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ORIGINAL ARTICLE

Global decisions versus local realities: Sustainability standards, priorities and upgrading dynamics in agricultural global production networks

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Abstract

Voluntary sustainability standards (VSSs) in global production networks (GPNs) have grown significantly in prominence. Existing research largely assumed that VSSs create linear upgrading outcomes for all GPN actors and has studied VSSs from the point of adoption in the GPNs, rather than a broader range of stages in their lifecycle. To address these limitations, and building on literature around power and agency in GPNs, we develop the constellation of priorities (CoP) model to unpack the diverse and often diverging boardroom (Northern lead firm) and local (Southern supplier) priorities involved in such standards. Through in-depth fieldwork on horticulture in Kenya and cocoa in Nicaragua across the VSS lifecycle, we find significant divergences in priorities between farmer groups in both countries and lead firms in the UK and Germany. We demonstrate analytically and empirically that diverging priorities coupled with power asymmetries produced contestations, leading to simultaneous economic and environmental downgrading, and social upgrading.

KEYWORDS
Central America, certification, environment, global production networks, global value chains, Sub-Saharan Africa, upgrading

1 | INTRODUCTION

Voluntary sustainability standards (VSSs) have proliferated in agricultural global production networks (GPNs) and global value chains (GVCs), yet considerable debate continues over their impact (Anderson et al., 2014; Bolwig et al., 2010). One perspective finds that adhering to VSSs can lead to upgrading for lower-tier actors, providing value capture opportunities by embedding green aspects within products (e.g., Ruben & Zuniga, 2011). A contrasting perspective is that such VSSs may lead to downgrading, due to rent accumulation by lead firms, exclusion and livelihood precarity for lower-tier actors (Giovannucci & Ponte, 2005; Hoffmann & Grothaus, 2015; Ponte & Cheyns, 2013).

While there are diverse types of VSSs, civil society-driven standards are most prevalent (Krishnan & Maxwell, 2020) particularly in agricultural production, and are thus the focus of our research. More broadly, Gereffi et al. (2001) distinguish between four key types of standards (and related certification), which involve very different stakeholders, processes and requirements: first-party certification idesigned by the private sector itself, second-party standards devised by industry associations, third-party standards shaped and audited by independent civil-society organisations (CSOs), and fourth-party from governmental or multilateral institutions. In agricultural production networks including cocoa and horticulture, standards driven by CSOs are most common, though they differ considerably in terms of what groups and actors are involved in each standard and how. However, even within this more narrow set of standards, different stakeholders along the value chain have very different priorities on what standards are to produce in terms of understandings of sustainability and upgrading opportunities.

Existing research on the upgrading implications of VSSs overwhelmingly suffers from two major limitations related to its underlying assumptions. First, the point of entry to assess upgrading or downgrading is often the point at which they are 'adopted' by suppliers in the GPNs/GVCs, rather than accounting for the complete lifecycle of how the standard evolved. Three clear stages can be identified in the lifecycle of a CSO-driven VSS – the 'design stage' involving (often Northern) CSOs, lead firms or associations which set 'priorities' of what the standard consists of (e.g., through various control points and economic, social and environmental requirements). Second, there is the 'boardroom stage' when lead firms and their subsidiaries (again often Northern) commit to using the designed VSS. Finally, there is the 'adoption stage' where lower-tier actors (mostly based in the global South), such as farmers, are expected to comply with the standard.[2] Broadly, the design and boardroom stage occur ex-ante or before the sustainability standard is diffused into the GPN/GVC, while the adoption stage occurs ex-post, when the standard is taken up in the GPN/GVC. This research emphasizes the need to study sustainability standard implications, both ex-ante (boardroom) and ex-post (adoption) in the GPN/GVC.

The second overall assumption is that VSSs are relatively homogenous instruments within GPNs/GVCs which either create linear upgrading or downgrading outcomes. However, not only are sustainability standards themselves very heterogeneous in their design, requirements, enforcement and robustness, but the benefits and costs of sustainability standards may be non-linear across GPN/GVC actors, with the serious possibility of trade-offs across economic, social and environmental dimensions of upgrading (e.g., Fransen et al., 2019). For example, use of Fairtrade standards in cocoa in Ghana and Côte D'Ivoire led to some economic upgrading through increased farmer incomes, but also social downgrading through lack of basic entitlements to land and long-term contracts (e.g., Barrientos, 2019; Barrientos, 2014). Furthermore, the net benefits of upgrading through the use of VSSs are difficult to gauge, due to the incommensurability of the dimensions. Yet, research has yet to focus on how VSSs simultaneously affect GPN actors, and the links between the sustainability standards' lifecycle and the multiple dimensions of upgrading/downgrading.

Going beyond these limitations of prior research, our study analyses the links between the boardroom and adoption stage of the sustainability standards' lifecycle.[3] We create the constellation of priorities (CoP) model to unpack

[2] The adoption stage equally involves assurance and auditing, which differ considerably across different VSSs, and is vital in determining standards' robustness. As the specificities and politics of auditing processes are complex (e.g., Locke, Amengual, & Mangla, 2009), this study does not delve into them.

[3] We do not study the design stage in this paper as the focus is on the implementation of standards and upgrading. However, we acknowledge the life cycle is interlinked and discuss implications of the design stage in the conclusion of this paper.

the constellation of different stakeholders' priorities involved in such standards. This is done primarily through using the GVC and GPN frameworks, while drawing on power and agency in GPNs/GVCs (e.g., Dallas et al., 2019; Henderson et al., 2002). Together, these abet the development of a CoP model which is a heuristic, practice-oriented way to map actors' sustainability priorities systematically. This model emphasises the convergences and divergences that arise between different priorities of GPN actors. The divergence or convergence of these priorities entails varied upgrading/downgrading implications for different GPN/GVC actors. This paper thus enriches GPN/GVC analysis by highlighting the (in)commensurability of economic, social and environmental dimensions within upgrading and by decomposing the heterogeneous implications of VSSs systematically in GPNs/GVCs.

The paper illustrates this deepened understanding of VSSs in GPNs/GVCs through case studies of the horticulture industry in Kenya and the cocoa sector in Nicaragua. Fieldwork was conducted on both cases between 2013 and 2016. Our interview data and findings, though somewhat dated, remain pertinent, as we have continued to study both sectors. While both cases are different, they share enough similarities in terms of exemplifying CSO-driven VSSs in agricultural production networks to merit this two-pronged investigation. In both cases, a combination of four different methods was employed to incorporate diverse data and voices all throughout the production networks. Documentary analysis involved examination of company, non-governmental organisation (NGO) and government reports and press releases. Semi-structured interviews were conducted with farmers and producers, as well as representatives of cooperatives, NGOs, government agencies and lead firms, with a total of 96 for cocoa and 46 for horticulture.[4] Three focus group discussions were also held for each case, with a total of 28 responsive consumers for the cocoa case, and involving 24 farmers for horticulture. The transcripts generated from the interviews and focus groups were recorded and typed in the local language, translated to English by the authors, before inputting the data into NVivo along with the documentary analysis. In keeping with confidentiality arrangements, all stakeholder names were anonymised. Nodes based on the three dimensions of the constellations of priorities, upgrading and downgrading as well as power relations were created within NVivo to categorise the data. Drawing on the mixed-method research, data were triangulated across the different sources (Barrientos, 2002; Kaplinsky & Morris, 2000).

The paper is structured as follows. We begin by reviewing VSSs' lifecycle in GPNs in terms of different stakeholders' priorities, and the conceptual underpinning of power in GPNs/GVCs. This is followed by introducing the CoP and the links to upgrading and downgrading opportunities. The following section delves into the case studies, illustrating that diverging priorities amid power asymmetries entailed non-linear upgrading and downgrading outcomes in social, economic and environmental terms.

2 | SUSTAINABILITY STANDARDS' LIFECYCLE IN GPNs: CoP AT THE BOARDROOM STAGE

Globalisation and the outsourcing and offshoring of production have increasingly been conceptualised through GVCs and GPNs. The analysis of GVCs focuses on how production and material flows are organised, illustrating the power of global 'lead' firms, that is, multinational corporations, in terms of controlling how transactions within these chains are governed (Gereffi, 1999; Gereffi et al., 2005). Research on GPNs also focuses on lead firms, but rather than a vertical, chain approach focused on firms, takes a network approach and also includes analysis of non-firm actors such as governments and CSOs (Henderson et al., 2002). In this paper, following many others (e.g., Neilson & Pritchard, 2009), we draw on both inter-related concepts. Henceforth through this paper, we use the term GPNs.

Standards play a key role in the governance of GPNs (Nadvi, 2008), including in agriculture. Lead firms often use standards to control the quality and traceability of food products. Some standards are mandatory, such as sanitary

[4] For cocoa, this involved interviews with: 21 producers, 18 civil society, 7 cooperative, 10 researchers, 11 government representatives, 11 development agencies, 13 private-sector representatives and 5 certifiers or auditors. For horticulture, this included 25 producers, 7 civil society/associations, 3 cooperatives, 7 government agencies and 5 development agencies. For Kenya, the interviews are coded based on interview number-country-actor, therefore #3kf, refers to interview number-Kenya-Farmers; #1ke (interview number 1-Kenya-Export firm); and #1kg (interview number 1- Kenya-Government).

and phytosanitary standards which have emerged due to international public-sector regulation. At the same time, a plethora of private, voluntary labour (e.g., Fair Labour), product and process (e.g., ISO) and sustainability standards have emerged (de Cordoba et al., 2018). Although known as voluntary standards, these standards are often '*de facto mandatory*', creating barriers to entry into GPNs and possible farmer marginalisation (Henson, 2008).

According to the ITC Standards Map, there are over 246 voluntary standards in the world across multiple sectors (Krishnan & Maxwell, 2020). Over 72 per cent are labelled sustainability standards, as they consist of economic, social and environmental control points. Sustainability standards have proliferated because they fill what is referred to as a governance deficit, related to the limited regulatory capacity of governments (Mayer & Philips, 2017, Bair & Palpacuer, 2015). For example, Newell (2008) refers to the 'regulatory chill' (pg: 88), wherein governments refrain from enforcing environmental regulations for fear of deterring investors or losing market share, and thus facilitate the adoption of voluntary standards instead. VSSs become entrenched within a GPN as these are seen as ways through which the private sector can gain reputational dividends and strengthen corporate social responsibility commitments (De Marchi et al., 2019; Nadvi, 2008).

Studies thus far have primarily considered CSO-driven VSSs, that is, our research focus, as a homogenous instrument in GPNs, without deconstructing the lifecycle of how VSSs enter and diffuse within a GPN. The first stage of the lifecycle is design, consisting of diverse dimensions of social, environmental and economic requirements, which are realised through 'control points' (actions that occur at any step where hazards can be either prevented, eliminated, or reduced to acceptable levels; FDA, nd).[5] Effectively, the control points are the auditable requirements which illustrate boardroom actors' 'sets of priorities'. Priorities are defined as a hierarchical preference of the goals or expected outcomes which may be independent or interdependent across actors in GPNs. In several low- and middle-income countries, VSSs such as GlobalGAP, Rainforest Alliance, UTZ, Fairtrade and Organic are the most pervasive (de Cordoba et al., 2018). Each of these standards consists of various economic, social and environmental requirements or priorities. For instance, about 76 per cent of the requirements of GlobalGAP are economic, while about 70 per cent of organic are environmental. For Rainforest Alliance, 46 per cent of the requirements are environmental and only 14 per cent are economic (GlobalGAP, 2019; Ascui et al., 2020; Rainforest Alliance, 2018).

When such sustainability standards are embraced by lead firms, there is a convergence of the priorities at design stage with the 'boardroom' priorities of lead firms and CSOs. Boardroom priorities relate to the triple bottom line, corporate social responsibility initiatives or sustainability commitments of lead firms. These boardroom priorities may differ across lead firms significantly. In the example of ethical coffee, Raynolds (2009) demonstrates that some lead firms' priorities aimed to procure 100 per cent fairly traded coffee through long-term partnerships with Southern suppliers, while others had priorities seeking gourmet supplies. A third group considered the standard a business opportunity to tap into ethically conscious markets, continuing with mainstream business activities outside of their niche engagement. This suggests that, at the outset, it is important to unpack the motivations and the constellation of different boardroom priorities of lead firms, which can thereby facilitate better understanding of the possible convergence or divergence in priorities embedded when diffusing a standard to suppliers within a GPN.

3 | SUSTAINABILITY STANDARDS' LIFECYCLE IN GPNs: CoP AT THE ADOPTION STAGE

The constellation of boardroom priorities of usually Northern actors places very different and partly incommensurable requirements through VSSs on Southern suppliers, especially farmers. Priorities emerge from choices made by actors who are, especially in the case of farmers, often under asymmetrical power relations. Within GPN literature, these asymmetrical power relations in buyer-driven chains like primary agricultural commodities come to pass as Northern lead firms have 'power over' other GPN actors. Power resides in the lead firm, through Schumpeterian barriers

[5] https://www.food.gov.uk/business-guidance/hazard-analysis-and-critical-control-point-haccp

to entry created by firms' market power, level of capabilities, organisational learning and asset specificity required (Gereffi et al., 2005). Within GPN analysis, this form of power is usually referred to as corporate power (Henderson et al., 2002). It hinges on the understanding that authority over relationships determines how resources are allocated in the network. This relational power is asymmetrical, in favour of lead firms who are able to choose standards and switch between suppliers, for example, based on sustainability standard preference. Institutional power or power wielded by state actors (multilateral organisations, regional, national and sub-national governments) is another form of power discussed within GPN analysis, while collective power stems from civil-society actors and social movements (Henderson et al., 2002).

Power concentration by Northern actors impelled Southern suppliers (e.g. farmers) to act in a bounded manner, that is, rather than optimizing and achieving the best possible outcome, farmers often act under satisficing[6] conditions (Krishnan, 2017; Tversky & Kahneman, 1979) in order to comply with lead firm requirements and continue to participate in GPNs. Thus, unable to exact agency to promote local priorities that emerge out of their local or societal contexts, Southern suppliers may be forced to conform to boardroom priorities, which may only yield satisfactory or non-optimal outcomes for farmers. The relationships that emanate between powerful and less powerful GPN actors have been frequently described as exploitative, wherein powerful lead firms appropriate surplus value of labour from weaker actors and/or farmers' land causing environmental degradation (Baglioni & Campling, 2017; Havice & Pickles, 2019). Thus, there may be divergences between boardroom and local priorities. For instance, research has shown that lead firms may have boardroom priorities of profit maximizing by procuring quality produce at low prices, which converge with farmer local priorities in terms of access to secure livelihoods, but also simultaneously diverge from farmers' priorities in terms of not paying enough attention to conserving the environment for purposes of bequest (Chouinard et al., 2008; McCann, Sullivan, Erickson, & De Young, 1997).

The divergences between boardroom priorities and local priorities are contested relationships. These contestations emerge as agentic responses to asymmetrical corporate and institutional power and the appropriation dynamics of lead firms and other powerful actors. Appropriation can occur both due to lead firm exploitation of labour (Selwyn, 2007), and due to extraction of ecological stocks in suppliers' territories (Bridge, 2002; de Cordoba et al., 2018). To understand the agentic responses to the contested and exploitative relationships, we draw on collective power in the GPNs (Henderson et al., 2002), that is, the power exerted by CSOs, farmer organisations or through social movements. We classify collective power into three forms of agency. The first is *resistance* which involves challenging existing relations; the second is *re-working (or negotiating)*, which involves improving position within the existing structure, while the third is *adaptation or coping*, which involves efforts to get by (Carswell & De Neve, 2013; Kabeer, 1999; Lund-Thomsen, 2013). This helps capture the multi-dimensional and multi-levelled nature of agency, that is, suggesting it can occur at the scale of the collective (farmer organisation) or the individual (farmer).

Figure 1 illustrates the constellation of boardroom (Northern lead firms) and local priorities (which occur at the adoption stage) within the VSSs' lifecycle. It shows the links between power and the contested relationships between the different GPN actors. These relationships, in turn, shape the extent of divergence or convergence across boardroom and local priorities. When boardroom priorities diverge significantly from local ones, it affects the efficient functioning of the GPN, while a convergence of priorities leads to increasing trust and co-operation through mutual space for negotiation (Murphy, 2006). The extent of divergence and convergence has implications for upgrading or downgrading within a GPN.

Convergence or divergence across the CoP may vary greatly, not just 'across' economic, social and environmental dimensions, but also 'within' the dimensions. For instance, even within the environmental aspect of VSSs, some lead firms may choose to implement organic standards, which limit permissible chemical inputs. However, others may mandate the use of a UTZ Certified standard that pursues a no-deforestation strategy. Both standards thus prioritise

[6] Accepting the first satisfactory decision reducing deliberative capacity (Simon, 1995).

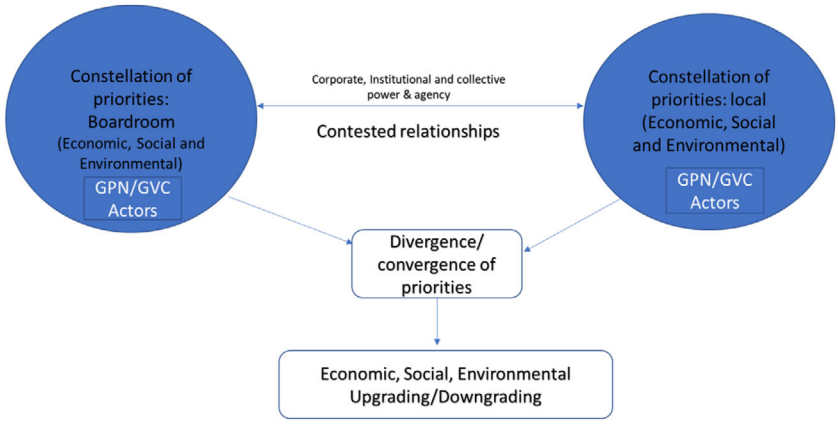

FIGURE 1 **Constellation of priorities and upgrading; *Source*: Authors' construction**

environmental considerations, but mandate very different concrete requirements on farmers (Krauss, 2016).[7] Thus, the CoP enables understanding the trade-offs across economic, social and environmental dimensions as well as within them, thereby illustrating heterogeneous priorities across GPN actors.

4 | CoP AND UPGRADING DYNAMICS

Much GPN research has been lead-firm-centric: it has taken firms as a point of entry and examined suppliers within their chains/networks and how they respond to, and benefit or not, from meeting lead firm requirements (Gereffi et al., 2005; Yeung & Coe, 2015). In contrast, entering from the point of Southern suppliers such as farmers can place more emphasis on the perspectives and experiences of different actors and their agency (Murphy, 2012; Starosta, 2010). The CoP incorporates agency of Southern suppliers, providing a foundation to problematise local farmer experiences of environmental, social and economic upgrading or downgrading against the backdrop of underlying contested relations.

Upgrading within GPN analysis is differentiated into economic, social and environmental upgrading. Economic upgrading is focused on the economic aspects and is described as a process of improving the ability of a firm to move to more profitable and/or technologically sophisticated capital and skill-intensive economic niches (Gereffi, 1999: 51). Social upgrading refers to improvement in working conditions and rights in GPNs (Barrientos et al., 2011; Bek et al., 2017), while environmental upgrading focuses on eco-efficiency and embedding green philosophies into products (De Marchi et al., 2019; De Marchi et al., 2013).

Several studies have an underlying assumption that complying with VSSs has a linear impact on economic, social and environmental upgrading and downgrading[8] outcomes (e.g., Delmas & Pekovic, 2013; World Bank, 2020). However, we argue such studies do not account for the possibility of diverging constellations of boardroom and local priorities which may result in simultaneous upgrading and downgrading across economic, social and environmental dimensions. As we depict in Figure 1, the extent of divergence between actors and their CoP creates contested relationships that ultimately may have implications for upgrading and downgrading. In sum, analysing the links between actors' priorities and upgrading at different scales within the GPN facilitates a nuanced recognition of the agency of farmers.

[7] Similarly, divergences may also occur at the level of governments. For instance, governments in the importing country (e.g., in the Global North) have priorities related to food security for their citizens and carbon neutrality, while governments in Southern countries (e.g., exporting countries) have less agency as they are dependent on Northern markets (Thorlakson, de Zegher, & Lambin, 2018; Barrientos, 2019).

[8] A process described by Gibbon and Ponte (2005: 138) as the 'relegation to less remunerative and/or secure end-market segments or channels'.

We develop here a heuristic framework, the CoP, to trace priorities and upgrading opportunities across stakeholders and the environmental, social and economic dimensions. Accounting for power in GPNs and the sustainability standard lifecycle, while further developing prior work (Krauss, 2016, 2017; Krauss & Krishnan, 2016), this CoP model gives space to various actors and perspectives in reflecting boardroom and local priorities. For instance, the priorities associated with what constitutes high quality in food range from price-dominated understandings to ethically driven interpretations, and require negotiation across different actors within a GPN (Cidell & Alberts, 2006; Franzen & Borgerhoff Mulder, 2007; Krauss & Barrientos, 2021). Thus, the CoP model systematically accounts for the economic, social and environmental priorities across a diverse set of actors, while linking to upgrading and downgrading opportunities.

We use a distinction here between economic, social and environmental priorities. Within the economic category, we account for the priorities at both boardroom and local level regarding the adoption of VSSs. Importantly, the economic boardroom priorities of lead firms are driven by underlying incentive of economic gain (Gereffi et al., 2005), which is in contrast to smallholders' priorities whose socio-economic motivations are linked to livelihood security and income maximisation under satisficing conditions. Similarly, in the environmental domain, lead firms or Northern NGOs may prioritise sequestering carbon, while farmers consider protecting forests, soils and water a key objective in maintaining the basis of their livelihood and participation in production networks. The priorities across all domains thus reflect different stakeholders' unique perspectives.

The heuristic framework developed does not aim to be exhaustive, but reflects inductively the priorities cited most frequently in data obtained from stakeholder interviews, focus group discussions and documentary analysis. A key fieldwork objective in in-depth interviews and focus group discussions was to remain driven and guided by our data and interviewees, asking our participants in data collection to explain their priorities without prompting. On the basis of these diverse understandings and perspectives across our networks, we developed key priorities within each dimension. This involved some compromises, both between and within our cases, to account for diverse meanings while producing a usable model. For instance, the aspect of adding to assets was important for Kenyan smallholders, necessitating its addition into what had only been an 'income' dimension for Nicaraguan cocoa farmers. To add to and contextualise our parsimonious visuals, we expand on diverse interviewees' accounts and understandings through the text.

Through data collection, we elicited binary results to represent the sustainability priorities of each of the actors across the economic, social and environmental dimensions. A limitation is that binary responses (is it a priority or not) may limit nuances in terms of understanding 'to what extent' priorities may differ. Given the limitations of binary in/out models, we equally emphasise through the text the complexity and nuances of the qualitative data collected. These more detailed accounts of the priorities and upgrading and downgrading outcomes reflect the granular, messy dynamics identified, crucially highlighting power dynamics, agency and contested relationships. We invite further research to review and modify the model for diverse contexts and settings, which could equally explore the possibility of shifting to a spectrum instead of binaries. Nevertheless, our deliberately parsimonious model usefully captures diverse actors' stances in one visual, while linking priorities with upgrading dynamics.

The model distinguishes between economic, social and environmental dimensions, highlighting five axes each. The social dimension encompasses five axes. Food security, a key consideration especially in rural settings, farmer organisation and social certification come under this umbrella. The latter two are important concerns for some certifiers and many bilateral donor organisations aiming to safeguard long-term producer support. Two further social axes are capacity-building, a key prerequisite for knowledge transfer, as well as the crucial livelihood improvement, which is an umbrella term covering income or asset increase and diversification.

The axes from the economic realm represented are concerns for reputation, and for safeguarding traceability and food safety, which are key control points within VSSs. The three other economic axes relate to supply and productivity, emphasising the need to safeguard long-term supplies of quality and volume (crop yields), which are important for ensuring value and volume of commodities as well as necessary for securing livelihoods of farmers. There are multiple interrelations and trade-offs between social and economic dimensions: improving livelihoods may clash

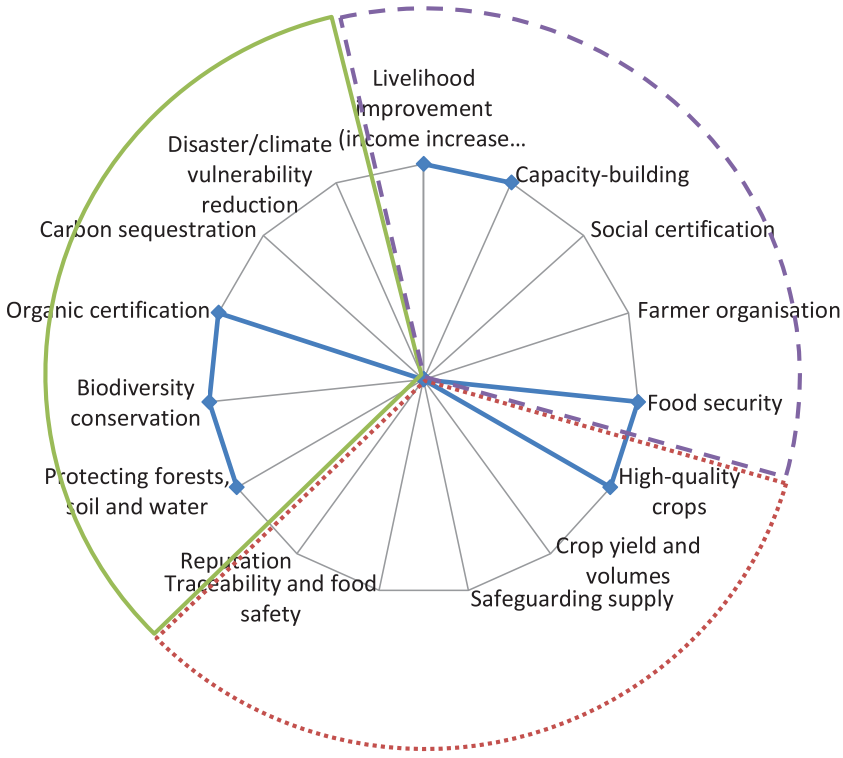

FIGURE 2 CoP illustrative example. Source: Authors' construction

with safeguarding supply at prices private-sector stakeholders desire, while improving food security through diverse, intercropped cultivation systems prioritising conservation may contravene boosting productivity.

There are similar interdependencies and trade-offs regarding the environment, the third dimension. Its five axes include two conservation-oriented priorities, preserving biodiversity and protecting forests, soil and water. Further axes are disaster and climate vulnerability reduction, a key concern in a changing climate, carbon sequestration and organic certification.[9] Organic certification has strong ties to both the social and economic dimensions given livelihood benefits and marketing opportunities, but also has considerable ecological implications in terms of conservation. All five require the social aspect of capacity building as well as economic outlets which appreciate environmental concerns.

Given the far-reaching implications of stakeholders' priorities, the need for identifying convergences and divergences as a precursor to analysing local experiences of upgrading and downgrading is evident. As we depict in Figure 2, the CoP allows for identifying and contrasting boardroom and local priorities in the economic (red and dotted), social (purple and dashed) and environmental (green and continuous) dimensions. A small shape on the axis indicates whether actors have mentioned the specific priority, with different coloured lines and different shapes denoting different actors whose priorities may converge or diverge.[10]

Individual CoPs can be developed for each actor in a GPN, and the CoP of each actor can be then overlapped with each other and visualized as in Figure 2. The overlapping enables identifying where divergences and convergences of priorities arise, which is relevant to find contested spaces in light of power asymmetries. The CoP is a flexible tool

[9] Various prior research (e.g., Bowen and Hoffmann, 2015) has demonstrated the importance of organic certification as a process of offering legitimate sustainability solutions.

[10] All colours, shapes and line types are arbitrary; all priorities are given equal weights.

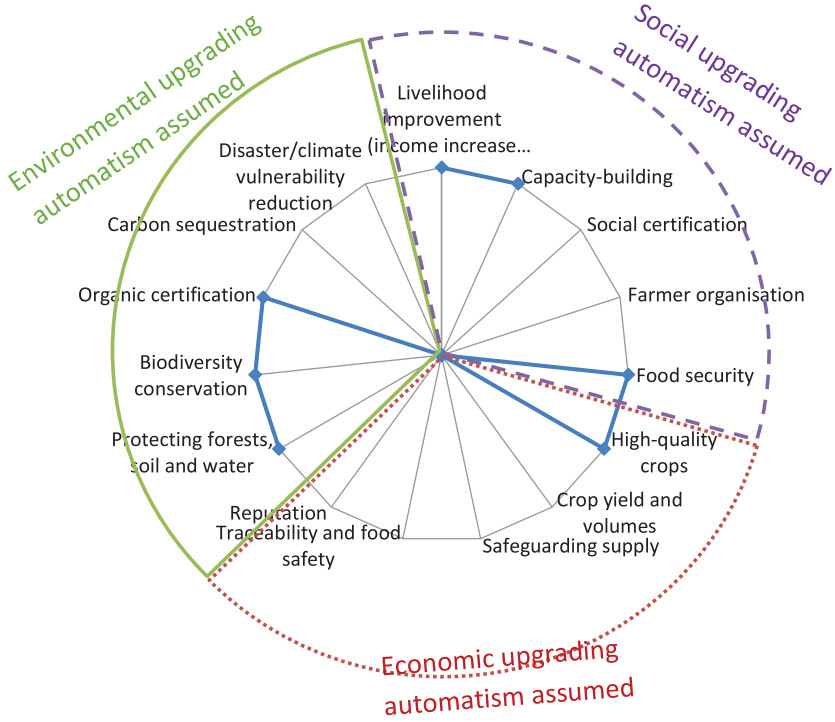

FIGURE 3 **CoP linked to upgrading. Source: Authors' construction**

that can be used to trace changing convergences/divergences also over time, facilitating the unpacking of the dynamic and iterative relationships across actors in GPNs. Capturing the change over time can thus elucidate the change in upgrading/downgrading trajectory.

There are diverse links between environmental, social and economic upgrading and underlying stakeholder priorities (cf. Figures 1 and 3 below). For instance, there is an assumption that pursuing economic priorities such as high-quality crops will entail economic upgrading in the form of higher income. Similarly, enabling farmers and workers to build capacities and organise into groups can enhance their bargaining potential and thus lead to social upgrading (Barrientos et al., 2016), with environmental upgrading expected through environmental priorities (cf. Figure 3).

However, it is vital to emphasise that, given complex power dynamics and the interdependencies between priorities discussed above, not all priorities lead to positive economic, social and environmental upgrading opportunities. As we show below in our case studies, there are complex links at work within and between different GPN actors' often diverging priorities in the economic, social and environmental spheres, and resulting upgrading or downgrading opportunities for farmers.

5 | CoP AND UPGRADING: THE CASE OF COCOA IN NICARAGUA

Cocoa is a significant source of livelihood in rural Nicaragua. In 2017, approximately 40 per cent of the 6 million population of Nicaragua lived in rural areas, with agriculture contributing 15 per cent of the country's GDP (World Bank, 2019). The heavily forested country (CEI, 2016) has seen a steady rise in cocoa exports, from 2100 metric tonnes in 2014 to 3800 metric tonnes in 2015 and 4200 metric tonnes in 2017 (CETREX, 2016; Prensa, 2016; El Nuevo Diario, 2019). In addition to cocoa exports, cocoa is also consumed in-country in maize drinks such as Pinolillo, although export quality is usually considered as superior to the supplies consumed domestically (interviews #34, #51, civil society; #58, research).

One key policy change was the Association Agreement signed between the European Union (EU) and selected Central American governments, including Nicaragua, in June 2012 (EU, 2012). A key requirement was safeguarding traceability for all food imports from Central America to the EU (interviews #54, #93, #100, private sector; #51, civil society). Consequently, policymakers must ensure all Nicaraguan cocoa is traceable, necessitating sustainability standards which can fulfil this non-negotiable requirement (interviews #108, cooperative representative, #93, private sector). This economic priority of traceability is thus essential, requiring cooperatives and producers to implement considerable changes on the ground for processes, product and training.

Given this policy shift, German chocolate maker 'Floral' altered their standard preference. Since the 1990s, with a personal attachment to the country, they had been active in Nicaragua initially from a social development and philanthropic motivation (interviews #93, private sector; #34, civil society), focusing on cocoa production concurrently to curb environmental degradation and provide rural livelihoods (interview #33, private sector). Their long-term commitment, favourable prices and voluntary payment of premiums to producers and cooperatives, such as for increased volumes or infrastructure development, was reported by interviewees to provide cooperatives and producers some livelihood security and stable sales markets (interviews #108, #112, cooperative representatives; #104, #106, cocoa producers).

> We know that whatever [cocoa] we produce in high quality, we can always sell to Floral; they provide a good, stable market, unlike we see in [other crops]. (interview #80, cooperative)

In the early 2000s, Floral's decision to prioritise cocoa exports and commercialisation entailed a stronger economic orientation (interviews #101 and #117, civil society). In 2013, following the EU-Central America Association Agreement, the company informed producers and cooperatives that it would no longer pay premiums for organic, but only a different sustainability standard, UTZ, to satisfy the traceability requirement (Floral, 2013b; interviews #33, private sector; #51, civil society). Thus, the boardroom priorities of Floral changed dramatically between 1990 and 2013.

Unsurprisingly, Floral (private sector), depicted in blue in Figure 4, had numerous economic priorities: high-quality output, productivity, safeguarding supply, reputational considerations and, crucially, traceability as required by the EU, which prompted a different certification preference. Floral's prior organic priority eventually shifted, along with the social priorities of improving livelihoods and capacity building. This created a contested relationship between Floral's prior emphasis on organic cultivation, which was well received by farmers, and the newly emerging economic priority of traceability prompted by legislative policy, which created challenges for cooperatives and farmers to manage and implement new requirements. This illustrates the corporate power of lead firms in response to governments' institutional power: policy decided by the global North thus affects producers' and cooperatives' local realities, changing the terms of engagement.

Given Floral's nature as a family-run, value-driven business, the economic 'reputation' driver also merits attention. Given concerns about whether the cocoa sector can match growing demand long-term (Barrientos, 2014; Thornton, 2010), ever more private-sector actors are resorting to VSSs both to address the problems causing shortage concerns and as communicable proof of change. Major chocolate stakeholders have pledged to use increasing percentages of their supply from certified sources (Fountain & Hütz-Adams, 2015; Tampe, 2016). Against this backdrop, there is a particular reputational need for companies priding themselves on value-driven operations to demonstrate commitment to improving their cocoa production's socio-environmental circumstances. As consumers consulted through focus group discussions confirmed,[11] Floral is strongly associated with positive, family-driven values. The company communicated the change in standards as a desire to meet strict social and environmental requirements (Floral, 2013a) and thus framed it as an opportunity for producers to upgrade.

[11] Based on results of three focus group discussions. First discussion with an environmental group (5 December 2013), second discussion with a church choir (23 April 2014), third discussion with the communications department of a non-food multinational (29 May 2014).

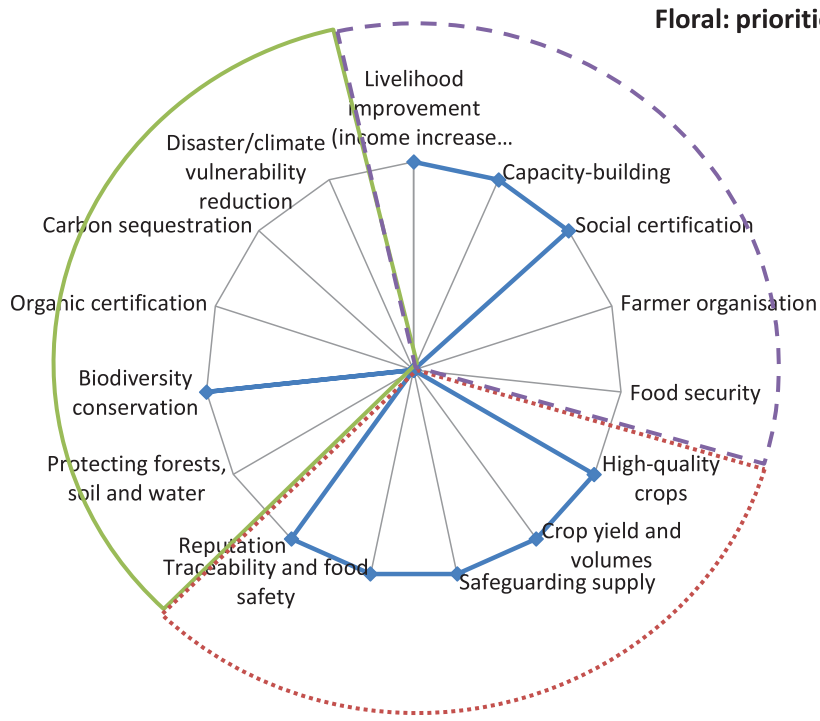

FIGURE 4 Chocolate maker Floral's priorities after EU-Central America Association Agreement. Source: Authors' construction

Nevertheless, civil-society representatives and two farmer cooperatives felt strongly about continuing organic production, which caused contestation between the cooperatives and Floral. This is shown in Figure 5, a CoP juxtaposing Floral's priorities with the local cooperatives, Macacao, who felt particularly strongly about the organic philosophy.

There are some commonalities and divergences between Macacao and Floral's priorities. Livelihood improvement and capacity-building in social terms, and the economic priority of producing high quality and high yields, are examples of converging priorities. However, Floral's shift in VSS preference was met with scepticism by CSOs, cooperatives and producers favouring the organic philosophy (interviews #108, #109, #112, cooperatives; #51, #101, #117, civil society; #70, #72, #110, #138, cocoa producers). Previously, they were content with Floral's organic preference and its concomitant local environmental and economic upgrading opportunities, as it was in keeping with their desire to maintain the ecological integrity of the land on, and from, which they live. For example, one cocoa producer stated:

> I want to cultivate my land in a certain way, in a way that respects the land. I want to leave it to my daughter. (interview #72)

Local collectives and their collective power ultimately were unable to resist Floral's direct, corporate clout and, ultimately, the institutional power of Northern governments. This meant for cooperatives a reduced need to comply with organic requirements, but heightened attention on socio-economic aspects, marking a clear shift. In social terms, some producers and cooperatives expressed appreciation that the new UTZ standard allowed added capacity-building, organisational and plot development, complementing environmental awareness with a health and safety component (interviews #103, #104, cocoa producers; #112, cooperative representative). Some farmers viewed this as an opportunity for social upgrading through learning and capacity-building. Ultimately, farmers were forced to 'adapt' to Floral's priorities. Among the cooperatives abiding by Floral's new UTZ standard, some farmers found that the

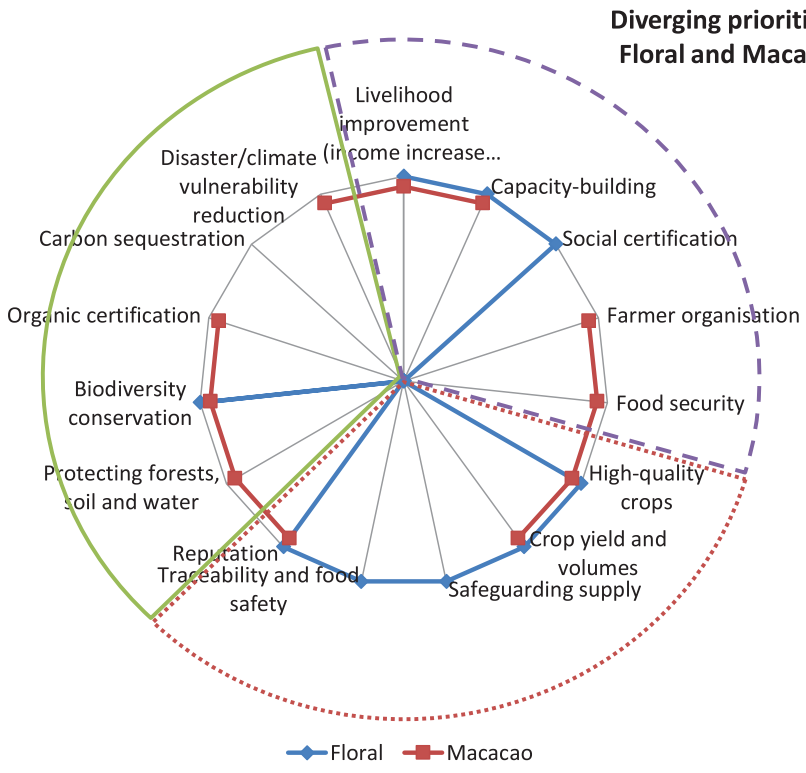

FIGURE 5 **Diverging constellation of priorities for cooperative Macacao and company Floral. Source: Authors' construction**

premiums paid did not cover the costs of meeting the capacity-building, documentation and infrastructure requirements (interviews #120, cooperative representative; #101, civil society). This difference between VSS premiums paid, and actual costs incurred for the transition, thus risked economic downgrading for some producers and the entire cooperative, contrary to common expectations of certification.

This divergence of priorities between global (Northern) and local (Southern) level thus produced a mixed bag of partial social upgrading, but potential economic and definite environmental downgrading. The new sustainability standard afforded some producers and cooperatives with social upgrading opportunities through capacity-building and empowerment. However, some recounted a risk of economic downgrading through the new seal on account of premiums not covering inherent costs. Moreover, ecologically minded stakeholders were opposed to a standard constituting 'five steps back' in environmental terms (interview #51, civil society), given the impact of extended chemical use under the new scheme on water, soil and biodiversity. Besides the health and safety risks of improperly stored and applied chemical inputs, they also rendered more difficult a potential future return to environmental upgrading through organic seals given the need for chemical-free operations three years prior to organic certification (interview #101, civil society). Floral's, and indirectly the EU's, corporate and institutional power thus outweighed cooperatives' and producers' collective power, affecting their upgrading opportunities both in environmental and economic terms. However, Floral agreed to reinstate organic premiums after Northern organic consumers and retailers organised vociferous protests in support of organic production, which were effective enough for the representative of a Nicaraguan organic-focused cooperative (interview #112) to cite their importance in changing Floral's stance: where Southern power could not sway Floral, Northern collective power succeeded in somewhat renegotiating the family-owned company's stance in a bid to maintain the economic 'reputation' priority while also pursuing the traceability axis in the CoP. Consequently,

only collective Northern power upheld environmental upgrading advances for some cooperatives while preserving social and economic upgrading opportunities for ecologically minded producers and cooperatives.

In the cocoa case (cf. summary in Table 1 below), a complex picture thus emerged in terms of diverging actor priorities between private sector and local producers and cooperatives, and the way that those priorities translated into upgrading or downgrading based on asymmetric power relations. Given the EU's policy shift in favour of strict traceability, Floral changed to a new standard, superseding the previous organic standard. The new standard's requirements facilitated some aspects of social and economic upgrading through opportunities for capacity-building and organisational development as well as premiums, yet also entailed some economic detriments and downgrading in ecological terms for farmers, as the new standard's environmental provisions do not go as far as the organic schemes. Despite Southern cooperatives' and producers' partly vociferous opposition, their collective power did not suffice to overcome Floral, and by extension the EU's, power, forcing them to adapt. However, support from Northern civil society upheld environmental advances for some, producing a renegotiation through collective power. This example of diverging priorities, complex power relations and up/downgrading results thus supports our argument that, given diverse priorities, there is a need to unpack assumptions of compliance with certification automatically entailing upgrading benefits at the local level.

6 | CoP AND UPGRADING: THE CASE OF HORTICULTURE IN KENYA

Kenya has had long-term trade links with the EU, especially in the horticulture sector. Fruits and vegetables are one of Kenya's foremost income earners (HCDA, 2012), having contributed 33 per cent of agricultural GDP in 2013 and having grown at a compound rate of 10–12 per cent per annum from 2010 to 2017 (ITC, 2019). This case study looks specifically at avocados, as they are one of Kenya's fastest growing fruit exports, expanding at the rate of 15 per cent a year between 2010 and 2019 (ITC, 2019). Between 1997 and 2000, EU legislative policy developed a series of hygiene controls and food safety measures through directives (Henson and Mitullah, 2004). At the same time, the Euro-retailer producer working group created EurepGAP, a certification scheme that encompassed EU legislative policy and was marketed to countries such as Kenya as falling broadly under the remit of good agricultural practices. This standard eventually evolved into GlobalGAP, a food safety measure with several hundred control points and compliance criteria (Dannenberg & Nduru, 2013; Evers et al., 2014). Traceability was one of the main requirements as it would enable international lead firms such as supermarkets and other retailers to trace produce back (interviews #5k #9k, farmers, #1kg government).

Initially introduced as voluntary requirements, GlobalGAP is now 'defacto mandatory' if farmers are to sell to the European market. This suggests asymmetric power relations exist between key lead firms, that is, European supermarkets, and farmers, as lead firms, with their corporate power, control the quality and practices which farmers must use to participate in the GPN. European retailers, partly to maintain competitive advantage, seek to safeguard their supply by forming partnerships with Kenyan exporting firms who control and maintain 'safe' and GlobalGAP-compliant supply (interviews #1e #3ke #8ke, exporters). Over the last 25 years, over 100 new export firms have emerged in Kenya with key companies being Vegpro and Finlays, AAA growers, and Kakuzi, which is Kenya-UK owned. Imposing such standards through corporate power provided both European retailers and Kenyan export firms with improved green and ethical reputational capital (interview #3kf FGD).

The primary priorities for European supermarkets and Kenyan exporters are economic – reputation, traceability and food safety, safeguarding supply and high-quality avocado crops as depicted in Figure 6 below. However, there were some secondary priorities of lead firms, primarily in the social domain of farmer organisation and capacity-building. European supermarkets and Kenyan export firms also often formed partnerships with local business associations (e.g., Fresh Producers Exporters Association of Kenya) and civil society (e.g., Kenya Agricultural and Livestock Research Organisation, CARE Kenya) to support the rolling out of GlobalGAP on the ground. Often, business associations and CSOs provided extension services. Such assistance involved specialised training in agricultural practices

TABLE 1 Nicaraguan cocoa CoP and upgrading implications

CoP	Actors and priorities	Divergence/convergence	Relationships, power and agency and power	Implications for upgrading/downgrading
Social dimension	Floral: capacity building, livelihood improvement, social certification Macacao: livelihood improvement, capacity building, farmer organisation, food security	Convergence on livelihood improvement, capacity building Divergence on social certification, farmer org., food security	Floral: corporate power Macacao: collective power	Social upgrading through capacity-building (supported by Floral's corporate power)
Economic dimension	Floral: reputation, traceability, safeguarding supply, crop yield, high-quality crops Macaco: crop yield, high quality, reputation	Convergence on reputation, crop yield, high-quality crops	Floral: corporate power	Risk of economic downgrading (Floral provides premiums, but corporate power forces a certification for traceability and reputation which does not cover costs for some producers/coops)
Environmental dimension	Floral: Biodiversity conservation Macacao: Organic certification, conservation, protecting forests, soil and water, disaster reduction	Convergence: conservation Divergence: organic certification, protecting forests, soil and water, disaster reduction	Floral: corporate Macacao: collective power (adapting) Northern civil society: collective (renegotiating)	First: environmental downgrading (Floral's corporate power/EU policy's institutional power forces a departure from organic certification and the concomitant protection of forests, soil and water) Then: environmental downgrading for some, no downgrading for those maintaining organic premiums based on Northern civil-society pressure

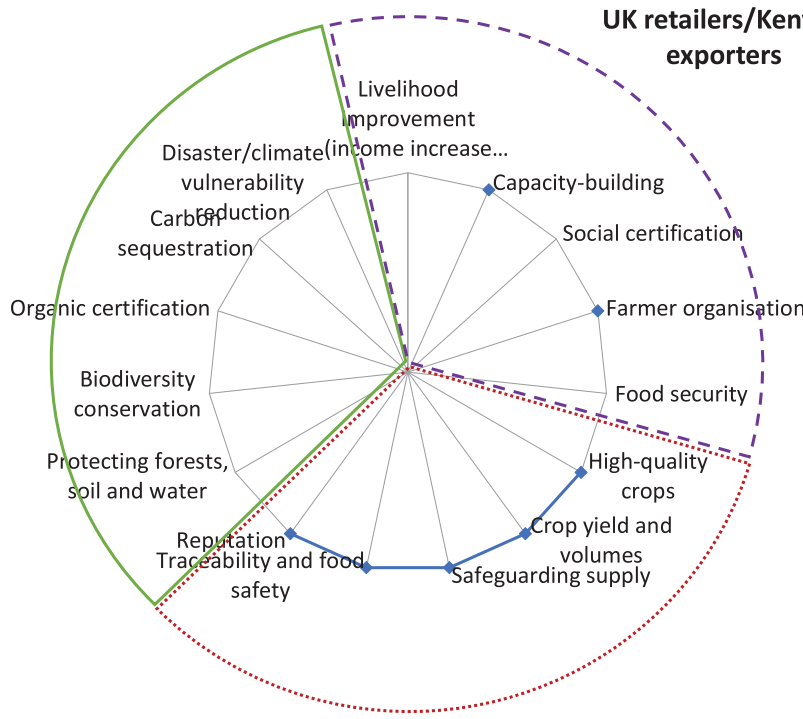

FIGURE 6 **Constellation of priorities for UK retailers/Kenyan export firms. Source: Authors' construction**

that were compliant with GlobalGAP, for example soil and water-testing training, spray schedules, or health and safety training (interviews #1ke #4ke #5ke #7ke, exporters, #1kb business association, #2kf FGD). These were mandatory requirements within standards that need to be adhered to in order to ensure compliance. However, certain other aspects within these standards, linked to environmental considerations of biodiversity and protecting soil, water, or social considerations linked to food security, were not seen as crucial.

Furthermore, Kenyan exporting firms, who sourced on their behalf, preferred to deal with farmers in groups so that they would achieve economies of scale in terms of volumes of avocado produce (interview #5kf, FGD) and would also prove more manageable for traceability purposes (interview: #2ke exporter). One such group was the Kandara Farmers' Group in Murang'a County, supplying over 300 tons of avocados to Kenyan exporters (Kakuzi, AAA growers and Vegpro) per season.[12] In order to facilitate the steady inflow of volumes and reduce overall transaction costs of monitoring, farmer groups were either formed by Kenyan exporters, by spatially demarcating a 'zone' that could provide them a constant produce of 10 tons per week, or by tapping into already existing groups (Krishnan & Foster, 2018). Kandara Farmers' Group was part of the former category. Thus, farmer organisation formation was a key social priority of European retailers/Kenyan export firms, along with economic priorities.

The Kandara Farmers' Group were mixed in their ability to appreciate the terms of the standard. Several group members complained that even though they received written contracts from Kenyan exporters, these contracts were usually less than one year and did not provide any leeway to deal with climate extreme events or even provide farmers with a 'fair price' that included the cost of living (interview #3kf FGD). This lack of livelihood security led to Kandara farmers collectively 'renegotiating' to attempt to improve the contractual conditions, as explained by the group leader:

[12] This created exclusionary bias towards small-scale unorganized farmers, making it even more difficult for them to access export markets.

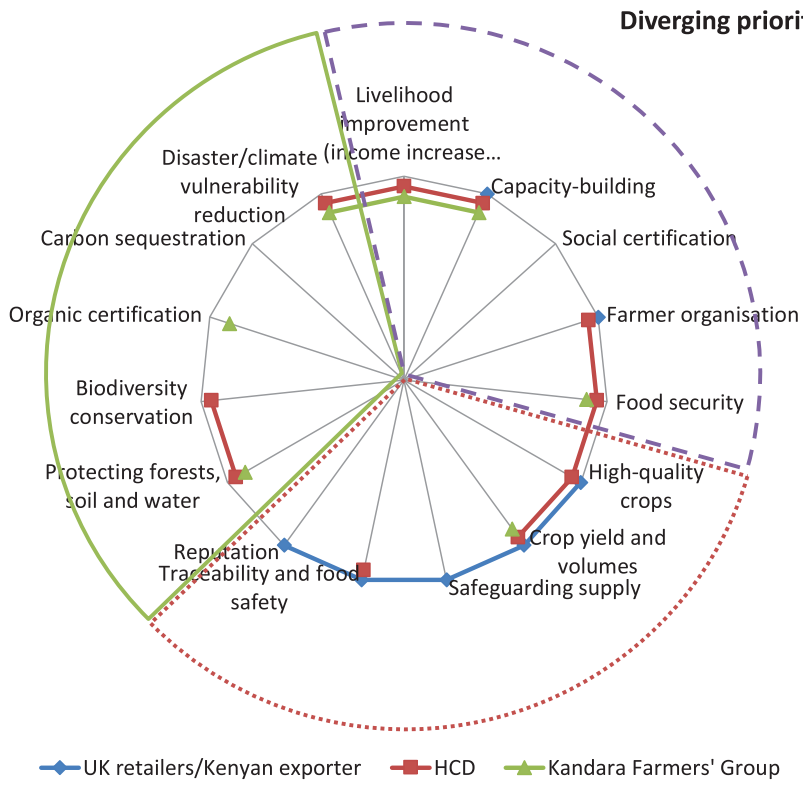

FIGURE 7 CoP for HCD, Kandara Farmers' Group and UK supermarkets in the avocado value chain. Source: Authors' construction

> We get poor prices less than Ksh 2 (USD 2 cents/avocado) and poor contracts … we know our product is good quality … even with the hot weather … we have had many meetings with exporters to offer us more money and longer contracts. (interview Kf#3)

The Horticultural Crops Directorate (HCD), Kenya's nodal government organisation, has come to the forefront in the last 30 years. Prior to a growing export orientation for horticulture, HCD's main priorities related to food security and organising farmers into groups in social terms, providing livelihood security and improving crop yield in the economic sphere (interviews #1kg, #2kg government). Thus, social and economic priorities were prevalent, while environmental priorities on protecting land, water and forest were implicit, without legislative policy in place (interview #1kg government).

Since the late 1990s, there has been a major shift in the priorities of government due to the expansion of the export market. The introduction of GlobalGAP created contestations between the government and European retailers, as the stringency of the standard would marginalise farmers from participating in the GPN (interview #3kg government). However, with over 30 per cent of the country's agricultural income through exporting horticulture, by the mid-2000s the HCD's priorities slowly began converging with that of the European supermarkets (interview #4kg government). New economic priorities of the HCD emerged such as traceability, food safety and quality as shown in Figure 7. The HCD made large investments to improve the traceability processes, as Kenya had been banned from exporting to the EU in 2007 due to exceeding the maximum residue limit of pesticides (interview #5kg government). This caused the Kenyan government to prompt legislative changes, including vetting exporters, providing licenses to export, and mandating registration of farmers for traceability (interview #5kg government). Thus, the corporate power of the

European supermarkets, as well as large Kenyan exporters, reshaped and dissolved some of the institutional power of the HCD, leading to a convergence of key priorities.

Although livelihood security was top on the government priority list in the past, it has now dissipated into a looser version of the same. In the attempt to capture maximum revenue from the export market, the HCD has inadvertently targeted capacity-building initiatives towards export farmers (interview #1kf FGD). Interviewees reported that county and national governments sent extension officers mostly to help farmers organise into groups that exported, as they had financial support from donors and international supermarkets (interviews #1kf #3kf FGD), and failed to support non-export-oriented farmers in the country.

Over the last 10 years, climate change and biodiversity loss were seen as an increasingly important priority to the HCD, especially with the increased pest and disease attacks on crops impacting product quality, which arose from national-level policies set by Kenya called Vision 2030. This was a mission to make agricultural emissions carbon-neutral and reduce the vulnerability of farmers to climate variability and extremes (interviews #1kg, 3kg government). Thus, there was a divergence in the priorities of the HCD and European supermarkets in this arena, as many of these requirements were not mandatory within GlobalGAP. The HCD aimed to force Kenyan export firms to include climate change and biodiversity-related 'clauses' in farmers' contracts; however, after several deliberations no change occurred, as explained by an HCD official:

> We believe traceability is key and food safety matters, but many farmers are monocropping on their land, which has degraded the quality of production, and this along with the threat of climate change will cause long term damage… we need our firms (Kenyan export firms) to take notice, and care for the environment. (interview #4kg)

Thus, corporate power prevailed, weakening the institutional power of the state. Figure 7 elucidates the mix of priorities of the HCD, Kenyan export firms and UK supermarkets showing the overlap of their economic, social and environmental priorities, and highlighting the divergences from the European retailers.

Before the introduction of GlobalGAP, the Kandara Farmers' Group were growing avocados for local and regional markets, with no specific standards enforced. Public policy did not focus on hygiene or health until the late 1970s. Farmer interviewees reported that the main priorities of farmers pre-1970s related to having good yields, conserving of water and soil, with many using organic or natural fertilizers on their soil. The priorities were predominantly environmental and economic in the sense of generating enough crop volume to sell into local or regional markets (interviews #6k #8k, farmers).

Since GlobalGAP, new tensions emerged between European supermarkets, the HCD and the Kandara Farmers' Group. Kenyan avocado farmers' groups reported that, since adhering to GlobalGAP, they have experienced rejection levels of over 15 per cent of their produce, with no explanations provided, making farmers complain about the lack of transparency. Furthermore, preferred supplier lists were developed by Kenyan exporters, marginalizing many farmers who even defaulted once or did not conform to GlobalGAP (Krishnan, 2018), increasing the precarity of their livelihoods. The Kandara Farmers' Group attempted to renegotiate their contract with buyers, claiming the terms were exploitative. A back–and-forth negotiation helped the group, as a 5 per cent increase in the commodity prices was provided. Thus, this was one case where the collective power of farmers successfully pushed back against corporate power.

There were also significant divergences in the environmental priorities between the Kandara Farmers' Group, European retailers and the Kenyan exporting firms. GlobalGAP required replacing indigenous, more environmentally friendly techniques with new modes of production. Many farmers echoed concerns on the difficulty of using new practices, worries on mono-cropping, and the slow degradation of the quality of their soils (interviews #10k, #14k, farmers). However, the reason they continued to stay in these markets was for income and livelihood security (interview #1kf FGD). Furthermore, farmers voiced concerns over the loss in yields due to increasing temperature and unseasonal rainfall, claiming that it impacts quality and may cause loss of livelihoods (interviews #10k, #11k, #12k, farmers). European

supermarkets' lack of environmental priorities and the inability of the HCD to support the Kandara Farmers' Group led to farmers resisting uptake of various environmental priorities that were 'composed' by lead firms. When the Kandara Farmers' Group sought to negotiate with retailers to arrive at mutually beneficial priorities, the attempt failed. They were unable to counter the hegemonic forces of Northern retailers, as shown in Figure 7 above. Thus, although farmers clearly attempted to renegotiate terms, they were unable to do so effectively. Thus, the relationships between the European retailer, Kenyan farmers, Kenyan export firms and the HCD were contested and divergent, with very little convergence across priorities.

In terms of upgrading outcomes, many farmers in the group felt that GlobalGAP did not increase their incomes significantly. Interviews suggested that farmers received at times less than farmers selling to local markets and that the payments were delayed by up to two weeks, leaving them cash strapped (interviews #10k, #11k, farmers). Livelihood security was short-lived, as many export firms would not provide farmers with more than a 1-year contract (interview #14k, farmer). Thus, even though multiple farmers economically upgraded, the local outcomes were not positive. Due to the short-term contracts, some farmers in the group experienced higher levels of precariousness in their livelihoods, discouraging them from demanding higher prices for goods (interviews #12k #13k farmers). Thus, many group members did not feel they had higher bargaining capacity. Consequently, the assumption that certifications lead to increased income does not hold in the case of Kenyan farmers, a key argument of this research. However, farmers were able to strategically diversify away from supplying to export markets and sell into growing regional markets, including Kenyan supermarkets, through the acquisition of new skillsets which gave many farmers entrepreneurship and leadership confidence to take bigger risks (interviews #10k, #11k, farmers).

In terms of social upgrading/downgrading, the Kandara Farmers' Group had access to much better-quality capacity building from the multi-stakeholder arrangements (interview #1kf, FGD). Some of the trainings on new hygiene requirements and health-related issues (e.g., protective clothing during pesticide-spraying) were seen as enhancing well-being (interview #1kf FGD). Thus, they felt more empowered to start new ventures and also became more aware of health and safety issues, which is a positive social upgrading outcome.

Finally, environmental upgrading outcomes appear to be a mixed bag. The economic priorities of the international retailers outweigh the environmental priorities of the farmer group. This is compounded by the lack of government support. Even though environmental issues are a priority of the HCD, environmental protection measures and investments have not been implemented effectively (interview #10k, farmer). The fear of losing livelihoods has forced farmers to mono-crop to meet volume requirements, impacting soil quality significantly.

In sum, upgrading outcomes involved negative environmental and to some extent economic implications, but some positive social outcomes. Comprehending the epistemologically diverse boardroom and local CoPs, and the contested relationships, helps identify varied implications on upgrading and downgrading simultaneously. Table 2 summarises the above discussion.

7 | DISCUSSION AND CONCLUSION

This paper unpacks the diverging and converging priorities of GPN actors throughout the lifecycle of VSSs, highlighting the Northern actors' 'boardroom priorities' vis-à-vis 'bottom-up' Southern supplier local priorities in GPNs. In order to comprehend holistically the different priorities that motivate different actors, we developed a heuristic CoP model. It addresses two key flawed assumptions in existing research: first, it allows us to review stakeholder priorities at several different stages in a VSS's lifecycle. Second, it highlights non-linear upgrading and downgrading outcomes through VSSs in agricultural GPNs, offering a chance to incorporate farmer voices systematically. The CoP model provides a refined model of agency to less powerful actors in the value chain and enables analysing the dynamic and contested nature of relationships over time. Thus, rather than focusing on only the priorities of a lead firm and understanding how it affects less powerful actors, we are able to overlay the priorities of less powerful actors as well, to gain a holistic understanding of the bottom-up experiences of local stakeholders. By juxtaposing priorities, we were able to analyse

TABLE 2 Kenyan CoP and upgrading implications

CoP	Actors and priorities	Divergence/convergence	Relationships, power and agency	Implications on upgrading/downgrading
Social dimension	European supermarket/Kenyan export firm: capacity-building, farmer organisation HCD: livelihood improvement, capacity building, food security Farmer group: food security, capacity building, livelihood security	Convergence: capacity building Divergence: livelihood improvements, farmer organisation	Corporate power (companies) Collective power (farmers: re-negotiation)	Social upgrading for capacity-building, certification Downgrading: in terms of increased precarity of livelihoods; and lack of food security due to replacing indigenous crops with export crops
Economic dimension	European supermarket/Kenyan export firm: reputation, traceability, crop yield, high-quality crops HCD: crop yield, high quality, traceability Farmer group: crop yields	Convergence on crop yield	Corporate (companies) and institutional power (HCD)	Economic downgrading (corporate power forces a certification for traceability and reputation which does not cover costs for Kandara; and high rejection rates reduces income)
Environmental dimension	European supermarket/Kenyan export firm: none HCD: biodiversity conservation, protecting forests, soil and water, disaster reduction (but only in principle, not actionable or implemented) Farmer group: organic/indigenous, protecting, forests, soil and water, disaster reduction	Convergence: disaster reduction (between HCD and farmer group; but not supermarkets) Divergence: organic/indigenous production, protecting forests, soil and water, disaster reduction	Corporate form of power by supermarkets and exporter firms Institutional (HCD) and collective (farmers) power (attempt to resist and renegotiate failed)	Environmental downgrading (mono-cropping and lack of using local environmental know-how, reduced overall soil quality; fear of long-term degradation of natural capital of farmers)

divergences and convergences as a basis for tracing economic, environmental and social upgrading and downgrading outcomes.

Our empirical analysis of two case studies confirmed that, in both Nicaraguan cocoa and Kenyan horticulture, complex sets of priorities emerged across different stakeholders. Divergences were revealed in terms of how 'sustainability' is understood in economic, social and environmental terms, causing significant tensions between actors in the GPN. For instance, in Nicaragua, Floral's main priority was economic, thereby deprioritising key environmental priorities such as organic farming and protecting forests, soil and water, which were key to farmers. Similarly, in the case of Kenya, both Kenyan exporter firms and the UK supermarkets had strong economic priorities, while deep divergences emerged considering the environmental priorities of Kandara Farmers' Group around preserving environmentally friendly, indigenous farming practices.

Our analysis showed that both country cases involved non-linear upgrading and downgrading for farmers, as they experienced simultaneous social upgrading and economic and environmental downgrading. Social upgrading was experienced because farmer groups attempted to counter hegemonic forces, at first adapting, then renegotiating terms of engagement and in some cases even resisting asymmetrical power structures. However, simultaneously environmental and economic downgrading was experienced due to environmental degradation, loss of forest cover, high rejection rates or prohibitive certification costs. Our findings thus complicate assumptions of linear upgrading outcomes through VSSs, highlighting instead that diverging priorities caused non-linear upgrading and downgrading outcomes in social, economic and environmental terms. Power asymmetries between GPN actors, in terms of collective power vis-à-vis corporate power, proved crucial in determining whose priorities would inform what understanding of 'sustainability' was dominant throughout the value chain. Further research could delve deeper into how actors disarticulate and rearticulate within GPNs (cf. Bair & Werner, 2011).

Although our paper focused on the boardroom and adoption stages of sustainability standards' lifecycles, further analysis of priorities through the CoP across all stages of a standard's lifecycle could be beneficial. An analysis in the design stage, that is, before the boardroom stage, could safeguard an involvement of diverse actors and juxtapose priorities in the design as well as the boardroom and adoption stages. The asymmetrical power dynamics emphasised in both the Kenyan and Nicaraguan cases hark back to a longstanding criticism of Northern VSSs in terms of their ability to grant agency and equity to actors in the Global South. This alludes to the importance of integrating local knowledge into the design of standards so that they can be co-produced. This in turn could facilitate greater convergence in priorities across GPN actors also in the boardroom and adoption stages. This equally relates to the question of whether the CoP could illuminate priority convergences and divergences also at the auditing and assurance stages, linking priorities and power across standard lifecycles stages ultimately to upgrading and downgrading outcomes.

Further research can deepen and refine the CoP model by helping understand how 'deep' or 'shallow' divergences or converges may be. For instance, if most of the economic, social and environmental priorities align, creating a shared consensus, this means that there are 'deep' convergences. By contrast, if, in aggregate, almost all priorities diverge across actors, then deep divergences arise. Such divergences may lead to economic, social and environmental downgrading of farmers, while shallow divergence may not necessarily engender downgrading across all dimensions. In both our case studies, relatively deep divergences were seen, which led to some social upgrading, but economic and environmental downgrading outcomes. We refrain from attributing causality, but future research can attempt to nuance and quantify the priorities and assess the possibility of adverse upgrading outcomes if deep divergences of priorities occur for GPN actors.

Finally, the CoP has practical implications as it can be used by businesses and policymakers to comprehend the nature of different stakeholders' priorities and the extent of divergences in GPNs (cf. e.g. UNCTAD, 2020). Our model facilitates the capture of different scales, temporal and spatial contexts, ensuring the voices of local actors are heard while allowing policymakers to identify specific leverage points for synergistic and cooperative measures. While this model may be more applicable in shorter value chains such as fresh fruit and vegetables, further research could test and refine the constellations of priorities in other spheres.

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CONFLICTS OF INTEREST

The authors declare no conflicts of interest.

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