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Sustainability Certification as Marketisation: Rainforest Alliance in the Sri Lankan Tea Production Industry

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Abstract

Unsustainable production is a root cause of numerous social and ecological problems. Whilst sustainability certifications face criticism for exacerbating greenwashing, comparative studies have identified improvements in social and ecological outcomes on certified farms. In this paper, we investigate the process by which a sustainability certification can enable a production industry to move beyond mere greenwashing. We conceptualise sustainability certification as a process of marketisation, organising economic activities within a production industry in ways that can enable new forms of thought and action. To examine this marketisation process, we study the case of Rainforest Alliance certification in the Sri Lankan tea production industry. We draw on an extensive six-month period of fieldwork, involving 74 semi-structured interviews with people working across the industry. We find that accounting devices deployed in this marketisation process create new visibilities within the industry to distinguish sustainability-certified tea as a marketable economic good, to equip producers to become economic agents capable of participating in markets for sustainability-certified tea, and to construct an economic exchange connecting supplies from certified tea estates with demands from ethically minded consumers. Our findings contribute to research on accounting for sustainable development, shedding light on the process by which, despite ongoing concerns regarding greenwashing, sustainability certifications can bring about positive impacts on social and ecological outcomes.

1. Introduction

Unsustainable patterns of consumption and production drive numerous social and ecological problems facing humanity (Bebbington & Larrinaga, 2014). Global markets are organised in ways that too often incentivise exploitation of workers, depletion of natural resources, and degradation of ecological systems (Burritt & Schaltegger, 2014; Lanka et al., 2017). Indeed, Goal 12 of the United Nations Sustainable Development Goals (UN-SDGs) challenges humanity to find ways to adopt more responsible forms of consumption and production.

> Economic and social progress over the last century has been accompanied by environmental degradation that is endangering the very systems on which our future development and very survival depend. If we don't act to change our consumption and production patterns, we will cause irreversible damage to our environment (UN, 2016, p. 1).

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Sustainability certifications purportedly aim to encourage consumers to make ethical purchasing decisions which, in turn, are meant to support producers to adopt more sustainable production practices (Eden et al., 2008; Tregidga et al., 2019). Extant literature has highlighted how sustainability certifications have, in many cases, contributed to corporate greenwashing, allowing companies to promote their products as being "sustainable" without having to actually make significant changes to their production practices (Constance & Bonanno, 2000; Elad, 2001). However, comparative studies of certified and non-certified producers find that sustainability certifications can have positive impacts on social and ecological outcomes, but with considerable scope for improvement (DeFries et al., 2017; Ochieng et al., 2013).

Motivated by the prospect that sustainability certifications can potentially become a more enabling force for sustainable development (cf. Bebbington & Larrinaga, 2014), we aim to study the process by which a sustainability certification can move a production industry beyond mere greenwashing.

We conceptualise sustainability certification as a process of marketisation (cf. Caliskan & Callon, 2010), organising economic activities within a production industry in ways that can enable new forms of thought and action. We use this conceptualisation as a theoretical lens to study Rainforest Alliance certification in the Sri Lankan tea production industry. Drawing on a six-month period of fieldwork in Sri Lanka, visiting numerous sites involved in tea production and conducting 74 semi-structured interviews with people working across the industry, we analyse the process by which this sustainability certification creates new capacities within the industry to address sustainable development challenges associated with tea production. Our key theoretical contribution in this study is to conceptualise sustainability certification as a process of marketisation, allowing us to focus our analysis on the specifics of how a sustainability certification deploys accounting devices in order to create new possibilities for organising production activities. This theoretical contribution advances research in accounting for sustainable development, shedding light on the process by which a sustainability certification can, despite ongoing concerns regarding greenwashing, bring about positive impacts on social and ecological outcomes (DeFries et al., 2017; Ochieng et al., 2013), thus becoming an enabling force for sustainable development (Bebbington & Unerman, 2018, 2020).

The remainder of this paper is structured as follows: the next section explains Bebbington and Larrinaga's (2014) vision for a research programme in accounting for sustainable development; section 3 explains our conceptualisation of sustainability certification as a process of marketisation; section 4 describes our methods of data collection and analysis; section 5 reports the findings of our analysis of Rainforest Alliance certification in the Sri Lankan tea production industry; section 6 discusses the implications of these findings for policy and future research; section 7 concludes the paper.

2. Accounting for Sustainable Production

Outlining their aim to make accounting research a force for sustainable development, Bebbington and Larrinaga (2014) argue that doing so will require accounting scholars to centre their work on the social and ecological problems facing humanity. This research programme is "motivated by a desire to keep open the possibility that the discipline of accounting might, under certain conditions, allow organisations to address sustainable development challenges" (p. 396). Furthermore, Bebbington and Unerman (2018, 2020) suggest that accounting research can be a key enabler of humanity's efforts to achieve the UN-SDGs.

UN-SDG 12 challenges humanity to find ways to "ensure sustainable production and consumption" (UN, 2016, p. 1). Pursuing more sustainable patterns of production and consumption, seeking out ways "to transform productive activities so that they might be less unsustainable" (Bebbington &

Larrinaga, 2014, p. 408), is central to the whole sustainable development agenda (see e.g. WWF-International, 2018). This is because unsustainable production, particularly in agriculture, drives many of the social and ecological problems that the UN-SDGs address, including poverty (UN-SDG 1), inequalities (UN-SDG 10), injustice (UN-SDG 16), climate change (UN-SDG 13) and degradation of ecosystems (UN-SDGs 14 and 15).

Unsustainable production practices are exacerbated by the way global trade can create very considerable distances between producers and consumers (Burritt & Schaltegger, 2014). Consumers often have little information about how products are produced, meaning that producer incentives tend to be geared towards maximising outputs and minimising costs (cf. Neu et al., 2014), leading them to drive down the pay and working conditions of employees, use ecologically harmful chemicals to artificially improve yields, and convert biologically diverse ecosystems to agriculturally productive (but biologically impoverished) land (Aznar-Sanchez et al., 2019). Whilst these kinds of actions may improve a producer's profits in the short-term, they are socially and ecologically unsustainable, not least because they destroy the ecosystem services that ultimately make agricultural production possible (Lanka et al., 2017; TEEB, 2010). Thus, the problem of unsustainable production results from a fundamental market failure, whereby producers are driven to pursue short-term profits at great long-term cost to society and nature.

> [M]arkets in which products are traded are viewed as having imperfections that will lead to either exploitation of the natural environment and/or impoverishment of producer communities (Bebbington & Larrinaga, 2014, p. 408).

Sustainability certifications, such as Rainforest Alliance, purportedly aim to better connect consumers and producers, encouraging more ethical consumer choices which, in turn, are meant to support adoption of more sustainable production practices (Eden et al., 2008). However, Tregidga et al. (2019) question the capability of some sustainability certifications to achieve this aim. Contrasting two sustainability certifications for bananas sold in New Zealand, and analysing the information made available to consumers about what these certifications represent, they find that consumers are unlikely to be able to judge the relative sustainability credentials of these certified products. In particular, they find that self-certification schemes, in which companies simply assert that their production practices meet certain sustainability standards, are fundamentally unhelpful for ethically minded consumers. In contrast, they suggest that third-party certification schemes, whilst not currently enabling consumers to make fully-informed ethical choices, do have "potential to work towards something more enabling" (Tregidga et al., 2019, p. 66). In third-party sustainability certification schemes, certification bodies set standards on various aspects of production, such as health and safety, worker welfare, human rights, wildlife protection, pollution, and emissions, which producers are expected to meet in order to become certified. Producers who wish to become certified are subjected to audit processes to ensure they can demonstrate how they have complied. Products sourced from certified producers may bear the eco-label of the certification body, supposedly signalling the product's sustainability credentials to the consumer. Whilst Tregidga et al.'s (2019) study focuses on the information made available to consumers, they call for research into how third-party sustainability certifications affect the practices of producers.

Extant literature shows how sustainability certifications can become vehicles for corporate greenwashing. Elad's (2001) study of Forest Stewardship Council (FSC) certification in the Congo basin rainforest analyses how a large logging company with a concession in Gabon navigates the audit process for FSC certification. He finds that certification shifts responsibility for the sustainable management of forests away from Gabon's forestry authorities, making it a matter instead for the management control systems of companies exploiting forest resources, consistent with a wider neoliberal approach to managing natural resources. Furthermore, he argues that the FSC certification eco-label allows this logging company to legitimise its operations in the Congo, even in the face of

fierce resistance from environmental groups and Gabon's own forestry authorities. Elad's analysis suggests that, in this case, sustainability certification amounts to little more than corporate greenwashing, having little material effect on actual production practices.

Likewise, Constance and Bonanno (2000) analyse the emergence of the Marine Stewardship Council (MSC) as a joint initiative of Unilever – "the world's largest buyer of frozen fish" (p.129) – and the global conservation charity WWF. They detail how the MSC met with considerable scepticism from numerous stakeholders in the fishing industry, with concerns that it was subverting the sovereignty of nation-States to manage their own fisheries, bolstering the power of large commercial fishing fleets over smaller vessels, and that a Western-based transnational corporation – one directly implicated in the global depletion of fish stocks – was able to impose its own values regarding what constitutes a sustainable fishery upon people living and fishing in developing countries. Constance and Bonanno thus suggest the emergence of the MSC allowed Unilever to perpetuate a set of institutional arrangements serving to consolidate and promote its own dominance in the market.

The way that sustainability certifications can shift responsibility and authority for managing natural resources from nation-States to corporations and NGOs can be amplified by the way sustainability certifications come to compete with each other (Raynolds et al., 2007). Certifications that are seen as being less onerous to producers have a distinct advantage, being more likely to be adopted by producers (see also Foley, 2017; Prado, 2013; Ruben & Zuniga, 2011). For these reasons, much extant literature depicts sustainability certifications as primarily serving corporations, allowing them to greenwash their products, offering little more than a legitimising veneer of sustainability to comfort Western consumers.

However, comparative studies offer a more optimistic view of sustainability certifications. In a survey of managers and employees on six tea estates in Kenya, of which three were Rainforest Alliance certified, Ochieng et al. (2013) find that certification was perceived to have improved some aspects of worker conditions and the environmental impacts of pollution arising from tea production. However, other aspects, such as worker housing and protection of native habitats, saw little or no difference between certified and non-certified estates.

> In this study, Rainforest Alliance Certification of Kenyan tea farms is demonstrated to be having a positive impact on a range of environmental and social aspects of certified farms, although with large scope for improvement (Ochieng et al., 2013, pp. 291-292).

Consequently, whilst Ochieng et al. (2013) recommend that all farms be encouraged to become Rainforest Alliance certified, they also caution that further work is needed to move certified estates towards a more comprehensive vision of sustainable production.

In a large systematic review of comparative studies, DeFries et al. (2017, p. 1) bring together the findings of 24 studies comparing social and environmental impacts for certified and non-certified farms across four sustainability certifications (Rainforest Alliance, Organic, Fairtrade, and UTZ) and three commodities (coffee, tea and bananas). Combining the results of these studies, so as to synthesise a combined dataset comprising 347 impact variables, DeFries et al. (2017) report that whilst 58% of impact variables showed no significant difference between certified and non-certified farms, 34% showed significant positive social and/or environmental outcomes from certification.

> These somewhat positive results indicate that voluntary certification programs can sometimes play a role in meeting sustainable development goals and do not support the view that such programs are merely greenwashing (DeFries et al., 2017, p. 1).

This systematic review therefore supports the view of Ochieng et al. (2013) that whilst sustainability certifications can have some positive impacts on the sustainability of production, the potential of such certifications is yet to be fully realised. Furthermore, in a review of interactions between corporations, governments and NGOs involved in sustainability certifications, Lambin and Thorlakson (2018) find some evidence that governments are increasingly engaging with processes of design and implementation to try to amplify realisation of positive social and/or ecological outcomes.

Consistent with Bebbington and Larrinaga's (2014) accounting for sustainable development research programme, we are motivated to analyse the means by which sustainability certifications can help address sustainable development challenges associated with production. We seek to understand the process by which a sustainability certification – in this case, Rainforest Alliance – can enable a production industry – in this case, the Sri Lankan tea production industry – to move beyond mere greenwashing. To do this, we adopt a theoretical lens from literature on marketisation, which we explain in the following section.

3. Sustainability Certification as Marketisation

The accounting for sustainable development research programme is predicated on the idea that accounting is what Miller and Power (2013, p. 558) call a "productive force". Rather than simply passively reporting on a pre-existing economic reality, accounting makes certain things visible and keeps other things hidden, influencing the conditions in which people think and act in the world (Hines, 1988; Hrasky & Jones, 2016). As such, accounting actively constructs the economic realities in which it operates (Hopwood, 1992; Russell & Thomson, 2009). Given this, the hope amongst researchers in accounting for sustainable development is that accounting can somehow render visible sustainable development challenges in ways that enable forms of thought and action conducive to addressing them (Bebbington & Unerman, 2018, 2020).

The accounting for sustainable development research programme, therefore, pursues a reformist agenda (Unerman & Chapman, 2014). Recognising that marketisation is a dominant force for organising global society, and that the urgency of sustainable development challenges necessitates a pragmatic approach (Baker & Schaltegger, 2015), accounting for sustainable development focuses on identifying how different forms of accounting can contribute to configuring economic markets in ways that make them more conducive to sustainable development (Cuckston, 2019).

Caliskan and Callon (2010) conceptualise marketisation as a process of constructing what they term socio-technical agencements. Agencement is a French word that translates loosely to the English word *arrangement*. But this translation does not fully capture how the term agencement connotes a sense that arranging heterogeneous elements in different ways can bring about the emergence of new social phenomena, new becomings (Gherardi, 2016). New possibilities for action are achieved through this open-ended process of making connections.

> [A]gencements are arrangements endowed with the capacity to act in different ways, depending on their configuration (Caliskan & Callon, 2010, p. 9).

Marketisation is thus described by Caliskan and Callon (2010, p. 9) as a process of arranging "human beings (bodies) as well as material, technical and textual devices" that can collectively calculate economic values and organise economic transactions. Constructing different arrangements of people and devices thus creates new possibilities for this collective calculating and organising.

A quintessential example of this is the construction of carbon emissions trading markets to address the sustainable development challenge of climate change (i.e. UN-SDG 13). This is a process of constructing vast new arrangements of heterogeneous elements that can collectively calculate a price for the right to emit a tonne of carbon dioxide and organise transactions in these rights between individuals, companies and countries (Lohmann, 2009). The dynamics of carbon emissions trading are determined, in large part, by the configuration of all manner of material, technical and textual devices making this calculating and organising possible (Callon, 2009). This marketisation of Earth's atmosphere purportedly aims to provide a way for the world's governments to act collectively to reduce overall global emissions and thus mitigate climate change (Cuckston, 2013; MacKenzie, 2009). Similar marketisation processes are deployed in efforts to address other sustainable development challenges, such as biodiversity loss (Tregidga, 2013) and declining fisheries (Holm & Nielsen, 2007). Whilst such marketisation processes tend to be highly controversial, being prone to accusations of greenwashing (Andrew et al., 2010; Cuckston, 2018a), the purported rationale is to mould the mechanisms of capitalism towards better social and ecological outcomes, bringing society closer to some kind of sustainable development (Cuckston, 2018b; Sobkowiak et al., 2020).

In this paper, we conceptualise sustainability certification as a marketisation process constructing socio-technical agencements that can enable action towards addressing sustainable development challenges associated with production. To allow us to analyse the role played by accounting within this marketisation process, we adopt Skaerbaek and Tryggestad's (2010) definition of an accounting device as being any kind of material entity that provides some kind of visual display that in some way informs economic calculations or judgements (cf. Latour, 1987). In line with Muniesa, Millo and Callon's (2007, p. 2) observation that "devices do things […]; they act or they make others act", accounting devices create visibilities that influence how economic actors see the world and act accordingly. For example, Warren and Seal (2018) conceptualise the Discounted Cash Flow model of investment appraisal as an accounting device creating new visibilities within the UK electricity generating industry and constructing socio-technical agencements that subsume issues of security of supply within financial calculations, leading to greater potential for supply disruption and power cuts. Accounting devices can thus play vital roles in constructing the socio-technical agencements comprising economic markets, creating new possibilities for how these markets influence the societies in which they operate (Cuckston, 2017, 2018c; Vosselman, 2014).

Sustainability certifications deploy numerous accounting devices. The most striking of these is the eco-label shown on the packaging of certified products. The Rainforest Alliance eco-label, for example, provides a visual display – the green frog logo (see figure 1) – that consumers are invited to use to inform their economic judgements about which products to purchase.

Figure 1. Rainforest Alliance eco-label: 'Our green frog certification seal indicates that a farm […] has been audited to meet standards that require environmental, social, and economic sustainability' (Rainforest Alliance, 2019).

As identified by Tregidga et al. (2019), consumers are often also able to access another accounting device, namely the sustainability standard(s) that producers of certified products are supposed to comply with. The text of the standard(s) provides a visual display that can inform a consumer's economic judgements. This text should also, in principle, inform the economic judgements of producers as they seek to demonstrate their compliance. However, as Tregidga et al. point out, consumers tend largely to be left in the dark about how these standards actually affect production practices on the ground.

Conceptualising sustainability certification as a marketisation process opens up opportunities for analysing how other kinds of accounting devices can be deployed in the construction of socio-technical agencements addressing sustainable development challenges associated with production. Callon and Muniesa (2005, p. 1229) suggest that marketisation involves somehow constructing what they call the "three constitutive elements of markets: economic goods, economic agents and economic exchanges."

Firstly, the construction of economic goods is a process of identifying a set of stable qualities that define the products being traded, making it possible for such products to be meaningfully compared with others and valued accordingly. For sustainability certifications, this process involves identifying those qualities that define a certified product, distinguishing it from a non-certified product. To construct the sustainability-certified product, this marketisation process will need to somehow delineate what it means for a product to be deemed to have been produced sustainably.

Secondly, the construction of economic agents is a process of equipping market actors to clearly see and understand their own interests in the constructed economic goods, enabling them to act accordingly. For sustainability certifications, this process involves equipping producers to clearly see and understand their own responsibilities and capacities in respect of producing certified products. To construct a sustainability-certified producer, this marketisation process will need to somehow delineate what these producers can control to move their production practices towards sustainability.

Thirdly, the construction of economic exchanges is a process of somehow bringing together and aggregating supplies of the constructed economic goods with demands for these goods, allowing for prices to be calculated and agreed. For sustainability certifications, this marketisation process thus somehow needs to connect supplies from producers of sustainability-certified products with demands from ethically minded consumers who want to make responsible purchasing decisions.

In our study of Rainforest Alliance certification in the Sri Lankan tea production industry, we use Callon and Muniesa's (2005) articulation of marketisation, as being the construction of these three constitutive elements of markets, as a theoretical lens for our analysis. Accordingly, we seek to explain how the sustainability certification marketisation process constructs socio-technical agencements within a production industry that can enable action towards addressing social and ecological problems.

4. Methodology and Methods

In order to pursue our research objective, we have adopted an interpretive approach to our research design, which encourages researchers to seek to explain how particular social phenomena are defined and constructed by the actors involved (Chua, 1986). Within this interpretive approach, social reality is understood to emerge from, and be created by, the interactions of actors. It is an approach that 'seeks the actor's definition of the situation and analyses how this is woven into a wider social fabric' (Chua, 1986, p. 618). Rather than seeking to impose some particular notion of how people should see

the world, the imperative in interpretive research is to draw out how a person's view of the world shapes, and is shaped by, their own actions. In doing so, interpretive research can 'enrich people's understanding of their actions' (Chua, 1986, p. 615).

In line with the work of Callon and Muniesa (2005) and Caliskan and Callon (2010), our ontology comprises both human and non-human actors – i.e. people and devices – interacting in ways that collectively achieve particular forms of action. Our interpretive approach to the study of marketisation therefore sees economic markets as emerging from, and being created by, the interactions of people and devices (cf. Callon, 1998). Our imperative is not to impose some particular critical view of the marketisation process, but rather to draw out how the actors involved make sense of their own roles in this process. For human actors, this interpretive work requires conducting in-depth interviews to enquire how these individuals see and understand their actions. For devices, we are able to directly examine how these are constructed to make certain things visible in ways that can influence the actions of people. Bringing these together, we can build up a picture of how these interactions collectively construct the social reality of Rainforest Alliance certification in the Sri Lankan tea production industry.

To collect data to inform our analysis, the lead author embarked on an extensive six-month period of fieldwork in Sri Lanka, from February to July 2015. This involved visiting sites involved in different aspects of tea production, including tea estates, smallholdings, tea processing factories, government offices, the offices of regulatory agencies, the offices of local representatives for Rainforest Alliance, tea research laboratories, company offices, auditors' offices, brokers' offices, and the Colombo Tea Auction. During fieldwork, 74 semi-structured interviews were conducted, aimed at establishing each interviewee's sense of their own role within the Sri Lankan tea production industry and their perceptions of how Rainforest Alliance certification has affected this role. The numbers of interviewees categorised by role are shown in table 1.

Interviewee category (designation)	**Number of organisations**	**Number of interviewees**
Buyers/exporters (EC 1-5)	5	
Managers (EC.M 1-8)		8
Producers (MC 1-8)	8	
Managers (MC.M 1-27)		27
Workers (MC.W 1-8)		8
Community (MC.C 1-2)		2
Tea Brokers (BC 1-5)	5	
Managers (BC.M 1-9)		9
Legal/industry/certification institutions (L 1-9)	9	
Managers (L.M 1-22)		22
Total	**27**	**74**

Table 1. Number of interviewees categorised by role in the Sri Lankan tea production industry

Interview length ranged from approximately 30 minutes to approximately 110 minutes, with the average length being approximately 60 minutes. With the consent of all interviewees, interviews were recorded and transcribed. Interviews were conducted in either English or Sinhala. To aid collaboration

amongst co-authors, all interviews conducted in Sinhala were translated into English by the lead author at the point of transcription. Where possible, relevant documentation was also collected to help support the analysis of the interview data. These included copies of relevant standards, Rainforest Alliance reports, company policies and records, and certification audit documents. Photographs of relevant features and/or events observed during fieldwork were taken where permitted. Full ethical clearance was obtained from the relevant ethics committee at the authors' institution prior to commencement of fieldwork.

We analysed the interview transcripts and documents using a thematic analysis approach, providing a structured means of identifying and elaborating points of connection between our extensive dataset and our conceptualisation of sustainability certification as a marketisation process (Braun & Clarke, 2006). We first annotated the texts with descriptive codes to identify aspects of the data pertinent to explaining the marketisation process. We then used Callon and Muniesa's (2005) articulation of the three constitutive elements of economics markets – i.e. economic goods, economic agents, and economic exchanges – to collate these descriptive codes into key themes concerning each of these elements. This involved an iterative process of going back and forth between the dataset and the marketisation literature, refining themes and relations between themes. The final thematic structure that resulted is shown in Appendix 1. From this analysis, we synthesised accounts explaining how themes identified in the dataset illuminate aspects of the marketisation process in respect of each of Callon and Muniesa's (2005) three constitutive elements. We focus these accounts on specific instances illustrating these elements. We have not sought to account for all of the effects of Rainforest Alliance certification in the Sri Lankan tea production industry. Rather, we have sought to highlight the ways that Rainforest Alliance certification has elicited new interactions of people and devices within the Sri Lankan tea production industry, creating new possibilities for thought and action. These synthesised accounts explain how Rainforest Alliance certification, through constructing these three constitutive elements of economic markets, can enable the Sri Lankan tea production industry to move towards addressing sustainable development challenges. These synthesised accounts are presented in the following section.

5. Rainforest Alliance Certification in the Sri Lankan Tea Production Industry

The Sri Lankan tea production industry produces approximately 340 million tonnes of tea leaf each year. The industry comprises both large-scale plantation tea estates, operated by private companies under lease from the national government, and smallholder producers. Tea estates consist of multiple tea fields, interspersed with areas for housing and other facilities, sometimes including so-called "mini jungles" (MC2M11). Tea estates often have their own factory for processing the tea leaf into black tea ready for blending and/or packaging. Smallholders grow tea leaf on their own land, which is then normally sent for processing at a privately-owned tea factory. When the processed leaf is sold at auction, the smallholder is entitled (under national law) to 68% of the sales price. Rainforest Alliance certification can be achieved by tea estates, administered by their operating company, and smallholders, administered by the privately-owned factory that processes their leaf. At the time of our field research, no privately-owned tea factories were administering Rainforest Alliance certification for smallholders. We have therefore focussed our analysis on the sustainability certification marketisation process involving large-scale plantation tea estates.

In the following three subsections we will explain our findings concerning how this sustainability certification has constructed new socio-technical agencements within the Sri Lankan tea production industry, comprising each of Callon and Muniesa's (2005) three constitutive elements – economic goods, economic agents, and economic exchanges – creating new capacities within the industry to address sustainable development challenges associated with tea production.

5.1. Economic goods

The process of constructing a sustainability-certified product involves somehow identifying the specific tea production practices that are meant to distinguish sustainably produced tea as a marketable economic good.

In order to become certified, a tea estate will need to demonstrate to its auditors that it complies with the Rainforest Alliance's *Sustainable Agriculture Standard*[2]. The Standard is comprised of ten principles covering various social and environmental aspects of agricultural production, including fair treatment of workers, occupational health and safety, ecosystem conservation, wildlife protection, and soil management. Principle 1 states that certified estates "must have a social and environmental management system […] that contains the necessary policies, programs and procedures that prove compliance with this standard and respective national legislation binding for social, labor and environmental aspects" (SAN, 2010, p. 12). The social and environmental management system (SEMS) requires tea estates to interpret the generic principles of the Sustainable Agriculture Standard (which are written to be applicable to all manner of crops grown in all manner of socio-economic contexts) to their own particular production activities. The SEMS is thus an accounting device that producers must construct in order to show how they specifically aim to comply with the Sustainable Agriculture Standard.

In interviews, estate managers consistently highlighted the environmental aspects of the Sustainable Agriculture Standard as being the most onerous for them. Sri Lanka's plantation tea estates were originally established by clearing old growth forest, leaving small patches of forest capable of supporting the native wildlife.

> Most of Sri Lanka's plantations are located around the forest boundary and there are a lot of mini jungles inside the plantations. They are very rich in biodiversity (L8M1).

However, there is a clear sense within the industry that these remnant ecosystems are under threat. One major factor is that greater use of chemical pesticides and herbicides has visibly harmful effects on the natural environment.

> In the streams today you don't get a small fish or a small frog. There is nothing to be seen. Why? Because [tea estates] are using so much chemicals (L1M3).

Meeting the environmental aspects of the Sustainable Agriculture Standard has required additional efforts and resources by estates. In interviews, estate managers highlighted how the process of developing and writing the policies, programmes and procedures constituting their SEMS has influenced how they perceive their own production activities and how they think about what they are trying to achieve on their estate. As estate managers document and formalise their practices within their SEMS, they construct an accounting device that renders these practices visible in a way that impels reflection on what is done and what can be done differently.

One aspect of this is that estate managers articulated how the act of recording and reporting their practices within their SEMS has the effect of making much more explicit those things that have traditionally been understood to represent good agricultural practices, but which over time have become overlooked. By formalising these good agricultural practices within their SEMS, estate

[2] The Sustainable Agriculture Standard is written and administered by the Sustainable Agriculture Network (SAN), of which Rainforest Alliance is a member. Rainforest Alliance have an 'exclusive and perpetual licence' (Rainforest Alliance, 2019) to use the SAN Standard as the basis of their sustainability certification.

managers say they become more consciously aware of the importance of ensuring these good practices are consistently adhered to.

> With this type of certification we are organised. Earlier we did many of these things. We had our own forest patches, we were maintaining all these ecosystems […] but we didn't know that's what we were doing. […] So now when we are doing it for certification, we are doing it as well as recording it. Then we know we are doing it. If we miss in one place we can correct it and we can see results out of it (MC4M1).

> Good practices were there but gradually they have been destroyed. But with these certifications they are coming up again, and that is good (MC2M11).

One of the measures in the standard aimed at tackling water pollution from agricultural chemicals is a requirement to protect aquatic ecosystems by "establishing protected zones on the banks of rivers, permanent or temporary streams, creeks, springs, lakes, wetlands and around the edges of other natural water bodies" (SAN, 2010, p. 14). In their SEMS, estates need to interpret these standards so as to apply them to their particular production activities. Figure 2 illustrates how one tea estate represents these protected buffer zones in its SEMS.

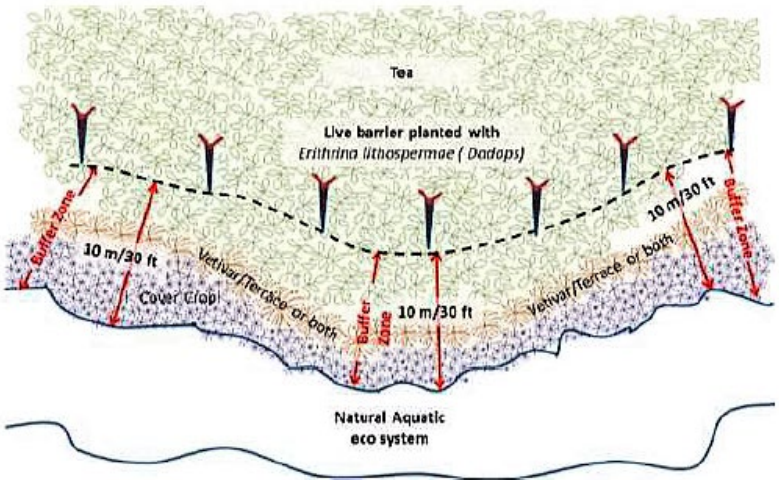

Figure 2. A diagram drawn as part of a tea estate's SEMS, interpreting the Sustainable Agriculture Standard on protected zones around aquatic ecosystems. The diagram shows that, where there is insufficient space between an aquatic ecosystem and a tea production area, then the protected buffer zone should be marked by planting a particular tree species, to show agrochemical sprayers that they must not spray beyond this boundary.

This interpretation then serves as a manual for managers on the estates to apply to particular aquatic ecosystems. The SEMS thus acts upon the material configuration of the tea estate by requiring the positioning of buffer zone markers within the tea fields. This, in turn, acts upon production practices, with managers instructing estate workers not to spray chemicals beyond the markers. The SEMS, the buffer zone markers and the workers form part of a socio-technical agencement collectively capable of reducing the amount of chemicals that pollute aquatic ecosystems.

Another aspect of the influence of developing the SEMS is the way it requires estate managers to identify and demonstrate compliance with relevant national laws and regulations. Interviewees working in Sri Lanka's regulatory authorities expressed frustration that whilst Sri Lanka has some

strong environmental laws, the regulatory authorities do not have sufficient resources or political support to implement these laws properly on the ground.

> The local authorities do not go to the tea estates. […] They can file cases according to the Environment Act. But there is no monitoring system. The problem is there (L6M1).

Estate managers highlighted how they had sometimes learned about their environmental responsibilities under Sri Lankan law for the first time during the process of developing their SEMS. For example, one estate manager pointed out that buffer zones around natural watercourses are actually required by the Sri Lankan Environment Act, but that regulatory authorities had rarely enforced this requirement. The process of developing the SEMS means that estate managers have had to take it upon themselves to ensure compliance with this law, even in the absence of pressure from regulatory enforcement.

> If you follow Sri Lankan laws, we don't need any of these certifications. […] No one knows about that. Even I knew only after this certification […] Because of this certification we got to know most of these things. Because of that we are doing it (MC4M1).

In this way, the development of a SEMS, required by the Sustainable Agriculture Standard, acts to raise estate managers' awareness of national laws and regulations, providing new impetus to improve compliance. This process of constructing the SEMS for their estate thus compels estate managers to explicitly reflect on their compliance with Sri Lankan law. In respect of aquatic ecosystems, estate managers suggested such reflection strengthened their sense of civic responsibility to reduce chemical pollution.

> When you take the plantation sector, it is the watershed of the country. If you can protect the water from this area then you are serving the entire country (MC4M1).

The construction by estate managers of the SEMS device for their estate is a crucial part of the process of distinguishing sustainably produced tea as a marketable economic good. In constructing the SEMS, estate managers are compelled to explicitly document their production practices and reflect on how the principles set out in the Sustainable Agriculture Standard can be brought into these production practices. The SEMS essentially articulates what it means for a tea estate to be producing tea in a way that can be deemed (by Rainforest Alliance) to be sustainable. In this specific context, not all aspects of the Sustainable Agriculture Standard were used to distinguish sustainably produced tea as an economic good. Principles relating to agroforestry, are regarded by estate managers as inapplicable given tea is not an agroforestry crop. Other aspects, such as worker pay, are seen by estate managers as being beyond the scope of their SEMS, because pay is negotiated in collective bargaining agreements at the national level. A regulator in the tea industry explained that workers' unions in the tea industry are in quite a strong position to make demands in these national-level negotiations.

> When they go on strike, unlike other crops you have to maintain the tea plant – every seven days you have to pluck – otherwise it will overgrow. Once it overgrows, if you cut it you have to wait another 3 weeks to get something (L2M1).

Therefore, the very nature of tea production, combined with a highly organised unionisation of the labour force within the industry in Sri Lanka, means that estate managers feel they do not need to directly address issues of worker pay when constructing their SEMS. What is deemed to be a marketable economic good is therefore contingent and context-specific. By acting upon the material configuration of the tea estate (e.g. buffer zone markers), and upon the managers and workers within the estate, the SEMS accounting device is central to building socio-technical agencements capable of addressing sustainable development challenges (e.g. protecting aquatic ecosystems).

5.2. Economic agents

The construction of a sustainability-certified producer, as an economic agent capable of participating in markets for sustainability-certified products, involves somehow equipping producers to clearly see and understand what they are able to control to move their production practices towards being deemed sustainable.

Whilst estate managers develop their own SEMS, particular to their own specific production activities (see section 5.1 above), interviewees also highlighted an industry-wide learning process, whereby a representative of Rainforest Alliance in Sri Lanka helped producers to collectively develop a clearer sense of what is expected of them in order to be deemed to be producing tea sustainably. TeaCo[3], a multinational company that owns tea estates in Sri Lanka and sells teas packaged under its own brand, was the first to adopt Rainforest Alliance certification for its estates, in 2010, in order to help promote the company's purported ethical values and commitment to sustainability. As an early adopter, its managers faced having to interpret the Sustainable Agriculture Standard for themselves with very little support.

> We were told [by TeaCo head office] that it can't be just going for another certification, for compliance, […] we have to use it for behaviour change. So a lot of effort had to be made to find out how we should adopt it into the Sri Lankan context. That is why it took nearly 18 months for us to work towards certification, […] because early adopters take that risk (MC1M2).

One major difficulty encountered by early adopters was how to deal with activities of people occupying housing on a tea estate, but who are not employed by the estate. The Sustainable Agriculture Standard specifies that all activities within the estate's boundaries are to be taken into account in determining compliance with the standard.

> The scope of the certification audits is the farm, which is defined as the production unit subject to an audit. It includes the whole farm, its infrastructure, processing and packaging areas, conservation and housing areas (SAN, 2010, p. 5).

In this way, the accounting entity for Rainforest Alliance certification is identified here as including all activities that take place within the tea estate boundaries. However, in Sri Lanka, the government has granted residency rights to people living in estate houses. This means that many people who live inside the estate boundaries do not work on the estate, or indeed have any other connection with the estate. As a result, the companies that operate the tea estates have very limited control over the activities of many of the people living there.

> In all other countries, when a worker retires, when they finish their employment, they have to leave the house and go out of the estate. […] But here they do not leave. […] More than 50% of the estate population are non-workers (L8M3).
>
> Here in Sri Lanka, I think housing neither belongs to us or them. In Sri Lanka, if we give a house to someone we can't chase them. Only 16% are working. All others are non-workers (MC2M2).

Thus there is incomplete overlap between the activities for which the tea estate is responsible (i.e. the accounting entity for certification) and the activities over which the estate actually has control.

[3] We have changed the name of this company to help maintain the anonymity of our interviewees.

Indeed, estate managers highlighted various issues where non-workers living on the estate are engaging in activities that are not allowed under the Sustainable Agriculture Standard. One of the most commonly cited activities was the use of banned agrochemicals for growing produce that they can sell at local markets.

> In any estate you can see so many vegetable gardens. These are encroachments. […] They are using banned chemicals inside the estate. That is a very big problem (L8M3).

In response to these issues, which are specific to the Sri Lankan context, some of the tea estates and their international buyers, facilitated by a Sri Lankan Rainforest Alliance representative, formed a working group to develop a Local Interpretation Guideline (LIG) for the Sri Lankan tea production industry. A LIG is described by Rainforest Alliance as "important for implementing good agricultural practices on farms and […] interpret[ing] the binding criteria of the standard for local conditions and/or a specific crop" (SAN, 2014, p. 3). The LIG for the tea production industry in Sri Lanka is thus an accounting device that makes visible the specific responsibilities of tea estate managers seeking Rainforest Alliance certification for their estates. It equips estate managers to clearly see and understand the aspects of tea production over which they are expected to have control. This LIG addresses the issue of non-workers living on tea estates using banned chemicals on smallholdings within the estate boundary.

> Estates DO NOT have control over the activities of individual small-scale holdings on their land. […] Any activity with regard to these small scale holdings are well documented by estate management and estate management is in a position to proof [sic] that they seriously attempted within their mandate and means to sensitize the operators of these small scale holding[s] on the objectives and requirements of the SAN Sustainable Agriculture Standard. If required, estate management reports conflicts with these small-scale holdings to the responsible authorities and keeps a record of the respective communication (SAN, 2014, p. 6, emphasis in original).

Following the LIG, estate managers pursuing Rainforest Alliance certification must therefore document their efforts to educate non-workers within the estate boundaries about issues such as banned chemicals, and report infringements of laws and regulations to the appropriate regulatory bodies. Estate managers spoke in interviews about how they use various techniques for educating non-workers, including poster campaigns, essay competitions, art competitions, and street dramas (see figure 3), often seeking to influence families through programmes with school children as "they are the best ambassadors" (L8M3).

Figure 3. Photograph of a street drama performed by children living on a tea estate

The estates then ask non-workers to sign a document agreeing that they have been educated on these issues. Where non-workers within the estate boundaries continue to use banned chemicals, these instances are reported to the Sri Lankan Registrar of Pesticides so that "they can take actions and can sue them" (L8M3). In this way, the Rainforest Alliance certified tea estates appear to take on the role of a kind of enforcement agency for Sri Lankan laws and regulations.

The construction of a LIG for the tea production industry in Sri Lanka has the effect of equipping estate managers to clearly see and understand their own responsibilities and capacities to control activities within the estate boundary. By closing the gap between the activities for which the tea estate is responsible under the Sustainable Agriculture Standard (i.e. the accounting entity for certification) and the activities over which they actually have control, the LIG plays a crucial role in constructing the sustainability-certified producer as an economic agent capable of controlling production practices in ways conducive to addressing sustainable development challenges.

5.3. Economic exchange

The process of constructing an economic exchange for sustainability-certified tea involves somehow connecting supplies from certified tea estates with demands from ethically minded consumers, allowing for these to be aggregated so that prices can be calculated and agreed.

By law in Sri Lanka, almost all bulk tea[4] produced in the country is sold via the Colombo Tea Auction. Tea estates send their product to one of eight brokers. Each broker has their own catalogue (each printed on different coloured paper), compiled each week from the consignments they have available to sell. These catalogues are distributed to buyers, along with samples of each consignment. Buyers use their own expert tea tasters to assess the quality of each sample against their own particular criteria for aspects such as colour, taste and aroma. They then mark the catalogues with their own valuations of each consignment to guide their bidding at the auction. Where consignments have come from estates with sustainability certifications, such as Rainforest Alliance, the brokers include an identifying mark in the catalogues (see figure 4).

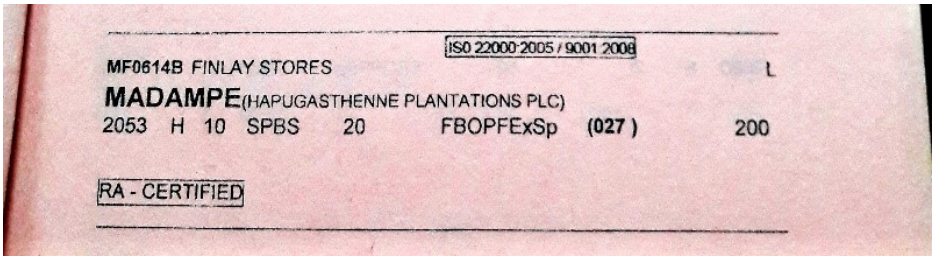

Figure 4: Extract from a tea catalogue at the Colombo Tea Auction. Rainforest Alliance certified tea is marked in the catalogue as "RA - CERTIFIED".

For those buyers exporting tea to Western consumer markets, particularly Europe, Japan and Australasia, where sustainable production and consumption is a prominent issue, the identifying marks for sustainability certifications in the broker catalogues act as an accounting device, providing a visual display that these buyers use in their economic judgements about how to bid on tea consignments. The mark in the brokers' catalogues is not the same eco-label display included on consumer packaging, but it serves a similar purpose, as an accounting device that communicates the sustainability credentials of particular economic goods. In interviews, buyers exporting to Western

[4] Tea that is packaged and branded in Sri Lanka may be directly exported without going through the auction.

markets indicated that quality criteria are the primary consideration in valuations, but that sustainability certifications such as Rainforest Alliance make a consignment more desirable.

> I think with or without certifications, tea has to have quality. If you want it to sell, it has to have quality. But these certifications bring social responsibility. […] If these are mixed together, if there is a happy balance, then this is good tea ethically produced (EC2M1).

The emphasis by buyers on tea quality as a basis for market valuations has been picked up by Rainforest Alliance representatives, who promote the idea that tea produced by sustainability-certified estates is likely to be of higher quality, due to a more systematic approach to production required by the Sustainable Agriculture Standard.

> Being Rainforest Alliance certified indicates that you are committed to quality. […] Farmers become better farmers. So in that way they increase their quality (L8M2).

As a result of increased demand from Western buyers, there was a strong perception amongst interviewees that Rainforest Alliance certified teas attract better prices at auction.

> According to the brokers, they say that when a factory has Rainforest Alliance certification, buyers come forward and pay an extra 20, 30 rupees. That is what I heard and noticed in the price list. I have noticed that Rainforest Alliance marks get 20, 30 rupees more than other factories (L2M5).

Indeed, brokers put considerable resources into analysing market data generated by the auction, to identify key trends and to communicate these to producers. As such, brokers play a "key pivotal role" (EC5M1) between buyers and producers.

> We transmit the message of the buyers' requirements to the plantations and tell them if you do this you are going to get this support (BC3M2).

In interviews, some estate managers highlighted how their brokers promoted Rainforest Alliance certification as an important way of maintaining access to certain buyers. Most prominently, BrandsCo[5], a large multinational company selling consumer goods worldwide, whilst not explicitly promising a price premium, let it be known through the brokers that they had set a target that 100% of their tea will be Rainforest Alliance certified from 2020 onwards.

> It is compulsory after 2020. [BrandsCo], who drive it in Sri Lanka, very frankly told us that, even though we might not have any monetary benefits, it is compulsory in 2020. Therefore, obviously you have to go whether you like it or not, you have to have it (MC5M1).

> Whether we like it or not, [BrandsCo] is a main buyer from us, so we have to do it (MC2M2).

So even though BrandsCo buy only approximately 10% of Sri Lankan tea, they are able to use their position as "global leaders in tea" (EC1M2) to move Sri Lankan producers towards compliance with the Sustainable Agriculture Standard.

> If you go to the auction you will see how much [BrandsCo] is supporting sustainability on the estates, you will see the price difference. [BrandsCo] don't care about the price as long as it is sustainable sourcing. [BrandsCo] just give that extra pound and we buy that tea (EC1M1).

[5] We have changed the name of this company to help maintain the anonymity of our interviewees.

For BrandsCo, selling mass market multi-origin teas, their stated aim is to "push the market, the farmer" (EC1M1) so as to build up sufficient supply of sustainability-certified tea in order to be able to meet their 2020 target. They describe this as a strategic move, a way to stay ahead of a trend in consumer markets towards an expectation that goods will be produced in a sustainable manner.

> Very soon it will be the norm. In the next ten years, with all the [social and environmental] pressures, and consumers being more mindful of these, if we don't have [sustainability standards] we are going to be at a disadvantage (EC1M3).

The Rainforest Alliance mark in brokers' catalogues is thus a crucial accounting device in constructing an economic exchange that connects supplies from certified tea estates with demands from ethically minded consumers. The mark allows brokers to make visible the price differential that is ultimately generated by this consumer demand, conveying this information to tea estates, promoting an economic case for certification adoption. This arrangement allows for large corporations like BrandsCo, who are seeking to market their products to ethically minded consumers, to drive the marketisation process by signalling their demand for sustainability-certified teas through the brokers. Whilst some early adopters of Rainforest Alliance certification highlighted how they were motivated principally by their own ethical stance (see section 5.2 above), later adopters appear to have responded to the economic incentives of an implicit price premium and access to Western markets through BrandsCo. Whilst BrandsCo is almost certainly driving this marketisation process for its own economic benefit, it forms an important part of the socio-technical agencements being constructed within the Sri Lankan tea production industry that can address the sustainable development challenges associated with tea production.

6. Discussion

In conducting this study we have sought to contribute to emerging literature on accounting for sustainable development (Bebbington & Larrinaga, 2014; Bebbington & Unerman, 2018, 2020), explaining how a sustainability certification – in this case, Rainforest Alliance – can enable a production industry – in this case, the Sri Lankan tea production industry – to move beyond mere greenwashing (cf. Constance & Bonanno, 2000; Elad, 2001) and to contribute towards addressing sustainable development challenges. To do this, we have drawn on theory from Caliskan and Callon (2010) to conceptualise sustainability certification as a marketisation process constructing socio-technical agencements enabling action towards addressing sustainable development challenges associated with production. This conceptualisation has allowed us to analyse Rainforest Alliance certification in the Sri Lankan tea production industry in terms of the construction of what Callon and Muniesa (2005) call the three constitutive elements of economic markets – i.e. economic goods, economic agents, and economic exchanges. The results of our analysis are summarised in table 2.

Element of the marketisation process of sustainability certification (cf. Callon and Muniesa, 2005)	**How does this element of the marketisation process of Rainforest Alliance certification contribute to constructing socio-technical agencements within the Sri Lankan tea production industry that can address sustainable development challenges associated with tea production?**
Distinguishing sustainably produced tea as a marketable economic good	The process of constructing the SEMS accounting device renders visible the production practices of a particular estate in a way that impels estate managers to formally reflect on how these comply (or don't comply) with the Sustainable Agriculture Standard and Sri Lankan laws.
Equipping producers to become economic agents capable of participating in markets for sustainability-certified tea	Constructing the LIG accounting device closes the gap between the activities for which a tea estate is responsible under the Sustainable Agriculture Standard (i.e. the 'accounting entity' for certification) and the activities over which Sri Lankan tea estates actually have control, thus rendering visible tea estates' specific responsibilities and capacities to move production practices towards sustainability.
Connecting supplies from certified tea estates and demands from ethically minded consumers within an economic exchange	Introducing the Rainforest Alliance mark into brokers' catalogues allows for price differentials between certified and non-certified teas to be rendered visible, promoting an economic case for certification adoption, helping drive the marketisation process.

Table 2. Summary of analysis of the marketisation process of Rainforest Alliance certification in the Sri Lankan tea production industry

In their analysis of how sustainability certifications can affect consumer purchasing decisions, Tregidga et al. (2019) highlight the accessibility of the certification standard as being crucial to enabling consumers to use certifications as a basis for making ethical choices. However, when it comes to producers, our research has shown that the standard itself is insufficient as an accounting device for enabling a production industry to move towards sustainability. Rather, we have shown how this requires a process of deploying various other kinds of accounting devices to create new visibilities within the industry, impelling new forms of thought and action. Estate managers constructed a social and environmental management system (SEMS) to render visible the production practices on their estate in a way that allowed them to delineate sustainably produced tea as a marketable economic good. Actors within the industry constructed a local interpretation guide (LIG) to render visible tea estates' specific responsibilities and capacities to move tea production towards sustainable development, thus equipping producers to become economic agents capable of participating in markets for sustainability-certified goods. An identifying mark in brokers' catalogues at the Columbo tea auction allowed brokers to render visible an economic case for certification, constructing an economic exchange connecting producers with demand from ethically minded consumers.

Collectively, the accounting devices deployed in this marketisation process have constructed socio-technical agencements within the Sri Lankan tea production industry, with new capabilities to address sustainable development challenges associated with tea production. This analysis, therefore, sheds new light on seemingly contradictory findings in extant literature on sustainability certifications, whereby sustainability certifications can promote corporate greenwashing (Constance & Bonanno, 2000; Elad, 2001), but can also have positive impacts on social and environmental outcomes (DeFries et al., 2017; Ochieng et al., 2013). We have observed that the marketisation process excludes some aspects of sustainable development from the construction of sustainability-certified goods, but can also instigate changes in the material arrangements that make up a production industry, which can create new capacities to act in pursuit of some aspects of sustainable development.

Consequently, our research also sheds light on how sustainability certifications can potentially become a more effective enabling force for sustainable development. Comparative studies have highlighted that there is very considerable scope for improvement in the extent to which sustainability certifications impact on social and environmental outcomes (DeFries et al., 2017; Ochieng et al., 2013). Our analysis of the marketisation process involved in adopting Rainforest Alliance certification in the Sri Lankan tea production industry leads us to suggest two ways for governments to intervene in this marketisation process that could help to drive such improvements.

Firstly, we were able to identify and analyse the SEMS and LIG accounting devices only by gaining the trust and cooperation of actors within the Sri Lankan tea production industry. Such devices create new visibilities within this industry, but these remain hidden from view for the general public. We suggest that greater transparency concerning how these devices have been constructed could be helpful for encouraging further improvements in the sustainability of production practices. If consumers, non-governmental organisations, trade unions, and journalists were able to see precisely how the principles of the Sustainable Agriculture Standard are being implemented on-the-ground, this would likely enhance the accountability of producers and incentivise the certification body (i.e. Rainforest Alliance), eager to maintain the credibility of its eco-label, to push the industry to seek further progress in tackling sustainable development challenges. National governments could mandate this kind of transparency for any sustainability certifications for products sold to its consumers. National governments in producer countries could also encourage and facilitate the participation of a wider range of actors, such as worker trade unions and non-governmental organisations into the process of constructing these devices so that these actors have an opportunity to contribute to the ongoing work of interpreting and operationalising the principles of the Sustainable Agriculture Standard within tea estates.

Secondly, our findings suggest that Rainforest Alliance certification in Sri Lanka acts as a force for strengthening enforcement of national Sri Lankan laws and regulations. Much extant literature on sustainability certifications argues that sustainability certifications can act to undermine the authority of the State, subverting governmental efforts to regulate their own industries (Constance & Bonanno, 2000; Elad, 2001; Raynolds et al., 2007). However, we observed how the development of a SEMS by tea estates has led to some awakening of awareness amongst estate managers about their responsibilities under Sri Lankan environmental law. Furthermore, we observed how the LIG, developed collectively by tea estate managers and international buyers, led to the tea estates adopting a role akin to an enforcement agency, ensuring small-scale holdings on estate land are compliant with Sri Lankan environmental laws. Rather than being in conflict with the authority of the State, we observe how sustainability certifications can support and invigorate State regulation of a production industry. This supports Lambin and Thorlakson's (2018) suggestion that government involvement in sustainability certification processes can potentially amplify realisation of positive social and/or ecological outcomes. We have shown how the socio-technical agencements constructed in this marketisation process equip national governments with a new means of enforcing social and environmental laws and regulations. As such, we suggest that national governments might carefully consider how the rapid growth of sustainability certifications can constitute an opportunity to improve the effectiveness of their efforts to regulate production industries. Indeed, if certified producers will act as a force within an industry for enforcement of laws and regulations, this may enable legislators and regulators to become more ambitious in setting laws and regulations aimed at improving social and ecological outcomes.

Our key theoretical contribution is to conceptualise sustainability certification as a process of marketisation, which has allowed us to focus our analysis on the specifics of how a sustainability certification deploys accounting devices to create new possibilities for organising economic activities within a production industry. Callon and Muniesa (2005) and Caliskan and Callon (2010) use marketisation as a theoretical lens for studying the construction of various financial and retail markets.

By turning this theoretical lens onto a production industry we extend its explanatory power by using it to develop a means of analysing a sustainability certification in terms of how it constructs socio-technical agencements that can address sustainable development challenges associated with production. Our theoretical contribution advances research in accounting for sustainable development, shedding light on the process by which a sustainability certification, such as Rainforest Alliance, can move beyond mere greenwashing and bring about positive impacts on social and ecological outcomes (DeFries et al., 2017; Ochieng et al., 2013).

Our conceptualisation of sustainability certification as a process of marketisation opens up new opportunities for studying how other sustainability certifications can be an enabling force in various production industries. Notably, within the Sri Lankan tea production industry, workers are well-organised, with trade unions that negotiate pay and working conditions at a national level. As a result, estate managers tend to regard the social aspects of sustainability certification to be relatively straightforward and undemanding at the level of the individual tea estate. Rather, it is the environmental aspects of certification that are seen within the industry to be the most onerous. Our conceptualisation of sustainability certification as a marketisation process shows that whilst the construction of sustainability-certified goods can enable greenwashing by excluding aspects of sustainable development, this is context-specific and depends on the material characteristics of a particular production industry. The Sri Lankan tea production industry stands in stark contrast to other production industries, such as textiles, where workers can be readily exploited and subjected to extremely poor, and often dangerous, working conditions (see e.g. Neu et al., 2014). Further research is therefore needed into these kinds of production industries, tracing how sustainability certifications can enable action to address all manner of sustainable development challenges, including poverty, inequalities, and poor health.

A key limitation of our study has been the need, in the Sri Lankan context, to focus our attention on relatively large producers – the plantation tea estates – rather than smallholder producers. It seems highly likely that sustainability certifications will need to deploy quite different accounting devices in order to enrol smallholders into marketisation processes. We therefore suggest that there is a need for future research into sustainability certifications pertaining to small-scale producers. There is an exciting stream of work within the accounting literature seeking to highlight how accounting devices can exacerbate difficulties faced by marginalised peoples in developing countries (see 2013 special issue of Accounting Forum, especially Beddewela & Herzig, 2013; Belal et al., 2013). We suggest that future research examines how sustainability certifications marketisation processes can potentially become an enabling force for such marginalised peoples. This would provide a more complete picture of how sustainability certifications can enable all actors comprising production industries to collectively address sustainable development challenges.

7. Conclusion

Accounting for sustainable development is a research programme predicated on the idea that addressing the social and ecological problems facing humanity will require collective work to reorganise markets and societies (Bebbington & Larrinaga, 2014). In this paper we have conceptualised sustainability certification as a marketisation process constructing socio-technical agencements enabling action to address sustainable development challenges associated with production. We analysed the case of Rainforest Alliance certification in the Sri Lankan tea production industry, showing how this process involves deploying various accounting devices to create new visibilities within the industry, contributing to the construction of three constitutive elements of economic markets – i.e. economic goods, economic agents, and economic exchanges. Our findings show that this marketisation process can enable new forms of thought and action to emerge whereby

the industry collectively is able to move beyond mere greenwashing. However, this is an ongoing process and our analysis has revealed possible interventions in this process that could help to realise the potential of sustainability certifications to become a more potent force for sustainable development.

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Appendix 1. Final thematic structure that emerged from analysis of our fieldwork data