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GLOBAL DECISIONS AND LOCAL REALITIES: PRIORITIES AND PRODUCERS' UPGRADING OPPORTUNITIES IN AGRICULTURAL GLOBAL PRODUCTION NETWORKS

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ABSTRACT

As certification is proving ever more popular as a particular manifestation of economic, social and environmental upgrading activities, this paper seeks to explore the socio-economic, commercial and environmental priorities which shape stakeholder certification choices in global production networks (GPNs), and the implications which upgrading intentions entail for smallholders' development outcomes. The paper argues that there is a need to problematize firstly the diverging socio-economic, environmental and commercial priorities which different stakeholders associate with the implementation of sustainability standards, and secondly to unpack the assumed automatism of upgrading activities entailing benefits for producers at the local level.

The paper introduces a malleable approach, the 'constellation of priorities', that enables systematic assessment of drivers across stakeholders, thus providing agency to all GPN participants. The paper presents two agricultural global production networks as case-studies, the production of fresh fruit and vegetables in Kenya and the cocoa sector in Nicaragua. The case-studies explore the complexities of the tensions between stakeholders' socio-economic, commercial and environmental priorities, highlighting that priorities projected through stakeholders' power and embeddedness relations affect how local outcomes, positive and negative, materialise for farmers.

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INTRODUCTION

Certification according to diverse sustainability[1] standards is proving ever more popular among consumers and companies alike in global production networks (GPNs) and global value chains (GVCs). Consequently, there is a need to unpack who is driving the change towards these particular manifestations of economic, social and environmental upgrading, and what these changes mean particularly for local producers and local upgrading outcomes. For agricultural global production networks in particular, multiple certification schemes exist, with a plethora of diverging and partly incommensurable drivers motivating diverse stakeholders to engage with sustainability standards. Such priorities need to be assessed given their far-reaching implications for stakeholders' resulting engagements (Raynolds, 2009). This paper proposes that it is essential to assess systematically the diverse socio-economic, environmental and commercial drivers that contribute to a variety of 'sustainability' initiatives. The paper thus extends the scope of analysis beyond the behaviour of powerful, multinational lead firms towards a range of diverse stakeholders.

The analysis firstly examines the question of who and what drives changes in favour of certification schemes, examining the socio-economic, commercial and environmental priorities which diverse stakeholders bring to the table as part of sustainability initiatives. Through chronicling the positions of different stakeholders across the global production networks, it is clear that different stakeholder priorities may prove synergistic or incommensurable, highlighting the need to unpack resulting tensions. Having mapped stakeholder priorities in two empirical case studies, we explore the paper's second research question by exploring what these changes mean locally, problematizing how local producers' upgrading opportunities from sustainability standards link back to the synergies and tensions emerging from the analysis of stakeholders' constellations of drivers. These sustainability initiatives consist of various economic, social and environmental activities that are often discussed as upgrades (Henson and Humphrey, 2010). In economic terms, a certification uptake is an example of process upgrading in GPNs. In terms of social upgrading (Barrientos et al., 2011), upgrading activities can include skill development of producers and workers through training, while upgrades improving environmental viability involve soil conservation, biodiversity preservation, water retention etc. Our research elucidates that the assumption that 'upgrading' will automatically benefit local producers does not always hold. Thus, one of the key contributions of this research is to show that diverse underlying priorities of multiple stakeholders affect upgrading and its outcomes.

This paper also contributes to improving our understanding of the fuzziness of upgrading, since we view upgrading beyond a lead-firm centric view as discussed in recent literature (e.g. Bair, 2008; Barrientos et al.,

[1] Although 'sustainability' is problematic as an analytical concept given hugely divergent understandings of what it is or is to entail between different stakeholders, this research nevertheless engages with the concept given its key role in driving forward compliance with certification schemes. It will use 'sustainability standards' and 'certification schemes' interchangeably.

2011). By doing so we are able to provide agency to other actors in a GPN and systematically recognize the multi-dimensional nature of upgrading. As an analytical contribution, this paper systematizes understandings of what different stakeholders hope sustainability standards can entail through a framework, the constellation of priorities model. The framework allows a systematic assessment of drivers across different stakeholder types and at different scales in terms of synergies and tensions. This understanding of different priorities forms the basis on which different stakeholders' drivers can be compared and contrasted with upgrading outcomes. Equally, it also suggests the importance of shifting from a firm-centric view of 'upgrading' towards the local development outcomes which upgrading activities can entail for local producers. As an empirical contribution, the paper presents and analyses two agricultural global production networks, the horticulture sector in Kenya and cocoa in Nicaragua as case-studies to investigate the link between underlying priorities and producers' realities.

The paper proceeds as follows. The research design is discussed firstly. The paper's theoretical underpinnings follow, situating this study within the wider literature on global value chains and global production networks with a particular emphasis on social, economic and environmental upgrading. The paper then introduces the constellation of priorities model as a tool to help answer the first research question of what priorities different stakeholders contribute in seeking to effect 'change' through certification. Examining the case-studies of first horticulture in Kenya and then cocoa in Nicaragua, the paper tests the 'constellation of priorities' framework introduced, and links the priority mappings to the observed local upgrading outcomes for producers. The fifth section on implications of this research synthesises previous observations on the two research questions of firstly who and what drives the changes, and secondly what the changes mean for local producers' upgrading opportunities, drawing out broader analytical implications for development.

1.1 Research design and methods

This paper builds on the in-depth doctoral fieldwork of both authors, conducted respectively in the horticulture industry in Kenya and the cocoa sector in Nicaragua between 2013 and 2015. Both authors opted to anonymise all stakeholders, replacing all organisation and places names with pseudonyms as part of their confidentiality strategy. In both sites, a combination of four different methods was employed including documentary analysis, semi-structured interviews, focus group discussions and participant observation. The multi-method approach aimed to minimise researcher bias and triangulate findings (Kaplinsky and Morris, 2000; Barrientos, 2002).

For the Nicaraguan cocoa and Kenyan horticulture case studies, documentary analysis firstly allowed engaging with a total of 321 documents related to cocoa and 244 for Kenya, ranging from websites via NGO and government reports to media publications. Their diversity required a careful assessment of documents' quality and agenda (Laws, 2003), provenance (Barrientos, 2007) and intended audience (O'Laughlin, 2007).

Given the importance of individuals' perspectives and priorities for this research (Woodhouse, 2007), the authors conducted 96 (cocoa) and 46 (horticulture) semi-structured interviews with diverse stakeholders throughout the GPNs under investigation: interviewees included producers via representatives of cooperatives, non-governmental organisations, and the public sector to lead firms, facilitating diverse insights across the sectors (Appendices 1 and 2 list all interviews cited in this paper). As interviews are a bounded and non-neutral exchange between the person asking the questions and the interviewee (Fontana and Frey, 2007), we each attempted to minimise bias by relying primarily on open-ended questions (Mikkelsen, 2005). The third method employed were focus group discussions (FGDs). Three FGDs were conducted with a total of 28 responsive consumers for cocoa; and four FGDs were organized across 24 farmers for horticulture. This allowed insights into social interaction (Bloor et al., 2001) and participants' worlds in terms of perceptions and assessments (Puchta and Potter, 2004). Despite difficult analysis for focus-group data, the advantage is generating data on a subject directed by the researcher (Morgan, 1997), although, as with interviews, there is a risk of words and actions diverging (Stewart, Shamdasani and Rook, 2007). A final research method was participant observation which can help researchers gain holistic insights into contexts (Jorgensen, 1989). As our presence nevertheless was bound to influence the outcome (Laws, 2003), introspection on the researcher's positionality and insider-outsider experiences proved crucial (Spradley, 1980), both for this and for all research methods, justifying four different qualitative methods to investigate the cocoa and horticulture sectors.

2. GLOBAL PRODUCTION NETWORKS, GLOBAL VALUE CHAINS AND UPGRADING

2.1 GPNs and GVCs

The wider processes of increasing globalisation and de-centralization of production relations form the backdrop within which our research on the drivers underlying sustainability standards and local upgrading outcomes is situated. There have been a number of conceptualisations seeking to capture these paradigmatic changes. Gereffi (1994, 1999) proposed a framework of global commodity chains (GCC) that explicated the importance of co-ordination and the emergence of global buyers as key proponents to globally dispersed and fragmented production networks. Gereffi's buyer-driven chains highlighted how buyers exercised 'explicit coordination in dis-integrated chains' (Gereffi, 2005: 82), while producer-driven chains focused more on vertically integrated forms of industrial organization. The GCC framework drew attention to a dichotomy of network forms, concentrated on powerful lead firms and viewed co-ordination as evolving from transaction costs. However, it was less flexible in interrogating different forms of network structures (Fold, 2002; Raikes et al., 2000). The concept evolved as Gereffi et al. (2005) introduced a typology of five forms of chain governance structures based on complexity of transactions, ability to codify transactions and capabilities in the supply base. Gereffi's work on global value chains (GVCs) was further

developed by researchers who elaborated the role of network analysis, conceptualising connections as relational processes in which power is exercised (Dicken et al., 2001; Dicken, 2003) and coining the idea of global production networks (GPNs). The GPN framework's organizational focus are lead firms, but it also explicitly includes horizontal actors such as governments, civil society organisations and non-governmental organisations in the analysis. This multi-level lens justifies its use as a framework for the purposes of this research as it captures multi-dimensional, polycentric processes at a diversity of scales throughout the production networks, allowing an analysis according to (Henderson et al, 2002; Coe et al., 2004; Hess, 2004):

- **Value** in terms of creation, capture and enhancement in terms of monetary returns by value addition;
- Corporate, collective, institutional **power** across different stakeholders,
- How stakeholders are **embedded in** territories or localities, in different relational within networks and in societies.

What makes the GPN framework crucial for our analysis is its ability to capture dynamically inter-connected and simultaneous processes with asymmetrical power relationships (Coe et al., 2008) involving a diversity of public-sector, private-sector and civil-society stakeholders. This allows mapping agents' mutual connectedness through their specific spatial configurations in the network (Henderson et al, 2002).Given the intention of our research to analyse a diversity of stakeholders' priorities and specifically producers' local outcomes, we will use the GPN approach as a framework for our observations on diverse stakeholders' priorities and the degree to which power and embeddedness constellations allow actors to project drivers, affecting producers' upgrading outcomes.

2.2 Upgrading

One of the early conceptualizations of upgrading comes from industrial competitiveness literature related to improving product quality and efficiency, along with moving into higher skilled activities (Porter, 1990; Kaplinsky, 2000), where upgrading was viewed as a means of achieving competitive advantage in global production systems (Humphrey and Schmitz, 2002). Humphrey and Schmitz define economic upgrading through marrying cluster and local innovation systems approaches (e.g. Rabelotti, 1997; Nadvi, 1999) with global value chain literature (Gereffi, 1999). They identify three types:

- Process upgrading, i.e. improving productivity in existing activities or undertaking improved methods of conducting activities;
- Product upgrading, meaning moving to higher value-added products; and
- Functional upgrading, which means changing the mix of functions executed by increasing or reducing activities performed.

A plethora of studies have identified the different forms of economic upgrading which local producers undergo when participating in GVCs/GPNs. For instance, research has found that farmers have experienced

process and product upgrading as a result of complying with international certifications (Tallontire et al., 2011; Laven, 2011; Evers et al., 2014). However, this understanding is very top-down, as it is assumed that policies of lead firms such as imposing 'sustainable' certifications have led to economic upgrading which has had positive local outcomes. However, research has not sufficiently delved into improving understandings of what upgrading 'means' to farmers. Rather, it has focused on comprehending what upgrading 'means' to all stakeholders in a GPN/GVC through the lens of a lead firm. This lead firm centricity makes it more difficult to unearth the realities of local development outcomes in relation to up- or downgrading in GPNs, causing this paper to emphasise the need to problematize to what extent lead firms' 'upgrading' ideas do entail economic, social and environmental benefits at the producer level.

Much recent work has helped deepen understanding of social upgrading (Barrientos and Smith,2007; Barrientos et al., 2011). The concept of social upgrading emerged from the International Labour Organization's decent work framework, which endeavours to alleviate working conditions and provide rights to workers in GPNs/GVCs(ibid). This conceptualization moved the unit of analysis from a lead firm in economic upgrading to an individual worker. Yet the understanding of social upgrading often favours a top-down approach; for instance, Barrientos and Visser (2012) find that since fruit and flower farms in South Africa complied with certifications, workers in those farms were able to socially upgrade through earning higher wages and some gaining permanent employment. One could argue that this analysis reproduces the entrenched top-down view of studying the effect of upgrading on workers through a lead firm lens, rather than providing a bottom-up view whereby workers have agency. Thus social upgrading research frequently does not problematize what upgrading 'means' to local level of producers or workers.

An even more recent concept to emerge is environmental upgrading. De Marchi et al. (2013) and Jeppesen et al.(2004) have clearly linked environmental upgrading with economic upgrading by looking at different environmental strategies from an economic upgrading lens. For instance, process upgrading would be related to eco efficiency, product upgrading with eco branding, and functional upgrading with performing environmental upgrades that go beyond certification compliance (De Marchi et al., 2013). This, too, takes a lead (and large second-tier) firm-centric focus by studying how suppliers alter environmental strategies to continue to sell to lead firms. To our knowledge, there has been very limited research that explores what environmental upgrading 'means' to local producers.

Thus there is a need to analyse the consequences of upgrading activities at different scales within the GPN, reiterating our view that a top-down understanding of upgrading fails to unpack crucial complexities and may conceal adverse realities at the local level. As aptly explained by Bair (2008:5): "Upgrading refers to the process by which actors (principally firms) seek to reposition themselves along the chain in order to increase the benefits (e.g. security, profits, technology or knowledge transfer) that they receive from participating in it". She brings in a dimension relating to the need to understand systematically what motivates firms to

upgrade, suggesting that motivations might differ across stakeholders. Past research has provided numerous examples of tensions between lead firms and suppliers that caused marginalization of suppliers from the GPN (e.g. Dolan and Humphrey, 2000; Evers et al., 2014). This marginalization has led to downgrading, a process described by Gibbon and Ponte (2005:138) as the "relegation to less remunerative and/or secure end-market segments or channels".

Hence, this paper aims to provide a more nuanced understanding that fleshes out what upgrading activities mean to local producers in terms of the outcomes attained. Through an innovative new framework of stakeholder priorities, this research will attempt to map tensions between different stakeholders' motivations for engaging with sustainability standards. Based on this analysis, the study will then link these tensions to local producers' experiences of environmental, social and economic upgrading or downgrading as a result of these sustainability standards. This framework will enable giving agency to diverse stakeholders in the GPN so as to comprehend firstly what motivates them to pursue sustainability initiatives, providing a basis on which to analyse in a second step the implications of upgrading for each. The constellation of priorities framework adds a new epistemological[2] and methodological strategy to deconstruct and capture the drivers underlying sustainability engagements as a precursor to problematizing what upgrading can mean locally. It nuances understandings on the aspect of 'whose' perspectives and power are critical to shaping and reshaping the drivers to upgrade and the possible implications for local upgrading outcomes.

3. CONSTELLATION OF PRIORITIES: THE MOTIVATIONS UNDERLYING SUSTAINABLE ENGAGEMENT

Given the considerable diversity of priorities associated with certification schemes and sustainability standards, there is a need to analyse what drives different stakeholders to engage with the seals. The drivers underlying engagement with and choices on sustainability standards will inform the format, stakeholder structure, time scale and spatial extension governing sustainability measures, affecting the local upgrading outcomes for producers. Raynolds (2009) argues that even though the behaviour of buyers of ethically traded coffee was identical, i.e. sourcing a fair trade commodity, their underlying drivers differed and altered the types of relationships established, distinguishing between three distinct types. Whereas **mission-driven buyers** seek to establish 100% fairly traded connections and build long-term partnerships with their Southern suppliers, **quality-driven stakeholders'** priority is attaining gourmet supplies, the seal being the vehicle to attain that. By contrast, **market-driven buyers** continue with mainstream business activities outside of their niche engagement with the fair seal, with traceability taking precedence over partnership. While Raynolds (2009) emphasises the three types are located on a continuum rather than within separate

[2] Murphy and Schindler (2011) also discuss the importance of a point of entry into a GPN, moving focus away from the lead firm and creating a focus on different stakeholders.

categories, the underlying logic of analysing priorities is crucial especially for as contested a concept as 'sustainability standards', and as diverse a set of stakeholders as those typically involved in implementing sustainability standards and certification schemes.

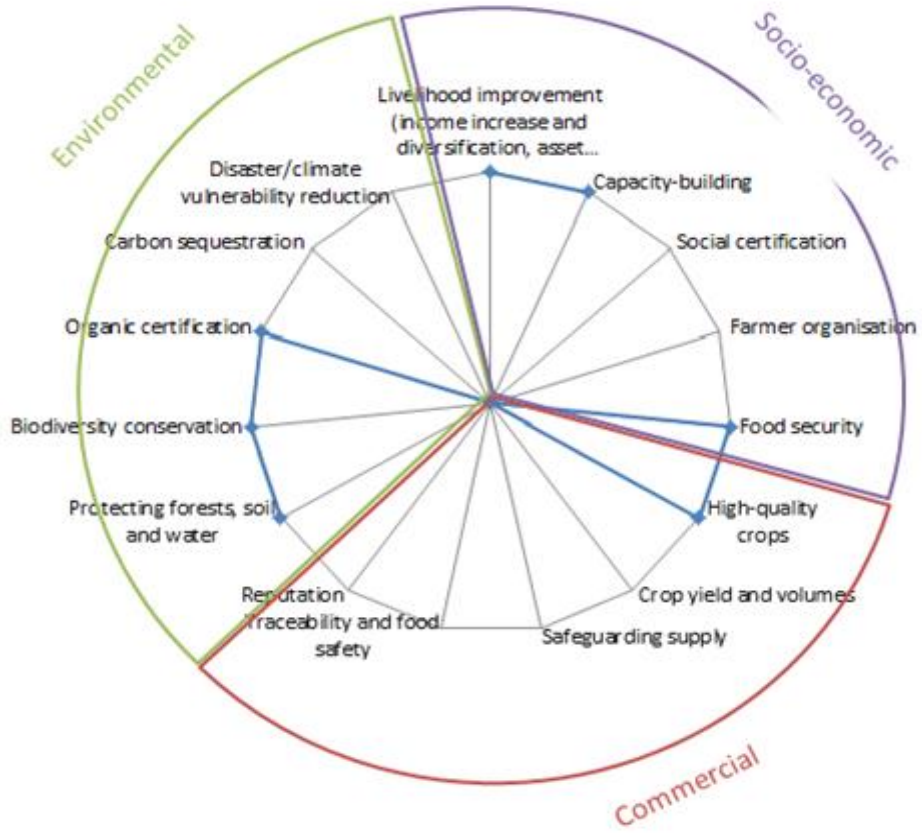
The diverse nature of stakeholders involved in certification schemes necessitates a framework of analysis which can accommodate the multitude of drivers contributed by diverse public-sector, private-sector and civil-society stakeholders. While agreeing with Raynolds's (2009) point regarding the need to investigate drivers, we would argue that her framework, in keeping with her study's focus, explains predominantly the motivations of private-sector stakeholders. By contrast, our intention is to capture drivers contributed by diverse stakeholders across the agricultural production networks investigated. Moreover, the insights of convention theory (Sylvander, 1995, 1996; Renard, 2003) illustrate that understandings of what constitutes quality will differ across different stakeholders. Indeed, the priorities associated with what constitutes high quality food, ranging from price-dominated understandings to ethically driven interpretations, will require negotiation across different stakeholders and segments of production networks (Cidell and Alberts, 2006; Fold, 2000).In order to find answers to our twofold research focus, we firstly need to map diverse stakeholders' priorities in answer to our question of 'who wants change' and the tensions which emerge from that, before we can then answer our second question of what this change means locally for producers in terms of upgrading outcomes.

Consequently, the objective here is to devise a framework to analyse diverse stakeholders' reasons for engaging with sustainability standards as a precursor to engaging with producers' local experiences with seal compliance. A particular emphasis within the framework's design was allowing for and unpacking the competing demands, particularly from public and private policy (Franzen and Borgerhoff Mulder, 2007), which are likely to be placed on agricultural production networks. The framework, originally devised and tested in examining cocoa sustainability initiatives (Krauss, 2016), builds on the two authors' in-depth fieldwork in East Africa and Latin America, respectively. Drawing inspiration from the above-cited literature (particularly Raynolds, 2009; Franzen and Borgerhoff Mulder, 2007; Cidell and Alberts, 2006), it encompasses three dimensions, socio-economic, commercial and environmental, including five axes each. The distinction into socio-economic, commercial and environmental deviates from the most common conceptualisation of sustainability, emphasising social, economic and environmental concerns. The reason is that we believe there is a need to distinguish between smallholders' livelihoods and a private-sector stakeholder's emphasis on its own commercial gain, as a buyer's interest in keeping commodity prices low is diametrically opposed to smallholders' interests in a viable socio-economic income. Smallholder producers feature heavily in both authors' research; in some global production networks and upgrading discussions, their voices receive less attention than for example firms' role. The classification into socio-economic, commercial and environmental priorities also allows a more complete mapping of drivers for different stakeholder types and

at diverse scales, facilitating a more nuanced analysis of local upgrading outcomes at the producer level in a second step.

The framework pictured below allocates five axes to each of the three dimensions, emphasising different facets of the socio-economic, commercial and environmental domains. It does not aim to be exhaustive, but reflects the priorities cited most frequently in data obtained from stakeholder interviews, focus group discussions and documentary analysis. A key emphasis is the need to identify and unpack potential synergies, but also incommensurabilities between different stakeholders' priorities within the same initiative or trading relationship, to explore in all these convergences and tensions. The diagram only distinguishes between a binary absence or presence, with the connecting lines only for better visualisation:

Figure 1: Constellation of priorities model for agricultural commodities



Source: Modified from Krauss (2016).

The socio-economic dimension encompasses five axes, including firstly food security, a key concern especially in rural settings, farmer organisation, as well as social certification, key concerns for some certifiers and many bilateral donor organisations to provide long-term support to producers beyond funding

cycles. Two other socio-economic axes are capacity-building, a vehicle to attain diverse economic, social and environmental upgrading outcomes through knowledge transfer, as well as the key aspect of livelihood improvement, which is an umbrella term covering income increase and diversification, key objectives for smallholders, as well as asset accumulation to facilitate an improvement of producers' local realities. The axes from the commercial realm represented in the above diagram are concerns for reputation, a key inclination, and secondly the desire to safeguard traceability and food safety, two interlinked concerns. The three other commercial axes relate to supply and productivity, emphasising the need to safeguard long-term supplies satisfying price and quality requirements, crop yield and volumes which both allow reasonable socio-economic livelihoods and satisfy private-sector buyers, and high-quality crops in keeping with high expectations especially in the global North. Clearly, there are multiple interrelations and overlaps between socio-economic and commercial motivations: some of the above-represented socio-economic drivers such as improving livelihoods or promoting food security may clash with objectives from the commercial realm such as boosting productivity and safeguarding supply at the prices private-sector stakeholders' desire. On the other hand, socio-economic goals are often also predicated on functioning links with private-sector stakeholders to facilitate capacity-building or attain the commercial outlet for produce upon which livelihood improvements are predicated.

There are similar interdependencies and tensions with the third dimension of the diagram, the environmental realm. The five axes within this dimension encompass disaster/climate vulnerability reduction, a key concern in a changing climate, as well as carbon sequestration and the often attached carbon credits as well as organic certification[3]. Organic certification clearly has strong ties to both the socio-economic and commercial realms given livelihood benefits and marketing opportunities, but comes under the environmental category given producers' strong sense of its ecological implications. The final two axes have strong conservation tendencies, including preserving biodiversity and protecting forest, soil and water concerns, respectively. All five of these aspects are strongly predicated on the socio-economic aspect of capacity-building, while also requiring commercial outlets in the form of continuing supply and crop yields. Moreover, the traceability and food safety dimension is an increasing concern for all types of certification, both social and organic certification. Given the far-reaching implications of priorities underlying certification for the initiatives instigated, the need for identifying synergies and tensions among different stakeholders' priorities as a precursor to analysing local upgrading outcomes for producers becomes evident. Sections 4 and 5 will apply the above-described framework to agricultural commodity case-studies in Kenya and Nicaragua to map the landscape of stakeholder priorities as a precursor to identifying the links to producers' local upgrading outcomes. First, however, the following section will explore further the link between

[3] Multiple papers (e.g. Bowen and Hoffmann, 2013) suggest the importance of organic certification as a process of offering legitimate sustainability solutions to agriculture.

priorities and local upgrading outcomes as well as the relevance of political and policy considerations in relation to sustainability standards.

3.1 Linking priorities, GPNs and upgrading

As mentioned above, compliance with sustainability standards is one particular manifestation of economic and environmental upgrading, requiring changes to process and product according to certification schemes and buyers' requirements. The proliferation of certification uptake has occurred for two major reasons: local revenues and market opportunities (Dolan and Humphrey, 2000; Barrientos et al., 2016; Krishnan, in press). However, different sustainability standards may stipulate a diverse range of requirements in terms of the social, environmental and economic upgrading activities they expect producers and farmer organisations to undertake. Thereby they define 'good performance' by aggregating different requirements in a variety of ways and impose these requirements on grassroots actors (Dudley et al., 2005; Foresight, 2011; Blowfield, 2003; Van Dam et al., 2008). For instance, while organic standards usually limit permissible chemical inputs, the UTZ Certified standard pursues a no-deforestation strategy (Krauss, 2016): both prioritise environmental considerations, but mandate very different concrete requirements on farmers. Therefore, stakeholders' different motivations for choosing diverse sustainability standards and the requirements they mandate will entail palpably different local upgrading outcomes for producers. Moreover, consumer pressure on companies for ethical awareness (Hughes, 2001) is a distinctly different driver from the business imperative which sustainability constitutes in some industries. In cocoa, improving cocoa production's socio-environmental circumstances is essential for the sector's long-term viability. This difference in priorities from purely altruistic or commercial opportunity-based motivations requires unpacking given the considerable divergences this may entail in different stakeholders' constellations of priorities in the same initiative, and the implications these motivations entail for producers' local upgrading outcomes.

The need for unpacking stakeholders' priorities becomes even clearer when considering the repercussions of policy considerations for standard selection and local realities. We define policy to mean stipulations either by a public-sector entity such as a governmental or international institution or by a private-sector entity which are a standard to be followed often for safety or security reasons (as used e.g. in Crucefix, 1998; Kilcher, 2005). Particularly within the European Union, food safety policies are the most prominent examples of binding regulations instigated either by public or private entities, imposing new sets of processes and product standards with which producers and all other segments of the global production network have to comply: palpable consequences thus result for producers' local outcomes and upgrading realities. The above-identified priority axis of 'traceability' within the commercial dimension is one vehicle commonly considered as contributing towards food safety, raising questions to what extent food safety policies may contribute to tensions with other priorities and affect local producers' outcomes. For instance in Kenya,

traceability requirements for GlobalGAP have only been used for export produce and not rolled out to local produce, thereby questioning the food quality sold in local markets (Interview: #3k, #7k farmers).

The priorities framework is set against the backdrop of the GPN lens, which emphasises the importance of considering stakeholders' power and embeddedness relations. Each axis of the constellations of priorities framework encompasses different power and embeddedness considerations, which allude to the diverse motivations fuelling the adherence, uptake and dissemination of sustainability standards. For instance, lead firms, though territorially embedded in developing country markets, may exercise their power to give precedence to a standard which is very marketable towards their own consumers, outweighing Southern interests and smallholder producers' potentially diverging standard preference. Producers' local upgrading opportunities will thus hinge on lead firms' upgrading objectives. However, as marketability is one of the main priorities for local suppliers, there will be an eventual iterative convergence of the priorities across Northern lead firm and Southern suppliers.

The priority framework can be used to elicit stakeholders' underlying drivers as a precursor to analysing to what extent these priorities have led to local upgrading outcomes, taking into account local producers' agency. To our knowledge, this has not been explored in other papers thus far. Our analysis takes care to map drivers across diverse segments of GPNs, taking into account e.g. smallholders as well as cooperatives in addition to the much-studied lead firms, producers' priorities may not match perceived local upgrading outcomes. In effect, we aim to deconstruct what upgrading really 'means' to local farmers, through the lens of local farmers, rather than the lens of a lead firm. As discussed above, there is a need to problematize the inherent assumption that upgrading activities will automatically entail benefits for local producers, given the risk of stagnation or downgrading at the local level even if buyers safeguard compliance with a seal. Moreover, depending on the sustainability standard and the buyer-producer relationship in agricultural global production networks, there may not be a systematic assessment of producers' and cooperatives' priorities prior to a standard's implementation. The asymmetries in terms of power and embeddedness may cause buyers to impose a sustainability standard which is not consistent with producers' priorities and may even entail adverse effects on smallholders' local realities. Given buyers' partly overwhelming corporate power and network embeddedness vis-à-vis producers' limited collective power and societal embeddedness in consuming societies, producers' ability to determine sustainability standards may be limited. This agency consideration is crucial and one of the emphases we wish to advance with this paper. The following two sections will explore through case-studies firstly the constellations of priorities among different stakeholders, and secondly the links between priorities and local upgrading outcomes for producers. Section 4 will explore cocoa in Nicaragua, whereas section 5 emphasises a case-study within the Kenyan horticulture sector.

4. CASE-STUDY I: COCOA IN NICARAGUA

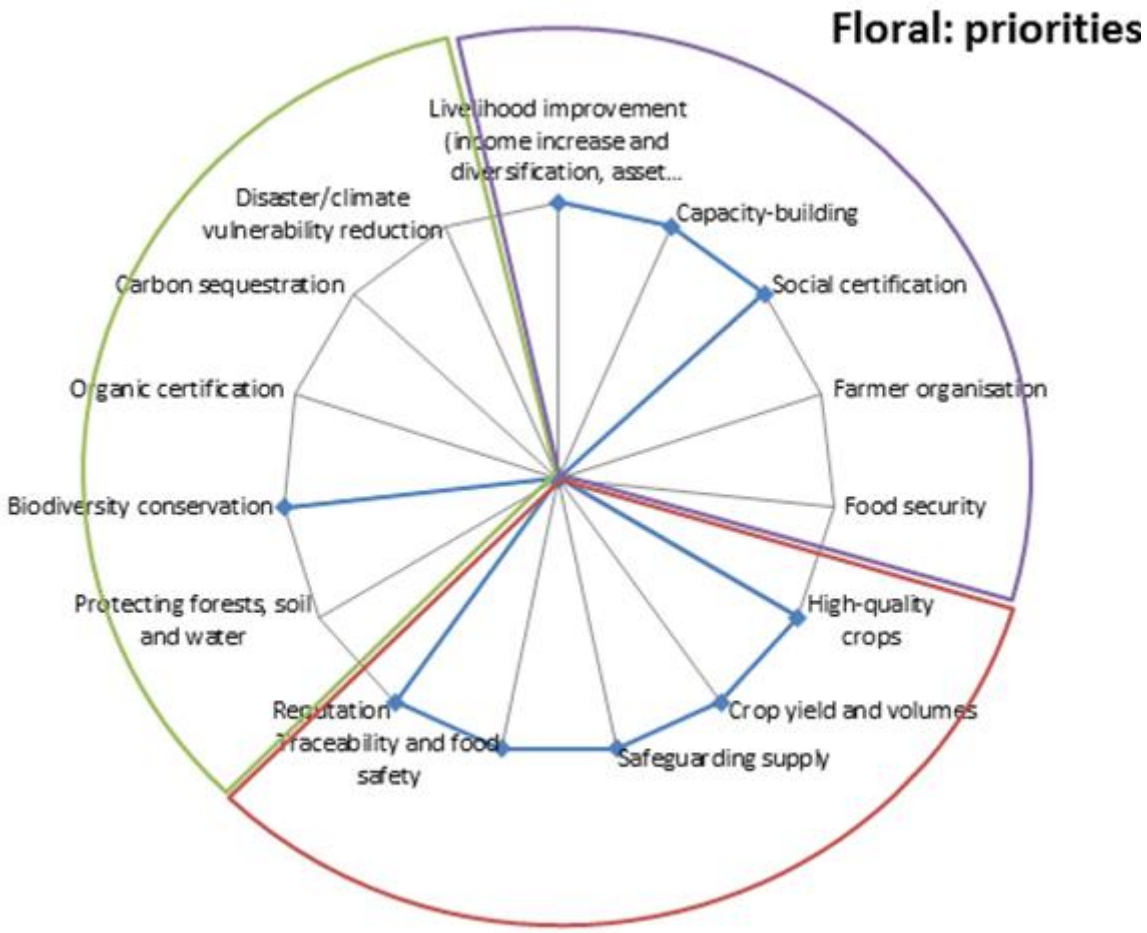
Cocoa, grown in agroforestry systems, is a significant source of livelihood in rural Nicaragua. In 2015, approximately 2.5 million of the 4.3 Nicaraguans lived in rural areas (World Bank, 2016a), with agriculture contributing about one fifth of the country's GDP (World Bank, 2016b). The heavily forested country (CEI, 2016) saw a sharp rise in its cocoa exports from 2014 to 2015, jumping from 2,100 metric tonnes in 2014 to 3,800 metric tonnes in 2015 and from USD4.3million to over USD7 million in value (CETREX, 2016; La Prensa, 2016). In addition to cocoa exports, cocoa is also consumed in-country in maize drinks such as Pinolillo, with export quality usually superior to the supplies consumed domestically (Author interviews #51, civil society; #58, research; #34, civil society).

One key public policy change introduced recently is the EU Association Agreement signed between the EU and selected Central American governments, including Nicaragua, at the summit of the System for Central American Integration in June 2012 (EU, 2012). A key component of this new regulatory policy environment is the need to safeguard traceability for all food imports from Central America to the European Union (Author interviews #54, #93, #100, private sector; #51, civil society). For European chocolate makers, that means that all cocoa supplies purchased from Nicaragua will have to be traceable back to individual cooperatives and producers, necessitating certification schemes which can comply with this fundamental and non-negotiable quality requirement (Author interview #108, cooperative representative, #93, private sector). In terms of stakeholder drivers, this thus introduces a clear emphasis on the commercial dimension, requiring cooperatives and producers to implement considerable changes on the ground in terms of processes and end product as well as training.

As a result of the policy-makers' shift in requirements, German chocolate maker Floral equally altered their certification preference. Since the 1990s, they had been active in the Central American country initially from a social development motivation (Author interview #93, private sector; #34, civil society), using cocoa production for the dual purpose of curbing environmental degradation and providing socio-economic livelihoods to rural communities given a personal attachment to Nicaragua and their philanthropic inclinations as a family-owned business (Author interview #33, private sector). Their long-term commitment, favourable prices and voluntary payment of various premiums to producers and cooperatives alike for increased volumes or infrastructure development, was and is much appreciated, affording cooperatives and producers some livelihood security and stable sales markets (Author interviews #80, #108, #112, cooperative representatives; #104, #106, cocoa producers). In the early 2000s, the project acquired a commercial dimension given Floral's intention to export and use organic cocoa in their chocolate (Author interviews #101 and #117, civil society). In 2013, however, the company announced to producers and cooperatives that it would no longer pay organic premiums, but only pay premiums for a different certification scheme, UTZ

(Floral, 2013b): the newly favoured label was to deliver the traceability requirement (Author interview #33, private sector; #51, civil society) which the EU-Central America Association Agreement necessitated, exemplifying a trend visible across the cocoa sector (Hoffmann and Grothaus, 2015).

Figure 2: Chocolate maker Floral's priorities after EU-Central America Association Agreement



Source: Authors' illustration

As Figure 2 illustrates, the private-sector stakeholder unsurprisingly had a number of commercial priorities, ranging from high-quality output via crop yields and safeguarding supply to reputation and, crucially, traceability in response to the EU's requirement, prompting a shift in certification preference. At the same time, their prior focus on organic certification transformed in favour of a certification scheme safeguarding traceability, with socio-economic priorities of livelihood improvement and capacity-building remaining identical and social certification newly added. In this instance, there is thus a clear tension between their prior focus on organic cultivation techniques, and the commercial priority of traceability prompted by legislative policy, requiring a certain kind of social certification. This exemplifies not only tensions between

different drivers, but also illustrates the corporate and institutional power of the global North wherein policy being decided by and in the North affects producers' and cooperatives' local realities, changing the terms of social, economic and environmental upgrading for smallholders and cooperatives.

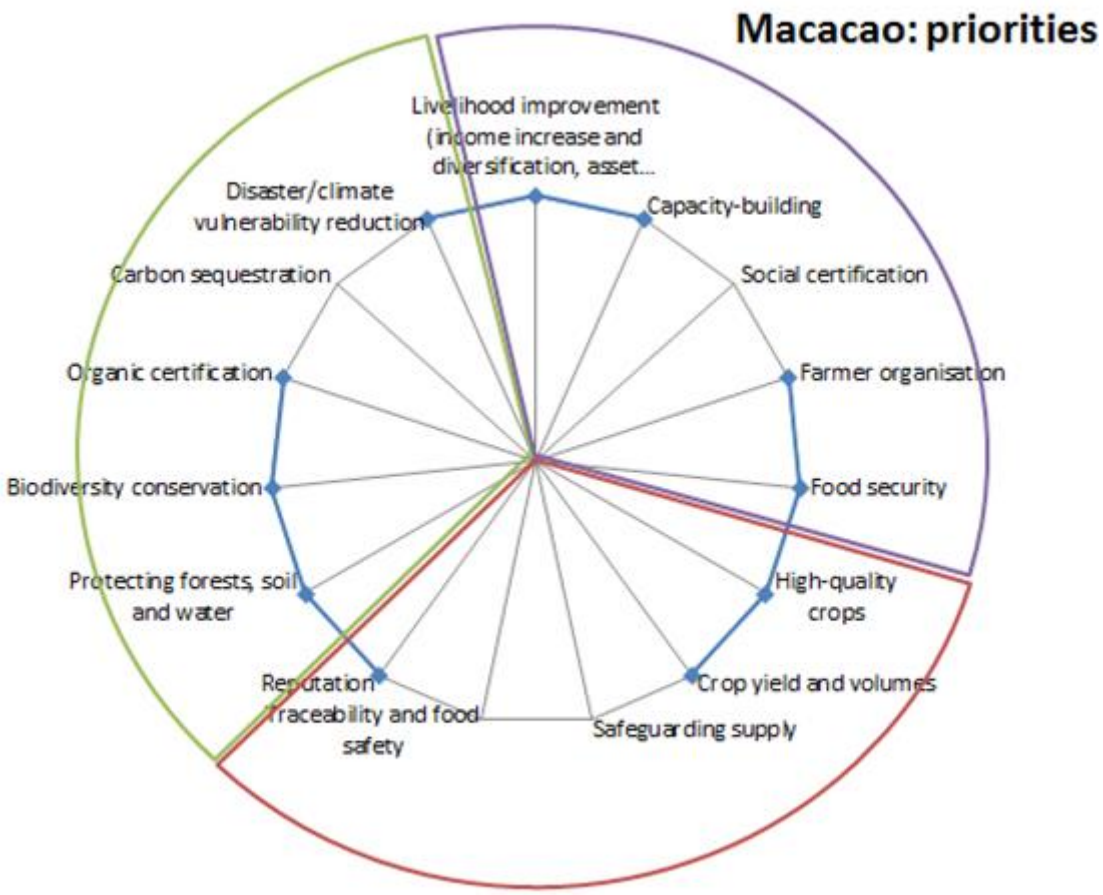
Beyond the policy aspect of an EU food safety requirement prompting a certification change, the commercial 'reputation' driver represented in the above diagram is also highly relevant. Given growing concerns about the long-term ability of the cocoa sector to match growing demand (Thornton, 2010; Barrientos, 2014; Fountain and Hütz-Adams, 2015), ever more private-sector stakeholders, encompassing traders, processors and chocolate manufacturers, are resorting to certification schemes. The seals serve a dual function both as a means of addressing issues and as communicable proof to investors and consumers that private-sector stakeholders are implementing changes, with multiple major chocolate manufacturers pledging to use 100% sustainable cocoa by 2020 (Confectionery News, 2012a-d; 2013). Against the backdrop of heightening private-sector and public-sector involvement in cocoa sustainability initiatives (Tampe, 2016), there is thus a reputational need especially for companies priding themselves on value-driven operations to demonstrate commitment to improving cocoa production's socio-environmental circumstances: representations showing altruistic commitments may thus distract from the need for genuine shifts away from entrenched power asymmetries and inequalities in the sector. As consumers consulted through focus group discussions confirmed (FGD 1, 2, 3), Floral is strongly associated with positive, family-driven values, with the seal change affording the company the opportunity to communicate its desire to abide by strict values on social and environmental terms to the public (Floral, 2013a). The shift was met with scepticism by various cooperatives and producers favouring the organic philosophy, but unable to assert their collective power vis-à-vis Floral's corporate clout given existing asymmetries.

For a number of cooperatives, producers and civil-society representatives, organic production is their preference (Author interviews #108, #109, #112, cooperatives; #51, #101, #117, civil society; #70, #72, #110, #138, cocoa producers), raising questions about Floral's shift in certification schemes. Previously, they were content with the company's organic preference and the local environmental and economic upgrading opportunities it afforded, as it was consistent with their own inclination towards production which prioritises above all the ecological integrity of the land on which and off which they live, and the ability of following generations to use the land:

> *"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." (Author interview #72, cocoa producer)*

As the following diagram shows, civil-society representatives, two cooperatives and diverse producers within them felt very strongly about continuing along the organic route, with the diagram representing the constellation of priorities of one cooperative, Macacao, who felt particularly strongly about the organic philosophy:

Figure 3: Constellation of priorities for Cooperative Macacao.



Source: Authors' illustration

Clearly, there are some overlaps with Floral's priorities. For instance, there are congruences in terms of livelihood improvement and capacity-building in socio-economic terms, and the commercial priority of producing high-quality crops and crop yields to maintain the commercial outlets. Notwithstanding these commonalities, Macacao's (and others') strong ecological and organic priorities no longer mirrored Floral's stance post-Association Agreement. Some producers and cooperatives expressed an appreciation for the opportunity for added capacity-building, organisational and plot development, viewing the new UTZ standard as complementing existing environmental preconditions with a health and safety component (Author interview #103, #104, cocoa producers; #112, cooperative representative): some thus viewed this as an opportunity for social upgrading through farmer learning and engagement. However, among the cooperatives abiding by Floral's new certification preference, some found that the premiums paid did not suffice to cover the added investments and expenses required to introduce the capacity-building, documentation and infrastructure conditions necessary to comply with the new seal (Author interview #120,

cooperative representative; #101, civil society): economically, the switch thus entailed a downgrading risk for some.

Socially, there was thus a mixed bag in terms of producers' local upgrading outcomes. While affording capacity-building and empowerment opportunities on the level of individual producers as well as for some cooperatives, ecologically minded cooperatives in particular found themselves unable to enact their collective power and desire to choose a certification scheme for themselves. Economically, while keeping access to the only export market open, the product and process upgrading requirements proved so costly in some cooperatives as to cancel out certification's commonly assumed livelihood benefits. Equally, ecologically minded stakeholders were opposed to a standard constituting "five steps back" in environmental terms (Author 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, these would also impair future steps towards upgrading through organic seals given the need for chemical-free environmental operations for three years prior to organic certification (Author interview #101, civil society): Floral's importance to and embeddedness in the network and its corporate power thus outweighed cooperatives' and producers' territorial embeddedness and collective power, adversely affecting their upgrading opportunities both in environmental and economic terms.

Despite the company's premiums and support, there were thus significant impacts on local realities as a result of Northern policy change and the politics of certification, with Northern preferences winning out over some Southern stakeholders' priorities and desire to continue farming in keeping with the organic philosophy. These tensions become particularly manifest when considering the implications for the challenges and opportunities of upgrading for smallholder producers: the need for process and product upgrading to comply with the traceability priority at the producer and cooperative levels facilitated certain social upgrading opportunities given the added need for training and health and safety compliance on e.g. chemical inputs. At the same time, however, environmental upgrading opportunities diminished compared with the prior organic certification model given the greater spectrum of chemical inputs used, with uncertain consequences for biodiversity, forests, soil and water.

Some stakeholders' vociferous displeasure at Floral's change in certification prompted a German organic news site to report on Floral's intention to discontinue its longstanding support for organic cocoa supplies (Organic news, 2013). Protests by organic consumers as well as organic retailers ensued: even the representative of a Nicaraguan organic-focused cooperative (Author interview #112) cited the importance of their reporting and the public's reaction in prompting Floral to revert to paying organic premiums as well as premiums for the newly favoured seal, although the pervasive traceability concerns meant Floral's overall policy change remained intact. This occurrence demonstrates an interesting tension between the collective power of Northern civil society, the institutional power of a policy legislator, and the relevance of Floral's

societal embeddedness in the global North in prompting them to alter their own premium policy, thereby altering local upgrading outcomes. Although the Northern policy priority still dictated the preferred choice going forward, the 'reputation' priority held sway vis-à-vis the 'traceability' axis by prompting the commercial choice to continue paying organic premiums as a means to preserve consumers' positive associations with the family-owned company. The reputational consideration of maintaining a positive image to satisfy the commercial 'reputation' driver, stemming from Floral's societal embeddedness in its home context, thus improved local realities for ecologically minded cooperatives, producers and civil society organisations in Nicaragua, confirming the need for careful unpacking and analysis. It was thus only civil-society and consumer pressure which safeguarded environmental, social and economic upgrading benefits for smallholders and cooperatives, upholding environmental benefits, training opportunities, and improved processes and end products.

As the fifth section will explore in more detail across the two case-studies, the questions of who wants change and what the change means for producers' upgrading opportunities merit examination given the far-reaching implications of emerging tensions. The new UTZ standard superseding the previous organic certification scheme and the provisions made in terms of infrastructure, training and documentation for compliance meant that while it facilitated some aspects of social and economic upgrading through opportunities for capacity-building and organisational development, it also entailed some economic detriments and downgrading in ecological terms: the new standard's environmental provisions do not go as far as the organic certification scheme's, which was very restrictive e.g. in terms of chemical inputs. Only civil society and consumer pressure, i.e. the collective power of mighty Northern entities, upheld environmental upgrading advances vis-à-vis Floral's corporate power, while preserving also social and economic opportunities for ecologically minded producers and cooperatives. This example thus highlights the need to unpack assumptions partly prevalent in the literature that compliance with certification will automatically entail upgrading benefits at the local level, emphasising that policy considerations conceived in the global North may contribute to downgrading in some respects and instances.

5. CASE-STUDY II: FRUITS AND VEGETABLES IN KENYA

Kenya has had long-term trade links especially in the horticulture sector with the EU. Fruits and vegetables are one of Kenya's foremost income earners (HCDA, 2012), having contributed 33% of agricultural GDP in 2013 (World Bank, 2015) and having grown at a compound rate of 10-12% per annum from 2003-2013 (ITC, 2014). Between 1997 and 2000 EU legislative policy developed a series of hygiene controls and food safety measures through directives (Henson and Mitullah, 2004; ISEAL, 2008). At the same time, the Euro retailer producer working group created the 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

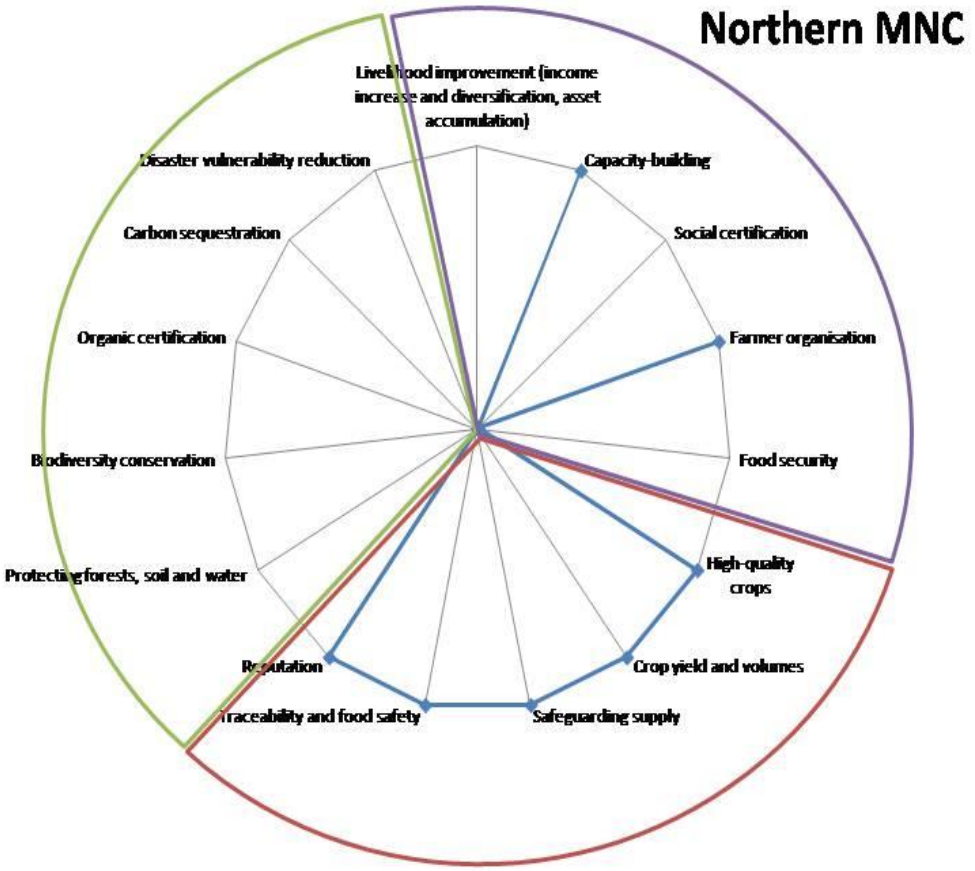
practices (Garbutt, 2005). EurepGAP eventually evolved into GlobalGAP, a food safety measure with several hundred control points and compliance criteria (GlobalGAP, 2016). However, traceability was one of the main requirements as it would enable international lead firms such as supermarkets and other retailers to trace produce back (Interview: #5k #9k, farmers, #1kg government), a similar requirement to the mandate emerging from the Central America-EU Association Agreement. Initially introduced as voluntary requirements, such standards[4] have thus become 'defacto mandatory', thus creating barriers to entry to European markets (Gibbon and Ponte, 2005; Hoffmann and Grothaus, 2015).

There is obvious evidence of asymmetric power relations, with Northern retailers controlling the quality and practices which local producers use in the GPN, thereby also effectively controlling their livelihoods. Northern 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 (Interview: #1e #3ke #8ke, exporters). A key outcome for Northern retailers was improvement in their reputational capital and marketability (Interview #3kf FGD). Most local farmers have experienced rejection levels of over 15% of their produce because it was not 'safe' enough or 'export grade' worthy, and thus have had to suffer losses on this produce (Interview: #1kf #3kf FGD).

Additionally, farmers' inability to adhere to certifications due to lack of capacity was a key issue preventing the uptake of certifications (Tallontire et al., 2011). In an attempt to circumvent this, Northern retailers through partnerships (with business association, donors, NGOs, Kenyan exporting firms) would provide specialized training in agricultural practices that were compliant with GlobalGAP (e.g. soil and water testing, pesticide applications, spray schedules, Interview: #1ke #4ke #5ke #7ke, exporters, #1kb business association, #2kf FGD). However, although these trainings improved certification uptake, they were exclusively provided to farmers selling into export markets who were organized into effective groups, such as the Kandara farmers' group (Interview: #4ke FGD). This marginalized and prevented local farmers from having access to better trainings. To add to this, most Northern retailers and 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 FFV produce (Interview: #5kf, FGD) and would also prove more manageable for traceability purposes (Interview: #2ke exporter). This created further exclusionary biases towards local farmers, making it even more difficult for them to access export markets. Clearly, Northern retailers' priorities lie in the commercial dimension – reputation, traceability and food safety, safeguarding supply and high quality crops as depicted in figure 4.

[4] International supermarkets such as Tesco and Marks & Spencer, have their own private standards eg: Tesco Nature, Farm to fork. However, many of these supermarkets also accept GobalGAP compliant produce as many of the compliance criteria overlap.

Figure 4: *Constellation of priorities for Northern retailers/ Kenyan Export firm*



Source: Authors' illustration.

Many exporting farmers appreciated the livelihood security resulting from written contracts that were provided by the Kenya exporter and supermarket or Northern retailer, although these contracts were usually less than one year for small-scale farmers (Interview: #3kf FGD). This livelihood security was also complemented by socially-oriented capacity-building for farmers and workers such as leadership skills enhancement and hygiene-related trainings (Interview: #1kf FGD). Thus there also existed a social dimension, along with the commercial priorities of international retailers, as figure 4 illustrates. However, GlobalGAP touches, but not does claim to focus on environmental sustainability (Interview #1kd, donor). Most of GlobalGAP's environmental requirements are not mandatory for compliance (GlobalGAP, 2016). Nevertheless, certain Northern supermarkets through private standards instated the need to protect land and water resources and develop biodiversity plans, but were not as consequential as commercial drivers.

Since the signage of the food safety-related protocols with the EU, the Horticultural Crops Directorate (HCD), Kenya's nodal government organization, has come to the forefront. Prior to a growing export orientation for

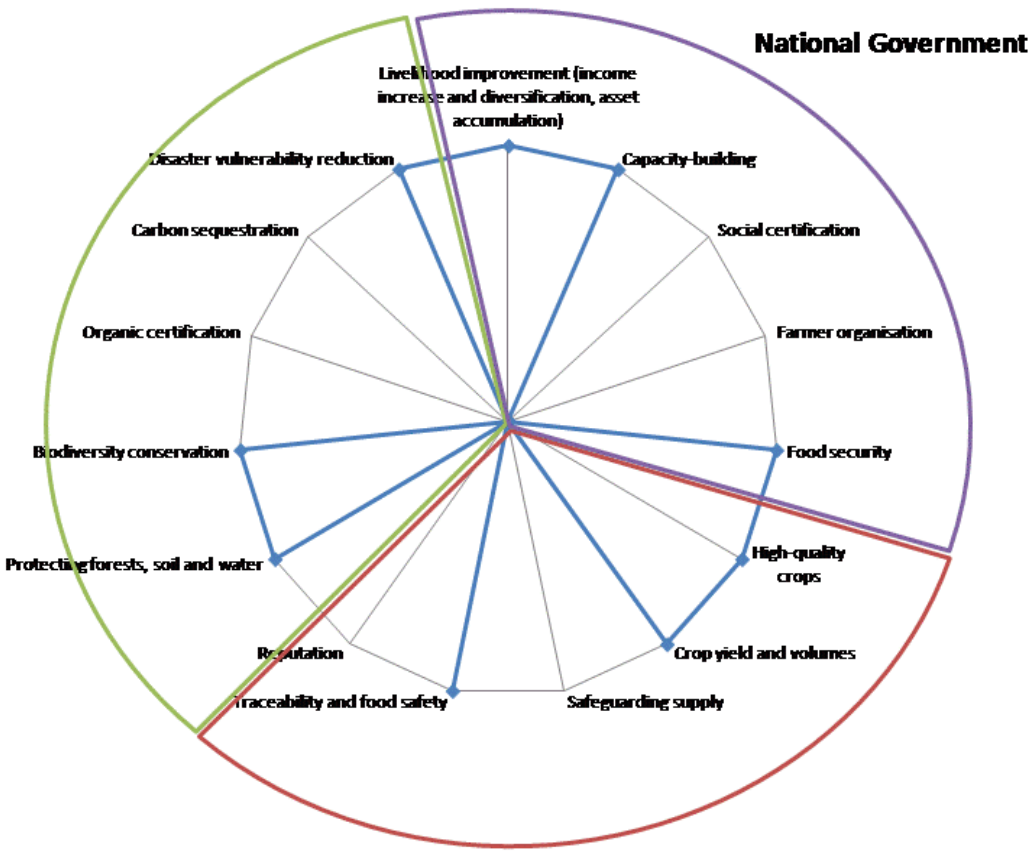
horticulture, the main priorities related to food security, improving crop yield in the commercial sphere, providing livelihood security and organizing farmers into groups (Interview: #1kg #2kg government). Thus social and commercial priorities were prevalent, while environmental priorities on protecting 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 tensions between the government and northern retailers, as the stringency of the standard would marginalize farmers and threaten livelihoods (Interview: #3kg government). However, since many Northern retailers network and territorially embedded themselves in Kenyan markets through increasing investment in capacity-building and infrastructure as well as trying to provide longer term contracts and organizing farmers into groups, the Government's Horticultural Crops Directorate's priorities slowly began converging with that of the international retailers (Interview: #4kg government). New priorities of the HCD relating to traceability, food safety and quality began to emerge commercially as shown in figure 5. Traceability became ever more important to the government, especially since Kenya was banned for one year from export to the EU in 2007, due to exceeding the maximum residue limit of pesticides (Interview: #5kg government), prompting legislative changes to vet exporters and acquire lists of farmers for traceability (Interview: #5kg government). Thus private policy and corporate power of Northern retailers reshaped and dissolved some of the institutional power of the HCD.

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 most of the capacity-building initiatives for export farmers (Interview: #1kf FGD). County and national governments would send extension officers to help farmers mostly organized into groups that exported, as they had financial support from donors and international supermarkets (Interview: #1kf #3kf FGD).

Climate change was also now seen as a looming threat to the HCD especially with the increased pest and disease attacks on crops impacting product quality. The HCD will partake in vision 2030, a mission to make agricultural emissions climate-neutral and reduce the vulnerability of farmers to climate variability and extremes (interview: #1kg 3kg government). Biodiversity, especially preservation of flora and fauna, are seen as important in this mission as well, with the public policy set by Kenyan National Environmental Monitoring authorities for the environment driving priorities of the HCD in this case. Figure 5elucidates the mix of priorities of the government, showing the overlap of commercial and socio-economic priorities.

Figure 5: *Constellation of priorities for Horticultural Crops Directorate*



Source: Authors' illustration

Before the introduction of GlobalGAP, the Kandara [5] farmers' group were growing for local and regional[6]markets, with no specific standards enforced. Public policy did not focus on hygiene or health until the late 1970s. 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. Clearly the priorities were mostly environmental and commercial in the sense of generating enough crop volume to sell into local or regional markets. In terms of social priorities, farmers grew a larger portion of their land under food for subsistence, stating that food security, i.e. food access and availability, to them was very important (Interview: #6k #8k farmers).

However, the advent of GlobalGAP created many tensions between the northern retailers, the Kenyan government and Kandara farmers' group. Most farmers began growing less and less of their own indigenous

[5]A subcounty of Murang'a, Kenya.

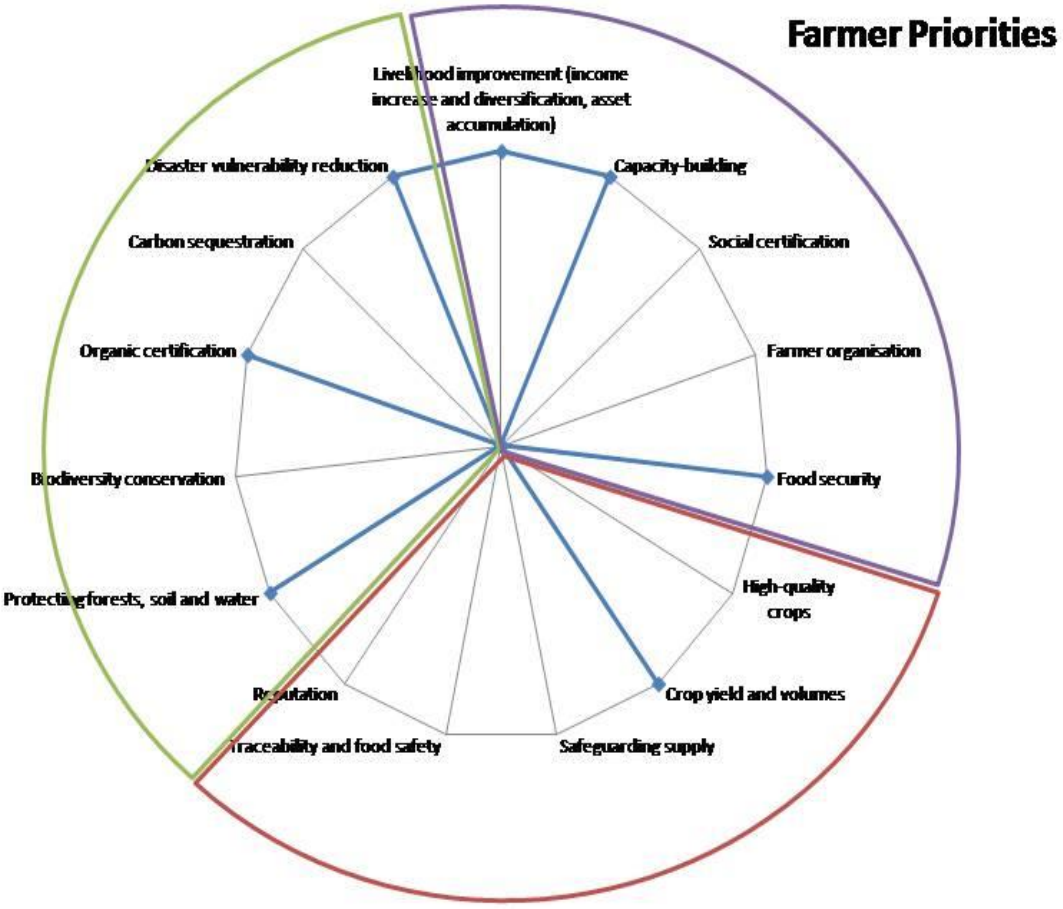
[6] Uganda and Tanzania

fruits and vegetables, replacing it with export produce that is generally not consumed within Kenya, affecting food security (Interview: #1kf FGD). Additionally, to adhere to volumes mentioned within contracts, farmers had to lease extra land, increasing the risk of crop failure and defaulting on land payments if the rejection levels by the exporting company were too high (Interview: #3kfFGD). Preferred supplier lists were developed, which marginalized many farmers who even defaulted once or did not conform to GlobalGAP (Interview: #1kb business association).

There were tensions between farmer groups and the Northern retailers and even with the government relating to environmental conservation. This was because of the requirement for farmers to replace indigenous, more environmentally friendly techniques with GlobalGAP requirements (interview: #11k #12k farmers). Many farmers echoed concerns on the difficulty in using new practices, worries on mono-cropping, and the slow degradation of the quality of their soils[7] (interview: #10k #14k farmers). However, the reason they continued to stay in these markets were income and livelihood security drivers (Interview: #1kf FGD). Furthermore, farmers vociferously voiced concerns on the increased loss in yields due to increasing temperature and unseasonal rainfall, claiming that it impacts quality and may cause loss of livelihoods (interview: #10k #11k #12k farmers). Thus, while they also have commercial and social priorities, clearly farmers' priorities are mostly environmental, protecting their biggest asset, i.e. their land, as shown in figure 6. Thus, Kandara farmers' group had limited collective power as opposed to the corporate power of Northern retailers.

[7] Especially problems of acidity increase in the soil

Figure 6: *Constellation of priorities for Kandara farmers' group*



Source: Authors' illustration

There are some overlaps across stakeholders mostly related to commercial and, to some extent, social priorities. For instance, improving crop yields is important to all, but a focus on the environment is missing and Northern retailers and to a large extent even the HCD have yet to provide tangible training to farmers on how to optimize use and conservation of natural resources in the current situation where horticulture is far more commercial than before.

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 upto two weeks, leaving them cash-strapped (Interviews: #10k #11k farmers). Livelihood security was short-lived, as many export companies would not provide farmers with more than a one-year contract (Interview#14k farmers). Thus even though multiple farmers economically upgraded through product and process, the local realities were not positive. Consequently, the

assumption that certifications lead to increased income does not hold in the case of Kenyan farmers, proving a key argument of this research. However, farmers were able to functionally downgrade, i.e. strategically diversify away from supplying to export markets and sell into growing regional markets, including Kenyan supermarkets, through the acquisition of new skill sets which gave many farmers entrepreneurship and leadership confidence to take bigger risks (Interview: #10k #11k farmers). Thus economic downgrading did lead to an inadvertent improvement in the quality of local produce and livelihood diversification opportunities.

Socially, the farmer 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. protecting clothing during pesticide spraying) to their homesteads (Interview: #1kf FGD). Thus they felt more empowered to start new ventures and also more aware of health and safety issues, which is a positive social upgrading outcome. Considerable research on social upgrading states that farmers who use certifications tend to also socially upgrade, i.e. have more bargaining ability especially if organized in groups (Barrientos and Visser, 2012). However, because of short-term contracts, some farmers in the group experienced higher levels of precariousness in their livelihoods, discouraging them from demanding higher prices for goods (Interview: #12k #13k farmers). Thus many group members did not feel they had higher bargaining capacity, while some medium-scale local farmers who were selling into local markets claimed they could bargain for better prices with Kenyan supermarkets (Interview: #9k farmer). However, in an intangible sense, many of the Kandara farmers' group members believed they received greater benefits. For instance, agro-vets (local shops selling agricultural products to farmers) and creditors gave them more privileges than other farmers, because export farmers were expected to have more stable income flows than their regional or local counterparts, entailing development of better social support networks.

Finally, environmental upgrading outcomes appear to be a mixed bag. The commercial 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 (Interview: #1ki education institution expert). Climate change is also bringing with it a host of issues:

> *"Many farmers are suffering from increased pest and disease attacks due to climate variability and extremes and are not able to effectively adapt … Instead to counter this they apply more pesticides which leads to increased rejection rates, it is a vicious cycle" (Interview: #1ki, education institution expert)*

The long-term environmental benefits of using GlobalGAP are unclear, but since GlobalGAP does not encompass climate change-related issues, there is a need for the government to provide technical support.

Farmers echoed concerns on the reduction in water access, soil quality and the increase in input costs (interviews: #10k #12k #13k farmers). Thus clearly, the priorities of the farmers' group were not met, impacting their overall upgrading outcomes.

In sum, upgrading outcomes have negative environmental and to some extent economic implications but entail some positive social outcomes: this shows that certifications have not necessarily improved the condition of farmers, confirming a key argument of this research.

6. ANALYTICAL AND POLICY IMPLICATIONS

The following section will examine the linkages and discuss broader aspects across the two case-studies, contextualising them in terms of their wider analytical implications for the understanding of sustainability standards.

Both case-studies involve commercial drivers contributed by Northern private-sector stakeholders, where corporate power outweighs Southern producers' collective interests, particularly in terms of environmental priorities. The traceability requirements necessitating process and product upgrading activities only relate to environmental issues where they involve avoiding food safety risks for Northern producers rather than concerns around preserving producers' cultivation base, despite the cocoa sector's acute supply woes. Moreover, while certification may allow Northern companies to access premium price segments, for producers the costs of sustainability standards often outweigh economic benefits, demonstrating that a key assumption about upgrading has proved flawed in both cases.

Other key findings regarding power and embeddedness valid across the two case-studies concern the sharp asymmetries between Southern producers and Northern buyers. While an unsurprising finding in itself, it is worth thinking through what the primacy of corporate power over collective power means in the context of diverging priorities, and the ability to project priorities onto other stakeholders. Equally, the imbalance is also relevant when it comes to what upgrading means for different stakeholders and who gets to enjoy upgrading benefits. Northern buyers should be able to access premium-price markets, but Southern producers may not reap livelihood benefits from buyers' economic upgrading. In terms of social upgrading, some producers and cooperatives express an appreciation for the opportunity for added capacity-building, organisational and plot development arising from certification. Whereas some literature has assumed that social upgrading activities such as farmer organisation or capacity-building will entail a strengthening of bargaining power, there is no such automatic linkage across our two case studies: this is also a policy-relevant implication as it highlights the need for specific support for Southern producers regarding advocacy and bargaining.

A further, related parallel across the two cases concerns the importance of territorial and societal embeddedness in buyers' home contexts over and above embeddedness in producer contexts. Across both GPNs, the ability to demonstrate to home consumers' compliance with standards to promote or uphold societal and territorial embeddedness outweighs embeddedness considerations in producer territories; marketability and traceability for food safety reasons are considered more pressing than producers' environmental priorities. This links again to the above-described power asymmetry, emphasising the need for multi-scalar and multi-dimensional analyses as facilitated by the GPN framework. At the same time, this finding also puts into doubt the assumption held in some circles that sustainability initiatives will automatically entail greater parity and genuine partnership between equals (Krauss, 2016), constituting another policy- and practice-relevant finding.

One difference emerging between the two case-studies is the degree of economic downgrading which producers choose to pursue. While poor returns and insufficient livelihood security, as well as the higher-order cultivation techniques required for export, have prompted some Kenyan producers to sell their produce to regional supermarkets instead of exporters, Nicaraguan cocoa farmers and cooperatives largely have no alternative to putting up with high certification costs without matching returns given the dearth of alternative sales outlets offering similar price levels. Equally, government has a stronger presence in the case of Kenya, with the vacuum of Nicaraguan public-sector support filled by the company taking on some support and capacity-building functions. Paradoxically, it is nevertheless institutional power, albeit predominantly from the European Union by way of the Association Agreement, exerting pressure on Nicaraguan cocoa actors to alter practices towards greater food safety, reiterating the policy-relevant finding of Northern actors' supremacy in imposing certification requirements.

The above-explored findings thus support the research's first key argument that differentiated analyses of diverse GPN stakeholders' priorities will show tensions between stakeholders and between their diverse socio-economic, commercial and environmental drivers in relation to sustainability standards. The power and embeddedness dynamics governing the GPN will have a considerable impact on whose power will lead to the projection of whose priorities, with both case-studies confirming the primacy of corporate power and private-sector stakeholders' commercial interests over producers' priorities. Secondly, the results equally underline that process and product upgrading activities which may allow Northern buyers to access premium markets may not necessarily entail an improved economic, social or environmental situation for Southern producers. Similarly, despite the improved capacity-building and organisational opportunities which certification schemes may entail, improved bargaining power is by no means an automatism, requiring careful unpacking.

We argue that the above-introduced constellation of priorities model makes a useful analytical contribution by allowing a systematic assessment of stakeholder priorities across GPNs, also providing agency to all actors.

The framework facilitated analysing and visualising the divergences between different stakeholders' priorities, helping to emphasise the potential for tensions and the underlying power and embeddedness asymmetries governing whose priorities become manifest in initiatives' implementation. In emphasising different stakeholders' and particularly producers' agency, it offers a framework to understand and unpack systematically the interests prevalent at different scales in GPNs. Thus it offers a systematic way to leverage different aspects of convergence and reduce divergence, which offers the potential to facilitate the construction of more socio-economically and environmentally resilient GPNs.

Another key finding is the intersection of public and private policy, and the need for multi-stakeholder participatory forms of engagement to develop sustainability standards that enable greater convergence of priorities. This is aptly put by Hoffmann and Grothaus (2015:9): "There is a need to carefully evaluate and balance the role of standards in serving private interests or addressing public concerns and public goods with a view to designing a strategy that best reconciles both facets". This indicates that increased iterative convergence through partnerships and collaborations are essential tools in promoting and building resilience of local producers for genuinely sustainable agricultural practices particularly in the face of climate change. Equally, it could possible create positive spillover effects for regional development across Kenya and Nicaragua.

In this paper, there was no space to build a framework which would allow a similarly systematic assessment of social, environmental and economic upgrading outcomes beyond lead firm centricity and highlight effects especially at the producer level. The research demonstrated that there is an acute need to investigate to what extent upgrading is assumed to create local benefits, and to what extent they actually materialise. The authors aim to develop a framework in future research which can equally systematise and visualise upgrading and downgrading outcomes particularly at the local producer level in terms of different aspects developed from the research following the constellation of priorities' mould. A second area for further research is the link between power, embeddedness, priorities and upgrading outcomes, which the authors equally hope to conceptualise more clearly in a subsequent paper theorising the links between priorities and upgrading outcomes.

7. CONCLUSION

This paper has identified and contributed towards filling two key research gaps: firstly, the study provides a framework to assess systematically who wants change, i.e. the priorities motivating diverse stakeholders to engage with certification schemes within global production networks. The multi-scalar, multi-level framework emphasises the need to give agency to all stakeholders and take the priorities of all actors, and particularly producers, seriously. Given diverse tensions between socio-economic, environmental and commercial drivers governing stakeholders' engagement with sustainability standards, conducting a multi-

scalar assessment is key to identify and analyse synergies and tensions resulting from stakeholders' diverging drivers. Building on this analysis, it emphasises how these diverging tensions become manifest in terms of the benefits local producers can hope to extract from engaging with sustainability standards. It argues that a careful unpacking of what this change means at the local level is required, problematizing that the often assumed automatic local benefits of buyers' upgrading activities may not materialise. It further highlights the need to distinguish between social, economic and environmental upgrading activities and problematize the commensurability of both diverse drivers and diverse upgrading outcomes when engaging in or with sustainability standards.

Using the case-studies of Nicaraguan cocoa and Kenyan horticulture, it examines and tests both its arguments, concluding that there is a broader need to analyse diverse stakeholder priorities to understand local outcomes and dispense with the assumption that upgrading activities will automatically benefit local producers. It emphasises that given considerable power and embeddedness asymmetries, Northern and particularly private-sector stakeholders were able to project their priorities irrespective of producers' diverging interests, influencing local realities and outcomes. Moreover, it finds that engagement in sustainability standards, contravening the narrative of sustainability as a panacea, does not even out such asymmetries, but constitutes another forum in which existing asymmetries are reproduced. The paper also concludes that there is a need to conceptualise further the links between concrete priorities and specific upgrading outcomes in future, with the authors aiming to write a subsequent paper systematising upgrading outcomes, theorising the interdependencies and highlighting connections to underlying power and embeddedness aspects.

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APPENDIX 1

Author interviews and FGDs: Cocoa case study

Number	*Interlocutor's affiliation*	*Date of interview*
#33	Private sector	13/01/2014
#34	Civil society	13/11/2013
#51	Civil society	20/01/2014
#54	Private sector	27/01/2014
#58	Research	20/01/2014
#70	Cocoa producer	06/02/2014
#72	Cocoa producer	10/02/2014
#80	Cooperative representative	12/02/2014
#93	Private sector	04/03/2014
#100	Private sector	06/03/2014
#103	Cocoa producer	11/03/2014
#104	Cocoa producer	11/03/2014
#106	Cocoa producer	11/03/2014
#108	Cooperative representative	12/03/2014
#109	Cooperative representative	19/03/2014
#110	Cocoa producer	18/03/2014
#112	Cooperative representative	18/03/2014
#120	Cooperative representative	27/03/2014
#138	Cocoa producer	07/07/2014

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FGD 2 – Focus group 2 discussion (2014). Second focus group discussion, with church choir. Effected on 23 April 2014 [audio-recorded].

FGD 3 – Focus group 3 discussion (2014). Third focus group discussion, with communications department of international non-food company. Effected on 29 May 2014 [audio-recorded].

APPENDIX 2

Author Interviews and FGDs: Kenyan Case study

Number	Interlocutor's affiliation	Date of interview	Place of interview
#3k	Kenyan farmers	29-10-2014	Kandara, Murang'a
#5k	Kenyan farmers	29-10-2014	Kandara, Murang'a
#6k	Kenyan farmers	05-11-2014	Kandara, Murang'a
#7k	Kenyan farmers	12-11-2014	Kandara, Murang'a
#8k	Kenyan farmers	20-11-2014	Kandara, Murang'a
#9k	Kenyan farmers	20-11-2014	Kandara, Murang'a
#10k	Kenyan farmers	04-12-2014	Kandara, Murang'a
#11k	Kenyan farmers	14-01-2015	Kandara, Murang'a
#12k	Kenyan farmers	19-01-2015	Kandara, Murang'a
#13k	Kenyan farmers	14-02-2015	Kandara, Murang'a
#14k	Kenyan farmers	19-02-2015	Kandara, Murang'a
#1kg	national government	11-11-2014	Nairobi
#2kg	national government	15-01-2015	Nairobi
#4kg	national government	21-03-2015	Nairobi
#5kg	national government	21-03-2015	Nairobi
#1ke	Kenyan export firm	23-02-2015	Murang'a
#3ke	Kenyan export firm	23-02-2015	Murang'a
#4ke	Kenyan export firm	17-03-2015	Nairobi
#5ke	Kenyan export firm	17-03-2015	Nairobi
#7ke	Kenyan export firm	19-03-2015	Nairobi
#11ke	Kenyan export firm	19-03-2015	Nairobi
#1kb	Kenyan business association	31-10-2014	Nairobi
#1ki	Kenyan education institute KARI	16-01-2015	Nairobi
#1kd	Donor	28-10-2014	Murang'a
#1kf	*FGD*	*29-10-2014*	*Murang'a*
#2kf	*FGD*	*18-11-2014*	*Murang'a*
#3kf	*FGD*	*12-02-2015*	*Murang'a*