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A Social Licence to Operate Legitimacy Test: Enhancing Sustainability Through Contact Quality

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Abstract: The social licence to operate is a notoriously ambiguous concept that encompasses a patent normative heterogeneity, making the emergence of a widely accepted standard capable of settling controversies on its legitimate use seem unlikely. To cope with this issue, the article builds a model (adapted from Arnstein’s ladder of public participation) to measure “contact quality,” used here as a proxy for gauging the legitimacy of the social licence to operate. This model is tested on a case study from the minerals and energy sector (Base Titanium Mine in Kenya). Our findings show that a company can move up and down on the legitimacy scale, depending on the contact quality with company stakeholders. The interest of providing a social licence heuristic is to make sense of the theoretical controversies surrounding this concept and to offer also realistic guidance to practitioners searching to understand where a firm sits on the legitimacy scale, to enhance transparency and accountability of its social licence to operate and ultimately improve business practice.

A Social Licence to Operate Legitimacy Test: Enhancing Sustainability Through Contact Quality

1. Introduction

The social licence to operate (SLO) concept, as a means of addressing growing social risk and incorporating issues of social acceptability through stakeholder engagement, has for some time been a well-established tool among minerals and energy (M&E) companies (Lesser et al., 2020) and finds increasing adoption in other sectors (e.g. Lehtonen et al., 2020; Sinner et al., 2020). Indeed, the attainment and maintenance of an SLO are now regarded matters of strategic importance (Boutilier, 2020b) and have been recognised by United Nations Environment Programme as key tools for sustainability (UNEP, 2020). Despite a seeming upsurge in academic writing on SLO in recent years (Dumbrell et al., 2020; Gupta and Kumar, 2018), SLOs have remained a trade in intangibles (Hitch et al., 2020): the SLO debate itself has become increasingly polarised (Boutilier, 2020a) and the concept's utility is still being questioned (Hitch et al., 2020; Woiceshyn, 2020).

In the absence of a formal issuance and in light of conceptual ambiguities, a company's claim to an SLO tends to be systematically challenged, especially as communities and NGOs have begun to utilise SLOs to resist unwelcome forms of development (Gunster and Neubauer, 2019; Mather and Fanning, 2019). This *status quo* was explained primarily by the insoluble normative heterogeneity of SLOs' legitimacy (Brueckner and Eabrasu, 2018), which renders the concept "functionally meaningless" in a normative sense (van de Biezenbos, 2019, 159). Despite concrete propositions to legitimise the SLO (Melé and Armengou, 2015) or to pre-empt controversies over SLO claims (Zhang et al., 2018), this normative impasse is still limiting the use and the interpretation of SLO legitimacy.

Acknowledging the impossibility of arriving at a universal definition of SLO legitimacy, we propose the use of an *Ersatz*, a proxy capable of capturing the normative complexity of an SLO and shedding light on SLO legitimacy: the “contact quality with stakeholders.” The pertinence of this proxy lies in the observation that engaging stakeholders is often considered an appropriate SLO quality gauge (Hurst et al., 2020; Kelly et al., 2020; Ranängen and Lindman, 2018), encompassing SLO factors such as credibility, trust, and fairness (Jijelava and Vanclay, 2017; Mercer-Mapstone et al., 2018). We readily acknowledge that contact quality in itself is a complex concept, involving various degrees of stakeholder engagement that must be taken into account. Therefore, the model we propose translates Arnstein’s (1969) ladder of public participation (see Figure 1) into the SLO context, ranking stakeholder engagement from low (manipulation) to high (citizens control).

Insert Figure 1 about here

The model is then tested using a case study from the M&E sector due to the industry’s social conflict potential owing to the nature of its operations and the widespread use of the SLO construct (Lester, 2019). However, beyond the specificity of this case, the insights gained from this study are likely to be transferable to other sectors, given that the issues underpinning an SLO are generic and thus inherent to any SLO negotiation. While the focus on SLO speaks to a narrow area of the sustainability literature, the model offers a practical tool for assessing the extent to which stakeholder engagement assists business to meet societal expectations and thus potentially improve its environmental and social management performance. It is also meant to

offer realistic guidance to practitioners searching to understand a firm's SLO legitimacy and to improve transparency and accountability of its SLO.

The paper is organised into seven sections, including this Introduction. Section 2 reviews SLO legitimacy proxies while Section 3 explains the SLO legitimacy model. Section 4 presents the methods employed for the case study presented in Section 5 followed by a discussion of main contributions, limitations and implications for theory and practice in Section 6 before briefly concluding in Section 7.

2. Reviewing SLO legitimacy proxies

The SLO is commonly interpreted as a tool for creating lasting industry-community relations (Suopajarvi et al., 2020; Hall et al., 2015); thus, engagement of various stakeholders is built into its very conception. While defying precise definition, SLO quality depends on the contact a company establishes with its stakeholders and on their ongoing support for its activities (Moffat and Zhang, 2014; Prno and Slocombe, 2012). It is precisely this contact quality that helps an SLO to fill a legitimacy gap when “actuarial” (legal) and/or “political” licences (see Bice et al., 2017) prove insufficient for solving conflict around industry projects, for they frequently lack public approval (Heffron et al., 2018). Therefore, the claim to an SLO in reaction to such controversies is expected to tilt the balance in favour of the issue in question by demonstrating public support, especially for M&E projects (Parsons et al., 2014, 83; Lacey and Lamont, 2014; van de Biezenbos, 2019).

2.1. From “social acceptance” to “public participation”

Amongst various possible interpretations of “stakeholder support,” the SLO literature has drawn extensively on “social acceptance” (Kostova and Zaheer, 1999, 64). Especially in the M&E field, a company is expected to have “broad public acceptance” of its activities (Edwards

et al., 2019, 1; Joyce and Thomson, 2000, 52), which is interpreted as a necessary, and sometimes sufficient, condition for legitimising SLOs (Gehman et al., 2017a). While an important stream of the SLO literature leans towards using “social acceptance” as a proxy for legitimacy (Gehman et al., 2017b; Owen, 2016; Palmer et al., 1997; Robinson et al., 2020), we argue that an SLO can be placed on a stronger conceptual footing (Parsons and Moffat, 2014) by using “public participation” instead.

The main reason motivating our focus on “public participation” is that in contrast to “social acceptance,” SLO can be circumscribed more adequately. “Social acceptance” calls for an analysis of perceived project legitimacy among a heterogeneous group of actors, larger than the group of consumers (Wüstenhagen et al., 2007, 2684) and even larger than the group of those directly affected by it. Social acceptance might also suffer a conceptual ambiguity relating to the large scale of social behaviours encompassing “support and adoption, apathy, disinterest, and disengagement (Devine-Wright et al., 2017, 27) as well as to the lack of agreement concerning the measurement of acceptance (Batel et al., 2013, 3). By contrast, the SLO approach calls for a more precise study, as its legitimacy depends on the explicit approval of those directly affected by the respective business operations.¹ Since the SLO is expected to fill the legitimacy gap of controversial projects and activities, showing they effectively enjoy public support (Zhang et al., 2015, 1064), it becomes particularly relevant to focus on how stakeholders are *actively* engaged (Nyembo and Lees, 2020) as a complement to how the public at large *passively* tolerates a controversial project (Bice, 2014; Owen and Kemp, 2013).

¹ We note that social licence concerns, while often localised, frequently extend beyond the “local” (Brueckner and Eabrasu, 2018; Gehman et al., 2017)

Finally, unlike “social acceptance”, which is the product of academia, the SLO is an industry concept (Mather and Fanning, 2019). So, inasmuch as SLO refers to the local impact of business operations, we consider it more pertinent to focus on SLO using “public participation” as a gauge of its legitimacy. Otherwise, when focusing on impacts of business operations on society at large, it would be useful indeed to refer explicitly to the “social acceptance” literature.

2.2. Public participation in review

Public participation represents a possible proxy for legitimacy since it is often used in moral and political theory, mainly for discussing the collective management of goods and resources, (e.g. nature, health or education services) and within development studies, with regard to community ownership and uptake of development interventions (Chambers, 2014; Cornwall and Fujita, 2012). Decision-making in conflict-prone areas such as natural resource management offers numerous opportunities for using public participation as a proxy for legitimacy, showing also how good stakeholder engagement can deliver a raft of benefits such as community empowerment, greater social equity and more improved resource management outcomes (see for instance Barber, 1984; Laird, 1993; Munro-Clarke, 1992; Piyapong et al., 2019; Poncian and Jose, 2019). Also, as SLOs can be regarded as direct expressions of the public interest (Bice et al., 2017), more direct forms of public participation serve to improve public interest representations (Arnstein, 1969; Mostert, 2003) and can thus be seen to enhance SLO legitimacy.

Yet, as Arnstein’s (1969, 216) ladder of “public participation” shows, there are different degrees ranging from non-participation and tokenism to citizen power (see Fig. 1). Despite patent disagreements on what public participation means, the sustainability literature seems to retain that the quality of stakeholder engagement improves when processes are guided by “principles of fairness, competence, and transparency” and when the “context” of engagement is

considered when organising and conducting public participation (Webler and Tuler; 2018, 4). Also, as processes of engagement entail power asymmetries between stakeholders, the potential clash of interests and expectations, particularly on questions of process control and outcomes, require addressing (Reed et al., 2018).

Arguably, engagement alone is therefore insufficient for SLO issuance (Hall et al., 2015), and attention needs to be paid to what Moffat and Zhang (2014, 64) coin “contact quality,” referring to modes of engagement suited for the development of trust and social capital. Contact quality differs widely across different industry-community contexts, and we thus see the applicability of Arnstein’s model in terms of its ability to classify the quality of contact with SLO stakeholders and thus to provide clues about SLO legitimacy.

3. The SLO legitimacy model

Akin to Arnstein’s (1969) ladder of public participation, we envisage an SLO typology similar to the SLO continuum put forth by Dare et al. (2014). Yet, this continuum would not proceed along geographical scales but along lines of different degrees of legitimacy, enabling the demarcation between various legitimacy types of SLO mirroring Boutilier’s (2009) “social licence boundaries.” Also, this analysis allows dynamic interpretations of the SLO, as it can show how companies move up and down the legitimacy scale.

3.1. The contact quality scale

The model presented here (see Figure 2) translates into SLO terms Arnstein’s (1969, 217) three levels of participation: *nonparticipation*, *tokenism*, and *citizen power*.

Insert Figure 2 about here

3.1.1. *Nonparticipation*

Nonparticipation speaks to a lack of meaningful stakeholder engagement. The interests and preferences of the proponent prevail over those of SLO stakeholders. In terms of Boutilier's (2009) social licence model, *nonparticipation* fails to cross the "legitimacy boundary" entirely.

3.1.2. *Tokenism*

By contrast, *tokenism* denotes attempts at stakeholder engagement, which, however, are lacking in terms of design and effectiveness of the engagement process. Some reasons for this could be the underestimation of process requirements due to the complexity of the SLO issues at stake, the cultural/paradigmatic differences between project proponent/industry and SLO stakeholders, or the lack of experience with stakeholder engagement processes per se. Process reiteration could bring about learning and as such offer scope for improvements in contact quality and thus, SLO legitimacy. This is where, following Boutilier (2009), "acceptance and tolerance" can be obtained, but where—owing to contact quality—credibility and trust are yet to emerge. Such a shift, however, requires sophisticated means of engaging SLO stakeholders and a deep understanding of their background, culture, values and perceptions of sustainability (Luke, 2017).

3.1.3. *Citizen power*

Finally, citizen power represents the top of the 'SLO legitimacy thermometer', i.e., the highest degree of contact quality and SLO legitimacy. This engagement type denotes a genuine power-sharing over the process and outcomes (Arnstein, 1969, 216) of the proponent industry with SLO stakeholders that are impacted by the respective project. This is also analogous to what Mostert (2003) describes as a high level of direct participation that enables either co-decision making or full decision-making by the public. Such engagement is also reflective of what Owen

and Kemp (2013, 34) describe as a “[stakeholder]-orientated, context-sensitive stance [that] prompts broad-based collaborative dialogue”. This in turn provides the basis for good engagement practices that are responsive to often highly varied stakeholder concerns (Saenz and Ostos, 2021) and help realise stakeholder acceptance (Dare et al., 2014). Consequent to these engagement features, both “credibility and trust” (after Boutilier, 2009) can be established.

3.2. Limitations and applications

The engagement categories we devised may strike as arbitrary and stylised, yet the pertinence of the legitimacy heuristic presented here lies in its ability to map what are often contentious SLO claims to key SLO legitimacy dimensions, thus enabling a determination of the genuineness of these claims. As a way of illustrating this and testing the value of the model as a meaningful SLO legitimacy heuristic, we apply the model to an industry case study.

4. Methods

4.1. Sample

The case study draws on fieldwork undertaken in south-eastern Kenya in February 2018 with local stakeholders about Base Titanium’s Kwale Cotton Project (KCP). This project became relevant for this research because since it began, in 2010, it experienced several contestations of legitimacy. Hence the interest in understanding how Base’s SLO claim moved up and down the legitimacy scale by assessing its contact quality with local stakeholders.

4.2. Data Collection

Qualitative data concerning the implementation of the KCP and assessment of its associated challenges were collected through semi-structured, in-depth interviews with key informants and semi-structured focus group discussions (FGDs) with smallholder farmers in the communities

adjacent to, and resettled by, Base Titanium's Kwale Sands Mining Project. Our qualitative approach (Boiral et al., 2019) included:

- Four small FGDs (3-7 participants) with executive staff from organisations involved in the project, including the farmer-owned social business (PAVI), Base Titanium and its non-government organisation (NGO) partner, Business for Development (B4D), as well as the Kenyan Agriculture and Livestock Research Organisation (KALRO).
- Two large FGDs with 15 agricultural extension officers in two sub-counties and three FGDs with 76 smallholder farmers from different villages.
- Three key informant interviews with the County Minister for Agriculture, the Director of Agriculture, and the Sub-County Administrator.
- Observation visits to PAVI and smallholder plots in a village adjacent to the mine site and resettled villages.

Not all farmers interviewed were beneficiaries of the KCP, which allowed us to capture a wide range of perspectives. Focus groups were conducted in the local Swahili dialect with a translator (who also spoke Digo when required), recorded, and transcribed with detailed notes taken in Swahili and English. As per university research ethics requirements, interview respondents signed a consent form before participating. Respondents participating in focus groups gave oral consent based on a culturally appropriate protocol approved by the University. Interviews lasted between 60 and 90 minutes and were conducted in English, recorded, then transcribed verbatim with extensive notes taken during each interview.

Early meetings were held with Base Titanium and B4D to understand the implementation of the KCP. Both organisations facilitated the research by providing a list of communities living

adjacent to the mine and those resettled and assisting with introductions to County officials and local organisations. In addition to the usual limitations of case study research, there were two limitations specific to this research context (Yin, 2017). First, if communities perceived that the researcher was working for either organisation, their responses may have been biased. Efforts were made to ensure that participants were informed about the researcher's independence from the organisations and the KCP and that they would not be impacted by participating (or not) in the research. Second, in addition of studying the SLO's dynamics, the empirical research was also addressing the issue of political licenses to operate vis-à-vis stakeholder experiences and perceptions of the KCP and its capacity to reduce poverty, increase food security and improve rural livelihoods sustainably.

4.3. Data analysis

For this article, the data were first analysed for themes pertaining to issues identified by stakeholders throughout the implementation of the KCP, contestations of legitimacy, and ways in which the organisation responded or not. Once the data were organised into themes (Denzin and Lincoln, 2018) in Excel, they were analysed for examples of contact quality using the SLO Legitimacy Model to understand how Base's SLO legitimacy can vary over time and how this is affected by changes in company-community interaction.

4.4. Case study

Base Titanium Limited (Base) is a subsidiary of Australian- and UK-listed resources company, Base Resources Limited. It operates Kenya's largest mine located in Kwale County (southeast), the flagship project under Kenya's Vision 2030 national development blueprint. The company largely enjoys political support at the county and national levels for its community engagement projects. On taking over the mining lease from Tiomin Resources in 2010, who had

resettled the local community without delivering the promised livelihood outcomes, Base commenced operations needing to regain its goodwill. Thus, between 2011 and 2012, Base finalised the commitments made by Tiomin for 13 corporate social responsibility (CSR) infrastructure projects and broadened its CSR programs to focus on health, agriculture, training, and education scholarships. B4D was appointed to design and implement a rural livelihoods development program (the KCP) centred on growing cotton and on integrating 15,000 cotton farmers by 2020 into the supply chain of global retailer The Cotton On Group.

5. Results

The empirical study found that, for legitimatizing its SLO by the local farming community, Base initially displayed two classical strategies: redistribution of resources and empowerment through employment. However, most importantly, the firm organised a system of committees that eventually helped it to take the temperature of contact quality and anticipate controversies and contestations. To illustrate this point, it is worth noting that prior to the KCP, Base met with farmers to learn about their livelihoods and what could be done to assist in developing their incomes outside the mine gate. The explicit intent of the KCP was to be responsive to farmers' needs, rather than to implement a generic CSR proposal.

5.1. Legitimizing the SLO in the first place

5.1.1. Fair compensation package

First, resources were redistributed via what Base deemed to be a fair compensation package for resettled households. To resolve the legacy land disputes, Base designed Resettlement Action Plans (RAPs) for those communities directly affected by the special mining lease (381 households), the Mukumudzi Dam (112 households), and the access road, water pipelines, and electricity lines (86 households). After the RAPs, the farmers received much higher

compensation than what they were demanding. The initial farmers' committee had put together a compensation request to Base for 50,000 shillings per acre (~US\$ 470). Base conferred with the Governor and offered the farmers a compensation package of 85,000 shillings (~US\$ 800) per acre. In addition, relocated farmers were paid a minimum compensation for 1.5 acres (even those squatting illegally on plots less than 1.5 acres).

5.1.2. Employment

Second, in terms of employment, Base guaranteed entry-level jobs at the mine site, which were allocated to resettled people and the immediate villages around the mine site. In addition, for developing a post-mining economy, Base organised in 2016 the Pamba and Viazi Cooperative (PAVI), wholly owned by low-income farmers in Kwale County. The Project trains small yield farmers in new farming and management techniques for diversifying and adding value to their production.

5.1.3. The steering committees

Although these projects might indeed seem conventional, they nonetheless enclose a feature, which makes them noteworthy in the context of this research: the steering committees. For instance, the process of mining hiring alluded to above was guided by the Agricultural Technical Committee (ATC): a formation of different stakeholders brought together by Base Titanium. The ATC is made up of representatives from Base, County officials, B4D, the PAVI cooperative, agricultural extension staff, Kinondo Bank, World Wildlife Fund, and KALRO. Additionally, ATC was implementing Base's Stakeholder Engagement Plan for the resettled farmers and the adjacent communities, and to oversee the Project. Base also established eleven Affected Stakeholders Committees across the special mining lease, the resettled communities, and those affected in the export area of Likoni. Alongside these are the three Sub-county Liaison

Committees² consisting of members from affected communities, religious leaders, and county government officials. More recently, an independent working group, The Kwale Mining Alliance Working Group (KMAWG), also formed in July 2019 by Transparency International Kenya and civil society organisations. It is composed of county government officials, civil society, members of affected communities and mining companies.

5.2. Managing slippery slopes on the legitimacy scale

Although Base has seemingly gained trust and consent from local farming communities and stakeholders, from time to time, there were lapses requiring Base to re-engage with the community over emergent issues. The appropriateness of Base's reaction to these issues dictates the movement of its SLO up and down the 'legitimacy thermometer'. An example of one such case was Base's subsidized testing of farmers' soil so farmers would understand their soil conditions for improved agriculture. Base collected soil samples from farmers (which involved digging a hole two inches deep) and sent them to a laboratory in Nairobi. On receiving the results, Base advised farmers about their soil conditions and which crops would be most suitable for their soil. A couple of years into the program, some farmers refused the soil testing upon the advice of a member of the County Assembly, who suspected that the samples might be used for mineral exploration instead of agricultural purposes. This issue came at a time when Base had applied for an exploration license near the Tanzanian border. Accordingly, Base needed to re-engage with the community and clarify that the proposed exploration site and the location of the agricultural activity were distantly located from one another and that the soil testing was thus unrelated to the exploration.

² The Msambweni Committee represents communities in the special mining lease area, the Matuga Committee represents those living in the Ukunda-Likoni transport corridor, and the Likoni Committee represents communities in the Likoni ship-loading facilities.

Another example involved the emerging issue of new resettlement projects being undertaken for an extensive railway development and a massive port project. Farmers who were resettled from the site of Base's mine began comparing their compensation of 85,000 shillings (~US\$ 800) per acre from nearly ten years earlier with the compensation people were being paid in 2017, which in some cases was as high as 2 million shillings (~US\$ 18,760) per acre.

To avoid the disintegration of community relations and risk the SLO issuance, Base maintains stakeholder engagement through the implementation of committee structures. The development of a community liaison committee structure is the interface of the company and the communities. Sub-county Liaison Committees are made up of 25 members, each representing three of the four sub-counties. Affected Stakeholders Committees consist of one made up entirely of Kaya elders for the protection of culture; these are smaller than the Sub-county Liaison Committees.³ While the committees are designed to funnel information both ways between Base and the communities, at times, the committees fail to disseminate information to the communities they represent.

In light of the case study data, the company's approach towards stakeholder engagement is directed towards quality community involvement with rural development as the basis of its CSR and where the engagement process is often shown to be responsive to community demands. These examples of contact quality arguably bode well for Base's SLO legitimacy.

5.3. Taking the temperature test

The subsequent application of the 'SLO thermometer' to the case of the Base Titanium Mine in Kenya enables us to show how SLO legitimacy can vary over time and how this is affected by

³ Sub-county Liaison Committees are similar to the new Community Development Agreements (CDA) Committees established under the new Mining Act of 2016. Once the CDA committees are established in Kwale, it is likely that Base will disband the Sub-county Liaison Committees and work with the newly formed CDA committees.

changes in company-community interaction. Data from the Base Titanium case study, summarised in Table 1 below, illustrate the urgency with which the company needed to invest in trust-building with local communities, given their negative experiences with the previous mine owner. The actions taken by the company, such as 135% compensation for relocated farmers, suggest a corporate willingness to build positive community relations. Thus, there is a strong indication that community stakeholder concerns —as here in relation to compensation— are not ignored but instead addressed in ways that exceeded local stakeholder demands. Base’s initial contact quality, and thus SLO legitimacy, can be seen to be above non-participation.

Insert Table 1 about here

Case study data suggest that Base deliberately engages stakeholders affected by mining activity to contribute to the decision-making processes of the Kwale Cotton Project. The company shares decision-making responsibilities on committees, giving affected stakeholders in the community the power to negotiate outcomes amenable to the community. However, it is worth noting that not all stakeholders affected by the mine will feel they have opportunities to be consulted on terms they regard as reasonable, nor will all stakeholders feel their individual concerns are dealt with or that their feedback is considered and acted on. We can surmise that this is why we see the recent emergence of the KMAWG.

The company’s engagement processes and their outcomes have enabled, to varying degrees, the redistribution of power to the farmers who were resettled and those who still live adjacent to the mine site. This form of power-sharing grants community members some level of agency over their destiny and forms the basis of community stakeholders granting an SLO. Farmers were

enabled to determine how decisions about their livelihoods are made and how the rural livelihoods program is operated. The community liaison committees are one example of delegated power, with the farmer cooperative representing a more sustainable example. Arguably, both represent some degree of citizen power on the legitimacy thermometer.

Insert Figure 3 about here

6. Discussion

6.1. Main contributions

The SLO legitimacy model presented here should be seen as a gauge of SLO legitimacy over time. The model's application to the case study highlights the dynamic nature of company-community relations as challenges to SLO legitimacy can arise, underscoring that the status of an SLO is not static (Boutilier, 2020a; Hurst et al., 2020). Overall, in light of the effectiveness of the company's stakeholder engagement efforts, contact quality established by Base appears to fluctuate between the mid to high range of the SLO legitimacy thermometer as engagement mechanisms seem to have responded well to emergent community concerns (see Figure 3).

Although the thermometer *per se* does not guarantee positive effects on an SLO's legitimacy, it nonetheless enhances both practitioners' understanding of existing issues and thus their capacity to respond. The legitimacy marker of this SLO model does not imply that robust, fair, and authentic SLO negotiations are necessarily conflict-free. To the contrary, conflict should be considered healthy, and it does not diminish a project's SLO (Gunster and Neubauer, 2019, 712) for as long as disagreements are managed appropriately (Eabrasu, 2018). If an SLO is breached,

“[c]ommunication and engagement are crucial factors in determining the outcome of any repair strategies ... [and] companies need to ‘walk the talk’, and thus show, tell, and deliver” (Hurst et al., 2020, 6).

The case study shows how ongoing community engagement can help identify challenges, such as community disquiet concerning soil testing, which otherwise would have fermented silently and possibly generated unforeseen contestations, thereby risking the loss of community trust and SLO legitimacy. The dialogue engaged in through steering committees did not only help Base to identify community concerns but also to build sustainable partnerships.

6.2. Research limitations

Before replicating this model to other case studies, two important limitations noticed during this research should be taken into account. One relates to Arnstein’s model itself: the asymmetry of knowledge can distort the accuracy of contact quality signalling (Gunster and Neubauer, 2019; Mercer-Mapstone et al., 2019). Both scholars and practitioners should be aware that the decisions of steering committees depend on the degree of informed consent of its members. Power-sharing is indeed a necessary but not sufficient condition for legitimizing SLOs. Even though they might be formally empowered, local communities do not necessarily make fully informed decisions. Whereas the dataset collected for this paper duly took into account the model’s caveat—as we made sure during the interviews that the consent of the steering committees members was reasonably informed— further replications of this model must be aware that the data input might suffer a cognitive bias (Maher, 2019).

The second limitation, is related to the dataset specificity. The case study introduced in this paper is obviously a unique snapshot over a given time span of a specific project. The dataset we collected did not allow us to extend the temperate test to the period prior to 2010 (before Base’s

taking over the mining lease from Tiomin Resources), and it does not prejudge the developments after February 2018 (when we concluded the data collection). During the interviews we noticed that references were made to pre-2010 conflicts and we could also interpret that the KMAWG, established in 2019, is meant to formalize the partnership. Yet, since these are mere suppositions, we had to set them aside for taking the temperature test. A critical limitation in applying this model for taking a legitimacy temperature test is to appropriately define the time frame. On one hand, it should be clearly defined, on the other hand, it should include critical situations for allowing the observation variations in the legitimacy temperature.

6.3. Implications for theory

With the above-mentioned precautions in mind, the limitations we encountered can be overcome by future research, thus opening new perspectives for SLO and for the sustainability research agenda more broadly.

While sharing of power through participatory schemes, as in the case of Base, cannot guarantee that steering committee members are not nudged or manipulated, it nonetheless helps curbing knowledge asymmetries. An adequate balance of power confers to local communities the possibility of delegating their competencies on specific issues to external stakeholders. This is especially useful when SLO controversies are spread widely across civil society, often owing to the nature of the resource a commercial operator might seek access to (e.g., coal, fisheries, forests) (Dare et al., 2014). The process is the central aspect in this regard, underscoring the relevance of contact quality as a legitimacy proxy, meaning that the authenticity of stakeholder engagement is more critical than the question of whether a project is approved or can progress. As argued by Mercer-Mapstone et al. (2019, 198), “dialogue processes should allow for the

possible outcome of development being ceased or having stringent rules and regulations on the activity that may curtail the activity.”

Moreover, it will be beneficial for SLO studies heading in this direction to connect with parallel academic streams, such as political science, discussing public participation. While most case studies in the SLO literature refer to private business operations, we cannot ignore that they operate in a political context and thereby within the area where public and private spheres overlap (Boutilier, 2020b). Consider that within an authoritarian political regime, the lack of contestation does not necessarily signal more public participation. The signal accuracy of “participation” in measuring the contact quality dynamics rely (amongst other parameters) on a political context authorising free speech. Furthermore, the operating within an area where public and private spheres overlap, also implies that public and private interests might collude. Further research could study the transactional relationships inside the committees, and see to what extent compensation, and possibly corruption, distort the accuracy of the signal sent by “public participation.”

As to the second limitation highlighted above, the data underpinning our case study limited the analysis to the actions initiated by Base for engaging with the local community, and to its reactions when facing critical situations. Yet, future studies that adopt the standpoint of the local community (Suopajarvi et al., 2020), could search for possible expectation gaps and point to possible solutions for closing them. Also, the geographical dimension should be taken seriously, especially in situations where an SLO might be legitimised locally while delegitimised at the societal level. A company’s attainment of an SLO across local, regional and societal scales would speak to the effectiveness of its stakeholder engagement practices (Mercer-Mapstone et al., 2019) and the successful closing of what has been described as the “Arnstein Gap” (Bailey

and Grossardt, 2010; Bailey et al., 2007): the difference between perceived and desired forms of stakeholder engagement.

6.4. Implications for cleaner production practice

The significant contribution of this paper to cleaner production practice is to show that the SLO vernacular employed by industry is not fatally ambiguous and that its precision can be enhanced for meaningful and concrete use. Within this perspective, the model presented in this paper is expected to strengthen the transparency of SLO processes and help pursue the dialogue between firms and their stakeholders in less ambiguous terms. Even though the threshold of empowering communities might be perceived as idealistic, too exigent, too challenging to be met in practice, practitioners must consider more pertinently discussions of the delegation of power in concrete terms of seat allocation in joint-committees and steering-groups instead of debating over an ambiguous idea of SLO.

This exercise of building and applying the SLO thermometer to an M&E industry case study can be further replicated to assess the SLO legitimacy of other enterprises and industries, and thus help practitioners to measure the contact quality of specific firms. In doing so, they are expected to gain a more precise understanding of where an enterprise sits on the scale of contact quality and, if necessary, take corrective action towards greater SLO legitimacy. The application of the thermometer to other cases should also contribute to a set of *better* practices and warning signals to anticipate slippery slopes. However, moving outside the M&E industry might require the translation of contact quality into the vernacular of other industries and possibly the fine-tuning the three Arnstein categories.

As to the question of whether SLOs can drive better sustainability outcomes, we would agree with Owen and Kemp (2013) that SLO is reliant on mainstream principles of CSR and as

such may suffer a similar fate of being a mere reputation and risk management tool (Owen, 2016). Not only has CSR —akin to SLO (Gunster and Neubauer, 2019; van de Biezenbos, 2019) —been criticised as a concept for being “too broad in its scope to be relevant” (Banerjee, 2001, 42), its wholesale adoption by industry to this day has not provided a clear indication of improved social and environmental performance outcomes (Halme et al., 2018). At the same time, however, in recognition also of plurality and participation being foundational sustainability principles (Palmer et al., 1997) and critical for effective sustainability transitions (Parris and Kates, 2003), the SLO concept may have potential through stakeholder engagement processes and consensus building to improve the management and conservation of environmental systems (Kelly et al., 2020; Kelly et al., 2017), drive procedural and distributional fairness (Baumber et al., 2019) as well as improve social relations and project outcomes (Mercer-Mapstone et al., 2017, 2019). While the full suite of relationships between community engagement and firms’ sustainability practices is not fully known (Boiral et al., 2019), any progress in the abovementioned areas can certainly be seen as a step in the right direction.

7. Conclusion

Our model as an SLO legitimacy heuristic offers a concrete answer to the question asked in the recent UNEP (2020) report on how SLO can enhance sustainability in the M&E sector. It holds promise to assist with the disentangling of what are often opaque and messy SLO conflict situations. Moreover, with the distinction between “tokenism” and “citizen power” in hand, we should be able to say when SLO is merely used for communication purposes and manipulating of public opinion and when it signifies a genuine partnership with those who are mostly concerned. Further refinement of the model along the lines suggested above would help shift both the academic SLO debate as well as industry praxis onto conceptually firmer ground and, in doing

so, render SLO a more effective tool for judging the social legitimacy of companies' operations and a possible vehicle for operational improvements.

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Figure 1: Arnstein's ladder of public participation. Adapted from Arnstein (1969, 217)

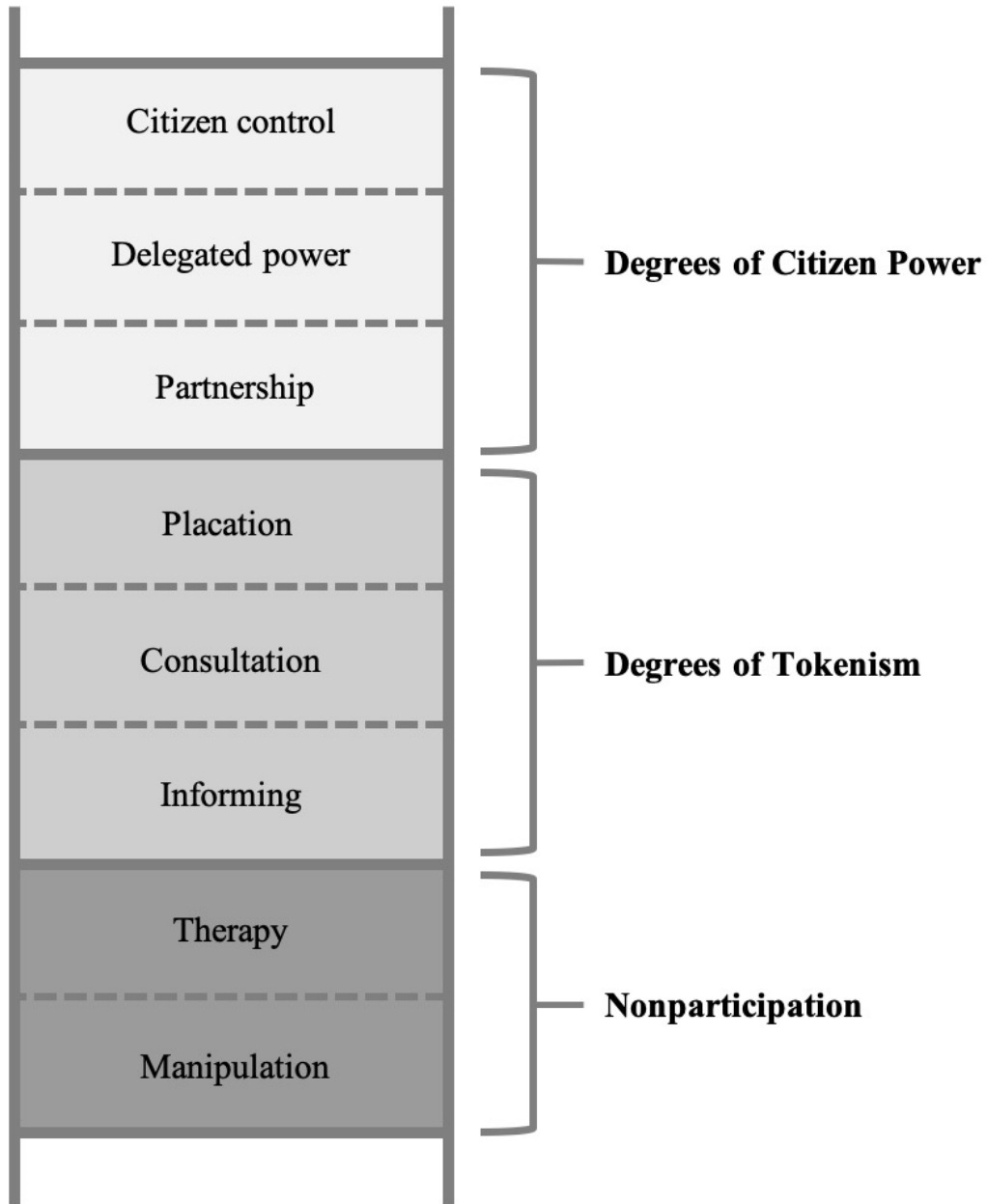


Figure 2: SLO legitimacy model

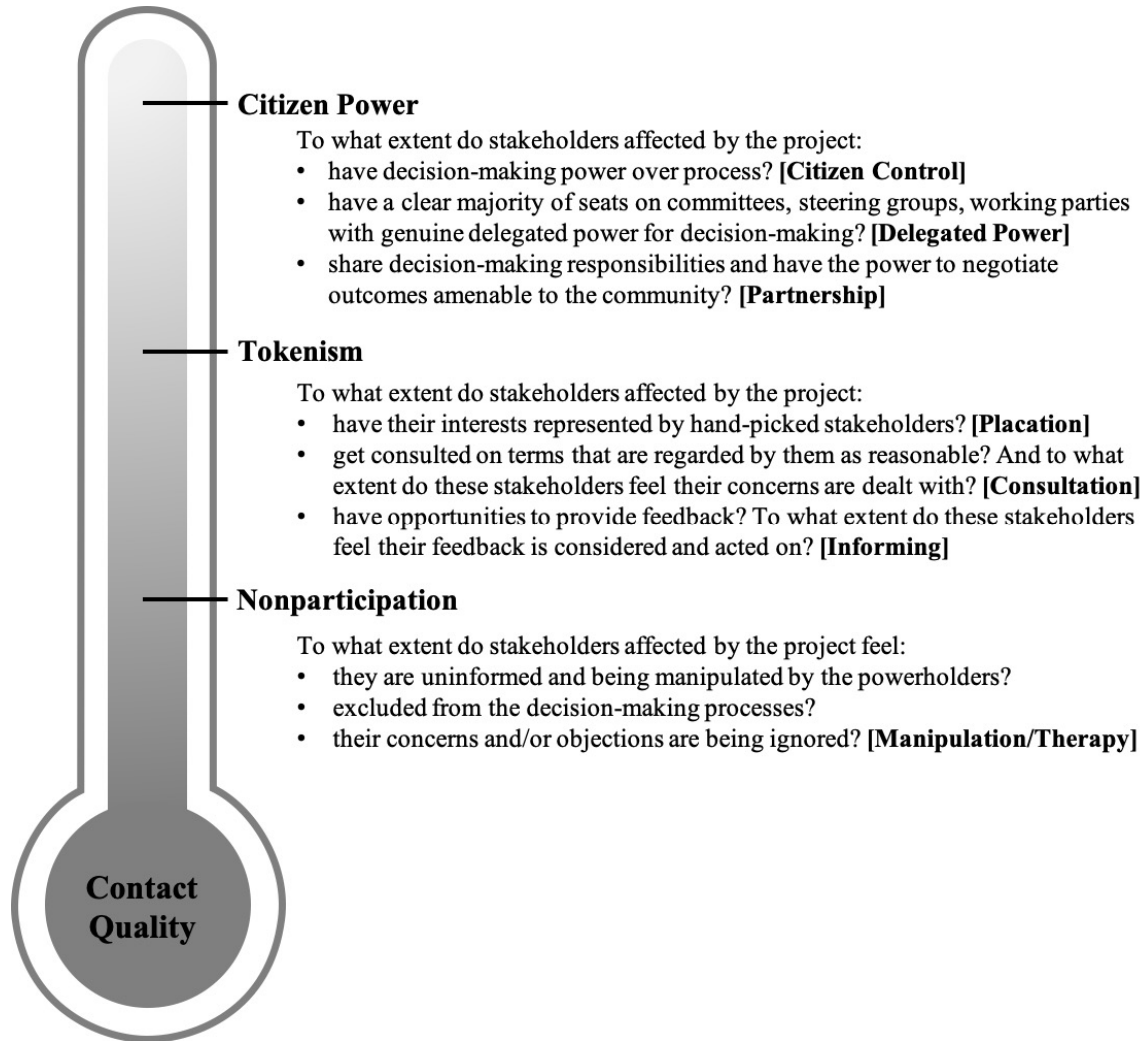


Figure 3: Dynamic of SLO legitimacy applied to Base case study (see Table 1 for the events corresponding to each number)

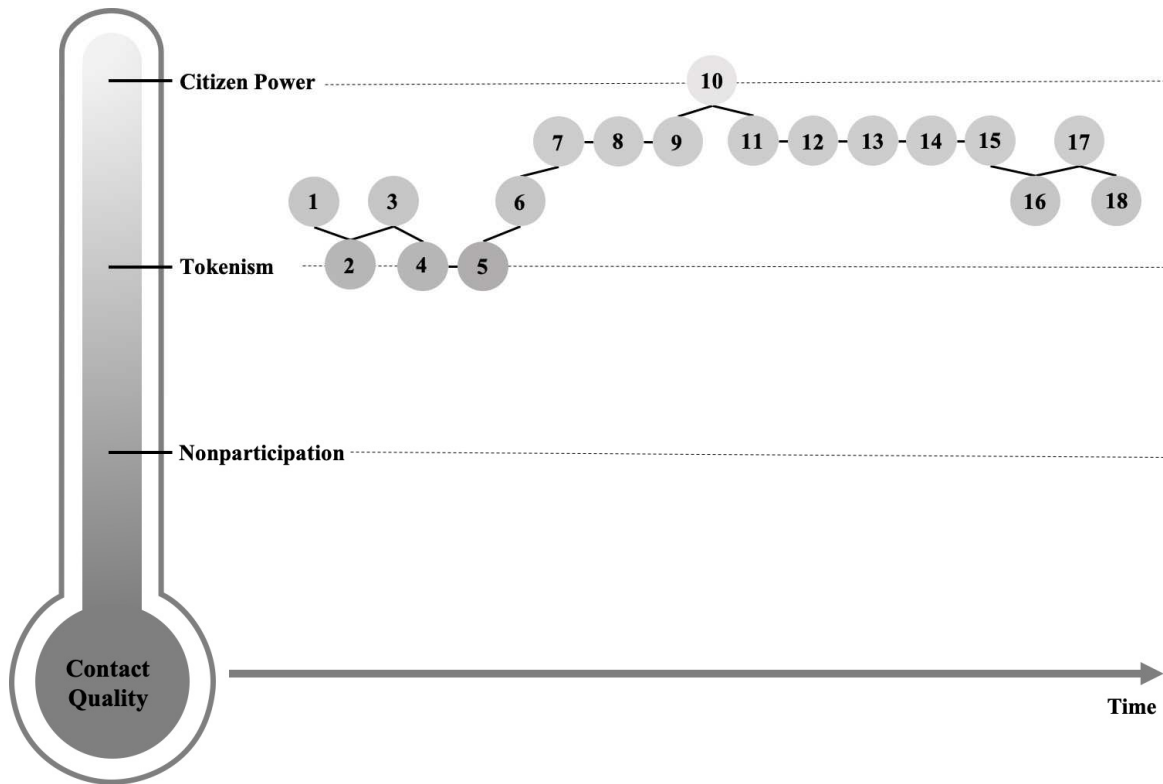


Table 1: Evolution of Base’s SLO legitimacy

No.	Contact Quality	Stated Intention	Base Stakeholder Engagement Actions
1	Placation	Regain the goodwill of resettled and neighbouring communities and government representatives	Finalised the commitments made by Tiomin for 13 incomplete CSR infrastructure projects
2	Consultation	Resolve the legacy land disputes	Implemented Resettlement Action Plans to determine compensation packages
3	Placation	Provide opportunities to work at the mine site for local people to gain experience and training beyond agriculture	Entry-level jobs at the mine site are allocated to resettled people and villages around the mine site
4	Consultation	Understand what type of CSR initiative could develop the incomes of local communities	Met with farmers to learn about their livelihoods
5	Consultation	Primary CSR goal to improve rural livelihoods through an agricultural project that is responsive to local needs	Implemented the Kwale Cotton Project (KCP) to train small yield farmers in new farming techniques
6	Placation	Establish a demonstration plot at Base to train volunteer	Piloted for the KCP

		farmers in new approaches	
7	Partnership	Build alliances at the County level	Collaborated with local communities form the Agricultural Technical Committee
8	Partnership	Work with existing local community structure rather than introducing a new one	Liaised closely with County agricultural extension officers to recruit and train nine volunteer farmers for the pilot
9	Partnership	Train more farmers in the new farming practices to expand the supply of cotton lint	Recruited volunteer farmers from the pilot as Field Assistants in the KCP
10	Delegated power	Implement a farmer cooperative wholly owned by low-income farmers	Established PAVI Cooperative
11	Partnership	Secure off-take agreements through PAVI to provide a ready market	Engaged The Cotton On Group as an off-take partner
12	Partnership	Advocate for local textile supply chain development in Kenya	Worked closely with Cabinet Secretary of Industry and Cooperatives
13	Partnership	Scale up to provide economic protections that the farmers	Trained farmers how to value add cotton seed into stock feed and

		need	edible oils		
14	Partnership	Implement community committee structures as a conduit between Base and communities	Established Stakeholders and three Sub-county Committees	11	Affected Committees and Liaison
15	Partnership	Support farmers to understand their soil conditions for improved agriculture	Brokered subsidised soil testing for farmers		
16	Placation	Respond to rising tensions concerning the soil testing	Provided information via Community Liaison Committees		
17	Partnership	Position cotton as a major economic driver in Kenya	Supported the government to brand cotton from Kenya and to work with Kenyan stakeholders to test and produce the best cotton suited to Kenyan conditions		
18	Placation	Ongoing community engagement and responsiveness to community concerns	Re-engaged with resettled farmers about their compensation packages		