

No Actor is an Island: The Role of Partnerships in Sustainable Value Chains

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Abstract

This research aims to explore key themes concerning partnerships between Business Actors (BAs) and Not-for-Profit Actors (NFPAs) along a Sustainable Value Chain (SVC). Forty interviews, as well as observations and documents representing (5) BA-NFPA collaborations, were done using a multiple-case approach. This research has identified two types of the key partnership-influencing themes: internally-focused and externally-focused partnership drivers and how they leverage the implementation of the SVC, including SVC approaches and governance forms. The innovative partnership approach is a novel contribution to the area of SVC research and helps the industry with decision making for creating successful SVCs amid the Covid-19 pandemic. Explicitly, findings regarding implementation and evaluation contribute to the theoretical and practical knowledge of value chains in the agricultural sector within emerging economies.

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Keywords: Partnership Approach, Sustainable Value Chain, Business Actor, Not-for-Profit Actor, Covid-19.

1. Introduction

The nature of the agriculture value chain has become complex to adapt and manage, which also creates an imbalance of bargaining power among the various actors within the chain [1,2, 3, 4]. Research highlights the importance of effective partnerships among the entities for a sustainable value chain [5,3,6]. This highlights importance of having a partnership approach in interactions between the key Business Actors (BAs) with Not-for-Profit Actors (NFPAs) and their impacts along the Sustainable Value Chain (SVC) [7,8,9,10,11, 12]. This is because, first, moving toward a sustainable partnership between both BA and NFPA calls for effective interaction within the supply chain actors' activities [13, 14,10]. Second, the content of this innovative partnership type should be formed by a multi-dimensional concept: information sharing and value creation from both actors [15, 16].

All sectors are expected to be affected by Covid-19, and agricultural sector is one of the most vulnerable, including disconnected partnerships, border disruptions and policy measures, such as quarantines, and closures of non-essential businesses impact all stages of SVCs, from input supply to production, logistics, marketing and consumption, elevating the risks of food insecurity and uncertainty [17,90]. Aday [18] carried out a study to evaluate the impact of COVID-19 in the agriculture and food sector and summarize the recommendations required to reduce and control the effect of the pandemic [78]. Prior

research has created the need to examine the role of BA-NFPA partnerships in the SVC from a multidimensional perspective [19,16, 4]. To allow practitioners and academics to identify how information sharing and value creation can be improved in these partnerships, it is necessary to identify the key internal and external themes that can be utilized to influence this association for better SVC amid Covid-19 [78]. Although there are several papers conceptualizing this association, but they have been based purely on literature reviews or limited empirical results [e.g. 20,19]. Furthermore, industries emphasize that partnership is a feasible mean for considering economic, social and environmental aspects [22]. Such partnerships have developed over time to link key actors along the value chain [16]. As the literature explaining partnership in SVCs is still at a relatively early stage, it is now time to conduct an extensive analysis to date [23,24].

Drawing from Transaction Cost Theory (TCT) [25], this research adopts governance as a key approach to further examine transactions in a sustainable BA-NFPA partnership. Governance is represented by the degree of chain actors following transactional arrangements as partnerships, which works to decreasing unwanted uncertain causes and information asymmetry in the chains [11]. This research examines the agricultural industry to develop many sustainable projects working with both local and international organizations; the industry has witnessed a growing reliance on NFPA partnerships as essential windows for better markets. This research uses extant literature as well as evidence from several case studies to examine the role of BA-NFPA partnerships in a SVC; a

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holistic conceptual framework can be proposed by interpreting possible key themes as business drivers that would help build this partnership.

This research has the following Research Questions (RQ):

RQ1. How are the key external and internal themes associated with BA-NFPA partnerships in SVCs?

RQ2. How do SAVC approaches and governance forms effectively incorporated in BA-NFPA partnerships resonate with SVCs in practice?

The paper is organized as follows. The article commences with a theoretical background to SVCs, BA-NFPA partnership and their drivers. The next section describes the research methodology followed by the key findings being presented and discussed. The managerial implications and future research avenues are explored in the last section.

2. Theoretical Background

2.1. Sustainable Value Chains (SVCs)

SVCs concept is a business context that produces value added products for a market by performing activities, transforming resources and by applying specific investment assets between actors along their economic, social and environmental supply chain [26,27,24]. This research focusses on agricultural business with sustainable value chains – a business that has grown dramatically over the last two decades [28,29,30,24]. However, improvements in production and marketing activities along the SVCs, specifically enabled by unsustainable mechanizations and unplanned collaboration in resource use and consumer added value, have led to potentially detrimental sustainability impacts [20]. These impacts are related to various pollutants (e.g. water resources, machinery usage, soil mineralization) as well as short-term

social (e.g. job security and family business) and economic (e.g. income and profitability) benefits [9,24]. Lately, research on Resilient Food Supply Chains (RFSCs) and SVCs has seen steep growth over the last decades. Prior research defined a range of strategies for building RFSCs [78,79]. Furthermore, research has indicated antecedents and consequence of risks for SVCs [90], and risk management strategies. However, survey-based empirical research investigating the underlying mechanisms amid Covid-19 that lead to the development of resilience amid exposure to supply chain risks in SVCs is still incipient, specifically in the context of SVCs [78].

Therefore, there is a need to shift from “government” to “governance” to encourage the development of SVCs that can serve the needs of both the BAs and the NFPA towards their partnerships. This is where the NFBA needs to foster a climate of mutual respect when SVCs are developed, particularly when the BAs rely on the support programmes from their NFPA [31]. These partnering relationships can provide considerable sustainable opportunities to engage with partners beyond simple financial support [32]. Hence, this research builds on features of SVCs such as coordination, cooperation and collaboration by linking them to approaches of corporate, intermediary, producer and hybrid driven-value chains [e.g. 33,34]. Key authors [e.g. 35, 20, 16] categorise the term SVC as a major field unto itself which has recently been identified as a key research area. Authors referring to SVCs have stressed that partnership is typically applied as one of the key terms to this field, formed by relationships that involve interactions such as coordination, cooperation and collaboration levels amongst various actors [36,30,24].

Table 1 details a classification of SVCs approaches; SVC features aim at identifying common value chain dynamics geared towards developing sustainability along the actors' value chain.

Table 1. SVCs-Approaches and Features.

SVC Approach	SVC Feature	Description
Corporate Driven-Value Chain	Coordination Level	<i>Actors:</i> Corporate buyers with small-medium producers for market linkages. <i>Driver:</i> Paramount need of the buyer to receive a certain value in quantity and quality of products for either processing or the end-customer markets. <i>Sustainable context:</i> Limited Availability
Intermediary Driven-Value Chain	Cooperation Level	<i>Actors:</i> buyers with small-medium-large producers via Heterogeneous private or public actors such as wholesalers, trade unions, NGOs etc. <i>Driver:</i> Intermediation platform to exchange value and employ sustainability. <i>Sustainable context:</i> Low Availability
Producer Driven-Value Chain	Cooperation Level Collaboration Level	<i>Actors:</i> buyers with small producers via collective organisation such as leader producer, NGOs, exogenous agent, public facilitator, etc. <i>Driver:</i> producer association or cooperative to exchange value, share costs and employ sustainability. <i>Sustainable context:</i> Medium Availability
Hybrid Driven-Value Chain	Collaboration Level	<i>Actors:</i> buyers with small-medium-large producers via local and international network such as leader private sector, government, etc. <i>Driver:</i> multi-stakeholder network and network platform to exchange value, information, share costs, share profit and employ sustainability. <i>Sustainable context:</i> High Availability

Source: Adopted from [36, 30].

To create value and improve sustainability for partners, the focus is on key outcomes of these approaches [37,29,16]. Product flow, information flow, interaction, partnership, information sharing and value creation – these hallmark concepts of SVCs underpin the key characteristics that underpin the hallmark concepts of SVCs. These concepts operate in varied strata within the market: partnering actors move from spot market via coordination to commodity markets, they move to trade relations through cooperation; or through collaboration to value chain partnerships [36, 33]. The analysis of partnership alongside the term SVC has undergone an evolution, carried out by a notable number of researchers [38,39,40, 33]. However, a conceptual overlapping exists in terms of the scholarship surrounding partnerships in SVCs. The concepts found within relevant literature are often individually considered as antecedents and/or outcomes [37,29]. Some research studies have examined associated interrelationships to understand partnerships in SVCs [41,28, 24]. Therefore, capturing the relevant concepts in a holistic framework from the perspective of NFPAs and applying sustainability in an empirical context [e.g. 19,8,11, 12] proved to be a formidable challenge, strengthening in the process, the rationale for this research.

2.2. BA-NFPA Partnerships

A partnership is defined as “a tailored business relationship based on mutual trust, openness, shared risks and shared rewards that yields in a competitive advantage resulting in greater performance” [42]. From a value basis, partnership can be divided into three types [43]: a) the symbiosis is a relationship that occurs when partners have different competitiveness to create value by themselves; b) the commensalistic relationship where one partner creates value and the other partners share the value. This should include coordination of activities of participants in the chain requires intensive exchange of information, while c) the parasitic relationship is when partners mutually offset the created value. It is important to develop a fair distribution of surpluses among all participants in the value chain. This is based on parasitic supply chain model that assumes the implementation of outsourcing strategy for partners.

One of the key themes in operations management and business literature is the focus on the dynamics of SVC and their actors [35, 16]. While many classifications of SVCs for actors exist, the focus is on the widely accepted classification of primary and secondary actors [22,12]. The term secondary actor is used to refer to partners such as NFPAs. Particular attention has been paid to primary actors such as BAs, while a large body of research has been built around multi-actor platforms and cross-sector partnerships between the two types [35,44].

Current literature suggests that NFPA is used as a broad term which also represents non-profit organizations (e.g. NGOs and international donors) in business for better knowledge transfer and value creation for partnership [38]. Teegeen [7] explains that NFPA is based on the resource-based perspective, with four types of resources being taken into consideration: financial (e.g. profit and income), intangible (e.g. knowledge and reputation), organizational (e.g. structure and culture) and physical (e.g. equipment

and machine) benefits. BAs tend to process these four benefits but with a lack of reputation and legitimacy as well as environmental and societal trends [20,8]. Therefore, interactions between BAs and NFPAs come across as an interesting link to manage resources as a governance approach to problem solving [45]. With this evolution of SVC, NFPAs have become a facilitating hub since they connect their organisations to BAs for better long-term activities between buyers and sellers [11]. NFPAs help the BAs in management functions, capacity building, agricultural technology, gender groups, market information and trade activities [10]. This can be facilitated in the form of collaborative resources and management flows in order to interact with those BAs in a conducive scenario within agricultural value chains [46]. These partnerships focus on the value that can improve activities based on innovation features to offer sustainable development for economic growth and poverty mitigation along multi-stakeholder networks [47,10,48]. While NFPAs have become important partners in local and global plans, they need to support poverty reduction plans and business development [47]. This research goes on to posit that NFPAs will play fundamental partnership roles in SVCs.

In this study, key interest lies in understanding the phenomena of BA-NFPA partnership, designed to enable NFPAs improve Bas strategies to form SVCs approaches and features; this in turn stimulates effective interactions with sustainability to strengthen specific drivers along their chains.

2.3. Drivers of BA-NFPA Partnerships and Transaction Cost Theory (TCT)

Over time, BA-NFPA partnerships have been steadily challenged by keydrivers of partnership such as themes of information sharing and value creation [12,18, 4]. These themes require key actors of BAs and NFPAs to be more open to partnerships that have been supported by sources of information and added value, with information providers including focal actors and value actors [49,50]. Such partnerships emerged from the innovative role performed by private sector and civil society actors to form creative connections such as sustainability development of economic, social and environmental results [9,31]. These types of partnership are among several approaches adopted by NFPAs to promote as well as derive sustainability from the BA-NFPA governance scenario [12].

In fact, such a partnership has not been explored in detail and it remains an empirical question. An analysis of representative themes for innovative partnership in SVCs should identify both internal and external-focused partnership drivers (Table 2). These drivers highlight how a partnership is focused on managing governed relationships between BAs and NFPAs within actors' value chain activities for improving economic, social and environmental elements [51,11].

TCT suggests that a partnership can reduce opportunistic behaviour, information searching cost and integration cost in the process of chain interactions to facilitate integrated capabilities [25]. For example, partnerships amongst non-market mechanisms can help

market actors reduce transaction costs and be dynamic towards transaction risks [57].

Williamson [25] suggests that when value created via asset specificity is linked to idiosyncratic investments, opportunism raises a key risk. Hence, high levels of asset specificity within partnership interactions linked to information symmetry can be governed via hierarchies, medium levels via hybrid modes and low levels via markets for a specific product flow.

Given the inconsistencies within the discussion of TCT in extant literature, examining the role of governance in BA-NFPA partnerships can bring key insights into the development of TCT in supply chain research. Hence, a particular focus is placed on the governance approach in SVCs where taxonomy of governance forms is proposed where the BA-NFPA partnerships can be involved as follow:

Markets: are characterised by low asset specificity and offer a low level of complexity in transactions. They typically consist of partnerships at local spot markets where products of typical value are exchanged at the price negotiated and commanded by buyers at the spot.

Modular value chains: involve low asset specificity and offer a low level of complexity in transactions. They also involve partnerships at commodity markets through coordination level when producers are able to supply products of specific value to customers based on informal agreements [58,16]. *Relational value chains:* display medium asset specificity and offer a high level of complexity in transactions. Partnerships at trade relation markets via cooperation level when producers are highly able to supply products of specific value to customers based on informal agreements or contracts. However, the producers and customers have difficulty arranging the product specifications and conditions due to their willing to create mutual dependence [55,29,15]. *Captive value*

chain: is linked to high asset specificity and offers a high level of complexity in transactions.

Thus, it is linked to partnerships at value chain markets via collaboration level when producers are not able to fully supply products of specific value to customers based on formal agreements or contracts. However, the customers are usually large buyers who apply a high degree of monitoring and traceability over producers[10]. *Hierarchy:* is linked to high asset specificity and offering a high level of complexity in transactions. Thus, it is linked to partnerships at value chain markets via collaboration level when producers are not able to supply products of specific value to customers based on informal and/or formal agreements or contracts. However, a neutral third actor (e.g. NFPA) coordinates the suppliers' network and drive the lead buyer to take full and direct control of production and logistics over producers[59,11, 60].

3. Methodology

3.1. Research Design

This study employs inductive qualitative methodology [63,61, 62]. The case study method is a rich source for exploring complex emergent phenomena [64]. Both case study selection and protocols were applied in this research [74]. The cases are partnerships in the context of SVC and are identified as sustainable partnerships by renowned NFPAs such as the UN and the World Bank. This sampling selection was based on a list of 20 organizations that was then shortlisted to five by putting them through the following criteria: satisfactory achievement records, positive email responses, and an initial interview.

Thus, the unit of analysis is individual partnerships (BA-NFPA), as presented in Table 3.

Table 2. Drivers of BA-NFPA Partnership in SVC, their definitions and key supporting author.

Key theme "Drivers"	Definition (Present research)	Key supporting authors
<i>Internal-focused partnership drivers</i>		
Interaction	A powerful wheel of cooperation, coordination and collaboration for value assessment moving towards partnership and for speeding sustainable results in the value chain	52,22
Information Sharing	An approach for interaction between actors for long term collaboration which leads to the improvement of their partnership's competitive advantage	53,39
Value Creation	A positive strategic agreement between the actors in their collaborative interaction for the expected growth of their partnership to highlight extreme sustainable benefits.	15
<i>External-focused partnership drivers</i>		
Information flow	Both effective formal and informal interactions for information management where actors working at cross-purposes with a focal actor to develop cohesive strategy for information sharing, essential for partnerships.	15
Product flow	Both direct and indirect interactions for relationship management where chain actors working at cross-purposes with a focal actor to exchange products along the value chain forming a link between demand and supply for partnerships.	54,55, 56

Table 3. Case Study in the Context of SVC.

Case	Partnership	Age	Partnership Description
A: Producer & International Agency 1	A1	3	For improving production, managing logistics, and collaborating with local factories. The agency provides training and workshops, equipment and technology for production development, quality control, and reasonable financial support for animal feeds and visit tours.
	A2	5	
B: Product supplier & International Agency 2	B1	5	For improving processing, reaching advanced technology, collaborating with local retailers. the agency provides training and workshops, equipment and technology for processing development, quality control, and reasonable financial support for exhibition and visit tours.
	B2	7	
C: Supplier & International Agency 3	C1	3	For improving production and processing, using better packaging, collaborating with local and international buyers. The agency provides training, equipment and technology for processing development, quality control, and reasonable financial support for exhibition and visit tours.
	C2	3	
D: Processor & Local Agency	D1	4	For improving processing, using advanced technology, collaborating with local and international retailers. The local agency provides training and workshops, specific equipment and technology for processing development, quality control, and support for exhibition and visit tours.
	D2	4	
E: Supplier and Local NGO	E1	10	For improving production, building better logistics, collaborating with local and export markets. In this relationship, the local actor provides membership for those suppliers, training and workshops, various projects, quality control, certification body, social networks, database, and reasonable exhibition and visit tours.
	E2	15	

The case protocol is applied for all cases for better research reliability [64]. Ten BA-NFPAs were identified in the context of agricultural sector in emerging economy. The basis for cases was semi-structured interviews with four staff members at each BA-NFPA. Managers were asked to identify a sample of relationships with the BAs in their agricultural value chains, which they highly believed included partnerships in information sharing and value creation for three years at least. Thus, two relationships of the same type for each case were explored using the same protocol. This is where semi-structured interviews, five observation days and document collection are applied for each relationship. Many countries have agreements and initiatives with international agencies and NFPAs' such as FAO, UN, EU, World Bank, IFAD, ILO, etc. to support rural development, agricultural industries and also new sustainable agricultural value chains (see reports e.g. 9).

3.2. Data Collection

A triangulation approach is applied by the use of existing research studies and case studies to ensure construct validity [62]. In previous research such as [73,75], the case study method has been instrumental in generating rich theoretical and practical insights especially in the fields of partnerships in SVCs [e.g. 28,29,16]. A triangulation approach was applied using existing research and case studies to ensure construct validity [62]. Previous research such as [75,73, 4], the case study method has been instrumental in generating rich theoretical and practical insights especially in the fields of partnerships in SVCs [28, 29,16].

Over 40 interviews ranging from one to two hours were obtained from the managers (four different managers\same actors in a relationship) involved in 10 partnerships in 2018. The aim was to answer the following questions; 1) how many partnerships are involved in information sharing and value creation? 2) what are the roles of information sharing and value creation within the value chain? 3) how do those actors cooperate, coordinate and collaborate for better interactions? 4) and lastly, how do they ensure that better information and product flows augment the supply & demand process? To obtain reflective practitioner inputs, several contacts were made with those managers with specific clarifications involving emails, phone calls and document exchanges that created

trust and mutual benefits [64]. Interviews were conducted and recorded by two authors in person with all the participants who were asked about the same questions using a comprehensive case protocol. The interviews were also transcribed and then sent to the managers for revisions. The approved interviews were used to develop the case studies that were analysed through cross-case analyses [63]. At the same time, the other two authors attended meetings that were organized between the BAs and NFPAs. This was when each author, as a silent observer, attended one meeting at five different scenarios. Finally, key documents (e.g. annual reports) were also obtained about each relationship for a triangulation purpose [62].

3.3. Data Analysis

Transcripts and key associated dimensions have been used to analyse the data where a thematic analysis was applied to summarize themes that constituted a piece of text [63]. A thematic analysis method is adopted, and this is defined as "*identifying, analyzing, organizing, describing and reporting patterns (themes) within a data set*" [76,p.6]. So it is considered a thematization that begins with a set of themes based on the existing literature and/ or the themes emerge from the data [77]. Themes refer to patterns across the existing data set that are most important to the description of various aspects of the phenomenon being observed. This included the following stages: a) initial codes were generated from themes amongst the literature review, for data reduction and display for each case using interview transcripts and other sources such as observations and archival documents b) selected themes were refined into non-repetitive themes wherein each case was explored using key themes and representative quotes to support the development of propositions with the literature evidence [64] and c) a cross-case comparison for data explanation was conducted to enhance replication logic amongst the cases providing both the BA/NFPA level-focused themes [62].

This analysis resulted in nine first-order themes, which were subsequently coded into three second-order themes and associated to one overarching theme "partnership" to establish the association for the conceptual framework.

To summarise, two approaches were followed: the first is the nested approach to analyse data gathered from each

case [65, 64] by multiple sources from two managers/relationships as opposed to a single case (four managers, two relationships) for a better opportunity to examine partnerships (Five cases A, B, C, D, E) in SVC. The second is the cross-case approach to analyse the commonalities between the five cases (62). The process was iterative, moving backward and forward in time, exploring what their value chain was like before the partnership, how and why they started to change. The benefit of this method was to allow the development of insights into key themes associated with the five NFPA and to help to clarify the conceptual framework. This research has achieved quality validity and reliability (Table 4)[64].

4. Results and Discussion

4.1. Characteristics of BA-NFPA Partnerships

The selection of themes for the initial conceptual framework was guided by the literature review, which identified a number of initial themes as influencing the BA-NFPA partnerships. According to Porter [52] and Walters and Lancaster [43], the concept of the “value chain” epitomized the unilateral role of the actor in

interaction based on information sharing, information flow and product flow for creating value. These initial themes were then developed through each exploratory case. The themes that were matched to analyse the data from the exploratory cases were: management interaction of BAs and NFPA involving information sharing; value creation, information flow; and product flow towards partnerships. The key findings further revealed that the BA-NFPA partnership with other functional themes appears to contribute to improved sustainability for many actors in SVC. However, it was unclear how these key themes would interrelate or their relative importance. According to Walters and Lancaster [43], the characteristics of the value chain framework dominate as a tool for the strategic analysis of firm value creation and information transfer and as a conceptual map for the description of activities that BAs perform in inter-firm relations. The SVCs for a BA-NFPA partnership amongst actors in an industry should be embedded in a more significant stream of activities that we term the “value wheel” in the present research (54,35). The value wheel includes the value chain of several BAs and NFPA under the explored topic [14, 28,10]. Thus, the approaches and features of SVCs, actor types of BA-NFPA partnerships, and governance forms are presented for case studies (Table 5).

Table 4. Research Quality

Validity and Reliability	Research design	More related stage
Construct Validity	<ul style="list-style-type: none"> - Building trust with interviewees. - Multiple source of evidence at data collection: interviews; observation (meetings); documents. - Chain of evidence at data collection: two relationships for each case and use the same case protocol. - Transcripts are refined by the interviewees 	Research design Data collection
Internal Validity	<ul style="list-style-type: none"> - Explanatory approach: develop a theoretical association. [at both Case level/ Cross case level] - Chain of evidence at data analysis: key theme matching and coding via support of key literature and key interview quotations. [at Case level] - Chain of evidence at data analysis: key proposition development. [at Case level] - Data triangulation: comparing quotes from interviews with observations and document material. [at Cross Case level] 	Data analysis
External Validity	<ul style="list-style-type: none"> - Multiple cases: replication logic/10 partnerships for five cases. - Analytical generalization: building a new holistic framework. 	Research design
Reliability	<ul style="list-style-type: none"> - Case study protocol is the same for all cases - Case database: interview quotes, meetings, and documents. - Key themes guided propositions and discussions - External review: final case report was validated by uninvolvement experts (Policy makers). 	Data collection

Table 5: Approaches and Features of SVCs, Actor Types of BA-NFPA Partnerships and Governance Forms.

Case: BA-NFPA partnership	SVC Approach	SVC Feature	Actor Types	Governance Form
A (A1, A2) Producer & International agency 1	Producer Driven- Value Chain	Cooperation Level Collaboration Level	NFPA links buyers with small milk producers via collective organisation such as leader producer, NGOs, exogenous agent, public facilitator, etc.	Captive value chain
B (B1, B2) Supplier & International agency 2	Hybrid Driven- Value Chain	Collaboration Level	NFPA links buyers with small-medium-large dairy product supplier via local and international network such as leader private sector, government, etc.	Hierarch
C (C1, C2) Supplier & International agency 3	Intermediary Driven- Value Chain	Cooperation Level	NFPA links buyers with small-medium-large pickling supplier via Heterogeneous private or public actors as wholesalers, trade unions, NGOs etc.	Relational value chain
D (D1, D2) Processor & Local agency	Corporate Driven- Value Chain	Coordination Level	NFPA links corporate buyers with small-medium fruit processors for market linkages.	Modular value chain
E (E1, E2) Supplier and local NGO	Intermediary Driven- Value Chain	Cooperation Level	NFPA links buyers with small-medium-large FFV supplier via Heterogeneous private or public actors such as wholesalers, trade unions, NGOs etc.	Relational value chain

4.2. Cross-Case Patterns for Drivers of BA-NFPA partnerships

The analysis of BA-NFPA partnerships in SVCs has thoroughly investigated typical themes based on internal and external partnership factors. These drivers highlight how partnerships focus on managing relationships between BAs to link supply and demand within actors' value chain activities [11], as well as linking focal actors (for example, BA), with service providers serving as NFPAs for better SVCs for economic, social, and environmental activities [11]. Consequently, these drivers are broadly consistent with the findings of previous key representative authors, who identified interaction as a key theme for internal-focused partnership drivers [36,14,10], as well as product flow and information [36,14,10]. Therefore, these drivers are broadly consistent with the findings of the previous key representative authors, who identified the concepts of interaction as a key theme for internal-focused partnership drivers [36,14,10] and the concepts of product flow and information flow as two key themes for external-focused partnership drivers [24]. The analysis shows that business relationships are based on themes, such as information sharing, value creation as well as internal-focused partnership drivers; these themes form BA-NFPA partnerships in SVCs [33].

Internal-focused partnership drivers. The managers in the five cases reported that the interaction of the BAs need to be efficiently managed since these interactions exist as an important strategy in their BA-NFA partnerships.

Cases A, B, C and D display evidence of interactional collaboration as a newly-emerged theme from the NFPAs, vital for the development of trust and mutual objectives. Both relationships in Case E show little evidence of collaboration in exchange information and value assessment; these relationships were the least effective in partnerships in SVC.

All cases indicate that both BAs and NFPAs recognize the importance of developing strong information-sharing as exchange links, which in turn, support interaction management thereby benefitting their partnerships.

Cases A and B indicate that information sharing is used by the BAs as a hub of knowledge including value, resources, types and sharing methods. The concept of the hub is a newly-emerged theme enhanced by an efficient information flow between BAs along the SVC. The managers in all five cases agreed that value creation provides highly sustainable benefits for both BAs and NFPAs; also, their partnerships involve information to share and value to add for the use of all BAs in the SVC.

Cases A, B, C and D indicate value creation as equal benefits for all BAs within SVC. This is an emerged theme that reflects minimizing costs and equal distributions of revenue for BAs as a result of their activities.

External-focused partnership drivers. The NFPA has become a facilitating body that connects their organisations to BAs for better long-term activities in the SVC.

Managers in all five cases agreed that information flow is a facilitating tool that helps BAs in interaction management, capacity building, technological know-how, employee classifications, as well as market activities. This

can act as a collaborative resource in combination with management flow for an effective interaction with BAs in situations where partnerships exist in SVCs.

All managers in cases A, B and C add that information flow is seen as a visibility tool where BAs within the value chain can gain the same level of information. This visibility is indirectly supported by NFPAs to enrich the relationships between the BAs for better sustainable approaches by learning from each other in the normal situation or during covid-19.

There was a strong evidence in all cases that partnerships cannot be formed without the link between demand and supply, such that product flow from the main supplier to end-customer exists. To have an ideal conceptualisation of BA-NFPA partnerships, all managers acknowledged that BAs and NFPAs tend to be highly dependent on a strong flow of products between BAs as a transactional tool that ensures manageable transaction costs, a good reputation and clear legitimacy.

Overall, this study identifies nine major antecedents to BA-NFPA partnership:

1. Two key themes namely, *important strategy* and *interactive collaboration* integrated into a longer-term form can inform the level of interaction;
2. The two themes of exchange links and information-sharing hub of knowledge
3. The two themes of sustainable benefits and equal benefits for value creation
4. The two themes of *facilitating tool* and *visibility tool for information flow* (that could help develop partnerships between various types of actors) and
5. The two themes of *transactional tool* and *links of supply and demand for product flow* (that could be managed for better supply and demand linkages along the value chain).

All managers from the NFPAs interviewed - in all cases among the ten relationships - highlight the importance of *interaction*, *information sharing* and *value creation* as three key themes for internal-focused partnership drivers [36,10]; both concepts of *product flow* and *information flow* are highlighted by the managers as the two key themes for external-focused partnership drivers [11,24]. This is also supported by the minutes of the meetings between focal BAs and their NFPAs, including the annual reports.

Both the literature review and the cross-case findings support that interactive collaboration is the key between BAs and NFPAs's interactions. Findings from cross cases highlighted that BA level-focused and NFPA level-focused usually interact for a long term, and this interaction reflects a positive partnership approach. The important findings show that both actors in all relationship for cases A, B, and C identify high antecedent effects in creating BA-NFPA connections in SVC. Cases D and E, on the other hand, reveal that the antecedents have a low to medium impact on the formation of BA-NFPA collaborations.

As can be seen in the overall scores of cross cases A, B, C, D, and E that reflect high effects of the antecedents in forming these partnerships, interactive collaboration, exchange links, a hub of knowledge, equal benefits, and links of supply and demand sides towards partnership are the most significant antecedents. The remaining

antecedences represent the antecedents' medium effects in building these SVC relationships.

These findings are consistent with works by [36, 20, 28, 47, 10, 4] who have indicated that many of these themes drive partnerships in SVC context. However, case E offers weak support for these findings in other cases. In this case, the NFPA is a local NGO which provides very limited partnership activities such as a membership for the focal suppliers (e.g. producers of fresh fruit and vegetables), training and workshops within specific projects, links to the certification body, exhibitions and visit tours for local and export markets. This finding gives a similar framing to those developed by Van-Der-Vorst et al. [67] and Mikkola [66].

4.3. A Tentative Conceptual Framework for BA-NFPA Partnerships

The present research explores the keydrivers "themes" jointly and extends extant literature by focusing on the SVC context.

Previous research, such as [36, 67, 66, 24], has examined these themes individually and has not uncovered associations fully amongst the identified key themes in the agricultural value chain. This work provides a new conceptual framework based on the literature review and case studies (See Figure 2). For enhanced validity and reliability, a case method based on BA/NFPA level-focused themes was adopted for both individual and cross-case comparisons. These findings contribute to value chain literature by emphasising the theoretical link between the indicated antecedents and SVC cooperation.

Many authors now see interaction as a powerful method for advancing collaboration and accelerating sustainable value chain benefits [21, 68]. All managers demonstrated strategic plans between themselves and the BAs. A few relationships showed little evidence of interaction in exchange information and value assessment, and these relationships were the least effective within SVC partnerships. Interactive collaboration highly leads to information sharing among value chain partners [69]. [41] have identified that active collaboration may be enhanced by joint planning and problem solving. For example, partners can support collaborative actors in natural capital (e.g. water management), physical capital (e.g. infrastructure for road and quality system), financial capital (e.g. loans) and human capital (e.g. technical; market information) [66]. Partnering collaboration has become a vehicle for reducing costs and increasing customer value propositions established on sharing information and value creation [21].

The exploratory cases found that the four managers' types of the five cases explained that they apply the concept of joint planning with the BAs entirely, and most of their partners are aware of efficient interactive collaboration for reintegrating the business functions. Literature and the case studies indicate that *important*

strategy and *interactive collaboration* are essential to establishing a partnership based on information sharing and value creation for SVC, and there are synergies between interaction and the other themes.

The exploratory findings highlighted how information flow promotes interaction, and that effective internal formal interaction (meetings and conferences), and informal interaction (casual contacts) are used to develop cohesive strategies as well as to break down functional silos [21]. The dissemination of information across all actors in value chains aids partnerships based on equal visibility of information for all [15]. The findings indicate that all five NFPAs recognized the importance of developing strong information flow links, which include facilitating tools and visibility tools for the BAs. At the same time, the two partners: BA and NFPA can share tactical information (e.g. operations) and strategic information (e.g. market information) (Hsu et al., 2008) in order to incorporate more benefits in SVC. An efficient information flow enhances information sharing towards establishing better value chain relationships for better decision making [24]. Information flow is this process of disseminating and facilitating tool for sharing information, which is believed to indirectly underpin partnership between the two key actors in a visible way within the SVC.

Chain members change their operations in order to include relationship paradigms and information management [11]. This is due to external directions, such as uncertainty, economic issues, off-season supply and demand and environmental regulation [70, 22], as well as internal directions, such as weak organizational structure (e.g. no expertise, insufficient information visibility). These directions have led BAs to bond with international actors in order to gain support for better transactional tools and to link supply with demand [56] against such product-related ambiguities. The benefits of partnership on which value to create and what information to share, for instance, are already apparent due to increased collaborative quality control (e.g. certificates of HACCAP, Global GAP etc.) and legal framework (e.g. international body) [69]. The manner in which BA- NFPA value chain is governed is significant for Bas since this brings access solutions to the market with support from transactional activities amongst the BAs and the way suppliers are linked to customers. To overcome the situation during and after Covid-19, Firstly, in all cases there was a shift toward shorter SVCs facilitated by multiple aspects of adaptive capacity, particularly social organization in the form of social networks. Secondly, emphasizing the risks of overreliance on the global and local trade and calls for balancing economic portfolios with better-developed local supply chains and networks, Thirdly, emphasizes that BA and NFPA to support adaptation need to be in place before a macroeconomic shock hits COVID-19 and associated mitigation measures have disrupted small-scale SVCs.

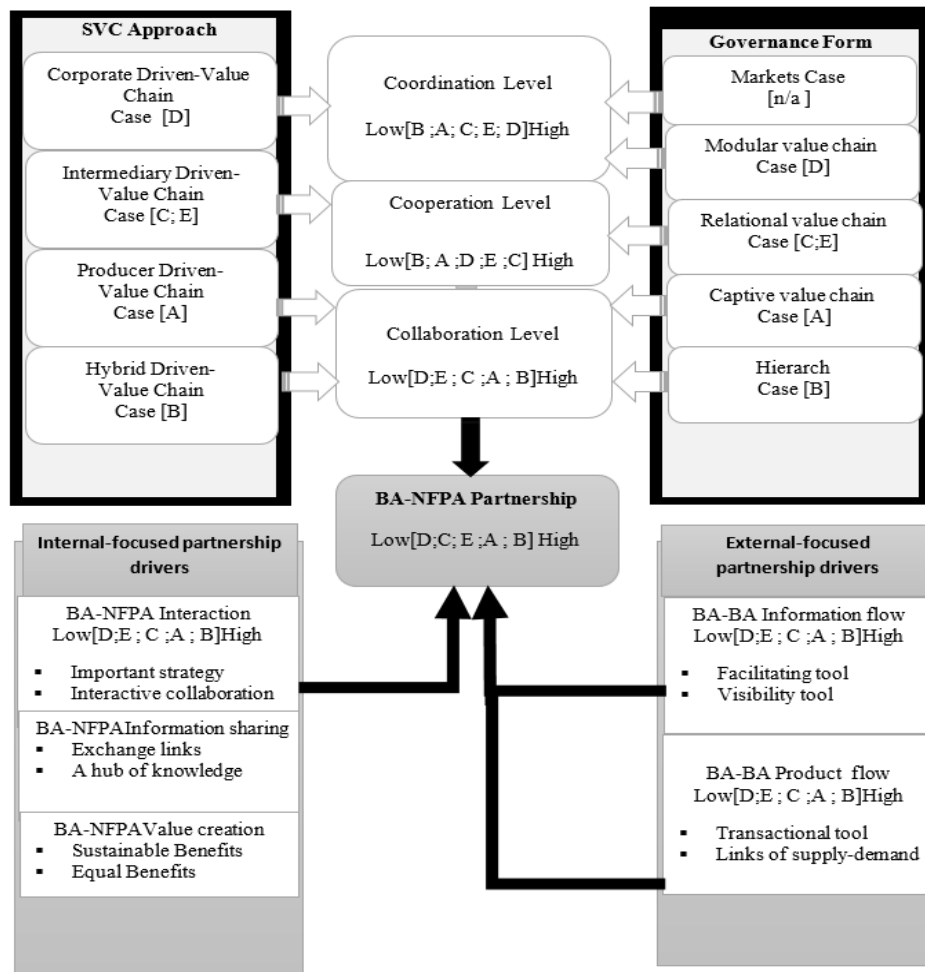


Figure 2. A conceptual Framework of Innovative BA-NFPA Partnership.

At the cross case level, we explain how and why these key drivers or themes are effectively linked to partnership in practice and how SVC approaches and governance form contribute to develop BA-NFPA partnerships. This indicates that the key themes identified should be categorized into three wheels:

1. Wheel 1-interaction of important strategy and interactive collaboration toward partnerships between BAs and NFPA. This wheel is affected by information sharing of exchange links and a hub of knowledge and by value creation of sustainable benefits and equal benefits between BA and NFPA for end-customers.
2. Wheel 2-information flow of facilitating tool and visibility tool between BAs but supported from NFPA and
3. Wheel 3-product flow of transactional tool and links of supply and demand between BAs but supported from NFPA.
- 4.

As can be seen from Figure 3, SVC approaches contribute to their features leading to the development of the concept of BA-NFPA partnerships which will be affected by wheels 1, 2 and 3. Hence, BA-NFPA partnerships rely on multi-stakeholder network and network-platform to exchange value, information, share costs, share profit and employ sustainability. These controllable activities may be used by top management to improve the information sharing and value creation

interface between BAs and NFPA. These activities include information flow and are considered to be sharing mechanisms that can be put in place quickly to support interaction of activities, and management of supply and demand for the product flow between BAs but supported from NFPA. In fact, among these, wheel 1 has become the central wheel that is surrounded by wheels 2 and 3 and influenced by SVC approaches and governance forms. The BAs are several actors surrounded by the focal actor as a supplier. For example consumers pull their “demand perspective” as a consumer value into a focal supplier in order to add input to the value chain approach and feature based on specific governance form as seen in Table 3. A supplier firm which provides inputs to a focal supplier of the value chain. The focal supplier’s product often passes through its channels’ value chains via key buyers on its way to the end-customer. Finally, the product as a perceived consumer value reflects a supply perspective to push a purchased output to the value chains to perform final customer expectations. Hence, the NFPA are the service provider actors that find “the right fit” for BA-NFPA partnerships to create the SVC for all BAs.

5. Conclusions

This study attempts to fill the gap in SVC literature in the agricultural context. Literature suggests the importance of actor involvement throughout the supply chain [6,4].

Recent literature,[17, 18] has conducted research that aims to discuss the effect of COVID-19 on socio-economic implications and the impact of lockdown on the food supply chain and agri-business. The study also summarizes the suggestions needed to control and deduce the impact of COVID-19. The study has reported some supply chain barriers caused by COVID-19 including national lockdown lack of labor availability, changing in customer behavior, delay in activity, and role of social media during the pandemic. However, there is limited research on operationalising the encouragement of an interactive partnership approach; this study endeavours to validate the constructs of value creation, information-sharing, product flow, and information flow as facilitating factors for a better partnership approach in the context of sustainable agricultural value chains.

5.1. Theoretical Contributions

The proposed theoretical framework based on an innovative partnership approach contributes to the background theory of SVC in an agricultural context and highlights avenues for further research within the value chain environment. This theoretical framework can help scholars understand underlying complexities of relationship research within value chains, thereby extending knowledge in the area. Without adequate empirical research on the partnership approach to an SVC, researchers and practitioners would be left without a SVC-oriented effective, efficient decision making tool.

5.2. Contributions to practitioner knowledge

This research contributes to practitioner knowledge that would benefit managers from both NFPA and BA working to improve BA-NFPA partnership in SVC. The developed framework utilises information sharing and value creation to propose systematic guidelines towards step-by-step partnership building between actors along the value chain. Research has highlighted relationship complexities among actors in the value chain who are engaged in various activities at different levels with multiple relations that create management issues and lower efficiencies [71,3]. Creating a relationship using a partnership approach that improves management and sustainability requires actors to interact based on strategic collaboration amply supported by the proper management of information and product flows.

Nine antecedents of the BA-NFPA partnership which may improve information-sharing levels between partners are highlighted, along with the information flow that leads to better value creation in their functions within the SVC. To improve information-sharing between partnering actors, managers should establish exchange links for a good source of information, classify information types, apply a variety of sharing methods and indicate the value of the information they need.

Managers may then apply the shared information (e.g., knowledge of quality control, demand, packaging) to their value generation activities along with the actor activities for sustainable value addition with the SVC. Policymakers, as well as internationally funded programs can also benefit from the current key findings. The new framework can help

them with corporate strategies and adopt the changes required for sustainable supply chain management [72].

From a strategic perspective, this research contends that partners need to interact mainly based on agreed strategies and collaborations rather than coordination and cooperation. Partners to respond to value chain complexity through interaction and lining up information visibility and product value, taking into account the uniqueness of each single function from production to consumption.

5.3. Limitations to research and future research

This research raises interesting areas of study. The conceptual framework indicates significant opportunities for future studies. Prior research has highlighted that information sharing [e.g. 15,20,69,73] and value creation [e.g. 20, 30] are needed at various levels of partnership development and improvement. Questions are raised about criteria for each level of development and improvement to support working actors in forming sustainable activities at each level. This study is qualitative in nature and the conceptual framework needs to be tested through further qualitative studies or quantitative studies involving large-scale surveys. The study considers only local value chains and, therefore, future research should consider international chains. Another potential area of study is the role of dyads (two firms) and triads (three firms) (e.g. lack of ties among partners) in partnerships from the perspective of multi-partners as actors. It remains to be verified how information sharing and value creation influence sustainable development and the chain dyad's performance especially in the field of agriculture [41,28].

References

- [1] Cho, D.W. and Lee Y.H. (2013), "The value of information sharing in a supply chain with a seasonal demand process", *Computers & Industrial Engineering*, Vol.65 No.1, pp. 97-108.
- [2] MacMillan, K., Money, K., Money, A., & Downing, S. (2005), "Relationship marketing in the not-for-profit sector: An extension and application of the commitment-trust theory", *Journal of Business Research*, Vol.58, pp. 806-818.
- [3] Janet, H., Meredith, L. and Kathleen H. (2016), "Value chain analysis: an iterative and relational approach for agri-food chains", *Supply Chain Management: An International Journal*, Vol. 21 No. 3, pp. 352-362.
- [4] Jraisat, L., Upadhyay, A., Ghali, T., Jresseit, M., Kumar, V., and Sarpong, D. (2021): Triads in sustainable supply-chain perspective: why is a collaboration mechanism needed?, *International Journal of Production Research*, DOI: 10.1080/00207543.2021.1936263.
- [5] Wu, Z., T. Y. Choi, and M. J. Rungtusanatham. 2010. "Supplier-Supplier Relationships in Buyer-Supplier-Supplier Triads: Implications for Supplier Performance." *Journal of Operations Management* 28 (2): 115-123.
- [6] Haiyan, E. L., Andrew, P., Vasco, S. R. and Helen, W. (2018) "Exploring sustainable supply chain management: a social network perspective", *Supply Chain Management: An International Journal*, Vol. 23 No. 4, pp. 257-277.
- [7] Teege, H., Doh, J.P. and Vacchani, S. (2004), "The importance of nongovernmental organizations (NGOs) in global governance and value creation: an international business research agenda", *Journal of international Business Studies*, Vol.35, pp. 463-483.

- [8] Graf, N.F.S. and Rothlauf, F. (2012), "Firm-NGO collaborations: A resource-based perspective", *Z Betriebswirtschaft*, Vol.82, pp. 103–125.
- [9] Baur, D. and Schmitz, H.P. (2012), "Corporations and NGOs: When accountability leads to co-optation", *Journal of Business Ethics*, Vol.106, pp. 9–21.
- [10] Bonney, L., Clark, R., Collins, R. and Fearn, A. (2007), "From serendipity to sustainable competitive advantage: insights from Houston's farm and their journey of co-innovation", *Supply Chain Management: An International Journal*, Vol. 12 No. 6, pp. 395-399.
- [11] Christopher, M. (1998). *Logistics and Supply Chain Management - Strategies for Reducing Cost and Improving Service*. 2nd edition, Prentice Hall.
- [12] Goodman, J., Korsunova, A. and Halme, M. (2017), "Our collaborative future: Activities and roles of stakeholders in sustainability-oriented innovation", *Business Strategy & Environment*, Vol.26 No.6, pp. 731-753.
- [13] Khan, S.A., Chaabane, A., Dweiri, F., 2020. Supply chain performance measurement systems: A qualitative review and proposed conceptual framework. *International Journal of Industrial and Systems Engineering*. Vol. 34, No.1, PP. 43–64.
- [14] Berger, I. E., Cunningham, P. H., and Drumwright, M. E. (2004), "Social alliances: Company/ nonprofit collaboration", *California Management Review*, Vol.47 No.1, pp. 58-90.
- [15] Porter, M. and V. Millar (1985), "How information gives you competitive advantage," *Harvard Business Review*, Vol.63 No.4, pp. 149–160.
- [16] Niall, P. and Rich, N. (2015), "The relationship between lean operations and sustainable operations", *International Journal of Operations and Production Management*, Vol. 35 No. 2, pp. 282-315.
- [17] Morsy, H., Salami, A. and Mukasa, A. (2021), "Opportunities amid COVID-19: Advancing intra-African food integration", *World Development*, Vol. 139 No. , pp. 1-3.
- [18] Aday, M. (2020), "Impact of COVID-19 on the food supply chain", *Food Quality and Safety*, Vol 4, No. 4, pp.167–180.
- [19] Austin, J. E., and Seitanidi, M. M. (2012), "Collaborative value creation: A review of partnering between nonprofits and businesses: Part 1. Value creation spectrum and collaboration stages", *Nonprofit and Voluntary Sector Quarterly*, Vol. 41 No. 5, pp. 726- 758.
- [20] Bailey and Francis (2008), "Managing information flows for improved value chain performance", *International Journal of Production Economics*, Vol.111 No.1, pp. 2-12.
- [21] Luzzini, D., Brandon-Jones, E., Brandon-Jones, A. and Spina, G. (2015), "From sustainability commitment to performance: the role of intra- and inter-firm collaborative capabilities in the upstream supply chain", *International Journal of Production Economics*, Vol. 165, pp. 51-63.
- [22] Amara, N., Halilem, N. and Traoré, N. (2016), "Adding value to companies' value chain: Role of business schools scholars", *International Journal of Business Research*, Vol.69 No.5, pp. 1661-1668.
- [23] Cojocaru, S. and Sfetcu, L. (2013), "Partnerships in Social Economy", *Social and Behavioral Sciences*, Vol. 92, pp. 197 – 201
- [24] Tasca, A. L., Nessi, S. and Rigamonti, L. (2017), "Environmental sustainability of agri-food supply chains: An LCA comparison between two alternative forms of production and distribution of endive in northern Italy", *Journal of Cleaner Production*, Vol.140, pp. 725-741.
- [25] Jarillo, J. C. (1990), "Comments on 'transaction costs and networks", *Strategic Management Journal*, Vol. 11 No.6, pp. 497-499.
- [26] Almeida, A., Bastos, J., Francisco, R.D.P., Azevedo, A., Ávila, P., (2016), "Sustainability assessment framework for proactive supply chain management. *International Journal of Industrial and Systems Engineering*, Vol.24, No.2, pp.198–222.
- [27] Simatupang, T. M. and Sridharan, R. (2005), "The Collaboration Index: a measure for supply chain collaboration", *International Journal of Physical Distribution & Logistics Management*. Vol.35 No.1, pp. 44-62.
- [28] Spekman, R. E., Jr, W. K. J. and Myhr, N. (1998), "An empirical investigation into supply chain management: A perspective on partnership", *Supply Chain Management: An International Journal*, Vol.3 No. 2, pp. 53-67.
- [29] Pagell, M. and Shevchenko, A. (2014), "Why research in sustainable supply chain management should have no future", *Journal of Supply Chain Management*, Vol. 50 No. 1, pp. 44-55.
- [30] Esfahbodi, A. Zhang, Y. Watson, G. (2016), "Sustainable supply chain management in emerging economies: Trade-offs between environmental and cost performance", *International Journal of Production Economics*, Vol.181, pp. 350–366.
- [31] Skjoett-Larsen, T., Thernoe, C. and Andresen, C. (2003), "Supply chain collaboration: theoretical perspectives and empirical evidence", *International Journal of Physical Distribution & Logistics Management*, Vol.33 No.6, pp. 532-549.
- [32] Tachizawa, M.E. and Wong, Y.C. (2014), "Towards a theory of multi-tier sustainable supply chains: a systematic literature review", *Supply Chain Management: An International Journal*, Vol. 19 Nos 5/6, pp. 643-663.
- [33] Aggarwal, S. and Srivastava, M. K. (2016), "Towards a grounded view of collaboration in Indian agri-food supply chains: A qualitative investigation", *British Food Journal*, Vol. 118 No.5, pp.1085-1106.
- [34] Cole, R., Aitken, J., 2020. The role of intermediaries in establishing a sustainable supply chain. *Journal of Purchasing and Supply Management* 26, 100533. <https://doi.org/10.1016/j.pursup.2019.04.001>.
- [35] Acquaye, A., Genovese, A., Barrett, J. and Koh, S.C.L. (2014), "Benchmarking carbon emissions performance in supply chains", *Supply Chain Management: An International Journal*, Vol. 19 No. 3, pp. 306-321.
- [36] Fearn, A. (1998), "The evolution of partnerships in the meat supply chain: insights from the British beef industry", *Supply Chain Management*, Vol.3 No.4, pp.214-231.
- [37] McAdam, R., Hazlett, S-A. and Anderson-Gillespie, K. (2008), "Developing a conceptual model of lead performance measurement and benchmarking: A multiple case analysis", *International Journal of Operations & Production Management*, Vol. 28 No. 12, pp. 1153-1185.
- [38] Giannakis, M. (2008), "Facilitating learning and knowledge transfer through supplier development", *Supply Chain Management: An International Journal*, Vol. 13 No. 1, pp. 62-72.
- [39] Ding, H., Guo, B., and Liu, Z. (2011), "Information sharing and profit allotment based on supply chain cooperation", *International Journal of Production Economics*, Vol.133 No.1, pp 70-79.
- [40] Kembro, J., Selviaridis, K. and Näslund, D. (2014), "Theoretical perspectives on information sharing in supply chains: a systematic literature review and conceptual framework", *Supply Chain Management: An International Journal*, Vol.19 No.5/6, pp. 609-625.
- [41] Taylor, D.H. and Fearn, A. (2006), "Towards a framework for improvement in the management of demand in agri-food supply chains", *Supply Chain Management: An International Journal*, Vol.11 No.5, pp. 379–384
- [42] Lambert, D.E., (2008), *Supply Chain Management: Processes, Partnerships, Performance* (3rd ed), Supply Chain Management Institute, The Hartley Press, Jacksonville.

- [43] Walters, D. and Lancaster, G. (2000), "Implementing value strategy through the value chain", *Management Decision*, Vol. 38 No. 3, pp. 160-178.
- [44] Rim, H., Yang, S-U. and Lee, J. (2018), "Strategic partnerships with nonprofits in corporate social responsibility (CSR): The mediating role of perceived altruism and organizational identification", *Journal of Business Research*, Vol. 69 No.9, pp. 3213-3219.
- [45] Andreasen, A. R. (1996), "Profits for nonprofits: Find a corporate partner *Harvard Business Review*, Vol.74 No.6, pp.47-50, 55-59.
- [46] Kim, N., Sung, Y. and Lee, M. (2011), "Consumer evaluations of social alliances: The effects of perceived fit between companies and non-profit organizations", *Journal of Business Ethics*, Vol.78 No.4, pp. 611-622
- [47] Porter, M. E., and Kramer, M. R. (2011), "Shared value: How to reinvent capitalism and unleash a wave of innovation and growth", *Harvard Business Review*, Vol.89 No.12, pp. 62-77
- [48] Mota, J., de Castro, L. M., & Brito, C. (2016). "Powered by... whom?" A network perspective on replication as strategy', *Journal of Business Research*, Vol.69 No.11, pp. 4732-4736.
- [49] Prahalad and Ramaswamy (2004), "Co-creation experiences: the next practice in value creation, *Journal of Interactive Marketing*, Vol.18 No.3, pp. 22-34.
- [50] Xue, X., Shen, Q., Tan, Y., Zhang, Y., and Fan, H. (2011), "Comparing the value of information sharing under different inventory policies in construction supply chain", *International Journal of Project Management*, Vol.29 No.7, pp. 867-876.
- [51] Wymer, W. W., Jr. and Samu, S. (2003), "Dimensions of business and nonprofit collaborative relationships", *Journal of Nonprofit & Public Sector Marketing*, Vol.11 No.1, pp. 3-22.
- [52] Porter, M. E. (1985). *Competitive advantage: Creating and sustaining superior performance*. New York: Free Press.
- [53] Cheng, J.H. (2011), "Inter-organizational relationships and information sharing in supply chains", *International Journal of Information Management*, Vol. 31 No.4, pp.374-384.
- [54] Giannakis, M. and Croom, S.R. (2004), "Toward the development of a supply chain management paradigm: a conceptual framework", *Journal of Supply Chain Management*, Vol.40 No.2, pp. 27-37.
- [55] Horvath, L. (2001), "Collaboration: the key to value creation in supply chain management", *Supply Chain Management: An International Journal*, Vol. 6 No. 5, pp. 205-207.
- [56] Flynn, B.B., Huo, B. and Zhao, X. (2010), "The impact of supply chain integration on performance: a contingency and configuration approach". *Journal of Operation Management*, Vol. 28 No.1, pp. 58-71.
- [57] Schmidt, C.G., Wagner, S.M., (2019), "Blockchain and supply chain relations: A transaction cost theory perspective", *Journal of Purchasing and Supply Management* 25, pp.100-552.
- [58] Arshinder, (2012), "Flexibility in supply chain using coordination: Issues and learnings", *International Journal of Industrial and Systems Engineering*, Vol.11, No.2, pp.308-330.
- [59] Reardon, T., Barrett, C., Berdegue, J. and Swinnen, J. (2009), "Agri-food industry transformation and small farmers in developing countries", *World Development*, Vol.37 No.11, pp. 1717-1727.
- [60] Adobor, H., McMullen, R.S., (2014), "Strategic purchasing and supplier partnerships-The role of a third party organization," *Journal of Purchasing and Supply Management* Vol.20, pp.263-272.
- [61] Denzin N. and Lincoln Y. (Eds.) (2000). *Handbook of Qualitative Research*. London: Sage Publication Inc.
- [62] Eisenhardt, K.M. and Graebner, M.E. (2007), "Theory building from cases: opportunities and challenges", *Academy of Management Journal*, Vol. 50 No. 1, pp. 25-32.
- [63] Miles, M. B., Huberman, A. M., & Saldaña, J. (2014), "Qualitative data analysis. A methods sourcebook," 3rd ed. Thousand Oaks, CA: SAGE Publications, Inc; 2014.
- [64] Yin, R. K. (2014), "Case Study Research: Design and Methods. 5th ed. Thousand Oaks, CA: Sage.
- [65] Voss, C., Tsikriktsis, N. and Frohlich, M. (2002), "Case research in operations management", *International Journal of Operations & Production Management*, Vol. 22 No. 2, pp. 195-219.
- [66] Mikkola, M. (2008), "Coordinative structures and development of food supply chains", *British Food Journal*, Vol. 110, No. 2, pp.189-205.
- [67] Van Der Rhee, B., Van Der Veen, J.A., Venugopal, V. and Nalla, V.R., (2010), "A new revenue sharing mechanism for coordinating multi-echelon supply chains", *Operations Research Letters*, Vol. 38, No. 4, pp.296-301.
- [68] Thilmany, D., Canales, E., Low, S.A. and Boys, K. (2021), "Local Food Supply Chain Dynamics and Resilience during COVID-19," *Appl Econ Perspect Policy*, Vol.43, pp.86-104.
- [69] Jraisat, L. and Sawalha, I., (2013), "Quality control and supply chain management: a contextual perspective and a case study", *Supply Chain Management: An International Journal*, Vol. 18, No. 2, 194-207.
- [70] Mohebalizadeh, M., Hafezalkotob, A., (2018), "Modelling sustainable supply chain management problem with fuzzy demand based on multi-criteria decision making methods," *International Journal of Industrial and Systems Engineering*, Vol.30, No.2, pp. 267-297.
- [71] Axelsson, B. and Easton, G. (1992), *Industrial Networks: A New View of Reality*, Routledge, London.
- [72] Johnston, A.D. and Linton, D.J. (2000), "Social networks and the implementation of environmental technology", *IEEE Transactions on Engineering Management*, Vol. 47 No. 4, pp. 465-477.
- [73] Jreissat, M., and Jraisat, L. (2019), "Sustainable Dyads in Supply Chain Management: A Qualitative Perspective." *Jordan Journal of Mechanical & Industrial Engineering* Vol.13, No. 4., pp. 277-290.
- [74] Stuart, I., McCutcheon, D., Handfield, R., McLachlin, R. and Samson, D. (2002), "Effective case research in operations management: a process perspective", *Journal of Operations Management*, Vol. 20 No. 5, pp. 419-433.
- [75] Reddy, B. Chandra Mohana, et al.(2008), "Quota Allocation to Distributors of the Supply Chain under Distributors' Uncertainty and Demand Uncertainty by Using Fuzzy Goal Programming." *Jordan Journal of Mechanical and Industrial Engineering*, Vol. 2 No.4, pp. 215-226.
- [76] Braun, V. & Clarke, V. (2006), "Using thematic analysis in psychology", *Qualitative Research in Psychology*, Vol.3, pp.77-101.
- [77] Boyatzis R. E. (1998), "Transforming qualitative information: Thematic analysis and code development", Thousand Oaks, CA: Sage
- [78] Myrto, R. (2020), "Safety of Foods, Food Supply Chain and Environment within the COVID-19 Pandemic." *Trends in Food Science & Technology*, Vol. 102, 2020, pp. 293-299.
- [79] Asamoah, D., Agyei-Owusu, B. and Ashun, E. (2020), "Social network relationship, SC resilience and customer-oriented performance of small and medium enterprises in a developing economy", *Benchmarking: An International Journal*, Vol.27 No.5, pp. 1793-1813.
- [80] Ivanov, D & Dolgui, A. (2020) Viability of intertwined supply networks: extending the supply chain resilience angles towards survivability. A position paper motivated by COVID-19 outbreak, *International Journal of Production Research*, Vol.58 No.10, pp.2904-2915.