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A multidimensional perspective on child labor in the value chain: The case of the cocoa value chain in West Africa

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ABSTRACT

The International Labor Organization (ILO) states that most agricultural work carried out by children occurs within the family unit, is generally unpaid and often hazardous in its nature and/or in the circumstances in which it is carried out. At the same time, some scholars nuance this view by positing that children who work in agriculture in the spheres of their own household are not necessarily exploited. Making progress in addressing (worst forms of) child labor by value chain actors necessitates unpacking the complex dynamics, context and interlinkages that connect firms and farms at the local community level. This study responds to this call by proposing a new multidimensional perspective on child labor based on comparing and contrasting Global Value Chain (GVC) literature and the Sustainable Livelihood Approach (SLA). Adopting such a perspective allows for an explanation of both vertical dynamics, including global inter-firm linkages and power distribution, as well as horizontal dynamics, such as local norms and values, access to capitals and livelihood trajectories that contribute to the occurrence of child labor. This framework is illustrated by a case study on child labor in the cocoa value chain in Ghana and Côte d'Ivoire, based on information obtained from a variety of sources, including 38 key informant interviews, 12 focus group discussions and structural observations. This study shows that children are not only factors of production, but are socially embedded in family structures and local communities. Children participate in a wider range of rural and agricultural activities as part of rural upbringing and learning a livelihood, in which not only harms but also benefits can occur. These findings advance the discussion by moving away from a dichotomy on child labor as a good or bad practice and putting the development opportunities of children center stage.

1. Introduction

According to the latest count by the International Labor Organization (ILO) over 152 million children are involved in child labor and more than two third of them are working in agriculture (ILO, 2017). Whereas progress has been made, there are still gaps in our understanding of children's labor participation and effective policy measures (Dammert, de Hoop, Mvukiyehe, & Rosati, 2018; Oryoie, Alwang, & Tideman, 2017). The ILO highlights that most agricultural work carried out by children is within the family unit, unpaid and 'often hazardous in its nature and in the circumstances in which it is carried out' (ILO, 2017, p. 34). Hazardous work, in turn, is defined as work 'which, by its nature or the circumstances in which it is carried out, is *likely* to harm the health, safety or morals of children' (ILO, 2020). While much research focusses on mapping causes of – and solutions to – child labor (Bandara, Dehejia, & Lavie-Rouse, 2015; Dammert et al., 2018; Del Carpio, Loayza, & Wada, 2016; Dumas, 2013; Oryoie et al., 2017), other scholars challenge the notion that child labor can be defined objectively and universally across cultures. They argue that most children working in agricultural production and on plantations are in fact not subject to 'abuse and exploitation', especially when they work in the spheres of their own household (Babo, 2014; Berlan, 2009; Mangnus, 2016). These scholars warn for Western conceptualizations that represent a work-free childhood (Abebe & Bessell, 2011; Khan, p. 104, 2010), and 'disenfranchising poor and working class children – by far the world's majority' (W. E. Myers, 2001, p. 41) by institutionalizing a particular Western model of childhood (Berlan, p. 144, 2009; Boyden, 1997; Hilson, 2012, p. 1664; Maconachie & Hilson, 2016, p. 136). Furthermore, they warn for one-sided representations about West African farmers as 'all evil child abusers – who cannot really assert their truth – of being

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hardworking, honest farmers who love their children' (Leissle, 2018, p. 19).

These competing narratives regarding child labor conditions raise questions about our understanding of child labor as a phenomenon in agricultural value chains and the private sector's role in addressing this issue. While the private sector has an important role to play, and can be in a position to facilitate change, it might not be in a position to reach far beyond their immediate business stakeholders (Leissle, p. 133, 2018; van Westen & Zoomers, 2016). Furthermore, recognizing the farmer not only as an entrepreneur and a laborer, but also as a member of a household embedded in the local context, is an important step to understand the occurrence of (worst forms of) child labor in value chains. In addition to market imperfections and subsistence poverty, also other factors such as parental preferences, or norms and values, are contributing to the occurrence of child labor (Berlan, 2004; Bourdillon, 2000; Boutin, 2012; Fors, 2012; Imoh, Bourdillon, & Boyden, 2019; Krauss, 2013; Kuépié, 2018; Maconachie & Hilson, 2016; Adonteng-Kissi, 2018).

This paper contributes to the existing literature by interpreting child labor occurrence through the lens of two distinct theoretical perspectives: the *Global Value Chain* (GVC) and *Sustainable Livelihood Approach* (SLA). By comparing and contrasting the implications of both perspectives, this paper offers a more nuanced interpretation of child labor. More in particular, this study addresses the interplay of both 'vertical' (global) economic mechanisms via the GVC approach and 'horizontal' (local) social mechanisms captured in the SLA framework. Both social (Berlan, 2009; Boyden, 1997; Maconachie & Hilson, 2016; Thorsen, 2009) and economic (Baland et al., 2000; Bandara et al., 2015; Basu & Van, 1998; Duryea, Lam, & Levison, 2007) types of relationships are well documented in the context of child labor and found to be strong. However, these types are – with some exceptions (Hilson, 2012; Krauss, 2013; Adonteng-Kissi, 2018) – mostly discussed in isolation of each other.

The Global Value Chain (GVC) analysis is a widespread tool for understanding how firms and farms in developing countries are integrated in global markets and could benefit from 'upgrading strategies' to capture higher value, mostly based on economic, structural and vertical relationships between buyers and suppliers (Gereffi, 1994; Gereffi & Fernandez-Stark, 2016). The coordination and configuration of value chains in global industries is mainly shaped by ideas from transaction costs economics (Bair, 2009) emphasizing costs and efficiency as market shaping conditions. With financial values as focus point of discussion, this perspective views poverty as an income problem. The Sustainable Livelihood Approach (SLA) instead takes a horizontal approach and is a framework that facilitates the assessment of people's livelihoods and the potential needs to enhance those livelihoods on household level in terms of economic, social and environmental stresses (Morse & McNamara, 2013). It recognizes poverty as multi-faceted phenomenon, emphasizing access to different capitals – human, social, natural, physical and financial – as underpinning individual, household and community livelihoods, including its vulnerability to shocks and influence of institutional context (Scoones, 2009).

GVC theories received critique for ignoring horizontal factors, such as local institutions, clusters and social relations, affecting sustainability and poverty concerns within global value chains (Bolwig, Ponte, du Toit, Riisgaard, & Halberg, 2010; Laven, 2010; Lowitt, Hickey, Ganpat, & Phillip, 2015; Mohan, 2016; Palpacuer, 2008). Meanwhile, sustainable livelihood approaches received critiques for ignoring power relations and macro structures and institutions shaping global-scale value distributions (de Haan & Zoomers, 2005; Morse & McNamara, 2013; R. Myers & Hansen, 2020; Ribot, 2014; Scoones, 2009). Therefore, combining both approaches allows for a multidimensional perspective of (worst forms of) child labor in value chains – most particularly in the stages of the chain related to farming.

This paper makes several contributions. First, while the value chain research has not yet widely picked up the SLA literature, this article suggests that combining those two competing theoretical narratives is particularly helpful for understanding child labor beyond an income poverty rationale and hence responds to calls made by Sumberg & Sabates-Wheeler (2020) and Bourdillon & Carothers (2019) to reframe the child labor discussion. Second, combining both theoretical approaches facilitates putting development opportunities of children and the circumstances under which they are raised at the center stage. This results in a more nuanced approach to understanding child labor in the daily context in which children live and work in agricultural communities. Third, this paper offers insights for practitioners to understand the various contextual dimensions that potentially influence the occurrence of child labor in global value chains. The multidimensional perspective developed in this paper is illustrated by a case study on child labor in the cocoa value chain in Ghana and Côte d'Ivoire. It is based on information obtained from a variety of sources, including 38 key informant interviews and 12 focus group discussions with industry actors, NGO's, farmers and farming communities, structural observations and existing literature. This paper proceeds by first discussing the relevant literature on global value chains and livelihood approaches. Second, it provides the methodology of the case study and a short background for the case description in section three, followed by an analysis of the case in section four. Section five discusses a conceptual framework for livelihood decision making in value chains and presents policy implications followed by a conclusion in section six.

2. Theoretical framework

2.1. Global value chain analysis

Following Michael Porter's (1985) seminal work on the concept of *value chains,* describing company's primary and supportive activities to create value for its customers, Gary Gereffi introduced the concept of global commodity chains (GCC)[1] – and later global value chains (GVC) (Gereffi, 1994, 1999; Gereffi, Humphrey, & Sturgeon, 2005). The GVC concept allows for the analysis of the role and power of multinational firms and state policies within global industries (Gereffi, 1994). Within the development literatures, the linear GVC approach is often used to examine how firms and farms in developing countries are integrated in global markets (Humphrey & Schmitz, 2002; Kaplinsky, 2000). The GVC is a tool for understanding dynamics of international trade and economic globalization, focusing on a vertical relationship between buyers and suppliers. Typical applications evolve around the question how organizations can upgrade their activities and capture more value by analyzing the actors, the structure of input and output and dynamics of value chains (Bolwig et al., 2010; Raworth & Kidder, 2009; Sturgeon, 2001).

Gereffi and Fernandez-Stark (2016) divide the GVC into six basic dimensions that assess global industries from a top-down (global) and bottom-up (local) perspective. The global dimensions are defined as follows: (1) *input–output structure* describes the process of transforming raw materials into final products; (2) *geo-*

[1] The concept of commodity chains,– as precursor of global value chains – was first introduced by Hopkins & Wallerstein in 1977, as part of world-systems theory. They define a commodity chain in their article: 'take an ultimate consumable item and trace back the set of inputs that culminated in this item - the prior transformations, the raw materials, the transportation mechanisms, the labor input into each of the material processes, the food inputs into the labor ' (Hopkins & Wallerstein, 1977, p.128).

graphic scope explains how the industry is globally dispersed and in what countries the different GVC activities are carried out; (3) *governance* explains how the value chain is controlled by firms. Then come the local dimensions: (4) *upgrading* describes the dynamic movement within the value chain by examining how producers shift between different stages of the chain; (5) *local institutional context* explains how the value chain is embedded in local economic and social elements; (6) *industry stakeholders* describes how the different local actors of the value chain interact to achieve industry upgrading (Gereffi & Fernandez-Stark, 2016, p. 7).

From those six dimensions, two have also received substantial attention in the development literature: *governance* and *upgrading* (Bair, 2009; Barrientos, Gereffi, & Rossi, 2011; Gereffi et al., 2005; Gibbon, Bair, & Ponte, 2008). Both concepts are seen as strategies to integrate and improve the position of farms and processors in global markets and restructure value chains to foster local development. Studies show that upgrading potential for firms, farms and industrial clusters and its effect on local economic and social development, is determined by the way global value chains are governed (Gereffi & Lee, 2018; Humphrey & Schmitz, 2002). As subsistence poverty is often highlighted as one of the main causes contributing to child labor (Abdul-mumuni, Vijay, & Camara, 2018; Basu & Van, 1998; Fors, 2012), these concepts are deemed highly relevant for this study.

The GVC *governance* literature is traditionally concerned with power distribution among chain participants. It focusses on control and coordination of material, financial and human resources by specific industry actors, such as lead firms (Gereffi & Fernandez-Stark, 2016; Gereffi et al., 2005). Other research, however, emphasizes the importance of external actors, such as NGO's, certification bodies and governments (Bolwig et al., 2010; Dannenberg & Diez, 2016; Laven, 2010; Mohan, 2016; Palpacuer, 2008). For example, the recent cocoa price reforms demonstrate the importance of the role of governments (in this case of Ghana and Côte d'Ivoire) in value chain governance (Angel, Aboa, & Nigel, 2019). The GVC literature has recently started incorporating these external actors in governance analysis as part of a more recent discussion on Corporate Social Responsibility (CSR) and 'social upgrading' of workers (Barrientos et al., 2011; Gereffi & Lee, 2018). However, little attention has been paid to the agency and heterogeneity of individual workers and producers in those value chains and how this leads to different upgrading opportunities and outcomes (Laven, 2010).

The concept of *upgrading* captures inclusion and economic upgrading of local firms and farms in global production chains and is seen as a prospect for developing countries to reduce poverty (Gereffi, 1994). However, empirical evidence is mixed (Mohan, 2016; Ponte & Ewert, 2009; Vicol, Neilson, Hartatri, & Cooper, 2018). Integrating poor people or regions in global markets, for example, does not automatically result in workers' rights and social upgrading (Barrientos et al., 2011; Raworth & Kidder, 2009). Rossi's (2013) case study of the Moroccan garment industry demonstrates that formal employees benefit from stricter legislation, while informal workers are squeezed to compensate costs. Other unintended effects include increased risks and vulnerabilities for farmers that can negatively affect livelihood strategies and household welfare (Bray & Neilson, 2018; Ponte & Ewert, 2009). Thus, the GVC approach would benefit from adopting a stronger livelihood lens (Challies & Murray, 2011). Such an enriched approach could then also reveal how unintended effects could potentially lead to *immiserizing upgrading*: worsened welfare due to strategies of value chain actors aiming to improve value chain governed livelihood factors, but causing adverse implications on livelihood factors beyond a value chain (Mohan, 2016, p. 62).

Although the *local institutional context* is conceptually part of Global Value Chain analysis, GVC theories have received critique for their limited attention to diverse local dynamics and institutions that influence value chain activities and strategies and recognizing farmers' agency within these processes (Bair, 2009; Bolwig et al., 2010; Laven, 2010; Lowitt et al., 2015; Mohan, 2016; Vellema, 2016). Based on transaction cost reasoning, the GVC describes how the local context influences inputs, such as the terms of labor participation or skill level of laborers, but does not recognize human wellbeing beyond an income rationale and as sensemaking individuals part of social communities. Livelihood theories offer another perspective that can help operationalize the *local institutional context* and horizontal dimension in which farmers and their children actively build their lives, also beyond the value chain they are participating in. Embracing a wider welfare perspective and recognizing farmers' individual, household and community livelihoods, can provide additional insights for understanding child labor.

2.2. The Sustainable livelihood approach: Child labor from a household perspective

Recognizing the dimension of the household is important for understanding the factors, both inside and outside the value chain, that contribute to the occurrence of child labor. Beyond subsistence poverty (Abdul-mumuni et al., 2018; Basu & Van, 1998), the child labor literature highlights a plethora of other underlying causes. This includes income shocks (Bandara et al., 2015; Duryea et al., 2007; Frölich & Landmann, 2018; Kwofie, Kessey, & Dinye, 2018), household characteristics, such as gender of the child (girls work more often in household chores), education and occupation of the parents (Badmus, 2011), lack of access to (quality) education and labor market opportunities (Dammert et al., 2018; Emerson & Knabb, 2006; Fors, 2012; Krauss, 2013; Kuépié, 2018). Also, sociocultural underpinnings play a role in child labor occurring (Berlan, 2004; Hilson, 2012; Jonah & Abebe, 2018). Examples of sociocultural determinants include socialization – the moral and social integration of the child into society, by participating in household chores and other types of work (Bourdillon, 2000; Adonteng-Kissi, 2018; Twum-Danso, 2009), and migration along kinship ties (Thorsen, 2007, 2009).

The Sustainable Livelihood Approach (SLA) offers a tool to assess how social-institutional processes are mediating economic attributes of livelihoods (Scoones, 1998, 2009). The framework connects people to their overall enabling environment and 'helps to organize the factors that constrain or enhance livelihood opportunities and shows how they relate to one another' (Serrat, 2017, p. 23). Building upon previous work on relations of production from Cobbett, Marx and Polanyi (Scoones, 2015) and entitlement and capability theories from Amartya Sen (1985), the concept of sustainable livelihoods was first introduced by Chambers and Conway (1992):

> A livelihood comprises the capabilities, assets (stores, resources, claims and access) and activities required for a means of living; a livelihood is sustainable when it can cope with and recover from stress and shocks, maintain or enhance its capabilities and assets, and provide sustainable livelihood opportunities for the next generation; and which contributes net benefits to other livelihoods at the local and global levels and in the short and long-term. (p. 6)

The SLA emerged in the 1990's as a response to failing policies and interventions with a narrow focus on income, consumption criteria and basic needs (de Haan & Zoomers, 2005). Within the development agenda, livelihood approaches were promoted as part of a broader welfare agenda and quickly picked up by various policy makers and development agencies, such as UNDP, OXFAM, SID and CARE, and further developed by the UK Department for Inter-

national Development (DFID). The SLA recognizes the complex bricolage or mix of activities that people engage in to sustain a livelihood (Scoones, 2009). At the core of the framework is people's access to five different capitals – human, natural, social, physical, and financial, that enhance or constrain livelihood strategies and outcomes (Fig. 1). Those assets are not only a *means* through which people build livelihoods, but also give *meaning* to their lives, influencing people's preferences, sacrifices and strategies (Bebbington, 1999). Livelihood strategies are dynamic and further transformed by the vulnerability context, including shocks and seasonality's, and the institutional context within which it exists (Morse & McNamara, 2013).

Over the years, the approach has also been subject to critique. A focus on micro-level analysis ignores broader market structures that shape global distributions (Ribot, 2014). The SLA has furthermore been criticized for its weak attention to power relations and global institutions as intermediating access to resources and capitals (de Haan and Zoomers, 2005; Morse & McNamara, p. 45, 2013; Myers and Hansen, 2020; Scoones, 2009, 2015).

2.3. Connecting GVC and SLA

Global Value Chain theories do not specifically account for micro level household dynamics and access to a wider pool of resources and capitals, while the Sustainable Livelihood Approach – that centers on this wider pool – falls short when it comes to broader market structures and power relations. Combining both theoretical approaches therefore holds a promise of facilitating a multidimensional understanding of child labor in value chains. Analyzing child labor – and more specifically development of children – at the level of the farm and the cooperative, requires input from both the Global Value Chain and Sustainable Livelihood Approach in order to understand both (vertical) macro and (horizontal) micro level dynamics and factors through which livelihood opportunities for the farmers and their children emerge. In the next sections we develop some initial steps to connecting both approaches. We do this by applying a multidimensional perspective to the case of child labor in the cocoa value chain in West Africa.

3. Methodology

3.1. Case study

Our case study examines the phenomenon of 'child labor in cocoa production' within the context of Ghana and Côte d'Ivoire. Ghana and Côte d'Ivoire are chosen as case study locations because of the high rates of child labor in their cocoa industries (de Buhr & Gordon, 2018; Tulane University, 2015). Furthermore they have large shares in the world cocoa production: roughly 17 percent of cocoa is coming from Ghana and 40 percent from Côte d'Ivoire (OEC, 2019a). While Ghana's export depends for about 12 percent on cocoa related products, this is 38 percent for Côte d'Ivoire (OEC, 2019b, 2019c). Geographically, both Ghana and Côte d'Ivoire are bordering the Gulf of Guinea as part of the North Atlantic Ocean. Cocoa is produced in tropical area's in the south, while the north of both countries represents semiarid landscapes bordering the Sahel (CIA, 2020).

3.2. Data collection and analysis

Fieldwork was carried out at the start of the cocoa harvest season in November and December 2018 (Ghana and Côte d'Ivoire), and November 2019 (Côte d'Ivoire). Research localities include Accra and Eastern Region, a cocoa producing region that represents 11,5% of the total cocoa production in Ghana (Cocobod, 2019). In Côte d'Ivoire research localities include Abidjan and Bas-Sassandra, Sud-Bandama, Haut-Sassandra and Marahoué, covering major cocoa producing regions (FAO, 2021) (see Fig. 2).

This research draws on 94 field interviews and observations. Different data gathering methodologies have been used, including 38 formal conversations, key informant interviews and transect walks with industry actors, international organizations, NGO's, cooperatives and farmers; 12 focus group discussions with male and female farmers and women's groups; and 14 structural observations of project locations and (cocoa) infrastructures, such as warehouses, schools, plantations and roadside observations (see Table 1). Furthermore 30 informal conversations have been held with various local industry stakeholders, as a source of inspiration for questions during formal interviews and a wider understanding of the cultural context. Using a variety of data collection methodologies and sources, including existing literatures, facilitates the internal validity of the research process through triangulation. By using various interview styles, ranging from formal and semi-structured interview style to ethnographic conversations, this study aimed to limit researcher and social desirability bias (Bernard, 2017, p. 250).

Snowball method has been used to select the participants, starting from various key-informants to avoid one line of inquiry. A case study protocol has been developed as part of this study to maintain a chain of evidence throughout the research process[2]. For all types of interviews a list of topics guided the questions, starting with *(worst forms of) child labor occurrence* and *possible causes* and *the activities and actors of cocoa production and trading* during the fieldwork in 2018. An iterative approach was then used to include topics and select new participants that emerged and deemed relevant from prior interviews and observations. This led to additional data collection in 2019, focusing on interviews with farmers and cooperative board members about topics including *rural lifestyle of farmers*, *daily life activities of farmers* and *child upbringing*. Formal interviews, conversations and FGD's have been recorded and transcribed or summarized in English or French by the author. For interviews that have not been recorded, notes were made during the interviews and worked out right after the interview in order to avoid memory failure. Before all formal interviews, conversations and FGD's commenced, consent to participate and be recorded was requested verbally on record and the identity and aim of the researcher and institution were revealed. Written notes and transcripts of all fieldwork have been thematically analyzed in NVIVO software, using both inductive coding (data-driven) to generate themes and deductive coding (theory driven), focusing on GVC and SLA concepts to connect themes to theoretical predictions (Fereday & Muir-Cochrane, 2006). The different types of interviews and observations have led to both Global Value Chain and Sustainable Livelihood insights (depending on the interviewee, see Table 1).

4. Findings

4.1. Child labor in the West African cocoa value chain

Adopting a GVC lens, this section discusses the input–output structure, governance and upgrading in relation to children participating in the cocoa value chain below. While this analysis pays attention to the entire cocoa value chain structure, particular attention is paid to the farmer node, as children mostly work in the production of cocoa within the family farm (de Buhr & Gordon, 2018; ILO, 2017).

[2] This study received ethical clearance by the Faculty Ethics Assessment Committee.

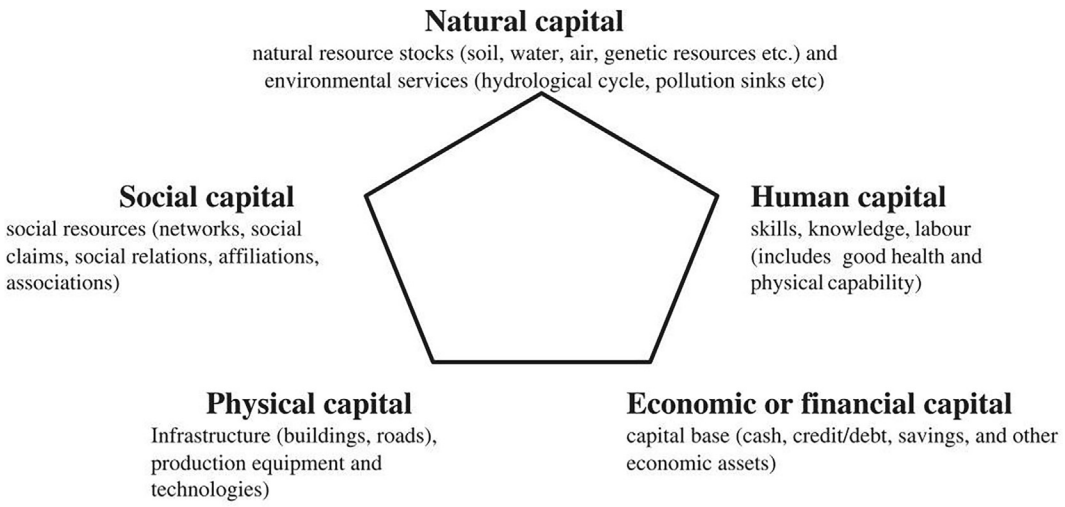

Fig. 1. The five Capitals of Sustainable Livelihood (Morse & McNamara, 2013).

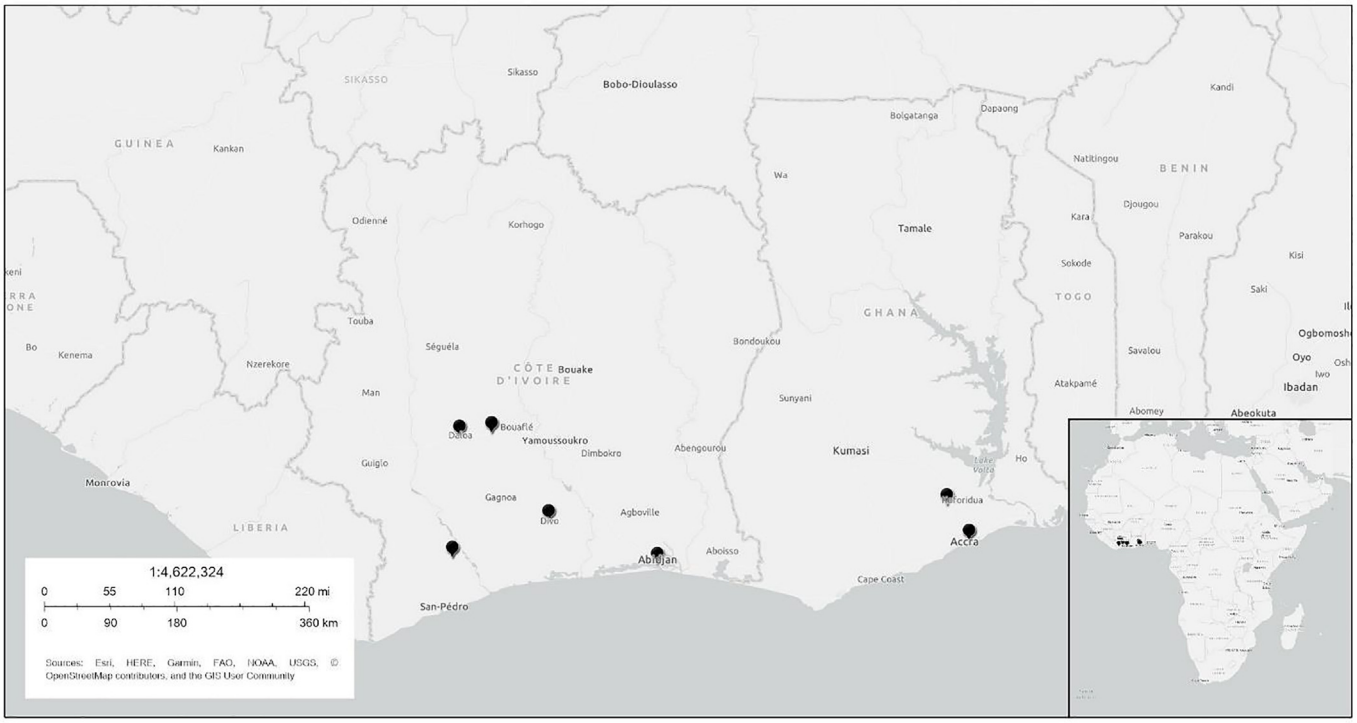

Fig. 2. Research Locations in Côte d'Ivoire and Ghana.

Table 1
Fieldwork Stakeholders and Participants.

Stakeholders	Interviews (n = 38)		Focus groups (n = 12)		Structural observations (N = 14)		Informal conversations (n = 30)	
	Ghana (n = 12)	Côte d'Ivoire (n = 26)	Ghana (n = 2)	Côte d'Ivoire (n = 10)	Ghana (n = 1)	Côte d'Ivoire (n = 13)	Ghana (n = 12)	Côte d'Ivoire (n = 18)
Farmers (n = 18)	4	6	2	5			1	
Community members (n = 24)		6		4		7	3	4
NGO's & Certifiers (n = 9)	3	4					2	
Industry players: others (n = 30)	4	5			1	2	6	12
Industry players: cooperatives (n = 13)	1	5		1		4		2

Note: Community members include women, teachers, children, residents.

4.1.1. Child labor in the production of cocoa in Ghana and Côte d'Ivoire: The input–output structure

The input–output structure of the cocoa value chain can be described by different types of flows between various actors, also called nodes. Those include the tangible flows such as the cocoa material and the financial flow, but also intangible flows such as knowledge or information (Bolwig et al., 2010; Gereffi & Fernandez-Stark, 2016). Furthermore it includes the various activities performed at various nodes, to create and capture value, based on inputs such as capital (land) and labor.

The value chain of cocoa can be drawn in the shape of an hourglass: millions of upstream farmers in the developing world are connected, through only a limited number of processors (grinders), manufacturers and traders, to thousands of chocolate makers and even many more consumers downstream in the Global North (Laven & Boomsma, 2012). Examining the input–output structure of cocoa – the raw material of chocolate – reveals that most children who work in this particular value chain are involved in activities on small holder plantations within a context of family farming (Anti-Slavery International, 2004; de Buhr & Gordon, 2018; ILO, 2017; Leissle, p. 103, 2018; Tulane University, 2015). More specifically, an estimated 3.4 million adults and 1.5 million children between 10 and 17 years are working on these small holder cocoa plantations in Ghana and Côte d'Ivoire (de Buhr & Gordon, 2018). Earlier studies revealed that the occurrence of child labor in the cocoa sector in West Africa has even increased between 2008 and 2014 to over 2 million children from 5 to 17 years old working in cocoa production on farms in Côte d'Ivoire and Ghana (Tulane University, 2015). This indicates that children constitute a large part of the total workforce.

4.1.1.1. Inputs: Labor and land. In rural areas of Ghana and Côte d'Ivoire, land ownership, inheritance and management of small holder farms are mostly based on customary tenure systems, therefore land allocation and ownership remains complicated and highly contested (Bymolt et al., 2018b, pp. 92–94). The division between land and labor is not always clear and sharecropping systems occur. With sharecropping systems, people get paid for their labor in natural produce or by acquiring part of the land over time. The general director of a cooperative in Côte d'Ivoire explains: 'Here for example they [land owner] can say, this is 10 acres empty [unused land]. Now you work. And when it will start producing, you give me 3 acres [back].'

After independence, Côte d'Ivoire adopted a policy stimulating cocoa production as major economic export crop. Liberated land policies led to over 2 million people migrating from dry and arid areas and neighboring countries to the tropical and fertile forest areas in Côte d'Ivoire. Whereas integration initially happened peacefully, land conflicts led to a civil war from 2002 until 2007, with resurgence of violence in 2011 (Leissle, 2018; Ryan, 2012). It is within this context of land conflicts, uncertainty and migration, that the farming of cocoa in Côte d'Ivoire takes place:

> Some people, they bought the land, but they don't have a paper. He is the owner of the plantation, but not of the land ... the farm belongs to him, but he is always.. he doesn't know what might happen tomorrow. (general director cooperative, Côte d'Ivoire)

4.1.1.2. Farming, fermentation and drying. Farming cocoa is a very labor intensive process, while the financial rewards are low. In both Ghana and Côte d'Ivoire, various activities take place at the small holder cocoa farms and family homesteads. Farmers and board members of cooperatives explain that cocoa trees become productive after about 3–5 years. Cocoa pods can be harvested twice a year, mostly during the main harvest season from October to February. After harvesting, pods will be gathered on a large pile and opened by a group of laborers with machete's or wooden sticks. Then the pulp will be removed from the cocoa pods directly at the farm. During transect walks in Ghana and Côte d'Ivoire farmers showed that the cocoa beans and pulp will be covered by banana leaves at the plantation or at the farmer's homestead for fermentation. After a period of 6 days, during which the beans have been shuffled once or twice, the beans will be put to dry in the sun on large bamboo beds above the ground or on plastic sheets at the homestead of the farmer's family. The fermentation and drying process are the first stages in the value chain that add value to the product and are a common practice at West African farms (Leissle, 2018, p. 108).

The type of activities – especially in Côte d'Ivoire – tend to be very much gender based. Land clearing, harvesting and opening of cocoa pods and selling of cocoa beans are a men's job. Women, instead, are primarily involved in the collection of cocoa pods onto large piles after harvest, transportation (carrying) of fermented beans to the village and the sorting of cocoa on the drying mats. 'It is women on the drying platform, so they just come, has [*sic*] some time to stir, to sort, to remove the extra items, sorting. To remove all the false beans, bad beans among the good ones.' (cooperative board member, Côte d'Ivoire)

When it comes to the involvement of children in both Ghana and Côte d'Ivoire, the major concerns are about the type and length of activities performed by them. Studies from the Tulane University (2015) and Walk Free foundation (de Buhr & Gordon, 2018) indicate that about 90% of the children involved in cocoa production perform hazardous work[3]. In relation to the activities above, children work beyond the hours allowed for their age. Hazardous tasks include working with sharp tools, clearing land and carrying heavy loads. Furthermore, an estimated 1000 children (forced by others than parents and relatives) to 15,000 children (forced by others than parents) are subject to worst forms of child labor – including forced labor – as of 2017 (de Buhr & Gordon, 2018).

Observations and interviews in both countries indicate that while part of the production of cocoa takes place at the plantations, another substantial part of the initial cocoa processing – drying and sometimes fermentation – takes place at the household in the villages. As the cocoa farming activities are mostly informal and part of the work is taking place at the homestead, there is little separation between commercial activities and household work. GVC scholars refer to this type of work as informal small micro-enterprise work or household-based work and state that 'income derived from these activities is generally low, and production involves both paid and unpaid family labor often including child labor' (Gereffi & Fernandez-Stark, 2016, p. 22). The GVC approach implies viewing child labor as negative externality of cocoa production, and solutions are to be found in economic upgrading to higher value capturing activities in the industry.

4.1.1.3. Financing the cocoa trade: Prices. Different reports and standards indicate that the cocoa price is far below a reasonable living wage for farmers (Fountain & Huetz-Adams, 2018; Rusman, de Adelhart Toorop, de Boer, & de Groot Ruiz, 2018). The Fairtrade Living Income Reference Price indicates that USD 2.16 per person in Ghana, and USD 2.49 per person in Côte d'Ivoire per day is needed to maintain a decent living (Veldhuyzen, 2019). For cocoa farming

[3] The ILO distinguishes working children, light work, child labor, hazardous work and worst forms of child labor. Child labor is defined as all work carried out exceeding maximum working hours corresponding the age of the child, and including all type of hazardous work (ILO, 2020). Walk Free Foundation methodology is based upon ILO framework. For detailed methodology and definitions, see https://cocoainitiative.org/wp-content/uploads/2018/10/Cocoa-Report_181004_V15-FNL_digital.pdf.

households, this translates into a price of USD 2.20 (Côte d'Ivoire) and USD 2.10 (Ghana) per kilo cocoa beans in 2019, while the farm gate prices for the 2019/2020 season were USD 1.37 per kilo in Côte d'Ivoire (de Bassompierre et al., 2019) and USD 1.52 per kilo in Ghana (Aboa, 2019)[4]. As various studies (Fountain & Huetz-Adams, 2018; Adonteng-Kissi, 2018) and most interviews indicate, the low cocoa price is a major concern to the occurrence of child labor.

> People don't have, even if the school is there, they don't have the means to send the children to school. And you can have.. kind of.. a cause like the lack of labor . . . or there are some laborers but it is too expensive. (industry expert certifier, Côte d'Ivoire).

Low incomes make it difficult for farmers to hire laborers to help on the farm and pay for school supplies such as books and uniforms. This results in family members, including children, helping on the farm.

4.1.2. Upgrading, local institutional context and stakeholders

The GVC describes different upgrading strategies that producers and farmers can follow to capture more value from participating in the cocoa value chain. As part of their CSR strategies, the major cocoa companies stimulate product upgrading. By distributing inputs and providing training in good agricultural practices they attempt to increase productivity and thereby farmer incomes. However, a sector wide focus on productivity increase among all cocoa farmers will in the long run most likely lead to oversupply and a drop in world market prices, losing all forward effects[5] (Fountain & Huetz-Adams, 2018). Other strategies farmers can obtain include improving the quality of their production or moving into organic or certified segments of the value chain, as farmers can get access to various price premiums. However, studies have indicated that even these price premiums tend to be insufficient for covering the cost of living (Rusman et al., 2018).

Cooperatives explain that part of the premiums paid to cooperatives is distributed in cash to farmers, while other parts are used to implement social and environmental projects. As cooperatives deal with different buyers, who pay different types of premium, cooperatives handle various request in regard to expenditures of those premiums. Challenges occur when not all cocoa can be sold under certified conditions, as put forward by a cooperative in Ghana. While all members of cooperatives put an equal effort in meeting the standards of certification, farmers miss out or receive different premiums depending on the specific buyer. To facilitate transparency cooperatives keep lists of farmers that supplied to particular buyers under certain conditions and receive the related premium based on their KG's sold. In other cases cooperatives prefer a fair distribution of total premium over all member farmers, to encourage them to farm according to principles and avoid internal conflicts.

From a GVC perspective, child labor would decrease if cocoa laborers can move up the value chain by abandoning smallholder family farming and look for more industrialized jobs including formal low-skilled labor intensive work and moderate skilled work (Gereffi & Fernandez-Stark, 2016). This would provide a higher income and improve labor conditions. However, there is a clear lack of industrialized job opportunities in both countries (Monga, Shimeles, & Woldemichael, 2019). The documentary 'Dominee of Koopman: Ghana' [Pastor or Merchant: Ghana] points out that the local processing of cocoa provides currently only few job opportunities and both countries have little expertise and consumer markets to engage in cocoa and chocolate making activities that would generate more revenues (Lodiers, 2020). Interviews with the Cocoa Health and Extension Division of the Ghana Cocoa Board (Cocobod) and with local entrepreneurs, indicate that some entrepreneurial initiatives start to develop in Ghana. Examples include '57 Chocolate', a company aiming to empower the local industry and 'Cocoapreneurship' a non-profit inspiring and supporting cocoa and chocolate entrepreneurs. However, in Abidjan these activities are still too scarce, as expressed by a local chocolate maker: 'There is more than 2 million tons of cocoa each year . . . Many many cocoa, but there are no.. there is no Ivorian brand. So I make it.' (chocolate maker, Côte d'Ivoire)

4.1.3. Governance and geographies of the cocoa value chain

The international trade of cocoa is characterized by high levels of market concentration, due to various takeovers and mergers both within segments of the same activities but also by vertical integration (Fountain & Huetz-Adams, 2018; Oomes et al., 2016; UNCTAD, 2008). For example, processors Cargill, Olam and Barry Callebaut grind about 60% of all worldwide traded cocoa, which is predominantly made into chocolate by the big five chocolate companies Mars Inc, Mondelez International, Ferrero Group, Nestle SA and The Hershey Company in the Global North. These five companies represent a two-third share of the total chocolate market (Leissle, 2018, pp. 73–74). The cocoa value chain is a buyer driven chain, mainly characterized by a captive form of governance. Due to the inelastic supply of cocoa, farmers have little power to negotiate and are mostly price takers (Oomes et al., 2016; UNCTAD, 2008). Their relatively low bargaining power makes them vulnerable for price volatility on the world cocoa market, leading to potential income shocks and incomes below a living wage (Fountain & Huetz-Adams, 2018).

The governments in Ghana and Côte d'Ivoire provide price stabilization for farmers through minimum farmgate prices (FGP) yearly announced by their cocoa marketing boards, respectively Cocobod and Conseil du Café-Cacao. While FGP protect farmers against sudden price drops, balancing some of the risks, these prices represent only about 60–70% of the world market price. The Cocoa Health and Extension Division of Cocobod, that deals directly with the farmers, posits that the difference is allocated to reinvestment in the cocoa sector. This includes the support of programs that subsidize fertilizers, seedlings and pollination for farmers, but also inspecting the quality of the beans. However, previous studies indicate that a lack of efficiency and transparency on the allocation of these public reinvestments and the exclusivity of the state in Ghana to locally buy and sell cocoa can also form a bottleneck to sector development (Laven, p. 231, 2010; Oomes et al., 2016).

In Ghana, the state owned marketing board Cocobod is in charge of the physical internal trade through Licensed Buying Companies (LBC's). Purchasing clerks working for LBC's buy beans directly from farmers and store them in local and district warehouses. From here, beans will be sold and transported to the government's cocoa marketing company (CMC) who has the exclusive right to sell to international clients. Whereas in both Ghana and Côte d'Ivoire a marketing board is in charge of forward sales and farmgate prices of cocoa, in Côte d'Ivoire there is less regulation in terms of who can trade cocoa. Traders and cooperatives mention that farmers can sell their beans to either cooperatives, farmer groups or local traders who resell to other intermediates and/or international clients.

[4] At the time of writing, the governments of Ghana and Côte d'Ivoire have announced a floor price of $2,600 per ton and a living income differential (LID) of $400 per ton for the 2020/2021 season. Effects of this have not been included in this research. For more information, see https://www.reuters.com/article/cocoa-ghana/update-1-ghana-to-raise-cocoa-farmers-prices-by-5–2-sources-idUSL8N2522CF.

[5] At the time of writing, the government of Côte d'Ivoire has halted any projects that focus on productivity increase, as also confirmed in interviews. See, https://www.reuters.com/article/ivorycoast-cocoa-yields/ivory-coast-suspension-of-cocoa-seed-plans-raises-quality-concerns-idUSL8N1S3A8Y.

The governance structure of the cocoa value chain outlined above underlines the limited negotiation power farmers have to influence prices and therefore cocoa related income. It also exposes the difficulties for local actors to get involved in higher value capturing activities. It can be concluded that the GVC functions in a way that keeps Ghanaian and Ivorian farmers captured in a system of informal SME and household-based work, with little financial returns and opportunities to structurally upgrade their activities, which generates conditions for the occurrence of child labor.

Increasing farmers' negotiating power and (thereby) their incomes is an important aspect of most programs addressing child labor, either through productivity increase and/or additional premiums and certification. However, as emphasized by most interviewed industry stakeholders and supported by a broad secondary literature (Berlan, 2009; Brüderle, 2019; Leissle, 2018; Ryan, 2012; Thorsen, 2009), child labor is not only an income poverty problem, and thus cannot be solved by only increasing the farmers income. The occurrence of child labor on cocoa plantations is also the result of lacking access to (quality) education, infrastructure, local norms and values, or 'ignorance' as referred to in various interviews with industry stakeholders. While the GVC explains how farmers capture only little value from participating in the cocoa value chain, it does not provide clear conceptual tools that acknowledge the relevance of local and household dynamics in shaping the conditions for child labor to emerge.

4.2. Child labor explained through the Sustainable livelihood approach

Examining farming households through the sustainable livelihood approach (SLA) uncovers children as part of households and families embedded in rural community structures. Livelihoods are based on access to a wide variety of capitals that, next to financial capital, comprise of human capital, natural capital, social capital and physical capital. Taken together, these capitals determine the available set of livelihood strategies that can be adopted to secure well-being. An in-depth examination of access to capitals therefore provides a deeper understanding of the role of children within livelihood strategies and how this relates to the issue of child labor.

4.2.1. Human capital

From a household perspective, human capital includes the skills, knowledge and also the physical strength that household members can build upon. Besides formal education, the upbringing of children by parents and family members plays an important role in the accumulation of this capital. Many interviews and focus groups, both with farmers and with industry experts, indicate that in the context of rural African communities the upbringing is all about helping and contributing to the parents' activities.

> So first of all, for the security of the children, you don't leave them alone at home. If.. the first place is at school. But if school is closed, they have to accompany with the parents. For example, boy will accompany with his father to provide water. Or some other help like: bring me this one ... and for ladies they have to imitate their mother. Like washing the plates and helping their mother. Because when you leave them alone, they can make some [bad] uses. (cooperative board member, Côte d'Ivoire)

Depending on their age, children are involved in various types of household tasks and gradually also farming tasks in order to learn how to be good members of society and learn a livelihood for their future.

> At least you should teach them how to, so for instance if you are washing, even a three years old can sit by you and fit the hand in the water and maybe yes, making what you are doing. So it is a way of teaching them. Yeah to be responsible adults. (male farmer FGD, Ghana)

Especially in Côte d'Ivoire a very strong gender division exists for the type of tasks children are involved with. Culturally it is common for girls to imitate their mother's behavior and tasks in the household, and for boys to imitate their father on the farm.

> Women are bringing the children when they are too young, and the boy will put in his mind that, when he will grow old he will follow his father's way and the daughter will follow her mother's way. (wife cocoa farmer FGD, Côte d'Ivoire)

In both countries, parents often indicate that the involvement of children is contingent on their age or physical strength, while gradually scaling up the activities. Learning how to execute tasks from parents is part of being an accepted member in society, as indicated by a teacher in an Ivorian community: 'here in Africa, if a woman cannot cook, she will not get married.'

While the importance of formal education is hardly debated in the interviews[6], an equally strong consensus posits that this does not necessarily imply that children should be banned from any type of activities in the household or farm, especially in the family context. Learning from the everyday activities of the parents is also a means to build up skills, mastering an occupation and build a generation of future farmers, as explained by the director of a cooperative in Côte d'Ivoire:

> If the child is not doing anything, it means that we are destroying that child. Because the child should learn what his father is doing, so that if he is not making success, or he is not improving at school, he can at least follow what his father does. And also we have to prepare the future generation of farmers. So when the child is in the farm, there are some activities that he can do and some other activities that they can't. He must assist. He look at his father working. And then the child keep it in his mind ... So the child, during his free time, his holidays, must go to farm and see what his father is doing.

Acknowledging the context in which children in West African communities are raised constitutes a key part of understanding why child labor occurs, witness statements by interviewed NGO's, certifiers and cooperatives in both Ghana and Côte d'Ivoire. Adopting a livelihood perspective to local human capital accumulation showcases that the involvement of children in cocoa farming should not be seen in isolation, but as part of a general habit to integrate all kinds of everyday activities within and beyond the household. Furthermore, the involvement in such activities is not only seen as potentially harmful, but also as an experience from which children are assumed to benefit in their future lives and careers. Seen through a livelihood lens, child labor cannot be addressed by removing a child from a cocoa farm, but requires a discussion on labor conditions and – more broadly – protection and development opportunities of children.

4.2.2. Natural capital

Natural capital includes the natural resource stocks that families have access to. Most households own multiple plots of land that are being used for different types of production, including a homestead in the village. Sometimes, a husband and wife can own different plots of land at different localities, acquired through heritage. Besides a cocoa farm, households have access to a vegetable garden or 'yam' farm. These farms are typically run by

[6] School enrollment for children (5–17 years) working in cocoa production in Ghana and Côte d'Ivoire raised from respectively 90.9% and 58.7% in 2009 to 95.9% and 70.8% in 2014 (Tulane University, 2015).

women and include the production of tomatoes, cassava, yam, groundnut, okra, peppers, eggplants and in some cases banana, plantain and papayas. Part of the produce is sold on local markets, the other part is used by the villagers for local consumption, reducing the need to buy food.

Lack of access to resources in the country of origin, can drive adults and children to cross the border in order to look for opportunities. Labor migration into Côte d'Ivoire is common and over two million migrants, mostly from Burkina Faso and Mali, habitat the country (Konan, 2009). Due to its long history of migration, Côte d'Ivoire typically exhibits various types of land ownership and customary systems that have developed over time. The ownership of the land is often contested as official land titles are rare and sharecropping systems occur (as described in more detail in the previous section). Uncertainty over land ownership and land titles sometimes disincentivizes migrant farmers to invest money locally, as they risk to be confiscated at any time, and prefer to invest earned money back home at their own properties.

Child migrants, outside of the protection of their family, are exposed to all types of risks and often do not have an opportunity to leave their situation. This is when worst forms of child labor – such as child trafficking or forced labor – can occur.

> Sometimes people from the north, they come down here and they are, instead of having paying them, they might intent and say hey, I'm giving you food, I'm giving you accommodation so I'm not going to .. and that also falls under forced labor. (industry expert certifier, Ghana)

A local facilitator explains that in some cases children are actually keen on migrating themselves, as in their home countries they receive a high status (Thorsen, 2009). These observations indicate that solutions to protect vulnerable children should not only to be sought at the cocoa farms, but also in the country or region of origin where constrains to access resources can be a driving force for migration in the first place.

4.2.3. Social capital

Social capital entails the social resources upon which families can draw. Farmers need a helping hand in all sorts of work, including pruning, harvesting, cutting open the pods, carrying, drying and sorting the beans. As – especially in Côte d'Ivoire – these tasks tend to be gender driven, farmers call either for the help of their spouses or other community members to give them a hand. Various forms of labor agreements occur. Most commonly male farmers form labor groups or so called 'groupe d'entraide' and help each other with the harvest as part of barter agreements and 'solidarity', as explained by various farming communities:

> This is mutual, so today they will work for someone, it is free of charge. and work today for someone, tomorrow for another one. It is like intern. (male farmer FGD, Côte d'Ivoire)

When you are not part of such group, payment can occur through a meal, a daily wage or payment at the end of the harvest season.

> The working groups are paid per day. But they are not paid directly. They wait until the harvest time before being paid. So it is like credits ... But you know, if you are member of the group then there is a helping group. But if you are not member then you have to pay. (male farmer FGD, Côte d'Ivoire)

The strong gender division of farming tasks can lead to problems for some households. As women are only supposed to do light work, e.g. in vegetable farms, a female headed household might not be able to continue a cocoa farm after her husband ceases or is disabled to work.

> My husband has become blind. So he cannot do anything. I am the only woman, I am supposed to do now both works ... So I call young men from outside to come and work [on the cocoa farm] and I pay them. The rest of the benefit I take it to run the family. (wife of cocoa farmer FGD, Côte d'Ivoire)

As women are not part of cocoa labor groups and barter agreements, they have to rely on male family members or pay laborers. This brings female headed households in a vulnerable position and could potentially lead to risks for children to be involved in child labor.

4.2.4. Physical capital

Infrastructure deficiencies, such as bad roads can limit economic activities in rural areas, while lack of other facilities such as electricity and health care can pose problems for safety and health. Focus groups with farmers and observations indicate that villages are often difficult to reach through sand paths and dirt tracks, which especially in rainy season can pose major challenges for heavy transport. Bicycles and motorbikes are common vehicles for farmers to reach their farms. School children mostly walk to their destination, however, when schools are far and hard to reach it can be challenging for them to go to school. Indeed, the access to schools has been pointed out as a major concern in relation to child labor in many interviews: 'The lack of schools, no school, no roads and then you know, there is no facility for better education. These things also would take children to child labor or increase the risk of child labor.' (industry expert certifier, Côte d'Ivoire)

Despite initiatives improving access to education, distances can still pose barriers, especially when schools do not have canteens. An industry expert in Côte d'Ivoire explains that in those cases, children might not return to school after lunch and are likely to remain with the parents on the farm. However, not only the distance or absence of schools, but also the quality of education matters. During field visits in Côte d'Ivoire multiple 'ecoles passerelle' were observed. These are community schools made of bamboo and banana leaves, where community members select teachers amongst themselves. Bad weather can easily interrupt this type of schooling as children are not protected from the rain. Furthermore, the quality of the education cannot be safeguarded, as these schools do not have formal teachers sent for by the government.

4.2.5. Financial capital

Financial capital includes all types of access to finance, including diversified income streams and access to savings and loans. Cocoa farmers often rely on multiple income streams. While in both Ghana and Côte d'Ivoire for cocoa households the cocoa crop is the main income source, households cultivate multiple plots and crops simultaneously (Bymolt et al., 2018a). Transect walks and farmer interviews in both countries indicate that diversification is common, including the production of palm oil, rubber, cotton, coffee, and a wide range of vegetables and fruits besides cocoa. In Ghana, a female farmer showed the banana, plantain, yam and cassava she grows on her cocoa farm, explaining that some crops are for household use. Banana is offering her a year-round income, as cocoa is a seasonal crop. Interviews and focus groups with male and female farmers and other women in the communities indicate that women and men have different access to financial resources. In Côte d'Ivoire, money from the sales of cocoa – the households' main income source – is often managed by men. The households, therefore, mainly have access to these larger amounts of money in the cocoa harvest season. Large expenditures such as school fees should be paid from this money. Women will get part of this, and are supposed to manage with it until the next harvest season for all household related matters. However, in a context where men often can have multiple wives, the money might not always be equally distributed over all women and their children.

> But you know, among those wives, maybe there is one woman, he really loves more than the others. In this case, her son will have more attention. You see. But if he doesn't, if there is one woman who he really dislikes, he will not support her children.. during school period. (wife cocoa farmer FGD, Côte d'Ivoire)

For additional support, women farm in vegetable gardens and sell these vegetables at the local market in order to generate some extra income. Given the lack of formal banks in rural areas, access to loans is often facilitated through community members by means of personal loans. In addition, cooperatives may provide access to loans via e.g. saving groups.

4.2.6. Transforming structures and vulnerabilities

In regard to local institutions, many different tribes have their own norms and values, inheritance systems and languages. As a consequence, tribal identities are strong, both in Ghana and Côte d'Ivoire. This creates a complex playing field especially in relation to land ownership. Furthermore, as demonstrated above, the traditional labor division between men and women can have a major influence on the access to capitals. Women are not allowed to perform particular tasks in cocoa farming and appear to have fewer access to barter agreements in the farming of cocoa. Therefore, they have to rely more on hired labor, loans or family labor. Depending on their financial situation this can make female-headed households specifically vulnerable to child labor. Gender, therefore is a key determinant in relation to available livelihood strategies.

Furthermore, as cocoa is often the major income source for cocoa farming households, they are highly vulnerable for shocks related to cocoa production, such as a drop in market prices or bad harvests due to pests and diseases. Deforestation and climate change could even facilitate bad harvests and trap farmers in a circle of poverty. Simultaneously, farmers with large families, including multiple wives and many children could experience constraints in sending children to school, as financial resources have to be distributed over a larger group of people. Examining how different access to capitals, vulnerabilities and transforming structures interplay, helps understanding the choices that people make to secure a livelihood. Formal and informal institutions shape the access to capitals and can pose particular vulnerabilities in relation to child labor. Absence of particular infrastructure such as schools, school canteens or day cares, but also cultural practices such as socialization can lead to children joining the parents on the farms and in other activities.

The livelihood approach underlines that child labor is not so much about children walking around and participating on cocoa plantations, but more about the circumstances in which children participate in all types of everyday activities. It enables assessing not only the harms, but also benefits that children experience from participating in various activities and the opportunities they have in life. It also allows to observe and analyze the degree to which local communities can be resilient when it comes to dealing with shocks that may occur in the value chain, however without holding a promise that it can truly affect mechanisms in the value chain.

5. Discussion

5.1. Towards integrating vertical and horizontal mechanisms to understand child labor

Assessing child labor from both the Global Value Chain (GVC) and Sustainable Livelihood Approach (SLA) perspectives reveals different mechanisms to be contributing to the occurrence and understanding of child labor in the cocoa industry that one perspective by itself does not fully account for. Based on empirical themes that emerged from our case study on the cacao value chain in Ghana and Côte d'Ivoire, six concepts of differentiation were identified that play a key role in explaining child labor from the different theoretical perspectives (Table 2).

The GVC approach perceives *farmers* and their *children* as laborers, merely as factors of production that produce agricultural commodities (cocoa). It shows how farmers capture little value and income from participating (*farming*) in the cocoa value chain. The farmers' income is the main determinant in assessing their *wellbeing,* as value chain coordination and configuration are substantially influenced by transaction costs economics (Bair, 2009). West African countries participate mostly in small micro-enterprise work or household-based work in the cocoa value chain, activities that capture least value. Describing a context in which labor activities are needed on the farm and incomes are insufficient to pay school fees, the GVC shows how child labor emerges as a product from *industry* organization (Gereffi & Fernandez-Stark, 2016). Opportunities for people to participate in higher value capturing activities are limited due to governance structures and limited policies and instruments that promote industrialization.

The SLA, instead, puts central the *farmer* and *children* as human beings who are part of a household and community (Chambers & Conway, 1992). It shows children's participation in a broad range of activities, also beyond cocoa *farming,* as part of an upbringing. These activities are not only seen as potentially harmful, but are assumed to provide an experience that can benefit children's future life prospects. The SLA sets forth that the involvement of children in cocoa farming should not be seen in isolation and emphasizes people's complex and dynamic bricolage of activities to gain a living (Scoones, 2009). It furthermore shows how not only financial income, but access to broader resources, such as natural and social capital shape households' livelihood strategies and *well-being* (Morse & McNamara, 2013), and how constrains to particular resources might facilitate child labor. Participation in the cocoa value chain influences the access to resources and livelihood strategy.

Comparing and contrasting these approaches indicates that the mechanisms explaining child labor complement each other. The GVC approach concludes that limited opportunities to capture value and the resulting low incomes for farmers in the cocoa value chain lead to child labor. The SLA lens indicates contextual mechanisms, such as norms and values and access to a wider pool of resources (e.g. schools) as explanatory factors. Studies have shown it is a combination of these mechanisms that play a role (Hilson, 2012; Krauss, 2013; Adonteng-Kissi, 2018). This poses the question if providing higher incomes to farmers (e.g. via productivity gains or directly) suffices to address child labor, when other mechanisms contributing to the occurrence of child labor are not considered. While research indicates that cash transfers tend to decrease child labor (Edmonds & Schady, 2012; de Hoop & Rosati, 2014), recent studies reveal that the relationship between income changes and child labor is not unidirectional and impacted by a range of complex factors (Del Carpio et al., 2016; Dammert et al., 2018; Ravetti, 2020).

Responding to the call by Bolwig et al. (2010) to integrate 'vertical' and 'horizontal' dynamics that affect sustainability and poverty concerns, this article proposes a multidimensional perspective on child labor that integrates these various dynamics and mechanisms into one conceptual framework (see Fig. 3). As the GVC analysis alone does not consider actors and actions beyond value chains (Laven, 2010; Lowitt et al., 2015; Mohan, 2016), and the SLA in isolation fails to address macro level market structures and power relations (de Haan & Zoomers, 2005; Morse & McNamara, 2013; R. Myers & Hansen, 2020), the framework in Fig. 3 combines both GVC and SLA approaches to provide a wider

Table 2
Comparing and Contrasting GVC and SLA Approaches to Child Labor.

Categories of differentiation	Global Value Chain (GVC)	Sustainable Livelihood (SLA)
Farmer (households)	A factor of production: labor	Human beings, family members part of households and communities
Children	Laborers, a negative externality of participating in informal small micro-enterprise work or household-based work	Human beings that are part of a household, family, community - They participate in all types of activities as part of rural upbringing - They participate in cocoa farming as a means to learn a livelihood
Farming (activity)	The activity of production that captures little value in the value chain: low value leads to little income	Farming seen as a livelihood strategy to sustain a living, a meaningful lifestyle
Wellbeing	The level of income as indication of wellbeing	Wellbeing based on access to and meaning of variety of capitals
Opportunities	Lack of income constrains the opportunity to invest and scale up to higher income activities, to obtain higher income	The access to a variety of resources / capitals determines the opportunities of children & households
Industry/value chains	West African countries participate mainly in particular stage of value chain: production of raw material, that captures least value and is characterized by child labor. There are little opportunities for people to participate in higher value capturing activities, due to governance structures and limited industrialization	A global structure that influences the access to capitals, such as income and access to knowledge and skills

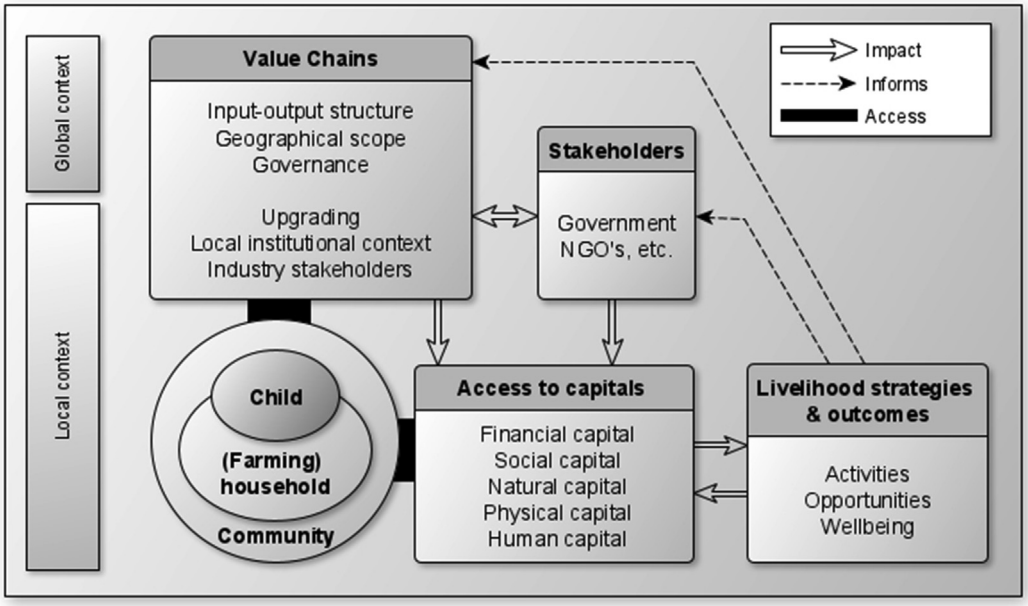

Fig. 3. Conceptual Framework Integrating Global Value Chain and Sustainable Livelihood Approach Source: authors, based on (Gereffi and Fernandez-Stark, 2016) and DFID (2001).

lens. It takes children as a basis, being meaningfully part of households and communities that participate in – and have access to – a particular value chain[7]. These children, households and communities also have access to various resources and capitals that influence their activities, opportunities, wellbeing and vice versa. Value chains, in turn, shape the conditions and influence the access that households have to some capitals (e.g. financial). Children and households, however, also participate in other activities beyond particular value chain activities. Furthermore, other stakeholders, including governments and NGO's, influence the households' access to capitals. This framework aids the assessment of households' access to capitals, and the role of various private and public stakeholders in providing or constraining access to resources. The framework provides insights into the needs and *wellbeing* of households and communities in regard to children, their *activities* and possible *opportunities* they have within and beyond the value chain.

5.2. Implications for policy, practice and research

The multidimensional framework (Fig. 3) developed in this paper has several policy implications. First, this framework is an initial attempt to bring together the various mechanisms contributing to child labor and facilitates insights into how these various mechanisms relate and interplay. At the local level, attention should be paid to the resources (capitals) that compose various livelihoods and can help prioritizing actions for particular vulnerable groups. At the global level, there is a need to focus on governance structures and industrial upgrading that stimulate

[7] Farmers have access to value chains through the presence of a market (e.g. through local traders and cooperatives)

industrialization and can offer additional livelihood and employment opportunities.

Second, the framework shows that for addressing child labor, a wide range of stakeholders, including governments, the private sector, NGO's and farmers themselves, should join forces and shape the debate on wellbeing and opportunities. In addition, the multidimensional framework outlined in Fig. 3 provides guidelines for collective action and a coordinated collaboration between the different stakeholders concerning responsibilities for different resources, supporting instruments and policies.

Third, this study proposes that for addressing child labor in an integrated and collaborative effort, we need to change our vocabulary. The multidimensional perspective developed in this paper can provide a first step in reframing the discussion from the absence or presence of child labor – paraphrasing Bourdillon & Carothers (2019) and Sumberg & Sabates-Wheeler (2020) – towards the development opportunities of the child. We suggest to move the discussion forward by focusing on the type and conditions of a wide range of activities that children participate in within a rural context. It is about facilitating an environment that supports the development opportunities of the child in order to secure its wellbeing (presented as livelihood strategies and outcomes in Fig. 3).

Our study has several limitations. First, while we combine two distinct streams of literature, our picture may not be fully complete. Further enrichment can be obtained to partial elements of the model. Second, the framework developed in this paper is based on the specific context of the cocoa value chain in Ghana and Côte d'Ivoire. While a diverse range of industry stakeholders has been included in this study, multiple farming communities of one project partner have been accessed. In addition, we cannot claim that we have studied a fully representative part of the regions involved in cacao production in Côte d'Ivoire and especially Ghana, even though we have no reasons to expect substantially different results of regions outside those where we held our interviews. Given these limitations, our study should be seen as a first indication of how different 'global' and 'local' mechanisms shape the occurrence and understanding of child labor. We would welcome in-depth analyses of different communities and value chains, focusing on farmers in other global regions. Follow up research may, for example, focus on a deeper understanding of how various stakeholders influence farmers' and children's enabling context. Furthermore, future research could focus on the identification of different type of vulnerability profiles in relation to particular access to capitals and child development opportunities. In addition, we suggest to enrich the economic discussion with inputs from the social sciences and child development literatures (Berlan, 2009; Bourdillon & Carothers, 2019; Liebel & Invernizzi, 2019).

6. Conclusion

Global Value Chain (GVC) and Sustainable Livelihood Approaches (SLA) offer distinct vocabularies that are both relevant for understanding the occurrence of child labor. This paper has shown how the GVC perspective can be helpful in explaining the physical production process and vertical trading dynamics of cocoa. From a value chain and ILO point of view, children walk around in production chains. Child labor is perceived as a labor issue and circumstances are bad. The Global Value Chain approach focusses on the role of financial value (income) and inputs (labor and land) in the production of one particular product (cocoa). However, adopting this theoretical lens reveals only part of the farmers reality.

From the SLA perspective, farmers and their children are inherently part of households and communities. They are part of a broader context with access to different resources (capitals) and activities that contribute meaningfully to their livelihoods. The SLA offers conceptual tools to assess not only harms, but also the benefits that various activities might provide within a wider context of everyday circumstances and activities in which children grow up.

While the GVC approach received critique for ignoring horizonal factors, such as the local institutional context, within and beyond global value chains, the SLA received critique for ignoring power relations and macro structures that shape global-scale value distributions. This study proposes a framework that combines 'vertical' (GVC) and 'horizontal' (SLA) mechanisms in order to allow for a multidimensional perspective of child labor in value chains.

Examining child labor from this multidimensional perspective offers a more nuanced understanding of the phenomenon of child labor within its context, beyond a particular Western model of childhood. It moves the discussion away from a dichotomy of child labor or no child labor and puts the development of the child center stage. It opens a discourse concerning the opportunities children have considering the wider context they grow up in, as well as the rules and plays of the game in global value chains, and helps identifying potential pathways of change.

CRediT authorship contribution statement

Milande Busquet: Conceptualization, Methodology, Investigation, Formal analysis, Validation, Writing - original draft, Project administration. **Niels Bosma:** Conceptualization, Validation, Supervision, Writing - review & editing. **Harry Hummels:** Conceptualization, Methodology, Validation, Supervision, Writing - review & editing.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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