Article

Unlocking the "Prisoner's Dilemma" of Corporate Water Stewardship in South Africa—Exploring Corporate Power and Legitimacy of Engagement in Water Management and Governance

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Abstract: Corporate water stewardship, *i.e.*, proactive water-using corporate engagement in water management and governance, has been hailed as a solution to global water challenges. However, it has also aroused criticism and skepticism, as it has been feared to lead to private securitization of resources and institutional capture especially in locations with weak public institutions and regulation. This article tackles this "prisoner's dilemma" of corporate water stewardship by exploring when and how it is legitimate considering the private nature of corporations and their power to change water management and governance processes and their outcomes. An analytical framework is constructed based on a literature review and applied into a case-study of corporations active in water stewardship initiatives in South Africa. The case-study findings suggest that the stewardship agenda would benefit from (1) a more open acknowledgement of power asymmetries between corporations and other parties; (2) more careful and systematic evaluation and enhancement of legitimacy of corporations to engage in public good and common pool water resources in the first place; and (3) stewardship actions should support stronger public institutions and especially civil society to equally participate. The research community is called in to scrutinize and facilitate the multi-actor water governance processes, which include corporations to assist in the effort.

Keywords: corporate water stewardship; water management; water governance; corporate power; legitimacy; South Africa

1. Introduction

During the past decade, an increasing number of large water-using corporations have started to proactively engage in water management and governance [1,2]. Behind this phenomenon is the understanding of their dependency on shared but limited water resources [3], sparked by the awareness of corporate water footprints [4], *i.e.*, the total volume of water resources appropriated in operations and value chains [5], the resulting physical, reputational, litigation and regulatory water risks to business, and the need to mitigate those risks [6]. The severity of the global water situation and its effects to business has been deemed such that in 2015 water crises topped the World Economic Forum Global Risks report [7].

The defining concept of this new type of engagement is "corporate water stewardship". As described by Alliance for Water Stewardship [8] (p. 4), corporate water stewardship aims for "[a] use of water that is socially equitable, environmentally sustainable and economically beneficial, achieved through a stakeholder-inclusive process that involves site and catchment-based actions". Different to internal water management measures, stewardship activities take place "beyond the fence-line" of corporate facilities and may include supply chain engagement, local project implementation, novel financing mechanisms and convening on policy, for example [9–11]. To Hepworth and Orr [10] (pp. 222–223) corporate water stewardship is "about non-traditional, private actors increasingly involving themselves in the management of common pool—public good regarding water".

By its definition stewardship fits perfectly with global policies emphasizing multi-actor water management and governance [12]. Corporate initiatives and activities are gaining maturity to the extent Hepworth and Orr [10] see a "corporate water stewardship paradigm" emerging and Sojamo and Larson [13] and Daniel and Sojamo [2] speak of a move from public *vs.* private to new hybrid, transnational water management and governance arrangements.

The growing corporate engagement on water has raised a lot of skepticism and criticism, however. The stewardship discourse has been perceived just as "blue-washing" and a PR-stunt [14], and the beyond the fence-line stewardship actions have aroused fears of private and foreign securitization of resources, reinforcing global North-South power asymmetries leading to resource "grab" and institutional capture [15,16], and to a further marginalization of the already vulnerable [17]. In other words, the worry has been that the new corporate water initiatives, regardless of the nature of their intentions, introduce starker inequities to water management and governance processes and their outcomes, just worsening the situation in places with weak public institutions and regulation.

These concerns are primarily related to the clash between the aforementioned view of water as a common pool and public good resource and the nature of corporations as private, powerful and, often, foreign entities [10,18]. Ultimately, though dependent on other stakeholders and regulated by national and international law, corporations are profit-driven actors accountable for their shareholders, not mandated masters of the complexities of sustainable and equitable water resources management and governance [19]. At the same time, however, solving the pressing global water challenges could greatly benefit from a greater corporate input as corporations are in part responsible for their creation and as governments and communities worldwide are struggling to tackle them with a lack of capacity and resources [20].

As Hepworth and Orr [10] (p. 233) put it, corporate water stewardship "presents an interesting case of the "prisoner's dilemma" [for water management and governance], where entities could gain important benefits from cooperating or suffer from the failure to do so, but find it difficult or expensive, but not

necessarily impossible, to coordinate their activities to achieve cooperation". They call for clear guidelines and evaluation criteria for stewardship "against which corporate actions can be gauged and actors differentiated" [10] (p. 233). This work is underway and occupying a number of consultants and stewardship organizations, such as the United Nations Global Compact CEO Water Mandate, the World Economic Forum 2030 Water Resources Group, CDP Water Program and Alliance for Water Stewardship, among others. The International Finance Corporation, the Swiss Development Cooperation, the UK Department of International Development and Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) are currently the main donor funders of the stewardship initiatives and commissioners of their development work. A strengthened theoretical and empirical research effort is needed though, also asking the questions the consultants and stewardship organisations involved in the endeavor may find difficult to raise, avoiding ideologically-laden high level generalizations for or against stewardship, but not losing sight of the bigger picture.

This article aims to respond to this need by tackling two interrelated issues arguably at the heart of the "prisoner's dilemma": *corporate power* and the power asymmetry between corporations and other actors, and *legitimacy*, *i.e.*, *justified authority*, of corporations to engage on water or the lack of it. Legitimacy is a concept frequently used but rarely defined in the existing stewardship literature (see e.g., [2,10,18,21]) and its building blocks are also left loose in the Alliance for Water Stewardship definition above [8]. The article adopts a viewpoint that in essence, corporate water stewardship is a form of water-using corporations' engagement on water, specifically in water management and governance. Thus the article explores the question of *when and how is water-using corporate engagement in water management and governance, and accordingly, in corporate water stewardship, legitimate, considering the private nature and power of the largest water-using corporations to change water management and governance processes and their outcomes?*

The structure of the article is as follows. First, deriving from a literature review, an analytical framework for investigating water-using corporate power and legitimacy of engagement on water is constructed, and the inherent relationship of power and legitimacy and the resulting implications for analysis described. Second, the framework is applied into a case-study analysis of corporations and water stewardship initiatives they engage in in South Africa. South Africa is one of the leaders in the world in the number of stewardship initiatives and actors in play, which makes it a critical and representative case for exploration [22]. The special focus is on the stewardship initiatives active in the country, but it is argued that analyzing corporations just in the context of the development and current orchestration of the new initiatives would skew the view from their broader power, their drivers, and implications of their actions. Therefore corporate agency needs to be situated into the structures of the historical and current political economy and institutional landscape, taking into account local context- and issue-specific factors. The paper concludes with a discussion of implications of the study findings for the criteria for corporate water stewardship in South Africa and elsewhere and further research on corporate water stewardship and water-using corporate engagement in water management and governance more broadly.

2. Corporate Power and Legitimacy of Engagement on Water—An Analytical Framework

A framework for analyzing corporate power and legitimacy of their engagement on water—here in water management and governance and in corporate water stewardship—presented in Table 1 and

described in detail below was constructed based on literature of corporate power and legitimacy of their engagement in water, food and environmental management and governance (notably [2,13,15,16,23–32]). The framework lists different dimensions and forms of corporate power on water and examples of each (described in Section 2.1) and components and sub-components of legitimacy to engage on water and suggested applications of each (described in Section 2.2). Though presented in Table 1 separately, it is emphasized that corporate power and legitimacy to engage on water are inherently dynamically intertwined and depend on a given context, as will be further described in Section 2.3 with the resulting implications for analysis.

2.1. Corporate Power

The definition of power applied here comes from Lukes [30], according to whom power consists of a capacity of an agent, and of an exercise of that capacity. Hence, power structures and relations prevail regardless whether there is action or inaction and whether the agents are conscious or unconscious about their power. Furthermore, besides individuals, power may be held and exercised by groups or collectives such as corporations.

Based on Lukes, Clapp and Fuchs [24] classify corporate power in global governance to three dimensions. First, *instrumental power* takes its form in direct influence of one actor over another, and depends on actor-specific resources for lobbying, political financing, and organizational and human resources to engage. In the case of corporate engagement in water management and governance, instrumental power is evident for example in corporations' capacity to support or block institutional processes on water [32].

Second, *structural power* illustrates corporations' broader influence: their bargaining power on societal issues supported by pre-existing material structures they control or have access to, and their capacity to set agendas and rules of the game in governance. When it comes to the former, corporations may for example use their position in national economies as an asset in water allocation negotiations [13,15]. When it comes to the latter, a small group of corporations have for example played a central role in engineering the transnational governance arrangements and institutional frameworks regarding corporate water accounting and disclosure and corporate water stewardship, which affect a larger group of actors [2].

The third dimension of power, *ideational and discursive power*, is relational by its nature as it depends on how actors perceive each other, but it is often the most powerful and persistent one as it influences which societal issues and problems are considered of importance and how. Corporations may for example utilize their ideational and discursive power to frame water stewardship approach as preferred to stricter governmental regulation [2].

Corporations held and exercise remarkable power in the current global and national political economies [24,33,34]. Power asymmetry between them and other actors has been attributed to countless injustices on water, leading to the mostly critical scholarship on their engagement to date [2,10,14–18]. Even though powerlessness itself can be seen as injustice [30], it is emphasized that corporate power is not benign or malign *per se*, but justification for corporate authority on a given issue, here water, depends on the criteria against which it is being evaluated. Legitimacy criteria for corporate engagement on water are next proposed and presented.

Table 1. Framework for analyzing corporate power and legitimacy of engagement on water.

Dimensions of Corporate Power	Forms	Reference	Example	Reference
Instrumental	*Direct influence* *Actor-specific resources: lobbying, political financing, organizational and human resources*	[24,30]	Corporations support/block institutional processes on water.	[32]
Structural	*Broader influence* *Bargaining power supported by pre-existing material structures* *Agenda setting and rule-making*	[24,30]	Corporations use their position in national economies as an asset in water allocation negotiations. Corporations engineer transnational institutional frameworks on water affecting them and others.	[2,13,15]
Ideational and discursive	*Relational* *Issue and problem framing*	[24,30]	Corporations frame water stewardship approach as preferred to stricter governmental regulation.	[2]
Components of Legitimacy	**Sub-components**	**Reference**	**Application**	
Source-based legitimacy	*Expertise and resources*	[28,29,31]	Corporate expertise and resources to tackle water issues.	
	Institutional tradition	[28,29,31]	Insitutional alignment of stewardship action , corporate mandate on water and track record in tackling water issues.	
	Fit with the dominant discourses of the society	[28,29,31]	Fit of corporate engagement on water with e.g., multi-actor water management and governance and human right to water.	
Process-based legitimacy	*Equal participation*	[28,29,31]	Equal participation of corporations and other stakeholders in stewardship initiatives and projects.	

	Accountability
	   – *Internal*
	   – *External*
		[25,28,29,31]	Internal and external accountability of stewardship initiatives and projects.	

	Transparency
	   – *Internal*
	   – *External*
		[25,28,29,31]	Internal and external transparency of stewardship initiatives and projects.	

Outcome-based legitimacy	*Effectiveness*
	   – *Output*
	   – *Outcome*
	   – *Impact*
	   – *Institutionalization of arrangements*
		[26–29,31]	Effectiveness of stewardship initiatives and projects in solving original problems.	

	Distributional equity and justice	[28,29,31]	Distributional equity and justice as a result of corporate engagement on water and stewardship initiative and project interventions.	

2.2. Legitimacy of Corporate Engagement on Water

Following Bodansky [31], the legitimacy criteria for corporate engagement in water management and governance and in corporate water stewardship are divided here to three components, with associated sub-components as described by Karlsson-Vinkhuyzen and Vihma [26], Karlsson-Vinkhuyzen and McGee [28], Fuchs *et al.* [25], Liese and Beisheim [26] and Beisheim and Campe [27] (Table 1). In order to enable practical analyses, the criteria are "normative", *i.e.*, "based on theories of democracy and justice" [31] and internationally accepted principles of good water management and governance [35,36] distinct to "sociological" criteria, which would be "based on the views of those subject to the authority" [31] (on the relationship of the two, see Section 2.3 below).

The first component is *source-based legitimacy,* with sub-components of *expertise and resources*, here those of corporations to tackle water issues; *institutional tradition*, here the alignment of the new forms of corporate engagement with the prevailing institutional frameworks, respecting the democratic mandates, rights and responsibilities, and the track record of corporate engagement on water; and *fit with the dominant discourses of society*, here the fit of corporate engagement on water with e.g., the ideals of multi-actor water management and governance [12] and human right to water [36,37].

The second component is *process-based legitimacy,* with a first sub-component of *equal participation*, here equal participation of corporations and other stakeholders in water governance and stewardship initiatives and projects, as also outlined in the key principles of water policies and declarations of the United Nations [35,36]; the guideline documents for corporate water stewardship [9,38] and the Alliance for Water Stewardship International Water Stewardship Standard [8]; as well as the South African water policies in focus here [39,40]. The second sub-component is *accountability* [28,29], both internal and external [25], the former measured in terms of internal responsibility checks by the stakeholder groups in water stewardship initiatives and projects, and the latter in the ability of those affected by the initiatives and projects to held the initiatives and projects accountable [25]. The third sub-component is *transparency* [28,29], both internal and external, in the form of understandable, timely and open communication [25,28], here in corporate water stewardship initiatives and projects.

The third component is *outcome-based legitimacy*, with first sub-component of *effectiveness* [28], which is divided by Liese and Beisheim [26] in multi-actor water management and governance arrangements to output (provision of knowledge, standards, services, and networking (as envisioned in the stated goals)), outcome (*de facto* change in behavior of rule targets or substantial changes in a given population), and impact (contribution to solution of problem). Beisheim and Campe [27] add institutionalization of arrangements as a fourth measure of effectiveness. Equally important to effectiveness, the second sub-component of outcome-based legitimacy is *distributional equity and justice* [28], here as a result of corporate engagement in water management and governance and stewardship initiative and project interventions.

2.3. The Inherent Relationship of Power and Legitimacy and Implications for Analysis

As noted, the different dimensions of power and different components of legitimacy usually coexist and influence one another in a context-specific manner, which results in the following implications for analysis. First, whereas the nature of power (benign or malign) depends on the legitimacy criteria against

which it is being evaluated as noted previously, all criteria of legitimacy, normative or sociological [31], are also directly or indirectly affected by makings of power. As Karlsson-Vinkhuyzen and McGee [28] (p. 57) put it, "powerful actors [such as corporations] engage in efforts to change what is considered legitimate in international society because legitimacy makes power more effective and its maintenance less costly." As mentioned, in order to enable practical analyses, the legitimacy criteria presented here are normative, based on theories of democracy and justice [31] and internationally accepted principles of good water governance [35,36]. They have thus gone through the broadest possible scrutiny and are also ultimately influenced by sociological legitimacy and *vice versa* [31], but the power structures behind them and their applicability to different social contexts should still be carefully considered.

Second, and related to the previous point, it is acknowledged that neither power nor legitimacy is static, but they evolve over time [23,28]. Even though it is emphasized that no component of legitimacy should be prioritized at the expense of others (e.g., the perceived effectiveness of private sector interventions does not alone legitimize corporate engagement on water), it is acknowledged that in practice the balance between different components may be hard to achieve. Therefore it is suggested that the legitimacy criteria proposed should be tested and applied as guiding principles from the very beginning of processes, not as once-off tick-box exercises, evaluating the extent to which the criteria are being full-filled and identifying the actions needed if the requirements are not being met.

Third, and finally, besides understanding the socially constructed and evolving nature of power and legitimacy, understanding the broader context and drivers for corporate engagement in the cases in focus is equally important for analysis. The analysis needs to be situated into the relevant institutional landscape and political economy, taking into account local context- and issue-specific factors; exploring what has led to corporate engagement on water in the first place and whether the actions taken are an appropriate response in addressing the key water problems in the given location.

3. Case-Study: Corporate Power and Legitimacy of Engagement in Corporate Water Stewardship Initiatives in South Africa

A case-study applying the analytical framework developed (Table 1) was conducted on corporate power and source-, process- and outcome-based legitimacy of their engagement in corporate water stewardship initiatives in South Africa. The methodology and data are described in detail in the Supplementary Materials. In brief, the data gathering methods consisted of document analyses, key-informant interviews and participation observation of five stewardship initiatives active in the country in 2013 and 2014, the initiatives forming five embedded units of analysis. Besides the embedded units, data was also gathered on the general national context of water management and governance, corporate power and corporate water stewardship. The analysis focused on content, linking the findings emerging from the data to the research questions and the propositions of the analytical framework (after [22,41,42]).

Before presenting the findings on corporate power and legitimacy of their engagement in corporate water stewardship initiatives in South Africa, the South African context is first set. First, the institutional landscape, *i.e.*, the water resources situation and the water management and governance setting, is described; second, the power of the water-using corporations in the South African political economy is

outlined; and third, the drivers for the increasing corporate engagement in water management and governance and corporate water stewardship are identified.

3.1. The South African Context

3.1.1. Water Resources and Water Management and Governance in South Africa

Water is "South Africa's scarcest resource" with annual rainfall of just 465 mm and climate change further exacerbating the situation [43]. More than 95% of the water resources are allocated for use, but the demand is still growing [44]. Furthermore, the resources are both geographically and socio-economically unevenly distributed. Eight percent of the country's land area produces 50% of its surface water [45]. South Africa's "hydraulic mission" with large-scale infrastructure projects has aimed at ensuring water security, especially in the economic hubs [46], but the infrastructure has started to deteriorate, leading to losses and water quality problems [47].

The post-apartheid democratic transition in water governance has not been easy. On the one hand, the South African water policies have been hailed among the most progressive in the world [48]. The Constitution [37] lists access to water as a human right, and the 1998 National Water Act [39] lays a governance model of multilevel, polycentric and multi-actor, but still state-controlled, integrated water resources management (IWRM) [48]. On the other hand, the massive "hydraulic bureaucracy" [49] under the Department of Water Affairs (DWA), transformed to the Department of Water Affairs and Sanitation in May 2014, has been too expensive to maintain and its portfolio too broad. The participatory governance model of Catchment Management Agencies (CMAs) and Catchment Management Forums (CMFs) and Water User Associations (WUAs) has not always suited the local conditions, as the organizations have suffered from lack of skills and capacity and have not been free from politics [50,51]. At the time of the study, the new government policy aimed at de-establishing the mostly dysfunctional WUAs and to reduce the number of CMAs from nineteen (out of which two had been operational) to nine [40]. However, how the local level governance was to be operationalized remained unclear. Furthermore, in a name of redress, *i.e.*, addressing past racial imbalances in access to water, the 1998 Water Act also launched a Water Allocation Reform, with equity targets of having 40% of the water use licenses transferred to the previously disadvantaged population by 2015 [39]. However, the reform has seriously lagged behind its implementation schedule, but the DWA was during the time of the study putting extra effort on its Verification and Validation program.

3.1.2. Water-Using Corporate Power in the South African Political Economy

Water-using corporate engagement in water management and governance in South Africa dates back to the apartheid era privileged access of white business and agricultural operators to water infrastructure and resources [46]. The largest water users—either in their operations or direct value chains—still include major corporations that are subsidiaries or affiliated companies of the apartheid era conglomerates (notably mining and financial industry), some transnational corporations and nowadays foreign listed South African companies, energy and chemicals parastatals, and large-scale land owners and agricultural producers and retailers [52–54]. Besides being historically favored as water users,

corporations, especially in the mining sector, have also affected the water use of others with severe pollution [55].

The power of the private sector in the South African political economy today is not as it used to be, however, as the government has especially challenged the previously dominant mining and agricultural sectors [52]. Nevertheless, fruits of the economic boom have been available for a few and privileged of the corporate and political elite [56]. According to Gini coefficient studies, South Africa is the most unequal country in the world [53]. Furthermore, the presence and reach of the government is limited in the vast country with huge disparities between different regions, especially at the local government and municipality level, which has led to the corporations having (to take) the role of the central authority in several locations [55,57]. Accordingly, corporations still hold substantial instrumental and structural power in South Africa. Moreover, their ideational and discursive power is on the rise again, also in the water space, due to the government's struggles to fulfill its mandate in solving the pressing water challenges.

3.1.3. Drivers of Proactive Corporate Engagement in Water Management and Governance and Corporate Water Stewardship in South Africa

A growing number of water-using corporations in South Africa have in recent years started to more proactively engage in water management and governance and in corporate water stewardship initiatives [54]. Out of the five stewardship initiatives in focus of the analysis, at the time of the study two of them represented features of supply chain engagement, four local project implementation, two novel financing mechanisms, and two convening on policy (after [9,10]), all of them "mature", beyond the fence-line stewardship actions [11].

The main impetus for corporate engagement on water had been water risks—physical, reputational, litigation and regulatory [6]—to their business, largely resulting from the resource and public governance challenges as described above. There was no such thing to be found as a uniform private sector, however. Some companies had already seen the operational risks materialized, whereas for others they only loomed in the future. Market and brand sensitive companies had been moving first, and listed companies in general were sensitive to their reputation (see also [58]). Nevertheless, the common denominator was that, distinct from more philanthropy type CSR activities, corporate self-interest had been driving stewardship. As one of the corporate informants put it,

> *"You can't achieve the scale you need without policy engagement."*
>
> *(Informant, Partner Corporation A)*

Some specific drivers were identified as described below.

First, even though regulatory failures had been driving stewardship, e.g., agriculture and retail companies linked to critical consumer markets were seeking private accreditation with stewardship to ensure market access despite the failure of state regulation on water quality, regulatory incentives and pressure had also had their role to play (see also [55]). When it comes to regulatory incentives, the most recent National Water Resources Strategy 2 (NWRS2) [40] calls for corporate engagement as "[n]either government nor businesses alone can solve water issues such as climate change and water scarcity" [40] (p. 15). In the NWRS2, strategic public-private partnerships are desired on funding, technical expertise, training and efficient implementation of policies. Special emphasis is on financial contributions,

mechanisms such as water off-setting introduced as incentives for the water-using businesses to invest, e.g., in the deteriorating infrastructure. When it comes to regulatory pressure, redress, though not linked to corporate engagement in the NWRS2 [40], was in the interviews found to be a major institutional driver to the corporations active in the initiatives. For example the Verification and Validation program had prompted stewardship action in the agricultural sector, the involved farmers wanting to showcase good practice in order to ensure their water allocation quotas and the retailers their supply in the future. Also, some corporations that had taken their internal efficiency to maximum but that were still pressured to reduce their water consumption had started to engage in improving efficiency of local infrastructure.

Second, besides regulation, the corporations in focus had also been incentivized and challenged by national and international NGOs to act responsibly on acid mine drainage (AMD), ecosystem integrity, and future water and food security, among other themes. NGOs involved in the stewardship initiatives justified corporate engagement by hopes of long-term and large-scale impact based on the consistency of the large corporations in the landscape and their power and resources. Furthermore, all the major international multi-party corporate water stewardship organizations were active in the country: CEO Water Mandate, 2030 Water Resources Group, Water Futures Partnership, Alliance for Water Stewardship, World Business Council for Sustainable Development and the CDP Water Program. Water Futures Partnership has a South African origin, whereas others had found the country a fruitful ground for collaboration and corporate uptake due to the other drivers mentioned.

Third, proactive engagement in water management and governance obviously provided several additional benefits to the corporations, too. Several informants pointed out that it was still profitable for the corporations to, e.g., invest in water infrastructure in South Africa, as the government still bore the risks. Stewardship activities were also deemed to be good PR to the corporations.

To summarize, the South African context represents a textbook example of the "prisoner's dilemma" of corporate water stewardship [10]. The majority of the drivers identified present a compelling case for corporations to engage on water, but at the same time, the deeply rooted power asymmetry between corporations and other actors and the complexity of the water issues in the country makes achieving the stewardship aims extremely challenging (see [8]). Against this setting, the detailed findings on corporate power and source-, process- and outcome-based legitimacy of their engagement in corporate water stewardship initiatives are next presented.

3.2. Findings on Corporate Power and Source-Based Legitimacy of Stewardship Initiatives

3.2.1. Expertise and Resources

Some corporations engaging in stewardship initiatives in South Africa were found to have a remarkable expertise in water resources, even a comparative advantage compared to the public sector and other water users. How the corporations were internally capacitated and how well they were connected to the global discourse, and to which global stewardship organizations, mattered the most to the maturity of their stewardship engagement. Often it was skilled individuals, organizational champions, who were driving the stewardship agenda.

However, several informants also cited a low level of general understanding of water by the corporate representatives participating in the initiatives. Stewardship was still predominantly found to be housed

in the PR and marketing units of the corporations, which had little expertise or direct executive power on strategic or field level operational issues. Furthermore, corporations were rarely grounded in their physical geography and not aware of their actual water use numbers. This had in some cases resulted in questionable problem analyses in the stewardship initiatives, disconnections between the head-offices and field operations, and predominantly technical solutions, which did not address the politics of water other than from the corporations' perspective. A key concern among the informants was corporate water stewardship reinventing the (broken) wheel of past policy frameworks, the corporate representatives especially lacking understanding of IWRM and its challenges and critique.

> *"Corporations keep repeating that "the government is incompetent—we just jump in and make it happen". It's not that easy actually."*
>
> *(Informant, Partner NGO A)*

In sum, even though the corporations engaging in the initiatives generally had capacity and resources available to engage on water, often more than the public sector and consistently more than the civil society as will be discussed later on, they often lacked expertise to put them in their best use.

3.2.2. Institutional Tradition

As noted, the South African water laws and policies have set a sophisticated but complex and evidently dysfunctional system of multilevel, polycentric and multi-actor but still state-controlled water resources management and governance [39,48,50,51]. Unsurprisingly, alignment of the new stewardship initiatives with the pre-existing institutional frameworks was found to be low.

At the time of the analysis, DWA had not yet found a way to coordinate its stewardship partnerships, but was still working towards streamlining the policy. Several informants raised a concern of stewardship further adding to the fragmented approach to water management in South Africa. The relevant public sector had not always been involved from the beginning, or its participation was hampered due to capacity constraints. According to the official policy, water resources planning at catchment level should have involved all the corporations operating in the area, but as mentioned, only two Catchment Management Agencies in the country and their Forums had been operational. Voluntary multi-stakeholder forums set up by corporate and NGO initiatives, all of them not even connected to the global and national stewardship discourse, had often more engagement going than the official fora of CMAs.

> *"You often hear we all work in isolation, and different parties are not doing much to change it."*
>
> *(Informant, Partner NGO B)*

Furthermore, the stewardship initiatives themselves were often in direct competition among themselves, especially the national level forums, and several of the corporations were members of more than one. Views often diverted on their mandates. Whether the content of the stewardship projects was aligned with national priorities and corporate responsibility was questioned by several informants. Pertinent issues affecting especially the previously disadvantaged population such as licensing backlogs and the Water Allocation Reform were not directly addressed by the initiatives in focus, even though the corporations involved often had a direct stake on them. The topics were seen as politically too difficult for the already challenging multi-stakeholder engagement.

> *"I've tried to approach them to say that if we want to have a key issue addressed in the partnership, why don't we assist DWA with licensing? If we are talking about legitimacy, we should help DWA to hold us accountable. It seems to be an open wound though, too sensitive, but would really make a difference."*
>
> *(Informant, Partner NGO A)*

3.2.3. Fit with the Dominant Discourses of the Society

Even though in principle corporate water stewardship fits well with the ideals of global [12] and South African policies [37,39,40] emphasizing multi-actor and polycentric water management and governance as stated previously, in practice corporate water stewardship was still found to be a discourse of a small group of actors and individuals in South Africa. The epistemic community involved in the stewardship agenda setting and discourse including the corporate head offices, DWA, donors, consultants, international NGOs and stewardship organizations, were by some informants worried to be generally detached first, from the field level operations of the corporations as referred to in Section 3.2.1 above, and second, from the on the ground reality of the majority of South Africans.

> *"The scarcity discourse behind this is strong. It is framed so that it touches everyone, that everyone should do their bit. But the poor should have more! Equity does not feature at all in the current corporate discourse."*
>
> *(Informant, Research Institute A)*

When it comes to the human right to water, as stated in the Constitution of South Africa [37] and the UN General Assembly Resolution [36], several of the companies involved had explicitly committed to respecting it via endorsing the UN Global Compacts' CEO Water Mandate, but its operationalization remained questionable. Some informants were of the opinion that, despite being scrutinized by the Truth and Reconciliation Commission after the apartheid era, the sectors even with the worst environmental and human rights violations such as energy and mining were largely not challenged by the government due to their importance to the economic growth of the country. Furthermore, NGOs and civil society were too weak and disorganized to act as their counterforce. Therefore international support to corporate engagement in the stewardship initiatives and the government's desire for them were heavily criticized.

> *"There are three civil society counterforces to corporate power in South Africa: ANC Tripartite Alliance, Environmental Monitoring Group and the SA Water Caucus, and the Anti-privatisation movement. They are not even collectively able to stop the corporations, they can just challenge them."*
>
> *(Informant, Civil Society Organization A)*

> *"Donors are spending their money in partnerships that just support the private sector's already privileged access to the government."*
>
> *(Informant, Research Institute B)*

3.3. Findings on Corporate Power and Process-Based Legitimacy of Stewardship Initiatives

3.3.1. Equal Participation

The difficult inequity and inequality situation still persistent in the South African society was expectedly reflected in the case study findings throughout, and especially in participation in the stewardship initiatives. As the drivers listed above also alluded to, corporations, stewardship organizations and some NGOs, donors and some government officials were found to have been rather promoters than stakeholders of the stewardship agenda. This was partly due to their failure to properly engage with other stakeholders. Local civil society participation was found to be especially flawed.

> *"There is no communication with local civil society groupings. I'm pretty well networked, but nobody in the civil society space knows about stewardship. It's not grounded. When civil society is being invited, it generally does not work. They feel like they are told to drive on a paved road. It is happening in a backward order, there initiatives should be grounded, initiated by and involve the civil society and communities from the start."*
>
> *(Informant, Research Institute B)*

In the view of the corporations, stakeholder engagement was often weighed against efficiency of the stewardship initiative. Some initiatives were blamed to be closed shops as new entrants had to pay unless they were invited.

> *"We tried not to invite the entire world, but who we think can contribute."*
>
> *(Informant, Partner Corporation B)*

> *"It has already taken too long for Initiative X to take action. Further engagement with civil society would lead to analysis paralysis."*
>
> *(Informant, Partner Corporation C)*

What was cited to have made the stakeholder engagement difficult in the first place and also affected the lack of initiation from other parties, especially the local public sector organizations and communities, was their lack of capacity, organization and representation, as also discussed previously. Informants involved in municipality level stewardship projects for example struggled with communities being represented by ward councilors, often political people advancing their own agendas, but on the other hand, they could not be dismissed because of their democratic mandate. In the agricultural sector, very few previously disadvantaged and marginalized people had capacity to engage in Water User Associations or CMAs (see also [50]), which should have been the primary forums for interaction.

> *"It is difficult when an institution is supposed to be representative of the demography but the reality is not."*
>
> *(Informant, Partner NGO A)*

> *"The bureaucratic processes are politically influenced. There's no continuity there—somebody who'd really be a stakeholder, who'd be affected, people change positions."*
>
> *(Informant, Consultant A)*

Ultimately, lack of public sector capacity to fulfill its mandate to take care of the public interest and to counter-balance corporate power was blamed to be the main issue undermining equal participation in the initiatives. It was often cited to be one of the main reasons behind the need for the initiatives, but continued to be the main reason complicating their execution. Third-party, neutral facilitation and mediation e.g., from donors, NGOs, consultants or academics was deemed helpful in the multi-actor projects to mitigate asymmetries in capacity, but a stronger lead from the government was called for.

> *"There is a real role for a third party, an honest broker."*
>
> *(Informant, Stewardship Organization A)*

> *"Government needs to have their mandate sorted. Otherwise this is just a way to protect corporate interest."*
>
> *(Informant, Research Institute B)*

3.3.2. Accountability

When it comes to the internal accountability of the stewardship initiatives, there seemed to be a lot of general confusion on what the initiatives and their projects were actually about and on roles and responsibilities among their participants.

> *"Corporation X has been very difficult with contracting. There's a big transaction cost of cooperation. They seem to want to maximize gain and minimize risk. They are distancing themselves from the partnership when it's not bringing immediate benefit."*
>
> *(Informant, Partner NGO A)*

> *"I'm mystified of what's happening next, I haven't seen anything. We sense it is going to the right direction, but at some point it is going to reach a stalemate: Who's in charge, who owns the process?"*
>
> *(Informant, Partner Corporation D)*

> *"In the executing position it is a challenge to ensure that everyone is informed. If you trust someone will spread the information further, it may just lead to Chinese post in communication."*
>
> *(Informant, Consultant A)*

Understanding prevailed though that the challenges were largely due to the novel type of multi-actor collaboration. Majority of the initiatives and their partners were working on improving their practices. A stronger mandate to participate and a continued commitment were called from all parties.

> *"Middle management environmental people involved—it is an organizational disaster."*
>
> *(Informant, Stewardship Organization B)*

> *"How well are the people involved in these initiatives communicating and connected with the people inside the company? Maybe to a tech person, strategic people, but allocation and human rights issues would need to be discussed at high level."*
>
> *(Informant, Public Sector Partner Organization A)*

> *"It is a key to have a few representatives within each stakeholder team to ensure continuity,*
> *and have the people with decision making power and mandate involved right from the start."*
> *(Informant, Public Sector Partner Organization B)*

External accountability of the initiatives was found to be more problematic, however, largely because of the corporations' past and current general power and privileged position in the South African political economy and society. In the worst case, stewardship initiatives were perceived to build a cover for the corporations, a self-created layer of legitimacy.

> *"Businesses are largely not accountable in the South African context. The human rights community does not know how to engage with them. We still live with that legacy. These stewardship initiatives are accountable to themselves, structures they've set up."*
> *(Informant, NGO C)*

Some initiatives were addressing the critique by developing internal guidelines for future multi-stakeholder engagement. Some initiatives were also becoming stricter on admission criteria for corporate entrants to join, discussing how to deal with their possible past and present regulatory violations.

Again, respecting democratic mandates was deemed to be central, though not always easy. The government and public sector as a whole not fulfilling their duties to protect and the corporations' neglect of their responsibilities to respect water resources and rights to them had led to the problems in the first place, but going beyond their mandates had also proved to be problematic. In some cases good-willing (and good publicity) efforts stretching beyond the regulatory duties of corporations and the public sector aroused worries of them creating false expectations in local communities and further disturbing the mandated accountability structures, potentially backfiring on both the corporations and the public sector involved. Accordingly, proper grounding in the local setting from the very start was seen as a prerequisite for more accountable actions.

> *"Social license to operate: Develop on that basis and on an agreement to share resources."*
> *(Informant, Civil Society Organization A)*

3.3.3. Transparency

Even though transparency is often cited to be the minimum criteria for corporate water stewardship (see e.g., [9,38]), in practice it turned out to be hard to achieve in South Africa largely due to the different communication cultures among different actors; internally among the initiative partners from different sectors as referred to above on internal accountability, and externally between the initiatives and their broader stakeholder groups. The technical nature of the stewardship jargon and restricted communications were the main factors undermining the external transparency of the initiatives.

> *"These meetings have been conducted in languages most of the people don't understand."*
> *(Informant, Public Sector Partner Organization B)*

> *"Ideologies and discourses in the water realm are amazing, very technical. Corporations have framed the issue."*
> *(Informant, Research Institute A)*

> *"[T]hey advertise via email—Communities do not have access to email! You have to advertise in a culturally appropriate manner, you should announce it with loudspeakers, in taxi ranks etc."*
>
> *(Informant, NGO D)*

3.4. Findings on Corporate Power and Outcome-Based Legitimacy of Stewardship Initiatives

Due to the still relatively early stages of the stewardship initiatives globally and in South Africa—at the time of the study them having been active in maximum for five years—the findings on the outcome-based legitimacy presented here are mainly indicative. Nevertheless, they are still relevant considering the further development of the initiatives

3.4.1. Effectiveness of Processes: Outputs, Outcomes, Impact and Institutionalization of Arrangements

> *"We didn't begin with the end in mind. What are the outputs and outcome, what is stewardship?"*
>
> *(Informant, Partner Corporation D)*

The outputs of the stewardship initiatives in South Africa included a series of workshops, education materials, feasibility studies, contract models, stakeholder platforms, water technology and infrastructure development, alien vegetation clearing, water stewardship standard testing, corporate water strategy development, and policy proposals, e.g., on water-offsetting. Whether these outputs really were what they were originally envisioned to be, how they differed from operational measures corporations would have needed to take anyway, and what the transaction costs of those would have been, was another matter, however (see also [21]). On the one hand, the projects were still experimental pilots, which should have enabled learning even if the original goals were not met. On the other hand, the biased stakeholder participation, lack of transparency and accountability, and the low level of institutionalization of the governance arrangements of the initiatives as described below put adaptive learning from them at risk.

Some corporations were better than others at showcasing their work, but when it came to outcome and impact of the outputs created, generally stewardship was still found to be more talk than action.

> *"There is a huge disparity between the high level discourse and what's happening on the ground, you need to be careful when evaluating companies based on their PR."*
>
> *(Informant, Public Sector Partner Organization A)*

The main successes had been in improving water yields and water quality and efficiency, but there were also major risks some of those projects falling back to the previous situation. Alien vegetation clearing promoted by a couple of projects should have been scaled up to regional level, especially in the Western Cape Province because the alien species grew back at a faster rate than the indigenous fynbos was able to recolonize the cleared areas. At community and municipal level projects, several informants worried that not addressing the systemic level issues of deteriorating infrastructure and lack of local level public sector capacity rendered the longer-term impact of the projects obsolete.

> *"Project X has set an industry standard, but it is a subsidized solution."*
>
> *(Informant, Consultant B)*

As mentioned previously, stewardship initiatives in South Africa in general had not addressed the major, albeit politically difficult, issues such as water licensing or water reallocation at the time of the

study. Generally, the limited outcomes and low impact of the initiative projects to date were a result of incomplete problem and stakeholder analyses or struggles in implementing the project plans. Accordingly, the larger scale impacts of the corporate activities were limited, and impact of their business-as-usual in general remained to be much higher than that of their stewardship engagement.

The informants also feared some perverse outcomes as a result of the stewardship engagement. First, even though the stewardship initiatives had, if anything, promoted a new culture of collaboration, they were also worried to have added to the fragmentation of governance in South Africa as mentioned previously, and the initiatives to worsen the participation fatigue of stakeholders. The water space was described to be "workshopped out" (Informant, Consultant C). Second, multi-stakeholder engagement was not always beneficial to all the parties, largely due to asymmetries in power and capacity, as described more in detail in the next subsection.

Based on the interviews, the level of institutionalization of governance arrangements of the stewardship initiatives in South Africa was in general low. Most of the actual projects under the initiatives were pilots, which should have contributed to the further development of the initiatives. Learning from them was questionable though considering their *ad hoc* management and governance structures, the very little disclosure, monitoring and evaluation they had.

> *"Water stewardship initiatives globally are still very much about piloting, but I don't think we have a clear strategy for scaling up. We are learning quite a bit about partnerships and cooperative approaches; it has had its transaction costs too. How are we going to measure what's working, in which context, how to then scale that up?"*
>
> *(Informant, Partner NGO A)*

According to some informants, the low level of institutionalization was a result of trying to avoid any perceived notions of slowing down, which would have resulted in, especially the corporate participants coming from the fast-paced private sector environment, getting frustrated. However, awareness was rising on the need to formalize the governance structures of the initiatives to improve their internal and external accountability, which ultimately were acknowledged to be among the prerequisites for longer-term sustainable impact.

3.4.2. Distributional Equity and Justice

As noted, effectiveness alone cannot be a measure of outcome-based legitimacy but needs to be weighed with distributional equity and justice [28,29]. Effectiveness, equity and justice were not that easily combined in the stewardship initiatives in South Africa, however.

As described, the persistent inequity situation in South Africa that the corporations had themselves also directly and indirectly contributed to was described to be so dire that some informants argued that it alone shrunk the outcomes and impact of the stewardship initiatives on distributional equity and justice meaningless. Furthermore, within the stewardship initiatives, some of the corporations had become aware that their desire for "quick wins" was often in clash with, not only procedural (as discussed in Section 3.3), but also distributional equity and justice if actions were taken beyond their immediate operations and supply chains.

> *"Major drivers sit outside the fence-line. When you engage there, you can be accused of resource grabbing, dominating, taking over the DWA's mandate."*
>
> *(Informant, Partner Corporation C)*

The main issues putting distributional equity and justice in the initiatives at risk and even leading to perverse outcomes were the potential and sometimes the actualization of institutional and resource capture, both water and human resources, largely due to the disparity in power between corporations and other actors.

> *"Even the development of capacity takes away government's role."*
>
> *(Informant, Partner Corporation C)*

> *"There is a high risk of companies establishing community organizations which are rival and disturb the genuine community activism, or employing those people in the companies CSR departments."*
>
> *(Informant, Civil Society Organization A)*

> *"Policy capture is a possibility, and I've seen it in many places, let's not lie about it. We have to constantly ask ourselves, whether we've done any policy capture. It's actually not good to any of the parties."*
>
> *(Informant, Stewardship Organization A)*

> *"I think DWA sees this as a capability, not a power capture thing, which is alarming. NWRS2 is almost embarrassing, how open and blunt it is about the desired role of the private sector. Is the government being blind to it?"*
>
> *(Informant, Research Institute B)*

An especially thorny policy issue discussed in South Africa at the time of the study was water off-setting introduced in the NWRS2 [40]. It had originated from companies contemplating investments in public infrastructure that were calling for concrete incentives to do so, to have their allocation share secured in the future against their contribution. The predicted, not verified, nature of the water savings created and the human right and public good nature of water instead of it being a tradable commodity were the main critiques against it.

In some cases, corporate stewardship actions did not match with their responsibilities and, e.g., polluter pays principle.

> *"Corporations cushion themselves against the risks—Banks and supplying farmers bear the actual risks."*
>
> *(Informant, Consultant D)*

> *"They should make provision for the life-time of the impact. It is unfair and unequitable for those costs to be carried by communities."*
>
> *(Informant, NGO D)*

Finally, inequity of the society as a whole was feared to worsen with the growing corporate water activities. As mentioned, dismissing equity issues in the stewardship initiatives and the growing appetite of international donors and the government to invest in corporate water stewardship instead of building capacity of the less resourced stakeholders was questioned by several informants.

> *"Why don't they give the money to the civil society to strengthen them? Of course you can ask, how representative are the civil society organizations. But we need a stronger civil society, and a stronger government."*
>
> *(Informant, Research Institute B)*

4. Discussion

Despite, and partly because of its fine but arguably idealistic definition [8], confusion has persisted on what corporate water stewardship in practice really is and what it can and should be. In order to unlock its "prisoner's dilemma" [10], largely resulting from the clash between the view of water as a common pool and public good resource and the nature of corporations as private, powerful and often foreign entities [10,18], this article set out to explore when and how water-using corporate engagement in water management and governance, and accordingly, in corporate water stewardship, is legitimate, considering the private nature and power of the largest water-using corporations to change the water management and governance processes and their outcomes.

This section discusses the implications of the study findings for the guidelines and evaluation criteria for corporate water stewardship and for water-using corporate engagement in water management and governance more broadly. Three key recommendations come across: first, a call for a more open *acknowledgement of power*; second, a need to more carefully *evaluate and enhance legitimacy* of corporate engagement on water; and third, an imperative to prioritize *support to stronger public institutions and civil society,* and to *streamline policies*. Finally, future research needs are identified.

4.1. Acknowledge Power

The findings of the South Africa case-study analysis epitomize the inherent relationship of corporate power and legitimacy of their engagement in water management and governance and in corporate water stewardship initiatives in particular. Power asymmetry, *i.e.*, asymmetry in position and capacity, between the corporations and other actors, on the one hand, was found to be the driver of the stewardship agenda in the country, but on the other hand, it was also the main factor undermining the legitimacy of the initiatives and projects.

It is argued here that power asymmetries should not be seen as hazards leading to a paralysis of action, however, but a factor all parties should be more aware of, a viewpoint also highlighted in recent discussions among the stewardship organizations and the engaging corporations themselves [59]. Power asymmetries do not go away in water management and governance by categorically dismissing attempts of corporate water stewardship, which at least in principle aim to improve the status quo. When the size and complexity of hydro-social systems grows to national or global political economy level, there is no way out of struggle for power and politics over water between different actors, be them state, corporate or civil society [60]. Furthermore, even in the seemingly cooperative situations on water, different forms and levels of conflict may still coexist [61]. Most importantly, however, power is not constant: it is in a continuous state of flux in interaction networks between different agents [30], though some power structures are more persistent than others. As the analysis findings show, corporations are also affected by the position and capacity of their stakeholders, and they were being challenged when their actions were not deemed legitimate.

Instead of depoliticizing water resources challenges to spark collective action as the original stewardship buzzwords of "shared water risk" [62] and "shared value" [63] arguably do, corporate water stewardship could benefit from a more open acknowledgement at the outset of the power asymmetries between corporations and other actors and the issues the asymmetries may lead to in engagement processes. If the asymmetries were perceived so dire that the stakeholder engagement could risk leading to institutional and resource capture, in situations asking for immediate action mediators and facilitators, such as NGOs, academics and consultants who were well-grounded in the location setting, could help leveling the playing field, but ultimately the capacity and position of the weaker parties—not least the public sector—to initiate and participate should rather be strengthened if longer term sustainable, equitable and just outcomes were desired, as also discussed below.

4.2. Evaluate and Enhance Legitimacy

Besides considering power, it is suggested that in corporate water stewardship, more attention should be paid to the proposed criteria for legitimacy.

To start with, if power and power asymmetries were more openly acknowledged, and the responsibilities assigned and the action to be taken planned accordingly, especially source-based legitimacy of corporate engagement on water could be greatly strengthened and a more solid foundation for process-based and outcome-based legitimacy laid. Furthermore, corporate resources indeed are a valid argument for greater corporate involvement in water governance in the first place, but the use of the resources should be better understood, executed and targeted. As the example of South Africa shows, corporate actions could be better aligned with institutional frameworks and societal discourses on water. In addition, as Orr and Pegram [64] suggest, water issues should be mainstreamed into the company strategies as part of their broader sustainability reform instead of being dealt by their PR departments.

Ownership of the stewardship agenda in general should be broadened not only within the engaging corporations, but even more importantly, it should be opened to the variety of stakeholder groups if not only its source—but also process-based legitimacy were to be strengthened. As it is, stewardship is still too much of a discourse of a relative small group of the largest water-using corporations, NGOs, stewardship organizations, donors and governments globally. Especially civil society and also small and medium sized businesses with remarkable accumulative impacts would be important to engage [65]. Improved transparency, more careful stakeholder analyses and making stewardship a joint narrative could lead to more accountable processes with more sustainable, equitable and just outcomes (see also [10,18]). In some cases, legitimacy of corporate operations as a whole could be challenged, e.g., if they were found out to be inherently unsustainable and contributing to water inequity and injustices, but in principle that should be an accepted end result of a legitimate process.

It is admitted that the legitimacy criteria set here for corporate engagement in water management and governance and in corporate water stewardship in particular may seem to be difficult to achieve in any water governance arrangement, be that public, private or their hybrid. Multi-actor collaboration among a diverse group of stakeholders never comes easy. Furthermore, when evaluating legitimacy of corporations as societal actors, naturally also other sustainability factors than just their agency on water need to be weighed in. Nevertheless, it is argued that legitimacy of corporate water stewardship should be taken more seriously and analyzed in a systemic manner, especially if stewardship as an approach is to be as

inclusive as it claims and if it is to be central to solving the pertinent shared water challenges, not just short-term water risks to business, as the hype around it in South Africa and globally aspires.

4.3. Support Stronger Public Institutions and Civil Society, Streamline Policies

As suggested by the previous literature (e.g., [2,10,55]) and confirmed by the case-study findings, one of the main drivers of corporate water stewardship has been the failure of public institutions to fulfill their mandate to protect and allocate water resources in a sustainable and equitable manner. Lack of public sector capacity to equally participate has also continued to be one of the main factors undermining the legitimacy of stewardship actions. Accordingly, when public institutions and regulation are weak, corporate water stewardship should support, not replace public water management and governance—not least because businesses as private and foreign actors do not have the mandate to step in to fill the governance gap beyond their immediate operations and supply chains, but because they lack expertise and willingness to do so, too. This is not to say any public governance arrangement should be preferred to privately led interventions, but to emphasize the need to ensure sustainability, equity and justice in multi-actor management and governance processes and their outcomes. Supporting the civil society to hold the public sector accountable and to participate in and scrutinize the stewardship agenda would be equally crucial (see also [2,10]). When it comes to the role and responsibilities of other parties, a stronger lead from international development agencies would be needed to streamline corporate water stewardship with corporate water strategies and the broader sustainability agenda, with trickle-down effects to donor programs and national policies. As mentioned, mediation and facilitation from NGOs, academics and consultants could help in getting the processes started, but they as well should work towards a stronger and more accountable public sector ultimately taking the lead.

4.4. Future Research Needs

It is acknowledged that the analytical framework developed here is built on certain international normative criteria, which may not be applicable with the sociological criteria in all the contexts where corporations engage on water. Furthermore, as noted, power and legitimacy are by their nature fluid, ultimately constantly redefined in interaction between different agents. Nevertheless, the choice of the criteria applied is justified with the links of the corporate water stewardship discourse to institutions such as the UN and the South African government that have themselves sanctioned those criteria. It is argued that in minimum corporate water stewardship and corporate actions in its name should follow the principles of good governance that their democratically mandated promoters have created. Besides testing the framework developed in other cases of corporate engagement on water, for broader understanding of legitimacy of corporate water stewardship studies applying more locally grounded sociological criteria would also be needed.

Further case-studies, comparative as well as longitudinal, of corporate water stewardship initiatives and projects and corporate agency in them are strongly encouraged. Finally, as noted, academics and other independent researchers could take a more active role in scrutinizing and facilitating the multi-actor water governance processes corporations participate in, especially in locations where the mandated institutions lack capacity to do so.

5. Conclusions

This article set out to tackle the unresolved questions of water-using corporate power and the legitimacy of their engagement in water management and governance, which were argued to be at the heart of the "prisoner's dilemma" of corporate water stewardship [10]. An analytical framework for investigating corporate power and source-, process- and outcome-based legitimacy of their engagement in water management and governance and, in corporate water stewardship in particular, was constructed based on a literature review and applied to a case-study of corporations and water stewardship initiatives they are active in in South Africa.

The findings caution against seeing corporate resources as a silver bullet solution to public funding deficits, reinventing the wheel of multi-actor and cross-sectorial water governance without learning from its past critiques, and call for questioning the justification of corporate activities and water-intensive operations in the first place. Due to the power asymmetry between the largest corporations and other stakeholders, risks of resource and institutional capture are real, especially in places with weak public institutions and regulation. It is argued that power asymmetries should not be seen as hazards leading to paralysis of action, however, but a factor all parties should be more aware of.

The findings suggest that first, the stewardship agenda globally would benefit from a more open acknowledgement of power and power asymmetries between corporations and other parties, and second, from more careful and systematic evaluation and enhancement of legitimacy, especially source-based, of corporate engagement on water. Third, efforts should be targeted to supporting stronger public institutions and to leveling the weaker players, such as civil society, to equally participate in the stewardship agenda setting and in its scrutiny, for which purpose global and national public and private policies should also be streamlined. By leveling the players and the playing field, stewardship as an approach could have a real chance to contribute towards solving local and global shared water challenges.

To conclude, further comparative and longitudinal analyses of corporate water stewardship and corporate engagement in water management and governance are strongly encouraged. The research community should take a more active role in scrutinizing and facilitating the multi-actor water management and governance processes, including corporations, to ensure sustainable and equitable outcomes for all.

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Conflicts of Interest

The author declares no conflict of interest. The funding sponsors had no role in the design of the study; in the collection, analyses, or interpretation of data; in the writing of the manuscript, and in the decision to publish the results.

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