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**What is sustainable
cocoa? Constellations
of commercial, socio-
economic and
environmental
priorities associated
with a polysemic
concept**

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Abstract

Given rising concerns regarding the chocolate sector's long-term future, increasingly more private-sector, public-sector and civil-society stakeholders have become involved in initiatives aiming to make cocoa production more 'sustainable'. However, the environmental, commercial and socio-economic priorities they associate with the omnipresent, polysemic term diverge: while transforming the crop into a more attractive livelihood for growers is crucial for some, others prioritise links to global environmental challenges through agroforestry. A third dimension encompasses commercial concerns related to securing supply. With these incongruent understandings of what sustainability is and is to entail contributed by diverse civil-society, public-sector and private-sector stakeholders, the paper argues that priorities associated with cocoa 'sustainability' diverge, yielding synergies, trade-offs and dilemmas for cocoa governance.

This paper builds on the author's in-depth doctoral fieldwork in cocoa sustainability initiatives incorporating environmental measures, which encompassed semi-structured interviews, focus-group discussions, documentary analysis and participant observation in Latin America and Europe. Developing the 'constellations of priorities' model, it captures how the priorities driving cocoa sustainability stakeholders variously dovetail, intersect and collide. Particularly against the backdrop of the cocoa sector's brewing crisis, it proposes that stakeholders systematically assess their and other actors' socio-economic, environmental and commercial priorities as part of the equitable engagement between stakeholders necessary to transform the sector.

Keywords

Cocoa, sustainability, environment, trade-offs, development studies.

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1. Introduction

Cocoa-sector stakeholders are finding themselves engulfed in a crisis. Recently, concerns whether cocoa production will be able to satisfy growing demand long-term have risen especially among private-sector actors. Given this projected shortfall, a rising number of stakeholders, encompassing private-sector, public-sector and civil-society actors alike, have begun engaging in far-reaching ‘sustainability’ initiatives (Matissek et al, 2012; Glin, Oosterveer and Mol, 2015; Tampe, 2016). After ‘sustainability’ efforts had been the domain of mostly small-scale, 100% ethical chocolate manufacturers for decades, the prospect of an impending crisis has changed stakeholders’ perception. Beyond the pre-existing notion of improved socio-environmental circumstances constituting an opportunity to sell to consumers pressuring companies to show they care (Hughes, 2001), a second thrust driving engagement with ‘sustainability’ emanates from a perceived business imperative to safeguard the sector’s long-term viability (Barrientos, 2014). Consequently, the circle of stakeholders engaging with ‘sustainability’ has widened, encompassing diverse constituencies with diverse understandings and priorities in terms of what the omnipresent, but polysemic term means. Some consider the concept’s commercial dimension paramount, aiming to safeguard supply in the quality they desire long-term given projected shortages. For others, socio-economic goals including making cocoa a more viable livelihood prevail after decades of declining cocoa prices and poor returns for growers. Others prioritise the links which cocoa agroforestry systems offer with global environmental challenges including conserving biodiversity or combating climate change. Whereas this business imperative also means that public-sector and civil-society initiatives to improve cocoa’s socio-environmental circumstances will meet heightened interest from commercial partners, the sector’s predicament has introduced a sense of unprecedented urgency, widening the spectrum of stakeholders and priorities.

This paper argues that this continuum of diverse understandings regarding what ‘cocoa sustainability’ is or is to entail offers a potential for tensions. Particularly given the diversity of private, public and civil-society stakeholders involved in the industry, it aims to explore these divergences, addressing a knowledge gap, and contribute a framework for stakeholders to assess their own and other stakeholders’ drivers, with its suggested visualisation offering a structure for conversations about synergies and tensions. I would argue that the crisis concerns can also offer an opportunity given stakeholders’ puzzlement at how to attain genuinely ‘sustainable cocoa’ and their consequent willingness to question vested interests and solve a problem together which none can solve alone. In terms of broader cocoa debates, the framework can thus offer a space to engage on priorities and begin addressing deep-seated governance challenges and inequalities in the cocoa sector in the transformational spirit which the cocoa sector’s predicament requires.

In terms of the relevance to broader debates, this paper makes a contribution firstly on the brewing crisis in the cocoa sector, discussing some observations and implications regarding the sector's long-term viability. I would argue that the 'constellations of priorities' model, developed through semi-structured interviews, documentary analysis, focus group discussions and participant observation, drawing on in-depth doctoral fieldwork incorporating voices from Europe and Latin America, could offer opportunities for cocoa stakeholders to engage. More broadly, the paper problematizes the inflationary and undifferentiated use of 'sustainability' due to its aspirational quality, which, however, paints over the differing definitions which emerge upon closer inspection and neglects to engage with whether 'sustainability' also entails greater equity. Given the term's omnipresence, it argues its polysemy merits unpacking and analysis.

After some brief background on the cocoa-chocolate sector, this paper's third section will introduce research design and methods. The fourth section discusses the theoretical underpinnings of the 'constellation of priorities' model and its three dimensions of socio-economic, commercial and environmental sustainability. The final section demonstrates how different stakeholders' drivers, despite multiple overlaps and synergies, showed subtle divergences in a real-world case-study. Prior to the conclusion, section six offers some recommendations and emphasises this paper's implications for wider governance debates especially in the cocoa sector.

2. Challenges in cocoa-chocolate: efforts towards 'sustainability'

While precise projections differ, there is consensus among chocolate stakeholders that the industry is likely to face a considerable gap between available cocoa supply and demand by 2020. While there are fluctuations depending on the harvest season, gross global production has averaged 3.76 million metric tonnes annually between 2004/05 and 2012/13 (ICCO, 2014). 2014-15 and, according to forecasts, 2015-16 crop seasons produced 4.2 and 4.15mt cocoa, respectively (ICCO, 2015a, b, 2016a). Although volumes have thus grown somewhat recently given stakeholders' increasing efforts, global production projections still may not be able to match growing cocoa hunger especially from emerging markets, with demand estimates for 2020 oscillating between 4.5 million (Fairtrade, 2011) and 5 million (Hütz-Adams and Fountain, 2012).

The reasons underlying the projected cocoa shortages emanate from the commercial, socio-economic and environmental realms. Commercial concerns partly stem from an amalgamation of concentrations. Firstly, out of the 5 to 6 million farmers who grow cocoa, 90% are estimated to be smallholders (Hütz-Adams and Fountain, 2012; WCF, 2012). Over two-thirds of global cocoa production hail from Africa, forecast to generate 73.7% for the 2015-16 cocoa year, with two West African countries, Côte d'Ivoire and Ghana, contributing ca. 60% of the worldwide crop (ICCO, 2016b). Beyond this geographical focus, further instances of concentration occur in other nodes in the production network, with both trading and processing as well as the brand

manufacturer segment dominated by only a handful of companies (UNCTAD, 2008). 40% of world cocoa grindings in 2006 were handled by the trio of Barry Callebaut, Archer Daniels Midland and Cargill (UNCTAD, 2008:23), with Cargill's takeover of ADM's cocoa segment producing further concentration (Cargill, 2015). Similarly, Mondeléz, Nestlé, Mars, Hershey's and Ferrero dominate chocolate manufacturing, with the former four controlling 43% of the marketplace in 2010 (Candy Industry, 2010). These successive oligopolies (UNCTAD, 2008) have exacerbated shortage concerns, prompting stakeholders to seek to increase their control over cocoa supply.

Beyond these commercial qualms, there are multiple socio-environmental issues causing stakeholders to question where cocoa satisfying their price and quality specifications will come from long-term. They include the rising average age of cocoa growers in West Africa, the region producing two-thirds of worldwide cocoa (ICCO, 2012b). Given cocoa prices declining for decades, grower populations are likely to shrink as the livelihood is unattractive for young generations (Hainmueller, Hiscox and Tampe, 2011; Hütz-Adams and Fountain, 2012). In response, Fairtrade's CEO has called for significantly higher cocoa prices (Confectionery News, 2015). Equally, there are questions on how to expand capacity-building and farmer organisation opportunities across millions of smallholders often living in remote settings (Author interview with a private-sector representative, #142). Environmentally, as cocoa only grows within 20 degrees latitude either side of the equator, the surfaces conducive to cocoa production are limited, meaning productivity-maximising, yet degrading practices cannot continue indefinitely. Equally, the effects of climate change are difficult to gauge (CIAT, 2011; Ofori-Boateng and Insah, 2014).

In combination, these factors mean there is uncertainty how the production of cocoa, and particularly cocoa matching price and quality required, is to keep up with demand. These projections of their key ingredient likely to be in short supply (Thornton, 2010; Hütz-Adams and Fountain, 2012; ICCO, 2012a) have caught the sector's attention, prompting engagement across the niche, mainstream and low-end market segments identified by Barrientos and Asenso-Okyere (2009). All major processors and brand-name manufacturers have responded by increasing the shares of their cocoa supplies certified by Fairtrade, UTZ Certified or Rainforest Alliance (Hütz-Adams and Fountain, 2012; Fountain and Hütz-Adams, 2015). Some stakeholders such as Mars, Ferrero and Hershey have even pledged to have all their cocoa certified by 2020 (Confectionery News, 2012). Despite all competitiveness and market concentration in the sector, ever more multi-stakeholder partnerships have been emerging in cocoa (Bitzer, Glasbergen and Leroy, 2012; Bitzer, 2012), in itself evidence of the severity of the industry's predicament.

As investors' and consumers' awareness of this predicament has exacerbated concerns, my research argues that aspiring to engage with cocoa sustainability has morphed from nice-to-have to a commercial necessity. Also beyond cocoa, this tension has required certification schemes to reconcile diverse ethical and commercial stakeholder interests (Doherty, Davies and Tranchell, 2013), with different schemes

pursuing a variety of priorities and principles (KPMG, 2013). While this business imperative also presents a greater opportunity for civil-society and public-sector actors to find commercial partners for their environmental or socio-economic 'sustainability' measures, it is crucial to recognise that this new impetus also entails different imperatives in terms of initiatives' set-up and direction. Moreover, the magnitude and scope of the sector's projected predicament requires addressing the diverse socio-economic, environmental and commercial issues introduced above, which, however, in itself furthers the potential for tensions: improving long-term supply security as a driver is rather distinct from wishing to boost growers' socio-economic livelihoods, with addressing global environmental challenges also constituting altogether different motivations. For the cocoa sector's wider governance, it remains to be seen whether this drive to safeguard long-term cocoa supplies also entails willingness by currently dominant actors to address causes rather than symptoms and rethink power asymmetries to develop transformational answers to the cocoa sector's problems. This considerable spectrum of understandings of what sustainability is and is to entail warranted constructing a framework to analyse different priorities in terms of tensions and congruencies emerging between different stakeholders. Section 4 will introduce this proposed framework, the 'constellations of priorities', after a brief discussion of research methods.

3. Research design and methods

A key objective of my doctoral research was conceptualising three case-studies holistically through a global production networks lens (Henderson et al, 2002; Hess, 2004; Hess and Yeung, 2006). This paper's fifth section presents one case-study initiative as a particularly illustrative example of considerable congruencies between stakeholders and thus resulting synergies, but also tensions: beyond useful insights on the case-study itself, the observations resonate with the sector's broader challenges. The research aimed to encompass voices from European and Latin American contexts all the way from cocoa production to chocolate consumption. As researching production networks and value chains will require drawing on a variety of sources to unearth and unpack relevant information (Kaplinsky and Morris, 2000; Barrientos, 2002), I employed four qualitative research methods to triangulate and confirm the data collected, encompassing semi-structured interviews, focus-group discussions, documentary analysis and participant observation in Europe and Latin America. To capture consumers' perspectives, I conducted three focus-group discussions (Morgan, 1997; Bloor et al, 2001; Kamberelis and Dimitriades, 2007) with European chocolate consumers with an environmental, a social and a business background, respectively (cf. Appendix 1 for a list). The objective was to test what priorities European consumers associated with 'cocoa sustainability', both from their own and from other stakeholders' vantage points.

Moreover, I conducted 96 semi-structured interviews with participants from multiple cocoa sustainability initiatives, encompassing cocoa producers, representatives of cooperatives, NGOs, development agencies, government, research, chocolate companies and retailers (cf. Table 1 below; Appendix 1 contains all interviews referenced in this paper).

Table 1: Breakdown of interlocutors interviewed for doctoral fieldwork

Interviews conducted	
Cocoa producers	21
Civil society	18
Cooperatives	7
Research	10
Government	11
Development agencies	11
Private sector	13
Certifiers	5
TOTAL	96

Source: Author

Interviews constitute a bounded exchange between interviewee and interviewer (Fontana and Frey, 2007) which elicits only what interlocutors are prepared to share (Laws, 2003), which could equally be said of focus-group discussions.

Consequently, supplementing these methods with documentary analysis and observing events held irrespective of my presence was a triangulation strategy aimed at reducing researcher bias and drawing on a greater variety of data types and sources. I analysed ca. 400 documents, reports and websites cognisant of their provenance and intended audiences (Barrientos, 2007; O’Laughlin, 2007), while also attending nine cocoa-related events for participant observation (Jorgensen, 1989; Spradley, 1980; Laws, 2003). Equally, beyond the interviewees selected purposefully primarily from the three case-studies examined for my doctoral research, incorporating data from other cocoa-sector stakeholders through documents and events allowed observations beyond the three initiatives. I utilised Nvivo to code the transcribed qualitative notes collected (Mikkelsen, 2005) while aiming to manage the transition across different sources of data and researcher roles in collecting information. To safeguard confidentiality and as a condition of ethical approval, all participants, organisation and place names were anonymised.

4. Conceptual contribution: the ‘constellations of priorities’ model

4.1. Rationale underlying the model

Given priorities’ relevance in determining cocoa sustainability initiatives’ direction, set-up and structure, it proved necessary to focus on and conceptualise stakeholders’ diverse socio-economic, commercial and environmental drivers which may variously intersect, dovetail or collide. As Lukes (2005:109) argues, stakeholders’ interests will

not be unitary, but manifold: given ever more diverse actors' interest in cocoa sustainability, exploring systematically what drives stakeholders is thus even more crucial. In her 2009 study, Raynolds establishes a tripartite distinction between 'mission'-driven, 'quality'-driven and 'market'-driven Fair Trade coffee buyers. She argues that while they all purchased ethically traded coffee, their motivations differed considerably, entailing palpable consequences for the engagements which buyers sought to establish. Mission-driven buyers subscribe to the ethical ethos, seeking to support its principles throughout their commercial operation. By contrast, quality-driven buyers are chiefly after gourmet supplies. Market-driven buyers, finally, regard a fair trading seal as a business opportunity, pursuing mainstream business operations beyond their niche engagement with the seal. Underlying priorities thus influence actors' behaviour, objectives defined and the engagement pursued all through the initiatives. While Raynolds stresses that the buyer types inhabit a continuum rather than distinct categories, mission-driven buyers generally are more concerned with a partnership-based setting, whereas market-driven stakeholders prioritise traceability. Raynolds's distinction also recalls another spectrum on which considerable divergences can occur, namely the continuum between stakeholders focusing on overhauling the system and those wishing to tweak it to be more socially, economically or environmentally viable (Renard, 2003). This represents another sense in which stakeholders' fundamental premises underlying their 'sustainability' efforts may differ, even more so in the cocoa sector given shortage projections.

While Raynolds's argument regarding the importance of drivers underlying sustainability engagements is well-taken, her tripartite distinction, while suitable for her research focus, proved nevertheless imperfect for my study for four reasons. Firstly, regarding the 'quality-driven' category of buyers, convention theory (Renard, 2003; Cidell and Alberts, 2006) would suggest that what different stakeholders take 'quality' to be will differ, as explored below. These understandings may range from organoleptic parameters via cocoa percentages to social and environmental circumstances of production, requiring an analysis of underlying priorities. Secondly, the distinction looks exclusively at fair trading rather than other standards. Thirdly, Raynolds's categorisation (2009) solely forefronts the 'buyer' stakeholder type. Her analysis also discusses Gereffi et al's (2005) fivefold categorisation of value chains, in which they establish five governance types ranging from arm's-length markets to integrated hierarchical connections. Raynolds argues that this analysis is too narrow given the exclusive focus on lead firms. For the same reason, this paper aims to develop a classification which looks beyond buyers and is applicable across the production network. The objective is not to essentialise any stakeholder type such as 'producers' or 'consumers' (Briones Alonso and Swinnen, 2016), but offer an opportunity to engage with diverse stakeholders' priorities. For non-governmental organisations, producers or development agencies, circumscribing their drivers only in terms of mission-driven, market-driven or quality-driven would explore insufficiently considerable dimensions, including different environmental priorities, which this study aims to highlight. With

those four reasons in mind, the objective was thus to find a framework able to capture diverse actors' drivers in cocoa sustainability initiatives.

A further source of inspiration was convention theory. As mentioned above, it builds on the important insight that what stakeholders consider to constitute quality may differ considerably (Cidell and Alberts, 2006:1000; Fold, 2000). Renard (2003) establishes four coordination types or 'regimes' governing stakeholders' perceptions of food quality:

- i. market-based contingent on prices,
- ii. industrial coordination relying on standards,
- iii. domestic-based highlighting geographical origin or brand, and
- iv. civic emphasising environmental or social principles.

An observation which proved very apt also in this study is that what is considered important in different production-network segments may vary considerably, requiring negotiation (Fold, 2000; Reynolds and Wilkinson, 2007), meaning one regime is unlikely to govern all behaviour in an initiative.

While convention theory and Reynolds's tripartite distinction served as sources of inspiration, I devised a tailor-made model to capture diverse stakeholders' drivers throughout cocoa sustainability initiatives. Discussing that cocoa cultivation may face competing demands from policy, Franzen and Borgerhoff Mulder (2007:3836) cite 'improving productivity, reducing negative biodiversity impacts, and increasing the social and economic sustainability of production', highlighting that these competing objectives can require trade-offs. The research suggested that in more abstract terms, these demands could be surmised under three dimensions:

- i. socio-economic factors emphasising particularly the producer and cooperative scale;
- ii. environmental aspects encompassing both local concerns such as preserving soil, and links to global environmental challenges including carbon sequestration and biodiversity conservation (Bolwig et al, 2010; Guha and Martinez-Alier, 1997);
- iii. the commercial level, including safeguarding supply, a particular concern for stakeholders from the Global North.

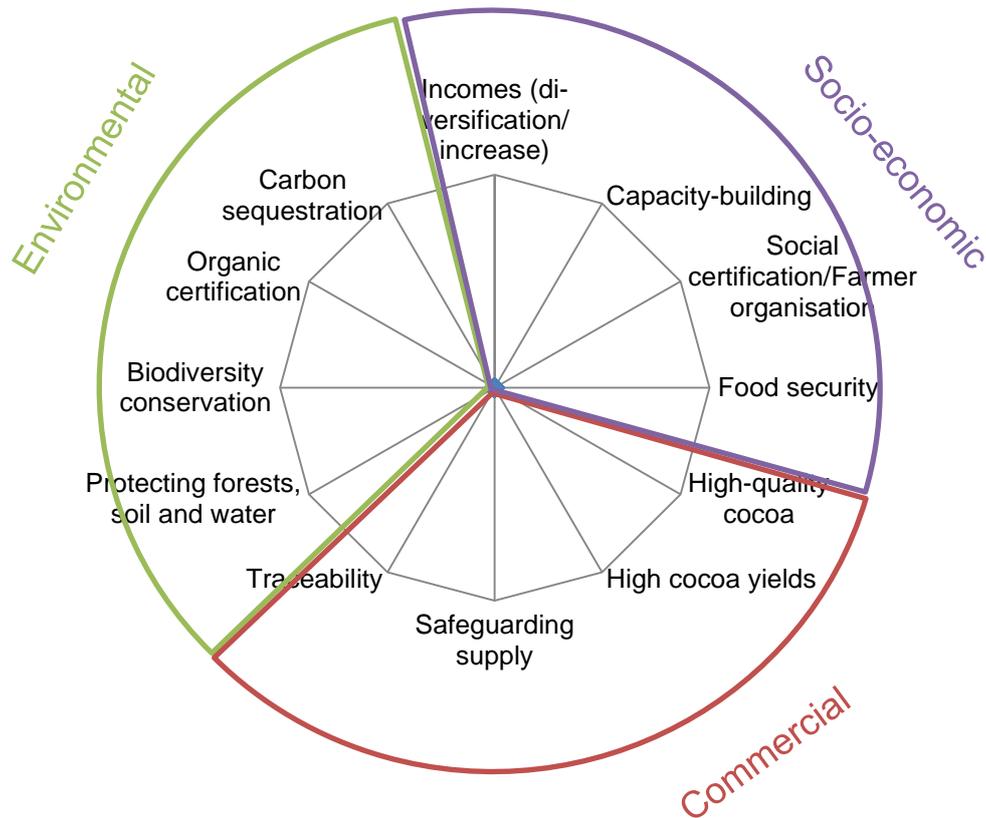
In my doctoral fieldwork, these three dimensions have proved valid starting points for delineating categories of drivers. Franzen and Borgerhoff Mulder (2007) distinguish between economic vis-à-vis ecological considerations, while the most common conceptualisation of sustainable development discerns social, economic and environmental aspects. The socio-economic, commercial and environmental delineation chosen for this model deviates from both, emphasising the difference between private-sector stakeholders pursuing their commercial interests, and socio-economic viability for producers. While both are based in economic-commercial

interests, the two sets of motivations are not congruent. Particularly large-scale multinational buyers have an interest in keeping cocoa prices low for their enterprise's sake, which, however, is at odds with producers' socio-economic interest to have a viable livelihood. Moreover, seeking to boost commercial productivity by thinning out intercropped shade trees may contradict producers' desire for diversified agroforestry systems which can improve food security and income, while safeguarding environmental benefits. Both examples of incongruences and even trade-offs thus justify exploring these priorities in distinct domains. This observation recalls the difficulties in reconciling commercial and social objectives in sustainability efforts (Mason and Doherty, 2015) or conservation and human development goals (Adams et al, 2004).

4.2. Priorities within the model

In the 'constellations of priorities' model, each of the three dimensions, as Figure 1 below shows, encompasses four axes symbolising priorities, many of which are interdependent and inter-connected, but partly incompatible. They also problematise that divergences of understanding can exist not only for what constitutes sustainability, but also for what socio-economic, environmental and commercial motivations are to entail, requiring unpacking. The twelve axes partly derive from Franzen and Borgerhoff Mulder (2007), partly are based on data collected through interviews, participant observation and documentary analysis. The intention behind the model and the visualisation is to facilitate systematic (self-)assessment of stakeholders' 'sustainability' priorities. The below spider-web diagram is only a heuristic representation of complex situations, yet the author's hope is that visualisation may help stakeholders identify congruencies and divergences. Additional tensions may arise from actors' differing notions about time frames and spatial scales, which are valid across all twelve axes. The diagram only shows binary presence or absence of a driver, no ranking or weighting:

Figure 1: Constellation of priorities, spider-web diagram



Source: Author

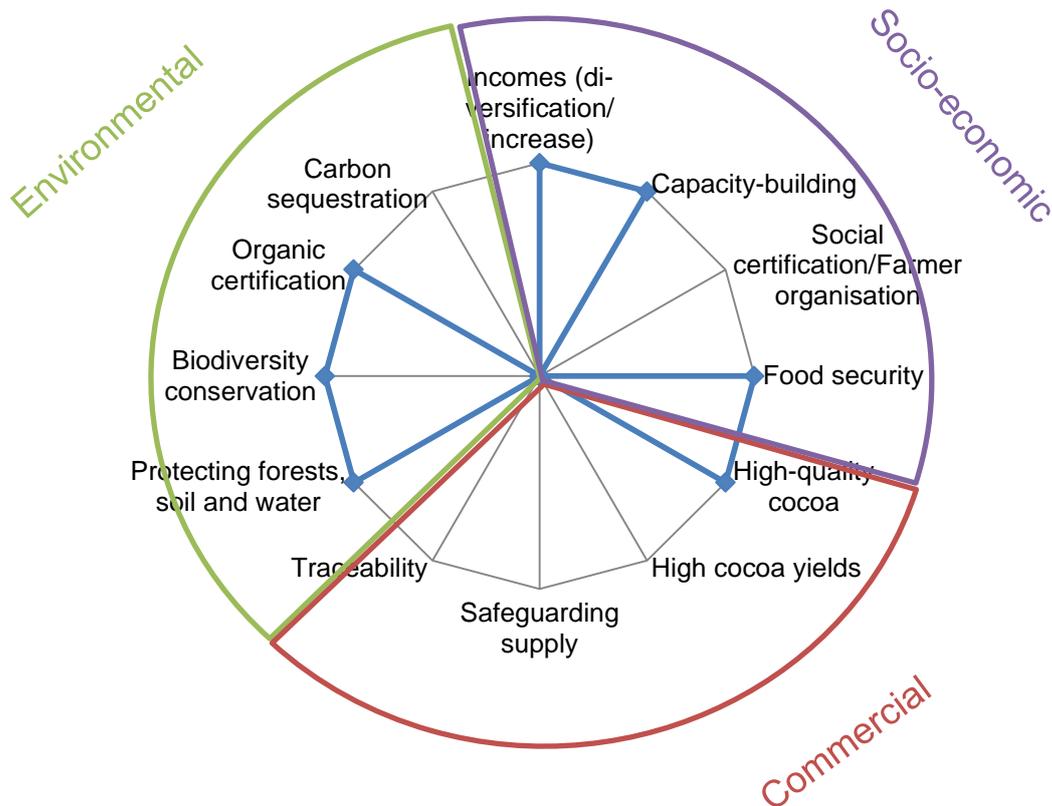
The motivations reflected in the diagram do not aim to be exhaustive, but represent the drivers cited most frequently in interviews, participant observation and documents. As Figure 1 visualises, in the socio-economic dimension, the most prominent driver was improving cocoa producer incomes. Beyond increasing revenues, various stakeholders also emphasised the importance of income diversification, for example through diverse agroforestry systems (Author interviews #142, private sector; #30 and #43, researchers; #69 and #74, development cooperation). The diversified systems spread risk and income sources, while contributing to the food-security axis (Cerda et al, 2014; Somarriba et al, 2014), although diverse cocoa agroforestry systems can entail less attention to cocoa. Farmer organisation is crucial for instance for Fairtrade, but also for numerous development partners who consider it an option to create long-term, self-sustaining support structures. Farmer organisations are often the vehicle for agricultural, financial, environmental or social inputs and capacity-building, another axis. Trade-offs between different socio-economic priorities may occur between diversified agroforestry increasing food security, but reducing yields and thus incomes from cocoa, as well as farmer organisation and capacity-building tying up funds which therefore cannot benefit growers directly.

The environmental dimension also encompasses four axes. The priority of carbon sequestration represents afforesting or reforesting spaces in cocoa communities to offset greenhouse gases. For this aspect, the speed at which trees grow is paramount: this may cause tree selection in favour of non-native rather than endemic trees, which may prioritise carbon reduction over promoting biodiverse habitats (Twin/NRI, 2013). There is a link also to the income diversification axis as cocoa buyers may pay additional premiums for carbon credits. Organic certification is another axis, which requires complying with standards limiting for instance usable inputs, but may also bring premium prices (Pay, 2009; Melo and Hollander, 2013). Conserving biodiversity, for which cocoa agroforestry systems offer various opportunities (Tscharntke et al, 2015), and finally protecting forests, soils and water, a key motivation for many producers, are the final two axes (Author interviews #71, #75, #113, #138, cocoa producers; #30, researcher). Both conservation priorities, particularly for forests, may clash with productivity-maximising approaches favoured by cocoa buyers seeking to boost supply.

The commercial sphere, which has increased in importance given concerns over demand outstripping supply, occupies the final third of the model. One aspect is ensuring that cocoa quality lives up to buyers' standards, with the socio-economic axis of capacity-building a crucial conduit for this prerequisite. A further axis is increasing yields, which is in growers' own interest, but may require trade-offs with plantations' long-term environmental viability. The priority may also entail genetic concentration through hybrid varieties which maximise productivity, but replace higher-maintenance varieties which can garner higher prices and preserve the genetic diversity necessary in times of changing biodiversity and climate circumstances. Safeguarding supply is a key axis whose importance is set to increase further as shortage concerns intensify. However, this growing focus entails a risk that this commercial driver may outweigh other priorities such as biodiversity or food security. Finally, traceability is an increasing private-sector concern given a strong risk aversion element, which also diverts some responsibility to certifiers.

The below visualisation aims to facilitate the model's practical usability, helping to identify similarities and divergences between different stakeholders' priorities, with lines between priorities (cf Figure 2) only a visual aid and not an indication of an actual connection:

Figure 2: Constellations of priorities model – example



Source: Author.

The following section will apply this model to the empirical case-study of World Choc, first introducing the stakeholders, then analysing their constellations of priorities, before finally discussing congruencies and divergences. Despite considerable overlaps in priorities and thus synergistic elements, there are subtle divergences which highlight needs for conversation also in other initiatives and resonate with the sector's broader challenges.

5. Case-study: World Choc

5.1. Introducing the initiative: stakeholders and their intentions

The 'World Choc' initiative encompasses one chocolate company, two non-governmental organisations, producers and cooperatives in cocoa communities in one African and two Latin American countries, and several retailers. The undertaking stems from a confluence of intentions by like-minded stakeholders. NGO Tree kids sought to find a commercial partner able to produce an ethically traded and carbon-neutral chocolate with a view to raising awareness and generating funds for their key pursuit,

planting trees to mitigate climate change. Iller Chocolate, already compensating for chocolate production's carbon emissions in-chain through afforestation projects in cocoa communities, could produce the chocolate bar. NGO Planet Concern, Iller's implementing partner working with cocoa communities on the ground, contributed expertise on intercropping cocoa with high-value timber. The product of their collaboration, 'World Choc', sells at a child-friendly price of EUR1 and is a sweet milk chocolate amenable to their young constituency. Certified under both a fair and a 'zero-climate' seal, the product is, according to the packaging (Tree kids, 2013b:3):

'just as we children want all products to be: climate-neutral and fair, because we do not want cocoa farmers' children to harvest cocoa beans for us, but them to go to school like us.'

Beyond a certification premium, growers receive additional income from the high-value timber trees which are intercropped with cocoa, which also help to offset all carbon emissions within the production network (Author interview #26, civil society; #30, researcher).

One stakeholder driving the venture is the children-for-children NGO Tree kids. Their key objective centres on planting trees to combat climate change, putting into practice the deeds adults prefer only to talk about (Author interview #26, civil society; Tree kids, 2013b). To raise funds and awareness for tree-planting, they aimed to produce a child-friendly, non-staple, double-certified luxury food item able to enthuse their young constituency, with their nature as a children-for-children venture an important factor in its sales success as the best-selling fair chocolate in Germany (Author interview #134, private sector; focus group discussions 1, 2, 3). There is also a clear objective to demonstrate the commercial viability of this approach as a beacon project (Author interview #26, civil society) designed to inspire other commercial ventures. Cocoa agroforestry was ideally suited for three reasons. Firstly, it provides a product which is a favourite among Tree kids' primarily young constituency, ie chocolate. Secondly, as a luxury rather than a staple food item, it could be argued to have a higher likelihood of proving that more expensive fair and carbon-neutral products are commercially viable. Finally, agroforestry production systems allow combining cocoa cultivation with afforestation to sequester carbon, thus complying with the NGO's understanding of 'sustainability'.

Another stakeholder is Iller Chocolate, a chocolatier working under the umbrella of a cooperative group. 95% of their cocoa supplies are already fair-certified, due to rise to 100% (Iller Chocolate, 2012). The company pioneered an approach compensating all chocolate production-related carbon emissions through afforestation projects in cocoa communities, offsetting all emissions from raw materials, operations, packaging, distribution and consumer level (Iller Chocolate, 2012; Tree kids, 2013a; Author interview #30, researcher): this approach bears in mind the entire chain as advised by Ntiamoah and Afrane's (2008) comprehensive analysis of cocoa's environmental impact. The company calculates emissions in collaboration with a foundation (Author interview #134, private sector; Iller Chocolate, 2013a, b, c): their dual mitigation-and-

reduction approach thus addresses a key criticism of offsetting inviting irresponsible behaviour given the carte blanche as which offsetting may be construed (Lovell, Bulkeley and Liverman, 2009). Interestingly, while the same product had failed a few years prior as British supermarket's own-brand venture, the collaboration with the children's NGO has yielded a children-for-children chocolate-cum-mitigation story vital to the product's success as the best-selling fair chocolate in Germany (Author interview #26, civil society; #134, private sector). Unlike most chocolate-sector actors, the company is keenly aware of the need for transformational changes, viewing the initiative and its nature of going beyond certification as a prerequisite for the sector's long-term viability (Author interviews #33 and #134, private sector). Consequently, there is also a clear commercial motivation, which is similarly manifest for private-sector retailers who sell the product to allow their own staff to support a cause (Author interview #142, private sector) and harness the positive associations inherent in supporting a children's venture: the children have contributed creative marketing strategies such as chocolate-tasting sessions and chocolate mobs in-store (Author interview #142, private sector).

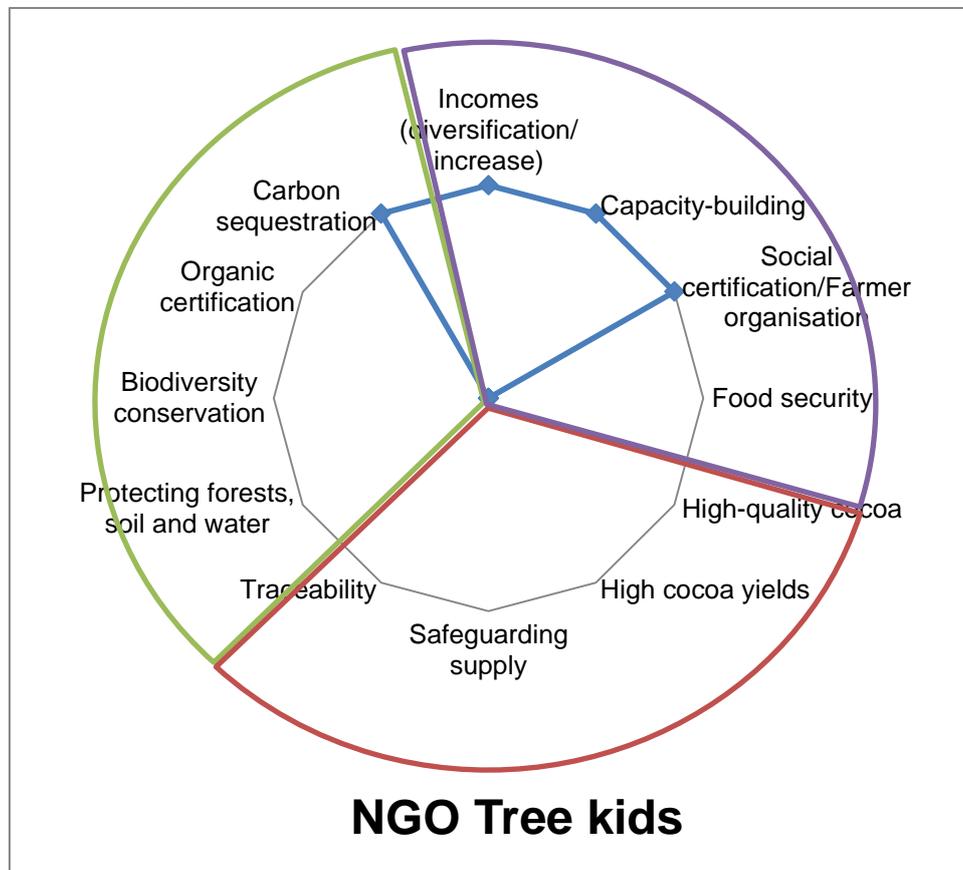
The final stakeholder explored here is NGO Planet Concern, which specialises in afforestation and conservation projects and works with cocoa communities to intercrop cocoa with high-value timber trees which also entail carbon sequestration benefits. Unlike companies which support unrelated causes from a logic of philanthropy (Utting, 2007) or purchase carbon credits in locations and sectors separate from their business interests (Peters-Stanley and Hamilton, 2012:38), the work of Planet Concern allows Iller's bread-and-butter business to entail greater benefits for cocoa communities. The initiatives' benefits result partly from high-value timber's long-term sales value (FHIA, 2007), from certification premiums, partly from the premiums paid for carbon-sequestering tree management, and particularly in Honduras from a commitment to paying attractive prices to reinvigorate the cocoa sector (Iller Chocolate, nd; Planet Concern, 2012, 2013a-c, 2014 a-c, 2015a-c; author interviews #100 and #127, private sector). Beyond facilitating local technical teams, capacity-building, and monitoring, the NGO also supports the establishment of community tree nurseries and a timber mill as further income strands (Planet Concern, 2013b-c, 2014a-c; author interview #30, researcher). This thus clearly complies with the above-mentioned call for diversified incomes to safeguard cocoa growers' livelihoods. Beyond diverse environmental priorities, Planet Concern thus has a clear socio-economic dimension in line with producers' own expectations in terms of livelihood improvements.

5.2. Analysis: Constellations of priorities within World Choc

The above-presented summary would suggest that there are considerable congruencies and thus synergies in terms of like-minded intentions driving the engagement, such as all three key stakeholders' perspective of the venture as an opportunity to transform conventional wisdom and validate alternative practices. Nevertheless, in-depth analysis of different stakeholders' drivers through the above-

introduced constellations of priorities demonstrates that there are subtle divergences offering potentials for tension.

Figure 3: Constellation of priorities for Tree kids



Source: Author

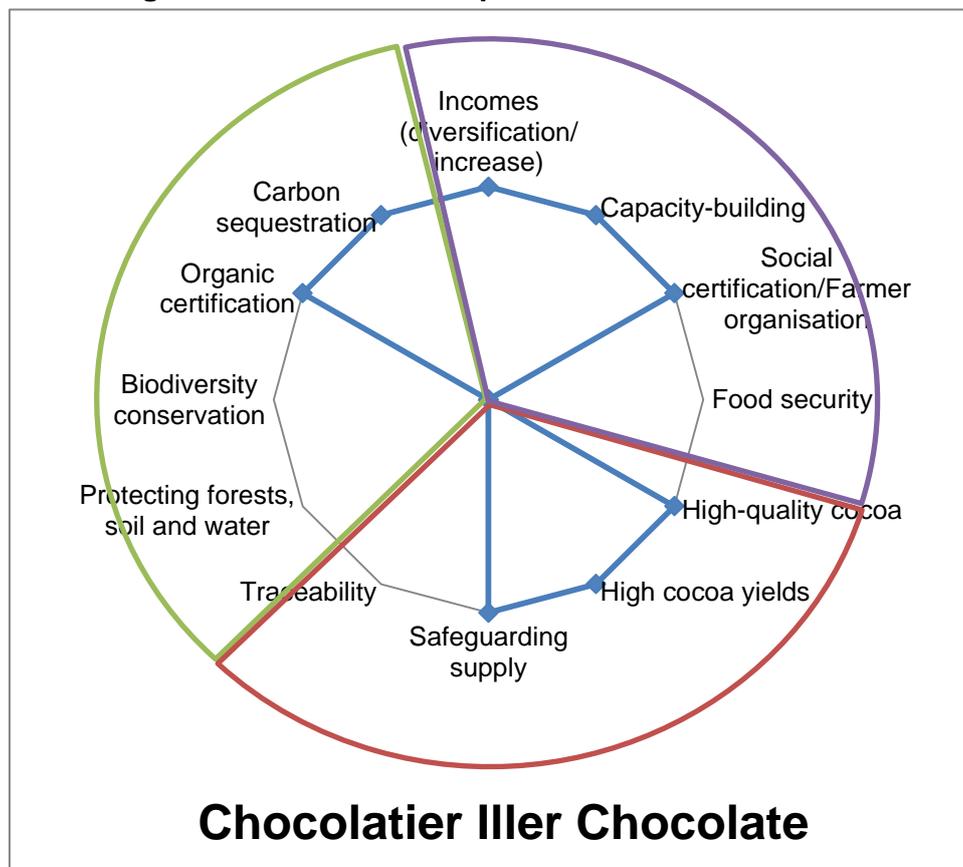
As Figure 3 illustrates, the key drivers for Tree kids are an environmental priority, carbon sequestration, and multiple socio-economic benefits. Their stated objective is for their product to be fair and ecological twice over (Author interview #26, civil society). Socio-economically, the ‘double fair’ adage alludes to growers receiving both the fair premium and additional payments for tree management, with a view to ‘tackling poverty at its root’. The NGO supports fair certification as they consider it to be the only label offering a better life to cocoa families, through farmer organisation and better incomes. The premiums for carbon-sequestering tree management diversify income, with agroforestry also predicated on capacity-building to support adequate cultivation and monitoring of timber trees. The ‘double ecological’ representation stems from the argument that beyond their own tree-planting efforts, Planet Concern also afforests for chocolate bars sold. One could argue that their roots as a children’s NGO become evident in such rhetoric and in the aim to ‘tackle poverty at its root’, given the simplifications inherent in such assessments. For instance, as the constellation of priorities model shows, equating tree-planting with an ‘ecological’ measure is a simplification as there are diverse priorities which various stakeholders may take to be ‘ecological’. Similarly, many scholars in poverty research (eg Green and Hulme, 2005;

Hickey and Bracking, 2005) would dispute the existence of a 'root' of poverty, and problematise the presence of diverse power and social structures dictating who benefits from outside investment.

By contrast, as Figure 3 visualises, the commercial dimension encompassing traceability, safeguarding supply, high cocoa yields and high-quality cocoa is absent for Tree kids. To the NGO, chocolate is a means to an end, the first of, in their vision, many products to be fair and climate-neutral. Cocoa is interesting as a crop amenable to afforestation through its cultivability in agroforestry systems, supporting their primary goal of climate change mitigation. Moreover, the product lends itself to their cause given its particular appeal to their predominantly young supporters, yet there is no attachment per se to attaining high cocoa yields, safeguarding high-quality cocoa or traceability. Their constellation of priorities emphasises tree-planting and socio-economic priorities, while the commercial dimension is a means to an end.

By comparison, for Iller Chocolate, means and ends are reversed, with their constellation of priorities emphasising the long-term commercial viability of their bread-and-butter business, as Figure 4 shows:

Figure 4: Constellation of priorities for Iller Chocolate.



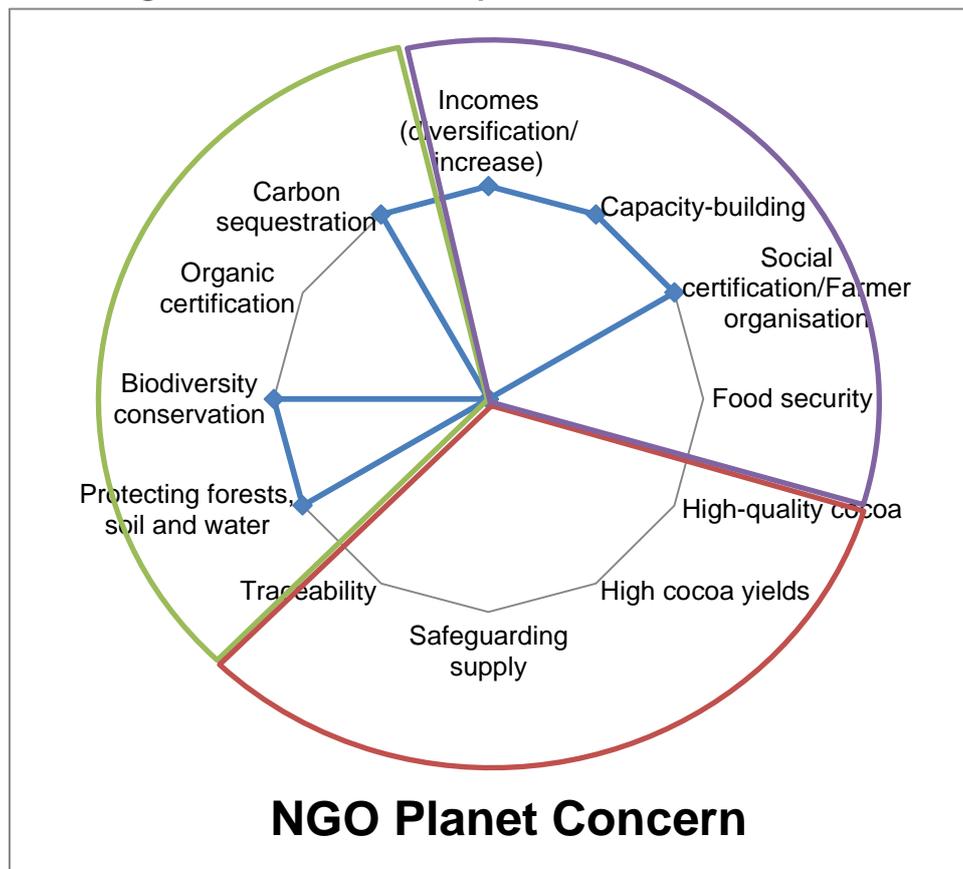
Source: Author

For Iller Chocolate, somewhat unsurprisingly, a considerable accent is on the commercial dimension. As a chocolate manufacturer, they are naturally dependent on cocoa's continuing availability. In addition, their membership in a cooperative group and intention to source 100% fair certified cocoa creates further commercial pressures in terms of the label they will require from producers and cooperatives. Consequently, there is an even greater need than for other chocolate-sector stakeholders to establish good relations with suppliers to increase independence from third-party traders and processors. Their engagement is a conscious choice, partly to demonstrate to other stakeholders that certification alone is not sufficient to attain 'sustainability', partly to make the business case of cocoa cultivation to the young generation:

'[This is] to make a contribution towards solving the challenges in the cocoa sector, going one step further than fair certification by supporting cooperatives' afforestation projects. All types of certification are a basis towards a more holistic sustainability engagement. Sequestering carbon or climate neutrality is only one aspect of the plantations. The most important aspect is that small-scale farmers' income will multiply in the long term from the cultivation of precious timber. Growing cocoa in diversified systems is an attractive business case for the young generation.' (Author interview #134, private sector)

This acknowledgement is interesting since it demonstrates that the prospect of shortages, and especially the underlying socio-economic factor of poor livelihoods and the commercial aspect of a concentrated marketplace, have played a role in how they designed their engagement: at the same time, this also introduces a market-driven element to the principally mission-driven and quality-driven dynamic. Paying premiums for carbon sequestration in addition to good prices and fair premiums is thus a means to the end of safeguarding high-quality and long-term supply. This rationale is thus reversed from Tree kids' viewpoint, for whom tree-planting is the end, and cocoa agroforestry the means, an interesting divergence explored further in section 5.3. While both the chocolatier's and the NGO's vantage points are understandable from their perspectives, their framings of what nuances of sustainability take precedence, and the relationship of what is means, what is end, are reversed, creating incongruences which the initiative has to navigate.

Figure 5: Constellation of priorities for Planet Concern



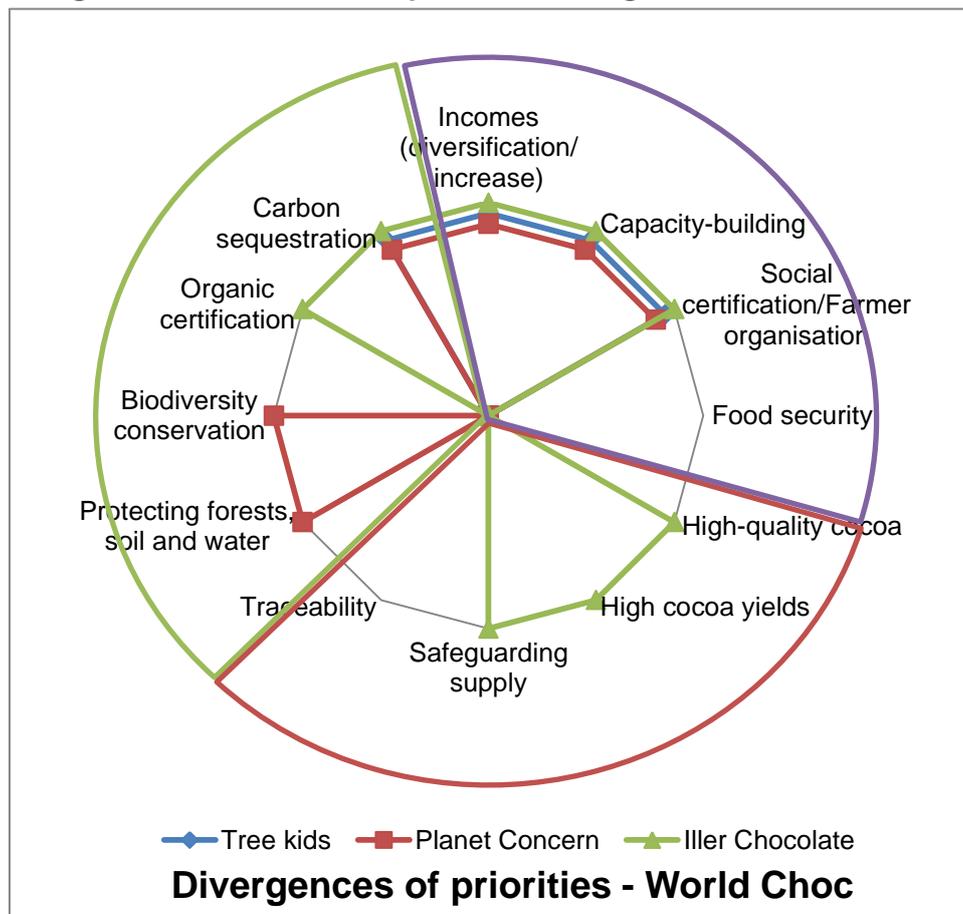
Source: Author

As Figure 5 demonstrates, Planet Concern contributes an organisational focus on environmental priorities given its expertise in conservation and carbon projects, yet also on socio-economic measures to incentivise environmental awareness. A key component of the projected long-term fivefold increase in producer income is the precious timber planted, with further income benefits resulting from cocoa, the benefits on yields from capacity-building, and the premiums for tree-planting and management. The logic is that the environmental objectives of carbon sequestration and conservation would be impossible to attain without livelihood opportunities for cocoa communities compatible with or stemming from those environmental measures, a tension explored further below. Again, commercial priorities are a factor only indirectly given pressures on the funding chocolatier.

5.3. Discussion: congruencies and emerging divergences

Even in an initiative bringing together like-minded stakeholders, diverse priorities emerged in the analysis, with Figure 6 showing overlaps, but also divergences in terms of multiple environmental priorities for Planet Concern and Iller Chocolate's commercial priorities.

Figure 6: Constellation of priorities, divergences for World Choc



Source: Author

While this spider web diagram is but one attempt at illustrating, however imperfectly, complex realities at a glance for practitioners, some visualisation may also help stakeholders identify starting points for necessary conversations. For instance, Figure 6 may encourage stakeholders to discuss Iller Chocolate’s commercial pressures, and the conservation aspects which Planet Concern brings to the table. While it may not be surprising that the private-sector stakeholder contributes commercial motivations, the systematic analysis nevertheless invites a deeper engagement with what these drivers mean especially in relation to socio-economic and environmental priorities, the degree to which they are commensurable, and the need to investigate how these priorities play out in terms of power and governance asymmetries.

In summary, despite many similarities between World Choc’s stakeholders, one incongruence emerges between prioritising tree-planting and cocoa in agroforestry systems, in some ways extending the above observation of a tension between what is ends, what is means. Planet Concern’s project site reports (2012, 2013a-c, 2014a-c, 2015a-c) detail the plantation models utilised, demonstrating cocoa agroforestry models combining cocoa with other species, and some timber plantations apart on

degraded or pasture lands. While this separate model increases carbon sequestration opportunities in line with Tree kids' objective of planting trees, the approach requires more land to plant and does not further Iller Chocolate's cocoa supply. Moreover, given the considerable income potential high-value trees offer, such separation may enhance the risk of reduced attention to cocoa trees going forward, which would contravene Iller Chocolate's interests. If commercial pressures continue to increase, this may promote agroforestry designs which boost the cocoa yields generated. If carbon-offsetting objectives simultaneously do not change, this would require more land. Equally, there is a risk this would reduce the land available for food-securing activities, creating tensions.

Another source of tension arises through certification schemes. Even voluntary private standards are increasingly becoming de-facto mandatory, limiting market access (Hoffmann and Grothaus, 2015). At the same time, the increasing proliferation of different certification schemes whose different priorities and requirements are only obvious upon detailed research (Reinecke, Manning and von Hagen, 2012) is causing increasing complexity also in the global South. While commonly touted as improving market access for smallholders, the combination of different labels can work to limit rather than enhance opportunities. In this instance, the chocolatier partly requires four different labels from cocoa communities, encompassing carbon and forest certification as well as fair and organic cocoa standards. While offering additional income benefits, these very specific requirements also restrict viable sales outlets for producers and cooperatives: few other buyers would be willing to pay premiums for all four standards, meaning that a change in buyer would mean producers foregoing rewards, with further research necessary to establish the thresholds where such losses become prohibitive and create de-facto captive relationships. Akin to buyers working directly with cocoa communities and thereby cutting out intermediaries, this dynamic increases grower prices, but also eliminates other sales options for cocoa communities. While producers very much appreciate stable demand and increased prices, it is worth considering these interconnections' implications in terms of cementing rather than overcoming existing North-South power asymmetries in the cocoa sector.

The final divergence in terms of priorities occurs between what is end, what is means, in many ways an omnipresent difficulty throughout the initiative and indeed the sector. Between the two civil-society organisations on the one hand, and private-sector retailers and chocolatier on the other hand, there are diverging perspectives on relations between whether chocolate or socio-environmental measures are the vehicle or the objective to be attained. What adds to this tension is the interdependence and inseparability of the three dimensions in this initiative: Tree kids' primary objective of tree-planting is predicated on Iller Chocolate and Planet Concern creating viable socio-economic opportunities in terms of cocoa sales, timber inter-cropping and carbon credits, all of which hinges in turn on Iller's ability to manufacture appealing chocolate and Iller's and Tree kids' ability to sell to and mobilise Tree kids' young, tree-focused constituency. While cocoa producers' support is predicated on socio-economic

opportunities, some constituencies in the global North prioritise carbon sequestration, creating tensions.

An exacerbating factor across all divergences is the question of asymmetries in terms of power and ability to influence the initiatives' direction and set-up. This initiative constitutes something of a special case as the heavy reliance on the children-for-children's NGO constituency for sales and innovative marketing bestows upon Tree kids more ability to influence the outcome than civil-society stakeholders can claim in most initiatives. However, this does not change the predominance of stakeholders headquartered in the global North, as the initiative does not create value-adding processing or production infrastructure or ownership shares in the South. While pioneering and exemplary in terms of boosting and diversifying incomes as well as incorporating environmental considerations, the initiative nevertheless cements this North-South inequality which has caused or aggravated the challenges facing the cocoa sector, raising the question whether the sector's predicament can be solved without resolving this fundamental imbalance more systematically. My paper argues that one step towards improving cocoa governance would be allowing cocoa producers and cooperatives an opportunity to contribute their own priorities in an equitable manner, raising the stature of socio-environmental drivers to preserve the land on and off which producers live, but also safeguard cocoa livelihoods (Author interviews #71, #75, #102, #103, #113, #138, cocoa producers).

Overall, while this initiative has synergistic elements, the analysis and discussion demonstrated that assessing diverging socio-economic, environmental and commercial priorities can help to identify incongruences. In terms of Reynolds's tripartite distinction between mission-driven, quality-driven and market-driven buyers, the buyer comes from a mission-driven stance given their affiliation with a cooperative group, reiterated by their adherence to fair certification. However, as shown above, there are also market elements given chocolatiers' need to shore up long-term supply sources. Consequently, there is a chance for friction with the clearly mission-driven and carbon-sequestration-oriented stance which Tree kids occupies, as well as the conservation-focused Planet Concern, and producers' socio-environmental interests. There is a similar tension between convention theory's civic-based and market-based aspects, with some industry-based elements of standardisation given the certification schemes involved. Both observations thus confirm the divergences identified above through the constellations of priorities model.

While the initiative brings together private-sector actors and NGOs who are largely like-minded in terms of their fundamental priorities of safeguarding socio-economic benefits and offsetting carbon emissions, their constellations of priorities differ in the detail. One incongruence was visible from different agroforestry models prioritising tree-planting or cocoa-growing. Another observation concerned certification schemes, with disagreements as to means and end a key tension for this initiative and throughout the sector. Irrespective of aims to work in partnership, the analysis showed the importance of knowing stakeholders' differing understandings of sustainability, rooted in their

different organisational priorities, and how concomitant drivers govern stakeholder behaviours. This thus supports the paper's overall argument of the importance of unpacking diverging priorities systematically, with the author putting forward the constellation of priorities framework as an assessment model. The incongruences also recall in different ways the North-South power asymmetries which pre-exist in the cocoa sector and which this initiative, despite its pioneering efforts, does not alter. This observation is particularly relevant regarding its wider governance implications for the cocoa sector-at-large, as explored in the following section.

6. Implications and broader relevance

The above analysis suggests that self-assessing own priorities and assessing other stakeholders' priorities can enhance understanding, identify potentials for tension in cocoa sustainability initiatives and promote stakeholder conversations. In terms of recommendations for private-sector actors, it would seem crucial to ensure that growing commercial pressures resulting from cocoa-chocolate's sustainability imperative do not overwhelm socio-environmental priorities in the interest of the sector's long-term viability. The sector's current predicament has in part been caused by continuous downward pressure on prices over the last few decades, with the prioritisation of commercial interests over livelihood support and ecologically diverse cultivation models contributing to current shortage fears. Consequently, the discussion in this paper further suggests that a serious, equitable engagement with all stakeholders' priorities, including producers', could help initiatives bridge existing disagreements on what is ends, what is means, while also aiding a much-needed redressing of power inequalities. For civil-society and public-sector actors, the sector's challenges offer a window to question some socio-economic and environmental parameters of production and trade in a way that was hitherto unthinkable. However, for commercial pressures not to continue coercing particularly producers into adopting untenable cultivation techniques, civil-society and public-sector stakeholders have a role to play in moderating these engagements as governance gatekeepers, through support, advocacy, and policy involvement, using their clout to make less dominant voices heard.

In the wider cocoa debate, this case-study is notable because, unlike most private-sector stakeholders, Iller Chocolate strives to engage with the transformational changes required. In addressing socio-economic issues through higher, diversified incomes, much to producers' appreciation, and environmental issues through cocoa agroforestry, the company aims to prove the viability of an alternative business model to competitors who are largely continuing with business-as-usual, albeit with slightly higher prices. Nevertheless, prevailing asymmetrical decision-making relations persist, with all key stakeholders, private-sector and civil-society, headquartered in the global North.

While 'sustainability' is often assumed to be a force for good addressing socio-economic and environmental issues and promoting genuine partnerships, sustainability initiatives investigated in cocoa (Krauss, 2016) frequently fail to address underlying power asymmetries especially between Northern corporate stakeholders and Southern actors. For instance, dynamics such as combining multiple certification schemes or cutting out intermediaries from the production network, while boosting grower prices, also remove alternative sales outlets, thereby increasing buyers' dominance. My study suggests that equitable partnerships between different stakeholders and their priorities in a spirit of fairness rather than charity can help to invite and heed especially Southern stakeholders' expertise, with both equitable engagement and wider participation crucial governance prerequisites for shifting the sector towards long-term viability and 'sustainable cocoa'.

In terms of opportunities for further research, my paper suggests that a meta-study chronicling different stakeholders' constellations of priorities in diverse cocoa sustainability initiatives in the volume, mainstream and niche market segments could prove instructive. Such an investigation could help identify the diversity of priorities contributed in various initiatives, highlighting tensions as well as possible synergies. Given cocoa stakeholders' puzzlement at how to resolve the challenges together which no one stakeholder can address alone, there is a potential for collaborative approaches rethinking vested interests. My study suggests that the magnitude of the cocoa sector's challenges requires transformational thinking to improve producer livelihoods and safeguard production environments. Further research could thus also establish what circumstances would be most conducive to such transformational approaches challenging existing power asymmetries. It is likely that equitable engagement which recognises different vantage points and encourages Southern stakeholders to formulate their priorities and contribute their expertise would provide a solid foundation to rethink the cocoa sector more holistically. Cocoa producers and cooperatives, given the high stakes for their own livelihoods involved, may be in a unique position to help bridge existing divergences on what is ends and means and how to live on and off cocoa in a way that is sustainable long-term for producers, private sector and environment. Further research facilitating a systematic, equitable exchange on and investigation into the commensurability and compatibility of socio-economic, environmental and commercial priorities across different stakeholders and contexts could be a first step towards attaining genuinely 'sustainable cocoa'.

7. Conclusion

In conclusion, this paper has explored stakeholders' priorities in cocoa sustainability initiatives. It argued that even within the same initiative, the diverse nature of stakeholders involved and their differing understandings of sustainability in socio-economic, commercial and environmental terms offer ample opportunity for divergence. It also argued that looking into these priorities and their implications for initiatives'

direction offered broader insights for cocoa governance. Following a discussion of the challenges which the cocoa-chocolate sector faces and the author's methods, it presented a framework, the constellations of priorities, which offers an opportunity for (self-)assessing stakeholders' priorities to enhance mutual understanding and identify potentials for tension. The paper analysed a case-study in terms of stakeholder priorities, identifying subtle divergences despite considerable synergies and overlaps. It found that the exploration confirmed the paper's hypothesis of tensions between differing understandings of sustainability, recommending the premise of engaging equitably with all stakeholder priorities as a vehicle to address asymmetries and rethink vested inequalities in the cocoa sector.

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Appendix 1: List of semi-structured author interviews and focus group discussions referenced

Interview with civil-society representative, #26, 13/12/2013.

Interview with researcher, #30, 02/12/2013.

Interview with private sector, #33, 13/01/2014.

Interview with researcher, #43, 21/11/2013.

Interview with development cooperation, #69, 03/02/2014.

Interview with cocoa producer, #71, 06/02/2014.

Interview with development cooperation, #74, 10/02/2014.

Interview with cocoa producer, #75, 10/02/2014.

Interview with private sector representative, #100, 06/03/2014.

Interview with cocoa producer, #102, 14/03/2014.

Interview with cocoa producer, #103, 14/03/2014.

Interview with cocoa producer, #113, 18/03/2014.

Interview with private sector, #127, 27/05/2014.

Interview with private sector, #134, 19/06/2014.

Interview with cocoa producer, #138, 07/07/2014.

Interview with private sector, #142, 27/08/2014.

FGD 1 – Focus group discussion 1 (2013). First focus group discussion, with environmentalist participants. Effectuated on 5 December 2013 [audio-recorded].

FGD 2 – Focus group 2 discussion (2014). Second focus group discussion, with church choir. Effectuated 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. Effectuated on 29 May 2014 [audio-recorded].