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NGOs fostering transitions towards sustainable urban sanitation in low-income countries:
Insights from Transition Management and Development Studies

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Abstract

Globally, 756 million people in urban areas have no access to improved sanitation, while the urban population is increasing rapidly. Providing toilets has often not been a sustainable solution because of failure to link them to the necessary service infrastructure. Resolving urban sanitation problems in low-income countries requires innovations in approaches covering infrastructure, technology, social embedding, financial mechanisms and cost recovery. This paper explores the potential challenges and contribution of NGOs in facilitating new, integrated solutions to urban sanitation problems that address the entire sanitation chain, promising better social, financial and environmental sustainability. A case study of a sanitation project initiated by a large Dutch NGO is presented, using reconstruction of project documentation and interviews with project stakeholders. The analytical framework combines elements from Transition Management (TM) with insights from process approaches to development projects and community development. The choice of the TM concept is motivated by the notion that the new NGO approaches could be conceived as efforts to initiate a sustainability transition process in urban sanitation, whereas its complementation with insights from the development studies domain answers to the need to attune a TM-based framework to participation in the socio-institutional context in low-income countries, to understand the progress of governing transition processes in informal, low-income settings. This context requires special attention for capacity-building and creation of organizational structures in poor local communities. The case study shows that this entailed specialised groundwork, with which the NGO laid a crucial foundation that enabled transition frontrunners to act. Simultaneously, this focus on bottom-up empowerment created challenges for the NGO in effectively involving the right frontrunner actors who could put pressure on incumbent societal structures and institutions. We conclude that transitions in low-income contexts require extra attention to local empowerment and institution building to lay the required foundations for a locally rooted transition process. Development NGOs like the one in our case study have the skills to do this, but need to learn how to combine these with additional necessary competences to facilitate systemic change.

Keywords: NGOs; Transition Management; process approaches to development projects; community development; urban sanitation; low-income countries
1. Introduction

Four billion people, about 54% of the world’s population, live in urban areas, where inequalities are rising (UN-Habitat, 2016). Many of the urban poor live in informal settlements characterized by unsanitary conditions because of high population density, inadequate (solid) waste management and poor drainage systems (Hawkins et al., 2013). Worldwide, approximately 756 million urban residents have no access to improved sanitation (Galli et al., 2014). In urban areas of sub-Saharan Africa up to 80% of sanitation access is established with on-site technologies (Diener et al., 2014), for example latrines that store excreta at the point of generation, in contrast with off-site systems, particularly sewerage that transport excreta to another location for treatment, disposal or use (WHO, 2006). The faecal sludge collected from on-site systems is often (illegally) dumped, causing large-scale health hazards. Storm water drains fill up with human waste, which frequently contributes to flooding and contamination (Galli et al., 2014). Residents of informal settlements suffer from cholera, diarrhoea and worm infections and thus have a lower quality of life and are less productive than other people (Hawkins et al., 2013).

The rapid urbanization in many low-income and lower-middle-income countries¹ will seriously aggravate these challenges in the future (UN-Habitat, 2014). Access to improved sanitation needs to be increased on a much larger scale (Hawkins et al., 2013). Therefore, innovative approaches in infrastructure, technology and cost recovery are needed (Diener et al., 2014). This paper focuses on the challenges and contributions of Non-Governmental Organizations (NGOs) to sustainable sanitation in urban informal settlements in low-income countries. While the humanitarian impact from improved facilities can be substantial, most of the existing NGO approaches have not resulted in solutions that last beyond the external support (Murray & Ray, 2010). Provision of free latrines to poor populations lack reliable solutions for emptying, transporting and treating faecal sludge and wastewater (Koné, 2010). Furthermore, many approaches have been supply led, failing to take into account the characteristics of sanitation demand at household level, which has resulted in unwillingness to pay for, maintain, and use new sanitation facilities (Jenkins & Sugde, 2006).

In response, several NGOs are developing new integrated approaches addressing infrastructure, technology, social embedding, environmental contamination and cost recovery. This shift is reflected in the adoption of the sanitation value chain concept (e.g. Galli et al., 2014). This conceptualizes sanitation as a system with inputs and outputs, comprising sub-components of capturing, storing,
transporting, processing and/or recycling of faecal sludge (Figure 1). The concept is also embraced by knowledge institutions (Evans et al., 2015), international development organizations (WSP, 2014) and specific donors (Gates-Foundation, 2010). In this paper, we speak of a ‘holistic approach’ when referring to these fundamentally new approaches that are based on recapturing waste streams to create value for financial, social and environmental self-sustainability, as opposed to old stand-alone latrine provision.

The holistic NGO approaches are more complex than the earlier approaches because they address the entire sanitation chain and necessitate cooperation with new types of actors in the different parts of the chain, for example non-conventional financiers and regulatory bodies. To oversee these collaborations and create a financially self-sustaining sanitation chain, actors need to be found who are able to orchestrate and govern the whole chain. An additional complication is the changing funding context in which NGOs work, caused by recent policy changes in the development sector that call for NGOs to become increasingly financially self-sufficient. For instance, the Dutch government has adopted a new policy paradigm, *From Aid to Trade* (Rijksoverheid, 2011) and ended one of the main governmental subsidy programmes for NGOs in 2015 (Rijksoverheid, 2016). Similar changes have been underway in, e.g., the UK, US and Australia, affecting NGOs that significantly depended on government funding (Smedley, 2014).

The goal of this paper is to explore the challenges and opportunities of development NGOs that are moving towards more holistic approaches in sanitation in cities in developing countries. What are their challenges, and how can they contribute to processes of structural change? We primarily use a framework based on Transition Management (TM) to answer these questions (Loorbach, 2007, 2010). TM is a transition-governance approach, and the challenge of these NGOs can be framed as one of initiating and governing a socio-technical transition process. However, the use of TM in informal, low-income settings requires more specific consideration and attentiveness to the participatory process for capacity building and empowerment. This has been out of scope of western applications of the TM framework. Process approaches to development projects (Bond & Hulme,
1999; Korten, 1980) and community development (Campfens, 1997; Mathie & Cunningham, 2005) seem particularly useful literature streams to gain insights into the specifics of participatory change processes in low-income countries.

In this paper, we analyse the challenges encountered by an NGO in applying its holistic approach in a specific project, based on project documentation and interviews with project stakeholders. We complement this with information from reflective conversations with representatives from several other sanitation NGOs in order to get a grip on issues of generalizability of the case findings.

Section 2 reviews Transition Management theory and its applications in low-income countries to date. These applications reveal certain limitations arising from TM’s western roots. The literature strands from development studies are introduced to deal with these issues, yielding a contextually relevant framework for analysis. Section 3 outlines the methodology. Section 4 contains the case analysis. Section 5 contains a broader discussion of challenges of transition facilitation in low-income countries and the potential contribution and role of NGOs in such processes, using the case findings and insights from other sanitation experts. It also draws lessons from using a combined theoretical framework consisting of transition and development studies literature. We conclude with the challenges of, and opportunities for, NGOs in fostering change processes in low-income countries with a holistic approach.

2. Theory

With the theoretical framework we should be able to analyse how well an actor facilitates systemic change in a low-income country context. In this section we review Transition Management (TM) and its applications in low-income countries for this purpose. We identify certain limitations of TM that emanate from its Western European scientific roots. This leads us to explore bodies of literature of potential relevance that have grown out of experiences in low-income country contexts, for essential complementary insights.

2.1 Transition Management

TM deals with complex societal problems and governance (Loorbach & Rotmans, 2010) and is said to be ‘a promising model for sustainable development, allowing societies to explore alternative social trajectories in an adaptive, forward-looking manner’ (Kemp et al., 2007, p. 2). It develops fundamental and also practical knowledge to influence and direct transitions towards sustainability (van den Bosch, 2010, p. 38). The new holistic sanitation approaches of NGOs can be conceived as
efforts to govern a process aiming for long-term structural changes towards sustainability. Therefore, the principles of TM can be useful for analysing how well an actor such as an NGO structures or ‘manages’ an ongoing governance process in society (Loorbach, 2010, p. 163). TM can be applied at different societal levels: societal system, subsystem, or project level (Loorbach, 2010, p. 171). For example, TM been used at national/sector level to change future health care systems radically; at regional level to increase cooperation between municipalities; and at local level to initiate a sustainable roof transition programme by a firm (Grin et al., 2010; Loorbach & Rotmans, 2010).

The TM framework is based on the multi-phase model of transitions and the multi-level perspective (MLP), two concepts used to analyse transitions in society (Loorbach, 2010, p. 167). The multi-phase model distinguishes four transition phases: predevelopment, take-off, breakthrough and stabilization (Grin et al., 2010). The MLP is based on the notion that transitions result from interactions between processes at three levels of structuration: (i) the regime, the dominant extant way of thinking and doing things in a particular sector, (ii) the niche, which offers a protected space in which radical innovations can develop without being subjected to the selection pressures of the regime, and (iii) the contextual landscape, which conditions the regime, contributing to its stability or to pressure for change and destabilization, creating windows of opportunity for niche innovations (Grin et al., 2010).

![Figure 2. The Transition Management Cycle (Loorbach, 2010, p. 173)](image)

The transition management cycle (Figure 2) can be used to systemically analyse a holistic governance approach. This is a practical management framework including a cyclical four-phase process comprising different types of governance activities that have different functions in the process of stimulating societal transitions (Loorbach, 2010). The first is the strategic governance domain, in
which ‘vision development, strategic discussions, long-term goal formulation, collective goal and norm setting and long-term anticipation’ take place (Loorbach, 2010, p. 168). TM starts with the development of a shared problem definition and a shared transition vision about the desired sustainable future state of the system. The selection of the right actors is essential, and should balance out frontrunners or niche-actors, and some representatives from the incumbent regime-level (Loorbach, 2007). People should be selected who are willing and enthusiastic to invest regular time and energy (Grin et al., 2010). The second phase is the tactical governance domain, with agenda building, negotiating, networking and coalition building. Coalitions are built that develop a transition agenda, a joint action programme including the transition vision and ideas for projects and experiments (Loorbach, 2007). The third phase is the operational governance domain, in which experiments, project building and implementation take place, with a short-term horizon (Kemp et al., 2007; Loorbach, 2010). The fourth phase is the reflexive governance domain, comprising reflexive activities related to monitoring, assessment and evaluation of ongoing policies, and ongoing societal change (Loorbach, 2010). Reflexivity and learning are important throughout the cycle.

There is no rigid sequence of steps in TM and the importance of steps can differ across cycles. Effective TM creates space for frontrunners in transition arenas: virtual spaces or networks providing room for reflection and experimentation (Grin et al., 2010).

In order to succeed in achieving structural change, the TM process needs operational activities that function as transition experiments (van den Bosch, 2010), which contribute to fostering change towards a common long-term vision (Loorbach, 2010). An experiment is an ‘innovation project with a societal challenge as a starting point for learning aimed at contributing to a transition’ (van den Bosch & Rotmans, 2008, p. 8). Transition experiments aim at solving persistent societal problems, and their goals are not limited to technological change or environmental sustainability (Grin et al., 2010; van den Bosch, 2010).

TM can contribute fundamentally towards analysing the challenges and potential contributions of an actor, e.g., an NGO that facilitates holistic change in the sanitation sector in low-income environments. However, TM has been developed in a Western European context. Therefore we elaborate on the specificities of its application in low-income countries in the next sub-section.

2.2 Transition Management in low-income countries

Until recently, non-OECD countries did not receive much attention in the sustainability transitions literature (Markard et al., 2012). However, transition frameworks, including TM, have begun to be applied in more diverse geographical contexts. In Global South settings, cultures, societies,
economies and institutional infrastructures can be very different from those in Western Europe; widespread poverty, low levels of industrialization, inequality and deprivation greatly influence the processes of change (Ahlborg, 2015; Murphy, 2015). Transition studies in such contexts must not only focus on nurturing the social support base for environmentally responsible change, but also pay attention “...to the ways in which innovations, technologies, policies, and practices might decrease the vulnerability of communities and livelihoods, foster and sustain distributive forms of economic growth, and empower developing regions in an age of rapid globalization” (Murphy, 2015, p. 88). This could challenge the conventional transition frameworks. In recognition of this, Loorbach (2010) called for their empirical validation in different societal contexts. Others are skeptical about their applicability in these contexts (Baker et al., 2014).

We deliberately confined the scope of our review to papers that have taken up Loorbach’s challenge using a TM approach specifically. We acknowledge the existence of many other transition studies set in the South that use Multi Level Perspective (MLP), Strategic Niche Management (SNM) and Technological Innovation Systems (TIS) frameworks, but without a TM governance lens which is of special interest and importance for the purpose of this paper. We conducted a Scopus search for TM studies, using the keywords ‘sustainability transitions’ and ‘Transition Management’ with a ‘title/abstract/keyword’ search query. Transition studies with a South focus but without a specific TM focus, as well as TM studies not focusing on the Global South were removed from the resulting set through a scan of the abstracts. We traced a few additional relevant studies by following up literature references given in the remaining relevant studies, but confined our selection to peer-reviewed published works. The end result was a set of 16 TM papers focused on a diverse range of countries in the Global South: South Africa, Kenya, India, Peru, Laos, Tanzania, Nepal, Vanuatu, Indonesia, Philippines, Morocco, and China.

All except one (Vreugdenhil et al., 2012) call for adjustment in TM for use in the Global South. Nine advocate adjustment of the conceptual lens (Lawhon, 2012a; Lawhon, 2012b; Marquardt, 2015; Mutoko et al., 2014; Ortiz et al., 2012; Pant et al., 2015; Pant et al., 2014; Woodhill, 2009; Xia & Pahl-Wostl, 2012); one argues for different ways of structuring, communicating and executing TM in practice (Poustie et al., 2016); three argue for a contextually sensitive TM application (Kemp & Never, 2017; Marquardt, 2014; Marquardt et al., 2016).

An argument found in 12 studies is that, while there is clear value in using the TM approach in Global South settings, the framework is Eurocentric in the sense of assuming that transitions can be pursued through rather egalitarian processes. It does not do justice to the reality of highly politicized projects and complex power relations associated with profound inequalities among stakeholders, which
deeply affect the direction and outcome of transitions in low-income countries. In the eight studies that call for conceptual adaptations, insights from environmental governance perspectives (Lawhon, 2012a), political ecology (Lawhon, 2012b), and participative approaches to (community-based) projects (Marquardt, 2015; Ortiz et al., 2012; Woodhill, 2009) are called upon to complement TM in order to grasp these complex dynamics. It is noted that although some TM scholars have attempted to bring in power (e.g., Avelino and Rotmans (2009); van Buuren and Loorbach (2009)), they “...tend towards categorizing types of power without consideration of diverse ways of enacting power to shape the outcome of a transition, let alone normative responses to redressing power imbalances” (Lawhon, 2012b: 955). The common acknowledgement in TM of the need ‘to include a diversity of stakeholders’ is also deemed to be insufficient. We need to pursue more strategic and sensitive questions: ‘Who gets what?’ and ‘Who decides?’ (Lawhon, 2012b, p. 956). Marquardt et al. (2016, p. 24) note that the mainstream TM approach often remains silent about causes of project impact such as power and capacity. These authors find the extensive participation literature to be particularly insightful, as it draws on decades-long experience with development aid in many different countries. This is the domain of political economy, dealing with ‘ownership’ and control over change processes, conflict and power struggles, nepotism, corruption, marginalization and exclusion, structural dependence on foreign stakeholders for funding or knowledge, as well as democratization, so-called ‘good governance’, capacity building, empowerment, rights and justice (Marquardt, 2015; Ortiz et al., 2012; Woodhill, 2009).

Other authors who adapted TM conceptually did so because of fundamentally different physical realities (Mutoko et al., 2014; Pant et al., 2015; Pant et al., 2014). For example, the Pant et al. (2014) study is set in a poor mountainous region of Nepal where the urban-centric, technology-abundant and innovation-driven context that has shaped TM lacks relevance. Subsistence smallholder farmers struggle to make a living without access to adequate technologies in a deteriorating ecosystem. The starting point of a transition is fundamentally different. In line with Murphy’s (2005) observation noted above, the authors observe that a transition in this context should aim for durable poverty alleviation through ecosystem regeneration and improved agricultural practices, rather than adoption of innovations with a lower environmental footprint per se as in high-income Europe. The authors extend TM with a Socio-Ecological Systems (SES) framing which sheds light on how to engage poor and vulnerable communities in a process of social learning about, and local adaptation to, their changing ecological environment. Their approach (see also Pant et al., 2015) points up issues of governance of eco-systems, participation, and capacity building as central pillars in transition strategies in poor rural settings. The study of Mutoko et al. (2014) about poor smallholder farmers in Western Kenya and the study by Xia and Pahl-Wostl (2012) about the transitioning to a new water
saving regime in Chinese regions show noteworthy similarities in approach and findings, and likewise adopt a SES/resilience perspective alongside TM.

Among the four studies that do not call for conceptual adaptations to TM, only (Vreugdenhil et al., 2012) do not argue for any adjustments to – in this case a South African – context. This study had a different aim, exploring how TM could learn from experiences with pilot projects and focusing on an environmental transition, so complex social problems might have been out of its scope. The other three studies argue in favour of contextually sensitive operationalization or implementation. Poustie et al. (2016), reports on an actual urban water management experiment in an island in the Pacific, where TM experiments needed adaptation to strong hierarchy, in the form of applying different criteria for selecting frontrunners; connecting the visioning in the arena to external government actors; and practicing “mediated participation” as it was found to be unacceptable and counterproductive to bring participants from different levels of hierarchy together into one common discussion forum. The other two studies in this sub-set analyse the effectiveness of national renewable energy policy (Kemp & Never, 2017; Marquardt, 2014). Their findings, as well as Poustie et al. (2016) point towards the key importance of government capacity. This is something that poor developing countries typically lack, with poor connections between levels and agencies of government resulting in fragmented policy-making and weak policy implementation capacity. Poustie et al. (2016) also report powerful insights about the main external donor. The local TM participants in this study identified the role of the Asian Development Bank as a core barrier to a successful transition. It had historically exercised dominant control over the local urban water management agenda, causing lack of ownership, frustration, passivity and despondency among domestic government and societal actors. Problems associated with such lack of domestic ownership of development strategies and interventions are common in poor countries (Castel-Branco, 2008).

Participation in these settings is not only necessary for evolving more appropriate local innovations and growing a broad innovation support base, but also for capacity building for empowerment and awareness-raising of local stakeholders to address structural power inequalities and external dependencies. This core issue has remained out of scope in western TM publications.

Some of the studies make salient remarks about institutions. Woodhill (2009) points out that formal, legal institutions (rules and regulations as well as organizations) are often less important for the functioning of Southern societies than unwritten informal customary institutions. Pant et al. (2014) note that barriers such as traditional gender norms or strong hierarchy can, and do, affect participatory dynamics through such complexities like ‘elite capture’ not taken into account in conventional TM. Closely intertwined with this is poverty itself: uneducated people lacking confidence to speak out in public, inability to analyse problems coherently due to lack of awareness.
and insight into problems, and fear of retaliatory action by powerful parties with vested interests in the status quo. Overlaid on this is a complex of unequal relations with external (often western) parties such as aid donors, companies or NGOs (Poustie et al., 2016; Woodhill, 2009).

2.3 Insights from Development Studies

The literature review reveals many specifics of low-income country contexts that influence the governance and impact of transition processes. One major aspect is participation, a cornerstone of the TM approach, which needs more specific consideration and attention in informal low-income settings than what can be gathered from most western applications of the TM framework. In general TM is focused on an egalitarian participatory process by a diversity of stakeholders. Two literature streams are particularly useful to address this issue: Process Approaches to Development Projects (hereafter: PA) and Community Development (hereafter: CD). These literatures belong to people-managed development theorizing and praxis (Greig et al., 2007; Martinussen, 1997). Compared to TM, the approach by CD and PA regarding participatory change emphasizes commitment to organization of an inclusive process that recognizes profound institutionalized inequalities among the stakeholders in a context of informality and poverty and focuses centrally on the difficulties in achieving meaningful inclusion. We highlight the participation arguments from these literatures that have remained underexposed in TM applications in western industrialized settings.

Beneficiary participation is one of the essential characteristics of PA (Bond & Hulme, 1999). Involvement of ordinary citizens is emphasized for several reasons, ranging from normative/ethical to instrumental Stakeholder participation is a means of reducing the likelihood of further marginalization of those on the decision-making periphery. It may increase confidence building, and the ability to analyse and debate among the poor, thus equipping them to tackle severe power inequalities vis-à-vis other stakeholders. It can also foster legitimacy of dominant actors (i.e. donors or governments) by promoting transparency. Mistrust of government is common in the Global South. Along with transparency, it is important that procedures are kept simple and easily comprehensible for disadvantaged groups that are generally less educated (Uphoff, 1998). Participatory systems of local organization need to be appropriate to the capacities of local people. Special (educational) programs are needed to give stakeholders more skills for participation, especially for the inclusion of women and disadvantaged groups that suffer from social stigma and economic deprivation (Uphoff, 1998). This helps to be sensitive to inequalities, informality and marginalization that need to be addressed in order to achieve “inclusion of a diversity of stakeholders” in TM (Lawhon, 2012b).
Necessary capacity building can cover the acquisition of technological capabilities to adapt innovations with foreign origins to local conditions; and organizational, negotiation and management skills (Korten, 1980). Participation can lead to learning from the people, which is essential because they understand their situation best, and their involvement, including investment of local resources increases local ownership (Bond & Hulme, 1999; Korten, 1980; Uphoff, 1998). Better decisions in development efforts result from the addition of local or indigenous knowledge to the knowledge that more formally and technically educated persons bring in (Uphoff, 1998). Creating and maintaining such social infrastructure needs considerable investment of effort, ideas, and material resources from both the local people and supporting agencies (Uphoff, 1998, p. 64).

CD attempts to foster structural change at local community level (Cook, 1994). It is characterized by bottom-up approaches to planning and intervention and contributes to understanding of the specifics of participation with its attendance to the internal social complexities of communities (Campfens, 1997). One should avoid addressing a community as homogeneous; their political and social values and practices can be highly diverse as a result of social class and ethnicity (Campfens, 1997). CD adds insight into how to deal with issues in TM experiments such as those identified by Poustie et al. (2016) in which bringing participants from different levels of hierarchy together into one common discussion forum was found unacceptable and counterproductive. Its essential focus is on how to address empowerment problems of specific stakeholders in communities, especially the marginalized and excluded (Campfens, 1997; Wilkinson & Quarter, 1995). The setting up of local community-based organizations, facilitated by community developers, in which (often unrecognized) social assets and talents are mobilised and built upon can be a means for a community to foster social cohesion and raise awareness about, and attention for its problems and advocate for improvements (Campfens, 1997; Mathie & Cunningham, 2005). CD thus helps to overcome the “Eurocentric” assumption in TM that transitions can be pursued through egalitarian processes.

The particularities of participation in informal, low-income settings are characterized by attentiveness to problems that are inextricably linked with poverty and inequality: ways of including marginalized people through empowerment, awareness raising and education activities, mobilization of specific community assets, facilitation of community-based organization building, and use of local/indigenous knowledge. These additions to the western TM framework help to overcome its Eurocentric assumption that transitions can be pursued through a rather egalitarian process of stakeholder participation.
2.4 Framework for analysis

From the previous sections we derive three theoretical building blocks: TM, CD, and PA, to construct a framework for analysis (Figure 3). The four different phases that form the cyclical model of TM give structure to the framework and analysis. The activities of each phase (i.e. envisioning in the strategic phase and experimenting in the operational phase) are added into the framework. A layer is added to the TM cycle, informed by insights from PA and CD. This layer in the framework feeds the TM cycle continuously with activities that ensure attentiveness to the socioeconomic inequalities to enable a TM inspired process to function and progress in a context of poverty and inequality. These activities are among others: the deliberate inclusion of marginalized people and local knowledge through capacity building and empowerment. The activities are not bound to a specific TM phase, but should be continuously considered in each step that is taken in the process. The framework enables an analysis of the different TM phases including reflections on the specifics of governing a transition processes in an unequal, low-income setting.

Figure 3. Analytical framework for a TM analysis in an informal, low-income setting (adapted from Loorbach (2010, p. 173))
3. Methodology

3.1 Case selection

This study adopted a case study approach (Yin, 2009) to analyse a new holistic sanitation project initiated by a large Dutch NGO in the informal settlements of Kisumu, from its start in 2008 to 2014, when the empirical research for this paper was conducted. The rapid urbanization and associated sanitation problems in Kisumu’s slums are representative of the conditions faced in many developing country cities. The NGO is one of the biggest development organizations in the Netherlands and works in (post-) conflict and fragile states on various issues, urban sanitation among them. It has a long history and reputable record. Like other NGOs in the sector, it is facing the need for major change in its delivery approach for more sustainable project results, while also moving towards internal financial self-sufficiency, in line with the general trend of declining international funding.

3.2 Data collection and analysis

Documents, notes and reports were gathered and studied, including ‘unobtrusive’ data such as company reports, written statements by members of staff, and contracts (Gray, 2004, p. 327). The NGO’s Programme Expert on sanitation, its Senior Corporate Strategist and Project Coordinator in Kenya, and 11 other relevant stakeholders in Kenya and the Netherlands were also interviewed face to face, through Skype, or through written correspondence (Table 1). The interview guideline followed a semi-structured format, covering the main aspects of the theoretical framework, while allowing ample room for the interviewees to elaborate on additional aspects that they considered relevant. All the interviewees had been involved in the process in Kisumu for several years. The interviews were recorded and transcribed, and the transcriptions sent to the interviewees for validation (Cresswell, 2009). Additionally, relevant observations were gathered by the first author during a seven-month internship in the NGO’s team in 2014-15. Together, the different sources were used to build a coherent picture of experiences in Kisumu and to triangulate the information.

Six semi-structured interviews with representatives of other Dutch NGOs working in the urban sanitation sector of low-income countries were conducted in order to gain insight into the generalizability and broader relevance of case findings (Table 1). All selected representatives were working on sanitation in low-income countries within their organizations; they were knowledgeable about the sector and the role of their NGO in it. These interviews covered factual information about the NGO’s urban sanitation activities and its approach to sanitation; and the representatives’ view on (the future) role and challenges of NGOs in the sector. These interviews were recorded, transcribed
and sent back for validation. Information provided by interviewees will be referenced with the numbers in Table 1.

We use the analytic progression approach as described by Miles and Huberman (1994), meaning that we first describe the story-line chronologically, after which we explain what happened through specific analysis. During the analytical process, the first author continuously consulted the NGO’s Programme Expert and the NGO’s Local Project Coordinator in Kenya to verify the case findings.

Table 1. Interviews

<table>
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<th>Organization</th>
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<tbody>
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<td>1</td>
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<td>The NGO</td>
<td>Skype interview</td>
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<tr>
<td>2</td>
<td>Programme Expert, Sanitation</td>
<td>The NGO</td>
<td>Interview</td>
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<tr>
<td>3</td>
<td>Senior Corporate Strategist</td>
<td>The NGO</td>
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<td>4</td>
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<td>Dutch water utility 1</td>
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<td>Intern</td>
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<td>Kenyan NGO 1</td>
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<td>Project Coordinator</td>
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<td>Project Officer</td>
<td>Kenyan NGO 3</td>
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<td>Senior Sanitation Adviser, Trainer and Project Manager</td>
<td>Dutch NGO 6</td>
<td>Interview</td>
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4. Results

Rural-urban migration causes rapid population growth in the informal settlements in Kenya (Okurut & Charles, 2014; UN-Habitat, 2016). This leads to a higher demand for sanitation services, and puts pressure on the limitedly functional existing sanitation infrastructure and services. The regime structures of the sanitation sector in informal areas need to change fundamentally to be able to deal with the challenges caused by urbanization. The intended holistic change in sanitation in Kisumu will affect the “slum sanitation-regime” in the city’s informal areas. Basic sanitation coverage in these areas is much lower than elsewhere due to the unique challenges of providing services, such as the
lack of space for toilets, the high percentage (>90%) of tenancy, and the low payment capacity of the residents (Okurut & Charles, 2014; Simiyu, 2015). Less than 1% of Kisumu’s slum residents have an individual household connection to the sewer (Okurut & Charles, 2014). Sanitation is not provided by the local government or public utility, but by private entrepreneurs. The main type of toilet is the (communal) pit latrine, which is predominantly emptied manually even though this practice is not formally recognized by the authorities (Simiyu, 2015). The usage of communal sanitation facilities is relatively low because of high costs and challenging access at night. People find it irrational to pay for these services, thus behavioural change embracing the use of communal facilities is difficult to achieve (Simiyu, 2015). A holistic change process of the slum-regime has to deal with a complexity of different user practices, absence of the public utility, low payment capabilities, and lack of awareness about the importance of adequate sanitation services among the residents.

Elsewhere in the high income neighbourhoods of Kisumu sewerage systems linked to household flush toilets are used. This ‘sewerage-regime’ is where the utility is in charge and where its expertise, capacity and engagement lie. It is essential for the NGO to involve the utility in its coalitions that target change in informal areas, because it is the mandated institution to provide utility services in the city, and has power and influence to create changes in formal institutions and regulations. However, a holistic change should address the utility’s capacities and rationale that are solely aligned to household flushing toilets, and lack awareness about alternative types of sanitation, that might be needed to change the slum-regime.

4.1 The NGO’s holistic approach to sanitation

The new holistic NGO approach is a niche-innovation for Kisumu’s slum-regime. It is based on a chain concept, comprising on-site sanitation services with proper management and re-use of the waste. All relevant stakeholders – residents, community organizations, (local) governments, the private sector, NGOs and investors – are all meant to be involved. The approach is intended to foster activities that should continue running sustainably in the long term and lead to systemic change (3).

Together with several Dutch experts, the NGO developed a model of a fully closed-loop sanitation chain consisting of decentralized (on-site) communal sanitation services; frequent collection services for transporting human waste without using sewerage to a decentralized treatment point, and re-using this waste as bio-energy, biogas or organic fertilizer. The re-used products are sold to recover some of the collection costs. The idea is to offer sanitation at an affordable price by trying to maximize the value from the re-use of waste and minimize the costs within the sanitation cycle.\(^2\) The approach can additionally contribute to the self-sufficiency of the NGOs’ own operations. It avoids

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\(^2\) Internal NGO publication.
costly hardware supply, instead aiming to obtain funding for the NGO as temporary process manager. The NGO facilitates the formation of a diverse stakeholder coalition with parties that can complement the NGO with technical knowledge on sanitation services.

4.2 Evolution of the project

The NGO started in 2008 by mapping the problems and possibilities of basic services delivery in different neighbourhoods in Kisumu. This was led by an external consultant, who held discussions with residents, community-based organizations (CBOs) and the local government. After this, the ‘Manyatta’ neighbourhood was selected by the experts for piloting and intervention (2). Manyatta houses half of Kisumu’s informal settlement population and is characterized by poor housing, water and sanitation services, lack of planning and high levels of poverty.³ Thematic fact sheets were developed by the NGO to gain a good overview of the sanitation problems and opportunities for intervention in Manyatta (1).

The next step was a ‘Work Week’ in Kisumu in 2009. Nine Dutch actors (mainly water companies) visited 30 Kenya-based actors, including NGOs, Civil Society Organizations (CSOs), CBOs, the Kisumu utility and the municipal council, with the aim of exploring collaboration opportunities (1). Thematic meetings on water & sanitation were held. Housing, employment and environmental issues were also discussed.⁴ Ideas and pressing issues were shared among the stakeholders, which resulted in a common future vision under the title ‘A Livable and Sustainable Manyatta’. It included ideas on housing quality, settlement planning, youth employment opportunities, household income, and a healthy environment, including improved non-sewered sanitation (1). Detailed thematic action plans were developed, identifying specific actions to solve pressing problems indicated in the meetings, such as ‘sanitation and hygiene education within schools in Manyatta’.⁵ As a result of the Work Week, thematic groups were launched in Kisumu (still existent in the summer of 2015) consisting of local leaders and residents.

After the promising start of coalition building and visioning during the Work Week, the residents in the thematic sanitation group in Kisumu held meetings in which they mainly discussed local health- and sanitation-related problems (1, 2), but these meetings did not directly lead to initiation of projects. Additionally, the Kenyan NGOs and CSOs and the Dutch water companies were waiting for each other to take action (2). One of the challenges for all actors was the lack of financial resources to realize the ideas developed in the initial vision building process (2). In 2010, under pressure of the

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⁴ The NGO was also working on these other issues as part of integrated neighbourhood development.
high expectations that had been raised, the NGO finally decided to initiate and fund a project itself (2, 11). A coalition consisting of several Kenyan NGOs, the municipal council and utility of Kisumu, the local water board and a Dutch water company was formed to start a project called ‘Quick Wins’. This project was meant to give the visioning and coalition-building process visibility and tangibility, and to prevent loss of trust among Manyatta’s residents (2, 11). The project consisted of several components, one of which was the construction of a bio-centre: a public sanitation block with biogas digestion, combined with services such as bathrooms, rental offices and a community hall. Its implementation was led by a Kenyan NGO (11, 12).

The Quick Wins coalition resulted in re-establishment of coalitions between the actors that had been involved in the Work Week. In 2011 a Memorandum of Understanding (MoU) was signed between Kisumu’s utility, two Dutch water utilities and several Kenyan NGOs (2). This formed a basis for the development of several project proposals for interventions that would contribute to the establishment of a closed-loop on-site sanitation value chain. One proposal was submitted to large African donor in 2012. The coalition that wrote the proposal consisted of the utility and the Municipal Council of Kisumu, the regional Water Board, three Kenyan NGOs, two Dutch utilities and the Dutch NGO. It proposed creating hygiene awareness and sanitation coverage in Manyatta; establishing a (private) company for faecal sludge and urine collection; upscaling the project outcomes to all informal settlements in Kisumu; and dissemination to 20 other Kenyan towns. The proposal was approved in 2014, but implementation had not yet begun at the time of this research.

The bio-centre was constructed and handed over to the community in 2013. It is operated by local community members; the communal toilets and showers are used and the community hall is rented very frequently (2). Its success, compared with the conventional communal toilets, could be ascribed to the popularity of the additional services offered and the feeling of community ownership, as also observed in Simiyu (2016) study of other bio-centres in Kisumu.

Another project proposal was written in 2014 by three Dutch water companies that partnered with the utility and the Municipal Council, the regional Water Board, Kenyan NGOs and the Dutch NGO. Its aims were similar to the first proposal, with an addition of a solid waste service in the chain (14). The coalition applied for funding from a large Dutch fund but was unsuccessful, mainly because the subsidy conditions did not match the needs of the proposed project well.

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7 Internal NGO Project proposal Innovative sanitation value chain for the unsewered urban poor in Kisumu, Kiwasco, 2012.
At the time of writing, the NGO had used its holistic approach in Kisumu for about six years and had managed to facilitate coalition building, a visioning process, the implementation of a bio-centre, and consortium processes leading to at least two big project proposals, of which one had been approved by 2014.

4.3 Case analysis

The joint development of plans and a common vision for Manyatta’s future during the Work Week can be conceptualized as the setting up of a transition arena in the strategic TM phase as described by Loorbach (2007). A project manager of a Dutch water utility typified the start of the project as:

“… an umbrella under which all type of activities take place (...) the NGO tries to create a platform which makes different parties meet with each other” (5)

The local residents and local leaders were involved from the start (1, 2) and the NGO took time to facilitate their involvement, in line with best-practice principles from CD approaches. Thematic groups were organized to gain political influence and negotiation power. The group leaders were, for example, able to negotiate with the local government for investments in Manyatta (1). In line with PA, local empowerment was considered essential to prevent certain powerful stakeholders from dominating. The thematic groups also increased the awareness among the communities about the importance of issues such as water and sanitation, and opportunities on how to improve the situation (1). Through supporting the thematic groups, the Kenyan NGOs also received a lot of information and feedback about problems, developments and pressing issues in the local community (7, 12), thus learning a lot from the beneficiaries. The capacities of the community were built through training (e.g. in negotiation and business skills) by the Kenyan NGOs (1, 12). The utility was also supported with capacity building by two Dutch water companies, which provided training and shared their knowledge and experiences to improve the utility’s O&M processes and operational efficiency (4, 5, 13). This also raised the utility’s awareness about alternative sanitation solutions.

A visioning process – essential in TM (Loorbach, 2010) – took place. However, the vision did not contribute enough to support structural change of the slum-sanitation regime through niche development. In the strategic TM phase it is fundamental to involve people who are able to develop new discourses and visions. These are niche actors, who simultaneously represent the incumbent regime for purposes of legitimacy and financing (Loorbach, 2007, pp. 117-118). In this case, the coalition building and visioning was mostly centred on the beneficiaries from the slum-sanitation regime, while not involving important actors in the sewerage-regime (e.g. regulators) (2, 3) that could have acted as frontrunners and shape innovations (Loorbach, 2007). The vision-building
process became too bottom-up and problem-oriented, and lacked precision. As the NGO’s Program Expert Sanitation explained:

“The common vision was very broad... the problems were named... but it was not a concrete plan” (2)

While involving marginalized communities is at the heart of traditional NGO work and essential for successful participative innovation, the NGO lost grip on the requirements of a broader transition and fell back into old “NGO-regime” routines. The visioning activities were mainly confined to changing local socio-economic aspects and daily practices of local residents in the communities, e.g., setting-up local community groups, learning about toilet preferences; and investigating the residents’ (lack of) financial capacity to contribute to sanitation provision.

TM also stresses cooperation with regime actors because of their awareness of, and power over, existing regime structures that need to change (Loorbach, 2007). In this case, these are physical structures (absence of a faecal sludge treatment plant causing sludge dumping), institutional arrangements (no legislation to enable the levying of sanitation charges in water bills) and cultural aspects or practices (lack of experience with safe collection of waste from on-site sanitation facilities). These issues were left unaddressed since the national regulator and policy makers were not involved.

The lack of this ‘translation’ of the long-term vision into a concrete agenda with possible projects and action points to realize the objectives (Loorbach, 2007, p. 120) caused about two years’ delay. Expectations about roles and responsibilities among the various stakeholders were divergent and unclear (2). As the Project Manager of a Dutch water utility describes:

‘The in-between phase: the phase between one, the project is accepted, and two, we really start implementing. That phase we have never explicitly heard anything about and we never really participated in it.’ (5)

Tactical activities such as formulating concrete actions and building agendas (as described by Loorbach, 2007) were hindered because no strategy was developed to acquire financing for the plans, causing stakeholders to wait for one another (2). Unclear land ownership in Manyatta also hampered investment planning and infrastructure building (1). The stagnation was harmful, as explained by the Team Leader of a Kenyan NGO:
“...the people in Manyatta thought at the start of the process that something big would happen. Managing these expectations is a barrier. In the end we came up with the Quick Wins to start a project at least” (11)

The Quick Wins project can be conceptualized as an activity in the operational phase of TM (Kemp et al., 2007; Loorbach, 2007), characterized by collaborative project building and implementation. This project profited for a great deal from the empowerment activities, capacity building, and community groups that had been set up by the NGO a few years earlier. The awareness that was created among the community members about their priority issues and opportunities proved useful for the implementation and adoption of the Quick Wins project (1). The bio-centre component was implemented by two Kenyan NGOs (2, 11). The project had several positive impacts. Most importantly, it improved sanitation and hygiene for the nearby communities, and it improved the livelihoods of certain community members who generate income from the facility (1, 12). The community was asked to identify a site to build the bio-centre (1) and community members were involved in improving its design and provided physical labour for its construction (1, 12). The use of the community members’ local knowledge and labour align with the CD approach (Mathie & Cunningham, 2005). Moreover, the capacity-building component of the Quick Wins resulted in four resident associations, which eventually spawned strong neighbourhood structures (1) in line with PA writings on how empowerment occurs. Yet, the NGO had difficulties in treating this project as a proper transition experiment, using its lessons to foster a broader change process. Making this connection is essential (Loorbach and Rotmans 2010).

Still, a few years later, Dutch water companies initiated new coalition-based proposal writing to develop the idea of chain-based sanitation, but without the NGO (2, 4, 5, 13). They acted as frontrunners, developing coherent and meaningful new discourses about a new sanitation concept, essentially tactical TM activities (Loorbach, 2007, p. 117). The frontrunners could work with well-organized community groups that the NGO had set up within the local communities (4,5). The proposals written by the frontrunners also benefited from the efforts of capacity building, awareness raising, and empowerment that the NGO had initiated together with the Kenyan NGOs in the community. The communities were well able to inform the utility and the Dutch water companies about their problems (1).

It was time-consuming for the Dutch water companies to convince the sewerage-focused utility to participate (13). However, their expertise and knowledge about sanitation helped them to relate to the utility’s practices and mind-set, and they could also capitalize on the relations established through their earlier capacity-building efforts with the utility. The earlier efforts by the NGO to involve technical knowledge partners thus came to fruition. Certain innovative aspects of the
proposal required institutional changes, for example, a levy for an on-site sanitation collection service in residents’ (future) water bills (13). This required a change in utility mind-set, as much as changed regulation to allow water rates to rise. National regulators needed to be consulted. The Dutch companies advocated for the necessary change in incumbent structures/regulation.

The NGO itself was only assigned a marginal role, as a trainer of communities in one proposal part. According to the NGO’s Local Project Coordinator and Senior Strategist, this emanated from their low negotiation power (1, 3). The NGO could not recoup the costs of its initial efforts through subsequent funding for actual project implementation, undermining its own financial sustainability (1, 3). Obtaining donor funding for the sanitation proposals proved difficult, because most funders prefer low-risk projects with concrete performance indicators for tangible project results. This is unhelpful for financial empowerment of frontrunners, viewed as crucial in TM (Loorbach and Rotmans, 2010).

5. Discussion

This section addresses the broader lessons arising from the case study about governing transition processes in low-income countries and the role of NGOs in this. We also reflect on the added value of using a combined theoretical framework composed of TM and development literature.

5.1 Facilitating transition processes in low-income countries

The Dutch NGO experienced many difficulties. Empowerment and capacity building among poor beneficiaries to help them overcome disadvantages arising from poverty, low education and (power) inequality constitute lengthy and complex tasks. This grassroots work was the traditional strength of the NGO, and clearly is still its dominant concern in its interventions in Manyatta. With this mind-set, the NGO found it difficult to embrace an essential new task: involvement of key change actors with money and political clout – potential frontrunners and regime players that need to come on board for successful niche development.

The work of the main change facilitator is thus more diverse and complex compared to a conventional TM process in industrialized countries. Moreover, the international nature of the project actor network limits possibilities of face-to-face meetings and slows down communication, which can impede the functioning of a transition arena as a continuous enabling process as envisaged by Loorbach (2007). The representatives’ diverse socio-economic backgrounds, perspectives and working cultures (e.g. slum dwellers vs. western water companies) call for extensive capacity building, awareness-raising and establishing of modalities to develop mutual understanding and respect and evolve effective working relationships, in order to avoid situations where western
concepts are introduced into environments where they are rejected for lack of fit and local engagement.\(^9\)

The case also pointed up how frontrunners were impeded by a lack of suitable funding for their proposals. The push for results-based financing among large donors (GPOBA, 2009) and the emphasis on leading roles for the private sector in development work (UN, 2015) are adverse landscape developments. Performance-related subsidies are not open to experimentation, flexibility, testing, learning and uncertain outcomes (16, 18), and investment in so-called Base of the Pyramid ventures is often viewed as risky in corporate boardrooms (London & Hart, 2004).

### 5.2 The role of NGOs in TM processes

The interviews with representatives from the six other Dutch NGOs confirmed that these organizations, too, increasingly embrace long-term systemic change (16, 17, 18, 20). They also indicated that our case illustrates certain typical NGO skills that are valuable in fostering such transition processes in low-income countries, especially skills for capacity building and empowerment of local residents (17, 18, 19). Capacity building can be done, for example, through awareness creation. Increasing the awareness about pressing health and environmental issues, and opportunities to solve these issues, can help local communities to participate actively in a TM process. It enables them to be equivalent partners to other actors in a TM process, such as policy-makers, business people, or international development agents. Empowerment can be created, for example, through setting up of alliances of different local organizations and supporting their effective local coordination, as an alliance is a stronger stakeholder than a local organization operating individually (17). These local organizations can be essential actors in a transition arena, because they can give otherwise marginalized people, a voice in a TM process.

NGOs are effective brokers and coalition builders; this is important when new types of consortia have to be built (16, 17, 18, 19, 20), not only between “formal” and powerful actors, but also with local communities. This prevents a one-sided focus on powerful actors in the development of coalitions in a TM process, and thus exclusion (as noted, e.g., by Lawhon (2012a); Lawhon (2012b) in the electronics waste recycling sector in South Africa). The roles of actors need to be redefined because innovative solutions often require different arrangements of responsibilities to grasp the opportunities (16). A final important quality of NGOs is their large international networks and connections with actors working in different sectors. NGOs thus have the ability to spread and share

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\(^9\) The earlier-mentioned local `elite capture` that can arise from heterogeneity among grassroots stakeholders was not found in our case, but development NGOs always have to be alert to these issues and skilled in handling them (Mansuri & Rao, 2004).
knowledge across a large network of actors around the world, and are able to initiate international coalition building (1, 4, 5, 14, 17). This can enable important learning across different low-income country contexts in which structural change processes addressing similar challenges take place. These qualities, that can enable a socially just and inclusive TM process in a low-income country context, cannot easily be acquired by other types of actors.

These points illustrate what NGOs can do ideally to foster a transition process. In the case study of this paper, several of these qualities of the NGO proved essential to the progress of the TM process. The work done by the NGO was important for the mobilization of actors in the operational phase and the frontrunners that wrote innovative proposals. However, the NGO in our case also faced major challenges in practice, such as: involving the right actors to put pressure on incumbent societal structures and institutions; facilitating a broad enough visioning process; obtaining project funding; and failure in articulating its unique network-facilitating role to other stakeholders. There was a gap between the NGO’s aspirations towards structural change and its current practices and actual capacities for effective implementation. Thus, learning and capacity building are needed within the NGO, too. It needs to learn how to combine its valuable competences at the community level, with additional necessary competences to facilitate a systemic change process. The NGO needs to shed the remnants of its ‘old NGO-regime’ thinking and doing. These lessons are likely to be equally valuable for other NGOs in the sanitation sector with similar ambitions, given their shared history.

The greater their own awareness about their expanded role, the more effective NGOs are likely to be in convincing others that they have a legitimate role as coordinating facilitators of structural transformation in low-income country contexts – a task that should be financially rewarded. The NGO in our case was unable to capture enough of the value that it helped to create: a classical public goods problem. TM asks for big investments in time and money from the initiators of transition processes with uncertain outcomes, and benefits can be claimed by others. Especially in contexts in which financial means for initiators are scarce and social processes highly complex, it remains a question who could assume the role as pioneer/facilitator. This problem has received little attention in the TM literature so far.

5.3 Combining transition and development theory

The combined TM, PA, and CD theoretical framework has been useful for unravelling complex transition challenges. More specifically, the development literature made the analysis sensitive to the NGO’s efforts in fostering participation for empowerment and capacity building, activation, and awareness raising in local communities. These activities proved to be essential for several tactical and operational activities of the TM process in the case study. A sole TM analysis would not have been
attentive to this preparatory work that enabled frontrunners to act, induced mobilization of actors in the operational phase, and furnished a smooth ground for the inclusive implementation of a bio-centre. A TM framework without PA and CD would have wrongly attributed this progress solely to the frontrunners as it would have been blind to the need for extensive ‘groundwork’ among marginalised communities. The combined approach further revealed the underlying reasons for the shortcomings of the NGO in giving attention to regime changes in physical structures, laws, customs, and standards, which lie in the complexity of combining these new tasks with its traditional grassroots work and focus. In this way, the use of a combined framework could give useful pointers for better practice in other projects in similar contexts.

6. Conclusion

This paper aimed to understand the challenges, and opportunities of NGOs that apply a holistic approach in sanitation in informal settlements in developing-country cities. The case illustrated that the NGO was successful in initiating activities of capacity building, empowerment, awareness raising about sanitation, and involvement of local communities. The NGO created important local networks and raised awareness that proved to be essential for the progress of the subsequent TM process. The NGO also faced challenges, it lacked the capacity to engage frontrunners who could foster systemic change in the sanitation sector by influencing regime players. This gap between the NGO’s aspirations towards structural change and its actual practices and capacities for effective implementation led to stagnation of the TM process for some time.

Based on these insights, we conclude that NGOs can potentially contribute to fostering transition processes in low-income countries by building up their capacity to act as coordinating facilitators of such processes. These insights have relevance for the development NGO community more broadly, as many of these organizations are moving towards adoptions of systemic sustainability transformation approaches.

The paper’s application of a combined transition- and development framework in a low-income context contributed to the exploration of applying transition frameworks in contexts other than their origin. This seems worth exploring further, because the transition frameworks have strengths that make them potentially useful for application in various contexts, provided they can be made sensitive to conditions obtaining outside their region of origin. This is important, because after all, many pressing transition challenges lie outside the industrialized western world.
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References


