rapidly increasing, the long-term sustainability of sanitation *service* provision calls for far more than infrastructure — services also need to be *governed* in a sustainable manner.

This transdisciplinary thesis, which sits in the intersection between international development, governance and design, delves deep into the governance of a specific type of (unsustainable) sanitation services: community-managed decentralised sanitation services in low-income urban communities in Indonesia. It questions the current reliance on, and perceived obviousness of, community management, and it explores whether governance could and, in some cases, perhaps should, be done otherwise.

Situated in a medium-sized city in Indonesia, this study, which combines case study and action research methodologies, takes the form of a critical design inquiry — an inquiry geared towards change rather than critique alone. It offers a detailed account of how sanitation governance is currently done and how designerly ways of questioning and rethinking societal governance can be explored *in situ*. It delves into the daily life and the experience of governance within three urban neighbourhoods, investigates the ongoing constitution of roles and responsibilities in service provision at the local government level and considers the broader governing effects of societal norms and values. Inspired by the tradition of participatory design, the thesis furthermore explicates how designerly governance disruptions were employed to question taken-for-granted ontologies of sanitation infrastructure and urban communities, as well as explore alternatives.

Through this thesis, decentralised sanitation governance emerges as a complex and highly situated practice through which ontologies are established and sustained, and whereby sanitation infrastructure becomes a political instrument. Community member's *experience* of governance becomes a matter of central concern, highlighting the need to involve them, not only in choosing infrastructure but also in deciding *how* to govern service provision.

Societal governance furthermore emerges as an important area for exploration and conscious engagement for designers. This thesis specifically offers three new insights for design: a typology of designerly strategies for questioning and rethinking societal governance, the notion of *redirecting* as opposed to *making* publics and, most importantly, a new field of design: governance design. Governance design refers to a form of deliberate design praxis that purposefully works at the ontological level to question and rethink the ontological constitution of people and things in societal governance.

Preface

This thesis is the result of doctoral research conducted as part of and alongside a three-year transdisciplinary action research project funded by the Australian Development Research Awards Scheme (ADRAS) and led by the Institute for Sustainable Futures (ISF) at the University of Technology Sydney (UTS). This project will henceforth be referred to as the ADRAS project.

The ADRAS project was led by Professor Cynthia Mitchell from ISF (primary supervisor for the doctoral candidate) and was conducted in partnership with the Indonesian Ministry of National Development Planning (BAPPENAS) and in collaboration with the National Association of Community-Based Organizations in Indonesia (AKSANSI), Bremen Overseas Research and Development Association (BORDA) and Overseas Development Institute (ODI).

The findings from the ADRAS project were further elaborated through a follow-up study led by Professor Juliet Willetts (co-supervisor for the doctoral candidate) from ISF in collaboration with the Centre for Regulation, Policy and Governance, University Ibn Khaldun Bogor. This project also took place alongside the doctoral research presented here and was funded under the Indonesia Infrastructure Initiative (IndII), an Australian Aid project managed by SMEC on behalf of the Australian Government. This project will henceforth be referred to as the IndII project.

All photos used in this thesis are by the author, unless otherwise indicated.

Background

Sewers have for centuries helped human civilisations thrive. In the ruins of Ur or Babylon we see evidence of drainage systems, latrines and cesspits built by the Mesopotamian Empire (3500–2500BC) (Brown & Lofrano 2015). Finer households in Herakopolis in Egypt (BC 2100) used bathrooms and toilets made from limestone, whereas in ancient Greece (300 BC to 500AD) public latrines drained into sewers, which led both wastewater and stormwater out of cities (Brown & Lofrano 2015).

Considering the engineering marvels of these ancient civilisations, it might be surprising to learn that 2.3 billion people,¹ or 32% of the world’s population, today live *without* access to so-called ‘improved’ sanitation (WHO & UNICEF 2017) — sanitation facilities that ‘ensure hygienic separation of human excreta from human contact’ (WHO & UNICEF 2014, p. 40).

The importance of dealing with the global sanitation crisis, urgently, can therefore not be overemphasised. The World Health Organisation (WHO) for example estimates that inadequate sanitation alone causes 280,000 diarrhoeal deaths annually² (WHO 2016). However, improved sanitation not only improves public health it also increases productivity; protects rivers, lakes and ground water; decreases malnutrition; improves school attendance; has positive impacts on gender equality; and reduces poverty (Corcoran et al. 2010; Kiefer et al. 2012; UN-Water 2008; WHO & UN-WATER 2014). For every dollar invested in sanitation in developing regions, a return of investment of between \$5 and \$46 can therefore be expected (Hutton & Haller 2004; WHO 2012).

Importantly, *access* to improved sanitation facilities does not ensure that the global sanitation crisis is dealt with *sustainably*. WHO & UN-WATER (2012) have, for

¹ The vast majority live in Southern Asia (953 million), sub-Saharan Africa (695 million), Eastern Asia (337 million), South East Asia (176 million) and Latin America and the Caribbean (106 million) (WHO & UNICEF 2015).

² Diarrhoea is, together with pneumonia, the leading cause of death of children under the age of five (WHO 2016).

example, warned of the world-wide risk of ‘slippage’³ on the gains made in extending access to sanitation (and water) services unless more attention is paid to the ongoing operation and maintenance of assets (WHO & UN-Water 2012). Others have highlighted the urgent need to divert funding from infrastructure implementation to ongoing operation and maintenance (Hutton, Haller & Bartram 2007).

The importance of ongoing operation and maintenance of sanitation infrastructure is today globally recognised. With the launch of the Sustainable Development Goals (SDGs) in November 2015, 193 nations pledged to, by 2030, ‘Ensure availability and sustainable management of water and sanitation for all’ (UN 2015).

This thesis is my humble contribution to move us one small, yet important, step closer to the finish line — to ensure *sustainable* sanitation services for all by 2030.

³ The term slippage has been used to describe water and sanitation services that have ‘fallen back’ to a lower service level within a defined period of time (Reddy, Rao & Venkataswamy 2013). The reasons for slippage may include insufficient operation and maintenance of infrastructure, lack of proper support mechanisms, a growing population and inadequate capacities and skills (Reddy, Rao & Venkataswamy 2013).

‘The sewer is the conscience of the city. Everything there converges and confronts everything else. In that livid spot there are shades, but there are no longer any secrets. Each thing bears its true form, or at least, its definitive form. The mass of filth has this in its favour, that it is not a liar . . . A sewer is a cynic. It tells everything’.

Victor Hugo

Les Misérables

