

# Exploring the impact of institutional forces on social sustainability of logistics service providers: Insights from a highly terrorism-affected region

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**Abstract:**

**Purpose:** Achieving social sustainability has become a critical challenge in global supply chain networks, particularly during complex crises such as terrorism. The purpose of this study, thus, is to explore how institutional forces influence social sustainability approaches of logistics service providers (LSPs) in highly terrorism-affected regions (HTAR). This then leads to investigating how the key factors interlock with Institutional Theory.

**Design/methodology/approach:** An exploratory multiple-case study research method is employed to investigate six cases of different-sized logistics LSPs in a HTAR. The data was collected by semi-structured interviews and triangulated by on-site observations and document analysis. The thematic analysis was utilized in iterative cycles for cross-case comparisons and pattern matching.

**Findings:** Our findings are interlocked with Institutional Theory and the three final-order themes. Firstly, management processes are driven by coopetition and innovation. Second, organizational resources, structure and culture lead to ineffective organizational design. Finally, the lack of institutionalization creates institutional uncertainty. These factors then are rooted in many other first-order factors such as information sharing, communication, relationship management, capacity development, new process developments, workforce characteristics, technology, micro-level culture, and control aspects.

**Originality/value:** The study answers the call for social sustainability research and enriches the literature about social sustainability, institutional theory and LSPs in a HTAR by providing illustrations that institutional forces act as driving forces for social sustainability initiatives by shaping current management processes. Conversely, the same forces impede social sustainability initiatives by shaping current organisational designs and increasing institutional uncertainty.

**Keywords:** Institutional Theory, Logistics Service Providers, Multiple Case Studies, Social Sustainability, Terrorism.

## Introduction

Sustainability is becoming increasingly important for the firms to be competitive in the modern business environment (Cantele and Zardini, 2018). Increasing customer awareness about social issues, stakeholders' pressure, social, political and legal triggers are encouraging the firms to contribute towards the triple bottom line of sustainability i.e. economy, society, and the environment (Dyck et al., 2019). The extant studies suggest that sustainability performance of firms is positively related to their financial performance (Wagner and Blom, 2011). Therefore, it is crucial for scholars and practitioners to explore the ways that enhance sustainability performance. However, firms' sustainability reports and existing literature reflects that the main focus of scholars and practitioners is on environmental sustainability i.e. net zero, and circular economy (Awan et al., 2021), and social sustainability still needs specialized research.

Social sustainability referees to *“actively supporting the preservation and creation of skills as well as the capabilities of future generations, promoting health and supporting equal and democratic treatments that allow for good quality of life both inside and outside of the company”* (Longoni and Cagliano, 2015, pp. 218). Social sustainability thus necessitates identifying and managing business impacts, both positive and negative on people and planet. The quality of a company's relationships and engagement with its stakeholders is critical for creating value (Huq et al., 2014). Particularly it is crucial to explore the ways to enhance social sustainability in crisis effected regions, such as terrorism and war affected regions. In such regions, institutional environment is quite fluid and evolving and the role of firms become extremely important to address societal issues. The severity of terrorist attacks has increased, with a rise in lethality by 26%. The global economic impact of violence was \$16.5 trillion in 2021, equivalent to 10.9% of global GDP, or \$2,117 per person (Institute for Economics & Peace, 2022).

To examine the ways to improve social sustainability in terrorism and war affected areas we considered a case of Pakistan. After 9/11, Pakistan became frontline state against terrorism and formed strategic alliances with global partners such as the USA to curb terrorism. One of the main contributions of Pakistan in war on terror was permitting the NATO suppliers to Afghanistan. Pakistan has provided cheapest and shortest supply routes to NATO forces based in Afghanistan. Over the past two decade, thousands of military vehicles and equipment, and millions of tonnes of food supplies and personal items have been moved into Afghanistan through Pakistan. Recently, these supplies have been disposed of or moved out from Afghanistan. It was one of the biggest logistics and resource-intensive operation for the UK military and NATO since the Second World War. The NATO supplies were a significant resource for the Afghan economy and government (Clemente and Evans, 2014). This situation makes Pakistan a relevant case for this study.

Institutional theory maintains that organisational decision-making is influenced by internal and external pressures from formal and information organisations and, thus, not always

rational (DiMaggio and Powell, 1983). Firm dependencies, lack of resources and expectations of wider societies force organisations by exerting pressures for diffusion of practices and code of conduct to seek legitimacy in the institutional field (Rafi-Ul-Shan et al., 2020). Institutional theory further describes how a shared system of norms, values, beliefs, rules and traditions are prevalent within an organisational field which differentiates it from other firms (DiMaggio and Powell 1983). Furthermore, Institutional Theory helps in broadening our understanding of how organisations progressively respond to three types of pressures in their institutional fields – coercive, normative, and mimetic- and bring changes in their structures and organisational processes by adopting various response categories (Khan et al., 2021). Given that the impact of institutional forces are a common phenomenon shaping organisational structures and processes of companies operating in emerging economies such as Pakistan (Khanna and Palepu, 1997), which suggest that firms operating in such markets have to deal with complexities, uncertainties, and dependencies to conform to institutional pressures to seek legitimacy and acceptance in the society. Against this backdrop, we examine the role of institutional forces on social sustainability practices of LSPs which are operating in a HTAR. Several studies have explored the effects of an uncertain environment on various aspects. One such example is the impact of terrorism on environmental sustainability, as highlighted by Tahir, Burki and Azid (2022). Additionally, Sajjad (2021) examined the impact of the COVID-19 pandemic on social sustainability and the resilience of global supply chains. Gultekin *et al.*, (2022), identified the notable uncertainties and risks that LSPs confront during the COVID-19 pandemic. However, it is yet unknown how LSP manage social sustainability issues in their supply chains under the influence of institutional forces in HTAR, which motivates this research. This study aims at answering the following research questions, 1) How Institutional forces impact social sustainability approaches of LSPs in a HTAR; and 2) How can LSP manage their supply chains' social sustainability issues under the influence of institutional forces in a HTAR. By examining the influence of institutional forces on organizational responses to social sustainability initiatives within the supply chain of a logistics service provider in a HTAR. The study contributes to our understanding of how and why organizations fall short in delivering their expected contributions to society, particularly in the context of institutional uncertainty observed across many emerging and developing economies. This research expands managers' knowledge of the institutional context in which they operate and the social sustainability practices that are influenced by various pressures within a HTAR. The study offers valuable insights into strategies that can be used as benchmarks for management processes, enabling them to effectively respond to growing institutional pressures. These strategies involve fostering cooperative and competitive relationships while embracing an innovative mindset. Furthermore, this research helps LSP in a HTAR that their organisational design and institutional uncertainty can cause coercive and mimetic pressures for social sustainability initiatives.

This paper is structured as follows. We first discuss the theoretical background focusing on literature on social sustainability, logistics service providers and institutional theory. Next research methodology for an exploratory empirical study is set out. The subsequent sections present findings from multiple cases including discussion of findings and concluding remarks.

## Theoretical Background

### Social sustainability:

Sustainability (TBL, 3Ps) has been long academic research interests and a cause of concern for corporate professionals due to continuous disclosure of environmental and social catastrophes in global and invisible supply chain operations (Nath, Eweje and Bathurst, 2021) (Nath et al. 2019). Rising temperatures, global warming and increased frequency and magnitude of natural disasters have (Jia et al., 2018) raised survival concerns in communities to heightened levels reflected by boycotting unsustainable business, however, exhibiting positive attitude and support for sustainable businesses (Glover *et al.*, 2014; Jia *et al.*, 2018). Advancements in communication technologies and growing power of social media and not-for-profit organisations have further increased the exposure and consumer visibility of unsustainable business practices (Rafi-UI-Shan et al., 2018). Consequently, focal firms are under intense pressures to internalise the externalities of environmental and social impact of their global operations.

In response to call for sustainable business operations, organisations have taken numerous sustainable initiatives, for example, natural resource conservation, capacity sharing, building customer and supplier relationship and partnerships for sustainability, recycling and sustainable design (Quarshie et al., 2016). Yet, empirical evidences suggests that the sustainability performance of supply chain operations is uneven across all three dimensions of sustainability, in particular, social dimension have been overlooked and under explored (Silvestre, 2015; Kelling *et al.*, 2021). Social sustainability defined as *“a holistic concept that must be integrated with economic and environmental performance considerations, recognises stakeholders within and beyond the supply chain; and attempts to ensure long-term benefit for society”* (Huq, Stevenson and Zorzini, 2014, p. 612), has become a critical challenge for organisations due to issues of child labour, human rights violations, forced labour, under wage, and inhuman working conditions in suppliers factories, disclosed by media and social organisations (Jia et al., 2018).

Organisations adopt social sustainability initiative due to shortage of labour and skilled workforce, community influences and institutional pressures (Kelling et al., 2020). Social sustainability initiatives are impeded by lack of enforcement of government regulations, lack of investor and customer pressures and voluntary nature (Nakamba et al., 2017). Evidence suggest that ethical and social sustainability issues (e.g., 2012 mining strike in South Africa, 2019 Brazilian dam tragedy and 2013 Rana Plaza incident in Bangladesh) exist at upstream supply chains levels due to ineffective enforcement of laws and lack of visibility and control (Rafi-UI-Shan et al., 2018). Voluntary nature and absence of laws on social sustainability including their ineffective enforcement, consequently, lead to institutional uncertainty and lack of institutionalisation of state and private institutions (Kelling et al., 2020). Implementation of such initiatives require organisations to adopt a more collaborative approach towards its operational partners by building partnerships and innovation capabilities (Nath, Eweje and Bathurst, 2019). Complimenting this with supplier selection, outsourcing planning and decision-making based on social sustainability concerns (Nakamba et al., 2017). The use of UN guidelines for sustainable development and implementing social code of conduct is also advised for sound social sustainability performance (Kelling et al., 2020). However, sustainable development related corporate planning and decision-making

and to making trade-offs, corporate professionals mostly prioritise price, quality and speed over social performance (Jia *et al.*, 2018; Longoni and Cagliano, 2015).

### **Logistics service providers in times of crises:**

Globalization of world economy adversely impacted supply chain networks by making them longer, complex, invisible, and spanning many different countries and regions of the world, consequently, minimising visibility, control, and resilience (Bin Makhashen *et al.*, 2020). A supply chain is an integration of different operational partners, activities, such as information, material, financial, manufactures and logistics (Chavez *et al.*, 2012). The term LSP is applied as a synonym for terms such as forwarding, carriers, transportation companies, logistics service, third-party logistics providers (3PL) and fourth-party logistics providers (4PL), global logistics providers, logistics integrators to mention few (Fabbe-costes *et al.*, 2008). In recent years, there has been a significant growth in the logistics functions performed by LSPs. The annual growth in third-party logistics services in China (25%), US (10%-15%) and the rest of the world (5%-10%) have seen increasing trends (Yeung *et al.*, 2012). Logistics outsourcing have also demonstrated an increasing growth, for example, 50% to 70% of logistics activities are outsourced (Langley, 2019). However, 3PL cannot provide unique and comprehensive supply chain solutions for its customers due to the development of outsourcing and customers' rising expectations of service levels. Therefore, 4PL were advocated as a solution to current logistics challenges such as improved efficiency, reduce logistics costs and managing disruptions (Li *et al.*, 2015).

Logistics service providers provide critical services to supply chain firms to manage resource constraints in an increasingly dynamic and complex marketplace enabling customer reach and value provision (Briggs *et al.*, 2010). Such services include inventory management, information system management, planning and decision-making, performance management, purchasing and procurement, including value addition activities in warehouses and distributions and customer service (Lai, 2004). However, logistics service provision comes with embedded risks such as carrier delays, hijacking, terrorism and theft, lack of security measures, liability for loss or delays, insolvency, lack of inventory, and new security and safety legislation (Ojha and Gokhale, 2009). McDowell, (2016) identified the top ten risks to LSPs: theft, fraud and corruption, political risks, fires and explosions, loss of reputation or value, macroeconomic developments, changes in legislation and regulation, natural catastrophes, cyber incidents, market developments and business interruption. A considerable amount of literature has been published on terrorism-related risks affecting global supply chains (e.g., Sheffi, 2001; Czinkota *et al.*, 2005; Bueno-Solano and Cedillo-Campos, 2014). Similarly, several studies have investigated LPS related risks (e.g., Selviaridis and Norrman, 2014; Wu and Chaipiyaphan, 2020; Giuffrida, Jiang and Mangiaracina, 2021). However, far too little attention has been paid to the exploration that how institutional forces shape social sustainability practices of LSP in a HTAR. Exploring contextual peculiarities can help broaden our understanding of various social sustainability issues to, consequently, design appropriate response or management strategies to deal with such issues (Khan *et al.*, 2021).

### **Institutional Theory:**

Sustainable supply chain management discipline has used institutional theory to provide an understanding of how organisations diffuse different practices and build isomorphism in their evolution process to answer environmental pressures which emerge from their structural, cultural, and from leading organisations (Dhillon *et al.*, 2022; Jia *et al.*, 2018). Institutional theory holds that organisational strategies and practices are not always based on rational decision-making or to strengthen financial bottom-line, instead, influenced by internal and external pressures, norms and values (Silvestre, 2015). In such contexts, scholarship suggests that institutions shape firms' strategic choices and behaviour (Kelling *et al.*, 2020). Thus, institutional theory provides a reliable perspective within social sustainability research (Huq and Stevenson, 2020) and a robust theoretical lens to explore social sustainability of LSP in highly disruptive and uncertain environment such as those observed in emerging and developing economies (Khan *et al.*, 2021). In particular, it broaden our knowledge of how focal firm and its supply chain partners progressively respond to three specific pressures: coercive, normative and mimetic (DiMaggio and Powell, 1983).

Weak and ineffective government regulations and unethical practices such as corruption and bribery, dependencies and resource constraints enable powerful organisations, governments or industry alliances to exert coercive pressures on firms within a network (Silvestre, 2015). Increased competition around speed, service, price and technologies add to increased uncertainties, consequently, forcing firms to attain legitimacy in the network by imitating best practices of market leaders (Nath *et al.*, 2021). Finally, wider expectation of multiple stakeholders cause normative pressures forcing firms to conform to social legitimacy concerns about social sustainability impact of their operations (Huq and Stevenson, 2020). Organisations also internalise and institutionalise social sustainability initiatives due to knowledge and understanding of consequences of non-compliance to wider expectations from multiple stakeholders (Dhillon *et al.*, 2022). When organisations demonstrate awareness of legitimate concerns for social sustainability and there is a social approval for such concerns, the diffusion rate of such practices will be increased leading to externalisation of such practices to other firms in the network and become a norm (Rafi-UI-Shan *et al.*, 2020; Khan *et al.* 2021).

Empirical research have made useful contributions by extending our knowledge of institutional pressures, particularly, in sustainability knowledge domain, for example, flexible green supply chain management in emerging economies (Dhillon *et al.*, 2022), sustainability implementation challenges in developing country clothing suppliers (Nath, Eweje and Bathurst, 2019), How sustainable supply chain can be implemented and managed in developing and emerging economies (Silvestre, 2015), implementation of socially sustainable practices in challenging contexts (Huq and Stevenson, 2020). Zhu, Sarkis and Lai (2013) reported that coercive and normative pressures for sustainability exist at home-market while mimetic pressures are prevalent at global levels. Dhillon *et al.*, (2022) found that all three pressures act as drivers as well as barriers for flexible environmental practices, however, Sarkis, Zhu and Lai (2011) found that coercive pressures mainly drive firms' environmental management systems. Empirical research reported a consensus that all three pressures force organisations to take sustainability initiatives, however, the intensity of coercive pressures is higher as compared to normative and mimetic pressures (Glover *et al.*, 2014; Jia *et al.*, 2018;

Dhillon *et al.*, 2022). Dhillon *et al.*, (2022) maintained that organisational contexts, situation and contingencies determine the nature and intensity of pressures and found that coercive pressures are mainly driven by downstream supply chain partners.

Above review demonstrate that empirical research have made novel and useful contributions by highlighting social sustainability strategies and practices from multiple disciplines and diverse corporate contextual perspectives (Nath, Eweje and Bathurst, 2021; Huq and Stevenson, 2020). Similarly, scholars have used institutional theory to explore and advance knowledge in the wider domain of sustainable supply chain management (Sarkis, Zhu and Lai, 2011; Silvestre, 2015). However, it is relatively unknown how LSP manage social sustainability issues in their supply chains under the influence of institutional forces which motives this research.

### ***Social sustainability and Institutional Environment of Pakistan***

The context of this study is Pakistan where business firms, logistics service providers in particular, are operating in a complex, uncertain, and vulnerable environment (Khan et al., 2021). Pakistani firms are under intense pressures, like firms in other regions of the world, to comply with social sustainability laws and code of conduct to seek legitimacy (Khan et al., 2018). The contextual setting of this study is informed by lack of scholarly research in the given context which is fundamentally different to those of Western economies and presenting a unique case due to war-on-terror (Yin, 2018). Although, Pakistani business laws are primarily driven and influenced by West, however, lack of enforcement has added into worsening market confidence and multitude of corporate failures (Khan et al., 2020). It will be too early to comment on the social sustainability progress in Pakistan, however, sustainability disclosures are not mandatory in Pakistan, but sustainability reporting is on the rise due to multiple stakeholders' interest and role of social promoting organisations (Khan et al. 2020). Khan et al., (2018) reported that Pakistani firms began modelling their sustainability practices recently inspired by MNCs operating in Pakistan. Kahn et al (2020) held that local institutions working in Pakistan such as CSR Pakistan, Pakistan Centre for Philanthropy, the sustainable Development Policy Institute, the Centre for Sustainability Research and Practice and the Pakistan Institute of Corporate Governance are working in direct collaboration with businesses to provide guidelines and training in line with GRI. Consequently, these efforts and training programs become normatively sanctioned by managers themselves (DiMaggio and Powell, 1983). Therefore, corporate professionals and sustainability promoting structural institutions are expected to exert normative pressures on Pakistani firms for social sustainability initiative.

Laws and national regulations including code of conduct play a vital role in mandating, facilitating, partnering, and endorsing social issues. Historically, sustainability initiatives are considered as voluntary, but responsibility is now shifting from Pakistani charities or local communities to national level, thus, Pakistani government is increasingly involved in national and international socially sustainable programs (Khan et al. 2021). Similarly, health and safety regulations and working conditions are evolving including laws such as Hazardous occupational Rules 1978 and labour policy 2002 (Sajjad and Eweje, 2014). Consequently, Pakistani firms are facing coercive pressures from regulations, normative pressures from societies to seek legitimacy and mimetic pressures from MNCs to minimise uncertainty and internalising, implementing and diffusion of social sustainability practices in their business

operations (Khan et al. 2021). Overall, Pakistani institutional environment is characterised by security issues, corruptions, lack of regulations and enforcement, unstable market, political instability, and widespread corporate abuses of social capital to mention a few (Khan et al: 2020;2021). It is this institutional environment and contextual peculiarities that present a novel and original context to exploring the impact of institutional forces on the social sustainability initiatives of LSP in a HTAR.

## **Methodology:**

### **Multiple Case Study**

The main objective of this research was to explore how LSP manage social sustainability issues under the influence of institutional forces in a HTAR and how can they do so more affectively. Given the complexity of phenomenon and lack of empirical knowledge of how LSP manage their social sustainability issues, it deemed impossible to design testable hypotheses (Rafi-UI-Shan et al., 2020). Thus, an inductive qualitative multiple case study research approach was used to explore the phenomenon of social sustainability under contextual parameters of institutional pressures and HTAR (Yin, 2018). Use of multiple case study advocated in the supply chain management discipline and sustainability research as it allows building more reliable theories, provide consistent account, gain better information about the social realities from social actors' perspective (Voss et al., 2002). Multiple case study enables gaining deep insights and providing interpretations of LSP's experiences for theory building from social actors' perspective and operational contexts (Yin, 2018).

### **Case Selection**

Pakistan has provided cheapest and shortest supply routes to NATO forces based in Afghanistan and NATO mainly relied on these routes to continue its war on terror. Almost 75 % of all NATO and US supply chain including fuel, food, construction material, and equipment for Afghanistan, moved overland through Pakistan (Rondeaux and Pincus, 2008). US containers reach Pakistani city of Karachi and Bin Qasim seaports and transported by land with the help of Pakistani LSPs companies. Over the past two decade, thousands of military vehicles and equipment, and millions of tonnes of food supplies and personal items have been moved into Afghanistan through Pakistan. The NATO supplies were a significant source for the Afghan economy and for Afghan government to function (Clemente and Evans, 2014). These supply routes, however, were vulnerable to terrorist attacks causing substantial losses including deaths of LSP and transporters. Thus, providing a context to explore social sustainability issues to LSP under the influence of institutional pressures in a HTAR.

Purposive sampling approach was adopted to select case companies which leaves limited scope for generalisability and transferability of findings, however, provides deep insights and rich understanding of the context to explore how LSP manage SS issues in their SCs under the influence of institutional forces (Yin, 2018). An initial list of LSP was prepared based on lead-researcher's regional and corporate information and companies were contacted through known managers. The selection criteria were a) company must cover the entire journey, from Pakistani port to its destination in Afghanistan enabling exploration of supply chain wide

social sustainability issues; b) company should be Pakistan headquarter based which can help in data collection and observation; c) companies must be of good mix in size including online presence for research robustness and quality purpose d) company is willing to grant access for interviews, observations and documents. Six Pakistani LSP agreed to take part in the research process and represent variety of sizes from large to medium size as shown in **table 1**.

Table1 . Profile of case companies and respondents

Company description	Date established	No of employees	Regions	Respondents	No. of Interviews
Case Company (LSP 1). Global Forwarding, Freight, Supply Chain	1970s	~1200	Pakistan, Worldwide	2-Transport Managers Finance Officer, Supply Chain Manager, Security Officer.	5
Case Company (LSP 2). Logistics & Construction	1960s	~49500	Pakistan, Afghanistan	2-Regional Logistic Managers, 3-Logistics Officers, 2-Security Officers, CSR Manager.	8
Case Company (LSP 3). Transportation, Warehousing, Brokerages	1980s	~1200	Pakistan, UK, UAE	Regional Transport Manager, 2-Transport Officers, Brokerage Officer, Security Officer.	5
Case Company (LSP 4). Logistics and Retail Network, Lubricants	1990s	~5000	Pakistan	3-Logistics Managers, 2-Distribution Mangers, 1-Ethics & compliance Manager.	6
Case Company (LSP 5). Logistics, Customs Clearance, Packing & Warehousing	2010s	~1400	Pakistan, Worldwide	2-Supply Chain Mangers, 2-Communication Officer, Finance Officer, Security Officer.	6
Case Company (LSP 6). Logistics, Movers & Packers, Warehousing.	1930s	~1000	Pakistan,	Regional Logistics Manager, 2-Transport Officer, Warehouse Manager	4

## Data collection

Data was collected by semi-structured interviews in relation to main research purpose. Purposive sampling was adopted to select respondents from sustainability, transportations including logistics and distribution, information sharing and communication, security, finance and supply chain managers due to their relevance and ability to answer research questions (Patton, 2015). Snowballing technique was applied in absence of sustainability manager role and speaking to other managers indicated by initial respondents or the lead researcher recognised their relevance (Miles et al., 2014). An interview protocol was developed integrating themes in relation to our main research purpose. Four pilot interviews were conducted with a contractor, government official, an insurance agent and an accidents and emergency department official to test the interview protocol questions for face validity and ensuring data reliability (Yin, 2018).

Data collection period was January 2023-March 2023, and thirty-four onsite face-to-face interviews were conducted, to reach saturation level, across all six case companies as shown in **table 1** and lasted an hour on average. For confidentiality and to maintain anonymity, interview names and their case companies are disguised in this research. The lead research gained ethics approval from the University and informed consent was requested from the respondent. The respondents were given further information how can they withdraw their consent within a specified period, and the relevant contact details were provided. Interviews were recorded with interviewees' permission which later transcribed by the lead researcher and verified by respondents enabling enhanced data reliability (Yin, 2018). To deal with respondent biasness, the interview data was further triangulated with the observational and document data for greater reliability and validity. Getting access through close contacts and establishing early relationships also helped the lead researcher to get access to useful documents including information available on companies' webpage (Miles et al., 2014). Conducting onsite interviews also presented opportunities to make observations regarding the operationalisation of institutional pressures for social sustainability initiatives in real context presenting opportunities for deep insights and rich information (Yin, 2018).

#### **Data Analysis and Validity:**

Data analysis was carried out in iterative cycles (Miles et al., 2014), where individual cases were compared, contrasted and summarised for greater internal validity (Yin, 2018). A coding scheme (open, axial and selective) proposed by Strauss and Corbin (1998) was followed to identify, compare and contrast and match patterns for all six cases. Technologically enhanced qualitative data analysis software NVivo12 was used to store, organise, structure, and simplify secondary sources of data including primary data from interviews and observations. Interview data was deconstructed using open codes leading to axial coding where codes were re-organised into sub-themes based on similarities and pattern matching. Open and axial codes generated sub-themes and sub-categories which later extensively discussed among the first three authors to identify and eliminate discrepancies in the data. This process, consequently, enhanced inter-rater reliability and data credibility which outcome into a refined set of key themes and categories for the impact of institutional pressures on LSP's social sustainability in a HTAR as shown in **Fig 1**. Finally, in selective coding, refined main themes and categories were selected to relate with other themes and categories based on their mutual relationships and pattern matching to develop findings and cross-case narrative (**Fig 1**) about the impact of institutional forces on social sustainability issues management in LSP' supply chains (Miles, Huberman and Saldana, 2014; Yin, 2018).

In terms of research robustness and rigour, this research followed research quality criteria and guidelines provided by qualitative researchers and used in supply chain sustainability research (e.g., Miles, Huberman and Saldana, 2014; Yin, 2018; Rafi-Ul-Shan, Grant and Perry, 2020). Qualitative research criteria which this research followed include trustworthiness which consists of dependability, credibility, confirmability, and transferability which are further summarised in **table 2** including measures taken to ensure these quality measures. Transferability of this research cannot be claimed due to inductive, exploratory and

qualitative nature; however, findings of this research could be analytically generalised to a broader set of theory (Yin, 2018).

Table 2: Actions and measures to ensure research rigor and quality

Measure	Purpose	Action taken
Credibility	Aligning constructed realities of social actors to those presented by researcher by establishing causal relationships	Respondent validation of emergent findings Triangulation of data Coding by first three researchers Selection of six cases for comparison and pattern matching
Confirmability	Ensuring integrity of the findings based on interpretations of grounded data and constructions, assertions, facts etc.	Purposive sampling used to collect data from well-informed respondents Documentation of multiple case study design Validation of findings from respondents
Dependability	To ensure transparency and trackable variance for repeatability of research with same results	Case study protocol was documented and validated Analysis carried out independently by three researchers Use of NVivo and coding scheme is elaborated
Transferability	Specifying research domain and context in which findings can be generalised	Multiple case study design for LSPs Analytical generalisability through theoretical sampling of four LSP in HTAR Provided thick description of research process

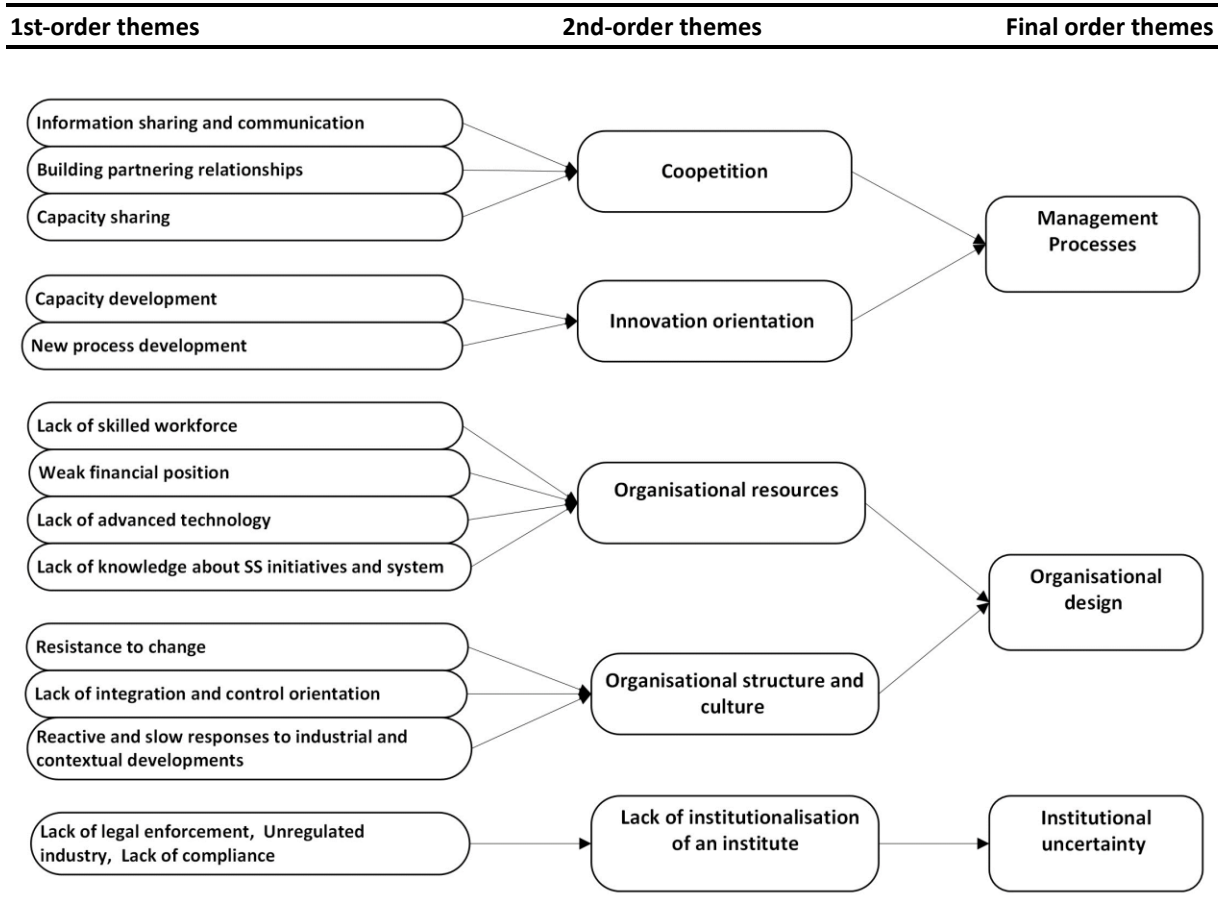
## Findings

Analysis of multiple sources of data suggest that the current organisational design, management process and organisational uncertainty are outcome of institutional pressures for social sustainability management as shown in **Fig 1**. Findings in this section will also demonstrate that current management processes are acting as driving forces for social sustainability initiatives while current organisational design and institutional uncertainty act as impeding forces for social sustainability in a HTAR.

Table 3:

First order codes	Quotations
<ul style="list-style-type: none"> <li>Information sharing and communication.</li> </ul>	<p>"We learned that most attacked could have been avoided, by simply, sharing information."</p> <p>"They (terrorists) had much sophisticated communication tools and systems as compared to us".</p>
<ul style="list-style-type: none"> <li>Building partnering relationships</li> </ul>	<p>"If you count, they're (terrorists) many, but they operate as one group, so, there was lack of unity and family terms in our company and other firms".</p>
<ul style="list-style-type: none"> <li>Capacity sharing</li> </ul>	<p>"They (terrorists) never run out of ammunition, people and support, this teach us a gold lesson, which was to share your assets, capital and even people".</p>
<ul style="list-style-type: none"> <li>Capacity development</li> </ul>	<p>"Their (terrorists) ability to attack on anyone and anywhere was dangerously surprising, on the top of that, customers were asking more and more, so, no choice, we had to take steps to build more resources".</p>
<ul style="list-style-type: none"> <li>New process development</li> </ul>	<p>"Major players in our group were not working, as we would, as a solution, first step was breakdown hierarchies, no one was boss anymore, all were team members"</p>
<ul style="list-style-type: none"> <li>Lack of skilled workforce</li> </ul>	<p>"Whether it was dealing with attacks or satisfying demands of our customers, the major issue was finance and people."</p>
<ul style="list-style-type: none"> <li>Weak financial position</li> </ul>	<p>"With this untrained workforce, it was suitable for Soviet times and slightly after that, absolutely not now, it demands new knowledge, systems and technologies, but, then all this requires money, which we don't have".</p>
<ul style="list-style-type: none"> <li>Lack of advanced technology</li> </ul>	
<ul style="list-style-type: none"> <li>Lack of knowledge about social sustainability initiatives and systems</li> </ul>	<p>"This region has seen enormous social and economic upheavals from decades, if not centuries, which implies that social sustainability and developmental trajectories to this endeavor have not been given resources and attention what it deserves".</p>
<ul style="list-style-type: none"> <li>Resistance to change.</li> </ul>	<p>"Not only these groups (terrorist organisations) have become more sophisticated in mobilizing their people and resources but also the multinationals how they operate and deliver, unfortunately, we did not change".</p>
<ul style="list-style-type: none"> <li>Lack of integration and control orientation</li> </ul>	<p>"Most imminent threat to whatsoever we do, or want to do, is that we are far behind, we're not flexible, we're not adoptable".</p>
<ul style="list-style-type: none"> <li>Reactive and slow responses to industrial and contextual developments</li> </ul>	<p>"Social sustainability or other social developmental activities will take ages in this region, I can say this for sure, because we wake up after attacks and do things when other companies would have done already, we just follow, we don't take lead".</p>
<ul style="list-style-type: none"> <li>Lack of legal enforcement</li> </ul>	<p>"I don't know any law or regulation about social sustainability, no one told me, I never saw a copy in written form".</p>
<ul style="list-style-type: none"> <li>Unregulated industry</li> </ul>	<p>"Our directors, they told us something is coming (social sustainability code of conduct), and we need to report, after that, I never heard about it".</p> <p>Personally, I know, because of my job role, there are some rules, but to be honest, we never followed, no one asked, and no one cares here".</p>
<ul style="list-style-type: none"> <li>Lack of compliance</li> </ul>	<p>"We have our own rule and regulations, we've never looked into government laws about it (social sustainability), sometimes we do follow government guidelines about security, route selection and travelling times".</p>

**Fig -1 Analysis and findings**



### Management Processes:

**Coopetition:** Complex, dynamic, and volatile business environment characterised by increased pressures for cost reduction, manage disruptions, and demands for superior customer services around speed, quality coupled with increased uncertainties and dependencies on regional small scale service providers have increased social sustainability concerns. These factors have forced organisations to increase information sharing and communication levels within and across supply chain networks. To respond these pressures, immediate response of case companies include capacity sharing in various operational areas and initiatives for long-term partnering relationships “*these, social sustainability, demands are here, to remain here, so, so, we’ve taken some short-term decision and some with long, very long-term commitment*” (LSP2, CSR Manager). Interview and observational data demonstrated that responses to institutional pressures for SS forced organisations to research their competitors highlighting a new insight: “*we were in a difficult situation, so, we knew they (competitors) will be in worse, so it was us who started conversation...to sharing people, fleets and a lot more*” (LSP 3, Regional Transport Manager). Although, institutional pressures forced case companies to information sharing, communication, capacity sharing and initiatives for building partnering relationships with competitors but this also demonstrate severity and importance of social sustainability issues withing the LSP in HTAR and, consequently, response categories.

**Innovation Orientation:** Institutional pressures for social sustainability also forced case companies to take initiatives for long term sustainability, be self-reliant, build capacity and demonstrate capabilities of a complete solution provider. These pressures positively impacted case companies who started developing innovation orientation, for example, by developing their own capacity through training and developing workforce and establishing workshops for technical skills provision. Similarly, case companies-initiated training programs for senior management development for more advanced planning and decision-making. These capacity development related practices also led the case companies to further develop their organisational processes, thus, case companies started focusing on more integration to avoid departmentalisation and re-engineering processes for a more robust, proactive and well-informed responses to social sustainability pressures *“the outcome of capacity development was remarkable, our director said, why not we should finish boundaries and sit together, why not we should improve in all areas”* (LSP 2, CSR Manager). Finally, case companies internalised the notion of shared values to adopt a more collaborative and partnership approach even with competitors to do what they thought right for the workers and broader community in which case companies operate *“it was good to start working on the idea of one company and one family, welcoming other, regardless of who they are, where ideas grow and make us self-sufficient”* (LSP 5, Logistics Manager). Thus, developing capacity and new processes demonstrate positive response categories to diverse institutional pressures for social sustainability in a HTAR.

#### **Organisational Design:**

**Organisational resources:** technological advancements in logistics, distribution, inventory management, warehousing and transportation operations including advancements in information and communication technologies and not having skilled, educated and technically trained workforce exerted coercive pressures on case companies by impeding their efforts to implement social sustainability initiatives. Similarly, the management also lack appropriate knowledge and capabilities to design and implement a robust social sustainability management system but mostly relied on their experience or organisational history to deal with existing or emerging social sustainability issues *“real problem is, we don’t have people with right skills and knowledge, we don’t have template to implement, if there is one, people on the top are unaware of those frameworks”* (LSP 2, Regional Logistics Manager).

Weak financial position and long persistent regional uncertainties and disruptions also impeding organisational efforts to implement social sustainability initiatives. New strategies and practices for changes in management processes meant case companies have invested in new people, technologies and processes and return on investment has proved not as quick as case companies had expected which is known phenomenon in sustainability related investments. Respondents from each case companies have highlighted their desire and need for more investment into modern transportation infrastructure, highly skilled, trained and qualified workforce, introducing social sustainability roles, however, weak financial position and lack of organisational resources including knowledge about social sustainability strategies and practices have caused coercive pressures which impeded organisational efforts to implement social sustainability initiatives *“at the moment, when we speak, our financial*

*position is weak, market is uncertain, ideally, we want to invest in all those areas (social sustainability related), it's just not possible, not feasible"* (LSP 5, Finance Manager ). This also led to mimetic pressures and forced organisational to learn from competitors and from other sectors to start planning and implementing social sustainability related initiatives.

**Organisational culture and structure:** Historically, working for or being in LSP industry has been a profession of regional people starting from Silk Road period (war against Soviet Union led by USA) until very recent times. In contrast, young generation is inclined more towards manufacturing and retail industry with very little to no passion for joining LSP industry *"young people, they think its big truck driving job, that's all, they don't know, they don't understand, whole world involved and different roles in it"* (LPS 1, Transport Manager). Consequently, this has led to aging workforce within the existing regional LSP industry who have resistance to change from decades old organisational and managerial structures and ways of work. This has also caused a slow and reactive organisational culture which is causing coercive pressures from demanding customers in a highly volatile, unpredictable, and chaotic business environment. People also work in isolated silos confined in their self-defined departments and entirely disintegrated with rest of the internal and external operational environment. Issues of bureaucracy, red-tape and centralisation of key people and information have made it challenging for various field managers to manage their social sustainability issues on the ground and in accordance with the situation and context *"there is real danger in the idea which our directors have, what worked well for USA, will work now too, they don't understand severity, they're fine at the position where they're sitting"* (LSP 4, Logistics Manager). Case companies are also experiencing severe competitive pressures from the presence of international LSP in the region which cause more coercive and mimetic pressures. Our findings suggest that, in contrast to Russian invasion in Afghanistan in 80s, the USA led war against terrorism in Afghanistan brought larger and financially stronger LSPs for construction and developmental projects. These LSP had well established organisational and management structures and possess more advanced technologies, knowledge, and relationships with global LSPs. These international LSP also had knowledge and resources to work in war situations because of their work experience in other war zones such as Iraq, Syria, Libia, and African countries. Consequently, adding further to the magnitude of coercive and mimetic pressures for social sustainability in a HTAR.

### **Institutional Uncertainty:**

Analysis of multiple sources of data suggests that case companies are operating under highly uncertain market conditions. Local private and public Institutions such as enforcement agencies, infrastructure development, law and order maintenance and asset recovery organisations, to mention a few, have their own regulations, code of conduct and operating mechanisms. These organisational behaviours were far from local, industrial, and global code of conduct regarding social sustainability and dominated by corruption, bribery and price fixing traditions and cartel formations *"you tell me what you want, I will get it done, I have a man, I only pay him, and he does the work"* (LPS 3, Transport Officer). Lack of legal enforcement and lack of compliance from the local LSP created no sense of urgency and no steps were taken until and unless a local tribe leader, member of parliament or NATO officials will intervene *"Our trucks were driven off, our goods were stolen, police didn't help, we asked*

*him (local MP), he contacted police, and we find our stuff- yet it was not free—we had to pay to MP and police”* (LSP 5, Security Officer). Respondents also mentioned that the local government wants to please the federal government and the federal government is trying to assist NATO and international LSP as much as they can even bypassing their own local and federal laws and policies. Thus, everyone in the industry and law enforcement agencies conceive this as a freedom message and licence to operate within their own organisational and strategic framework if it does not offend the NATO forces or cause substantial problems for the international LSP who have close relationships with NATO and sometime directly appointed by allied forces. Case company respondents also mentioned of cartel formation of local LSP in collaboration with local tribes to fix prices and use of force to implement their dictated methods of work at various security check posts or even granting permission to use transportation routes and schedules. Similarly, local tribes also benefiting from this situation by providing private security, helping recovery of transportation resources, providing workforce and maintenance and many other heavily priced services *“they (local tribes) can do almost anything, but for a price, they’re THE force in the region, if you’ve any issues with them, that’s all, no more work for you, you’re stopped, you can’t move anything”* (LSP 3, Transport Officer). Due to unregulated industry and lack of legal enforcement and compliance, unethical practices such as corruption, bribery and price fixing has become diffused practices and, thus, regarded as a norm which impede organisational efforts to institutionalise their institutions to reduce institutional uncertainty.

### **Discussion:**

Highly uncertain and dangerously disruptive business environment created numerous institutional pressures and forced LSP to adopt a cooperative approaches as a response mechanism (Tidström, 2014; Nath, Eweje and Bathurst, 2021). Customer pressure for speed, cost and service levels coupled with route complexity and continuous terrorist attacks on physical infrastructure created coercive pressures (Glover et al., 2014). This, consequently, translated into information seeking behaviour and communication initiatives within and across supply chain (Tidström, 2014). Compounded impact of growing coercive pressures further encouraged case companies to start establishing partnering relations with firms historically perceived as competitors and started sharing capacity, fleets and workforce (Rafi-UI-Shan et al., 2020) Dependencies on technically skilled and knowledgeable workforce and on small scale transportation companies including technological advancements in the industry further exerted coercive and mimetic pressures forcing case companies to start developing leadership and workforce capacity and creating seamless organisational structure with enhanced internal and external integration (Huq and Stevenson, 2020). A novel insight to observe was that the case companies prioritised their coercive pressures over mimetic and normative, however, magnitude of mimetic and normative pressures also proved high. Consequently, case companies embedded social sustainability measures in corporate response, for example, building partnering relationships within and across supply chain including competitors was an outcome of mimetic and normative pressures (Zhu et al., 2013). Information sharing and communication, capacity sharing and development and new process adoption were outcome of coercive and mimetic pressures (Sarkis et al., 2011) supporting

empirical research that all three types of institutional pressures drive organisations to adopt cooperative and innovative management processes (Rafi-UI-Shan et al., 2020).

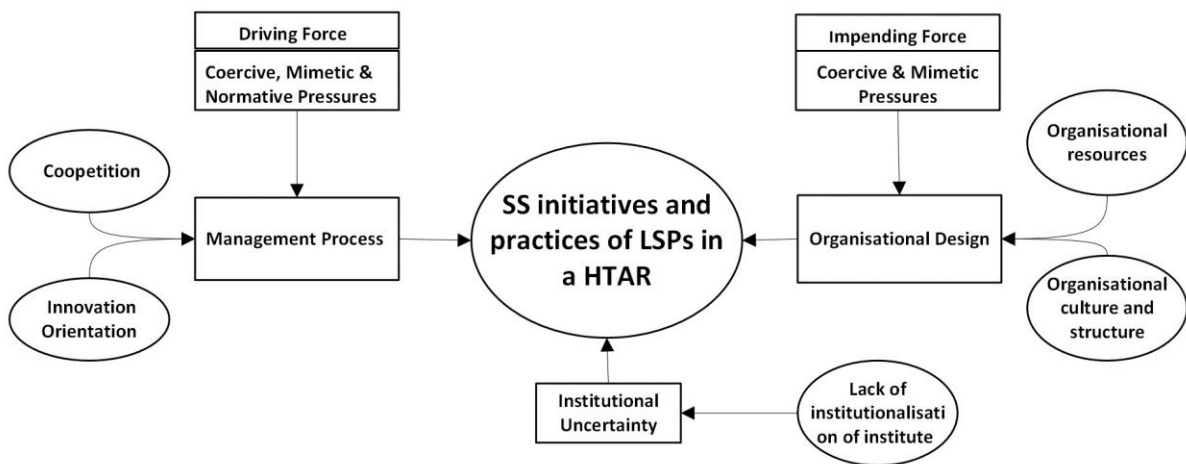
The importance of organisational resources is well documented in the extant empirical research as a driver as well as barrier to taking sustainability initiatives (Huq and Stevenson, 2020; Rafi-UI-Shan et al., 2018). A robust social sustainability system implementation requires investment, time and resources which SMEs find difficult due to their weak financial position, lack of knowledge and technologies (Dhillon et al., 2022). The case companies find themselves under intense coercive pressures from organisational perspective, for example, case companies were operating with weak financial position, outdated technology and shortage of technically skilled workforce. The existing workforce does not possess knowledge about social sustainability issues and to work in a terrorism impacted region. This lack of resources has caused opportunistic behaviours with the regional industry (Tidström, 2014), where larger and in most cases foreign firms offer lucrative packages to attract skilled workforce of competitors or even partners to acquire competitive resources (Jia et al., 2018).

Highly uncertain and volatile business environment need an agile culture with increased levels of internal and external integration, collaboration and responsiveness to changes in the marketplace (Rafi-UI-Shan et al., 2018). An agile culture open to embrace marketplace changes enables organisational change and, thus, helps managing risks and creating flexible and resilient structures (Makhashen et al., 2020). Resistance to change including issues of bureaucracy, red tape, slow and delayed response to market changes results into increased costs and financial losses and costly mistakes including loss of lives in a terrorism affected region (U.S Congress Report, 2010). Structurally, departmentalisation and control orientation substantially impacted information sharing, communication, and collaboration within and across the supply chain. Thus, current organisational culture and structure are prime reasons of coercive pressures from multiple stakeholders (Kelling et al., 2020). Presence of international LSP which operate as boundaryless firms with advanced technologies and resources have further created mimetic pressures and, in response, case companies mimic best practices to survive and grow (Huq and Stevenson, 2020). Thus, organisational sources, culture and structure (coercive and mimetic pressures) output into an organisational design which impedes efforts to adopt, implement and diffuse (DiMaggio and Powell, 1983) social sustainability strategies and practise within the LSP supply chains.

This study findings suggest that all three types of institutional pressures (coercive, mimetic and normative) have shaped current management processes within the case companies and act as driving forces for social sustainability initiatives and practices (DiMaggio and Powell, 1983). In contrast, coercive and mimetic pressures have shaped organisational culture and structure under the constraints of organisational resources (coercive) which shows that organisational design has become an impeding force for social sustainability strategies and practices and prevents seeking social legitimacy within the supply chains of LSP in a HTARs (Huq and Stevenson, 2020). Similarly, unregulated industry, lack of enforcement and compliance has led to opportunistic behaviours, corruption and bribery and prevents institutionalisation of local LSP institutions and outcome into increased levels of institutional uncertainty (Tidström, 2014; Silvestre, 2015). Institutional uncertainty caused by lack of

institutionalisation of LSP outcome into coercive pressures forcing organisations to adopt unethical means of getting the work done through bribery, corruption, forming cartels and increasing the role of local tribes to regulate and manipulate industrial and operational practices (Hanousek and Kochanova, 2016; Kelling *et al.*, 2021). In case of denial, LSP have to face severe consequences such as terrorist attacks on workforce and theft of organisational resources. Lack of institutionalisation of local LSP further explains longevity of institutional uncertainty in the local LSP industry and diffusion of norms such as corruption, bribery and lack of legal enforcement and compliance. Thus, impeding organisational efforts for social sustainability initiatives as reflected in the following framework:

Figure 2: The research framework



For a robust social sustainability system design, implementation and diffusion, it is imperative to institutionalise local LSP industry (Jia *et al.*, 2018; Zhu, Sarkis and Lai, 2013). Existence of industrial and local laws but lack of their enforcement results into institutional voids which impede social sustainability initiatives, consequently, increasing supply chain vulnerability from ethical issues (Huq and Stevenson, 2020). Ineffective law enforcement and absence of regulations or the presence of unregulated and unscrutinised industries further raise institutional uncertainty and a perfect breeding den for predators to exploit social resources (Nath *et al.*, 2021). Very often, economic development is accompanied by compromises on social performance and, thus, strong institutions, effective enforcement and scrutiny mechanisms should be designed in collaboration with industry partners and enforced by government and local agencies so that social sustainability performance should not be overlooked (Kelling *et al.*, 2020). Designing social sustainability measures and formulating regulations will be futile without their effective enforcement by government and private actors (Huq, Stevenson and Zorzini, 2014; Nakamba, Chan and Sharmina, 2017). An effective enforcement of social sustainability regulations, strategies and practices is achievable through institutional pressures. Institutional pressures impeded or drive organisations in their actions, changing organisational processes and structures and enforce compliance to regulations and laws on social sustainability (DiMaggio and Powell, 1983). Consequently, compel organisations to engage in cooperative and horizontal relational and operational practices and shifting

mindset to innovation orientations, thus, leading to organisational isomorphism for enhanced social sustainability performance (Huq and Stevenson, 2020; Kelling *et al.*, 2021).

### **Conclusions:**

Empirical research in the logistics discipline have investigated LSP related security and risk issues including positive influences for LSP in regional and war zone contexts. For example, the impact of war on terror on the profitability and growth (Clemente and Evans, 2014), creating employment opportunities, knowledge sharing and infrastructural development (Ekwall, 2010). Negative influences include demand fluctuations, uncertainty and increased disruptions and financial and personal loss (Modarress *et al.*, 2012). However, it was unknown how institutional forces (DiMaggio and Powell, 1983) shape organisational responses to managing social sustainability pressures in a HTAR, consequently, how can this be done more effectively. This research support extant empirical research in the domain by supporting that all institutional forces contribute to shaping organisational responses for social sustainability initiatives (Rafi-UI-Shan, Grant and Perry, 2020; Zhu, Sarkis and Lai, 2013). However, coercive and mimetic pressures mainly contribute to ongoing institutional uncertainty (Glover *et al.*, 2014). In contrast, organisational design and existing management processes are outcome of responses to all three types of institutional pressures (DiMaggio and Powell, 1983). This study made novel and original contributions by advancing our knowledge that existing management process, organisational design and institutional uncertainty are outcome of institutional pressures to internalise the externalities of social sustainability where management processes drive organisations for social sustainability initiatives while organisational design and institutional uncertainty impeded such initiatives.

### **Theoretical contributions:**

This inductive and context specific research contributes into knowledge domain by exploring how institutional forces shape organisational responses to social sustainability initiatives in supply chain of LSP in a HTAR. This research made novel contributions by arguing that all three types of institutional pressures (coercive, mimetic, and normative) drive organisations to adopt cooperative approaches and innovation orientation by embedding relevant strategies in management processes. However, coercive, and mimetic pressures also manifested their impact in the form of existing organisational resources, culture and structure and persistent organisational uncertainty by impeding organisational efforts to internalise the externalities of social sustainability impacts. The organisational design and lack of institutionalisation of LSPs is inconducive to social sustainability initiatives. Thus, this study made a novel and original contribution in the knowledge domain by exploring the phenomenon in a HTAR and highlighting that coercive pressures are main contributing factors while normative pressures are least in shaping current organisational design, management processes and institutional uncertainty and impeding organisational efforts for social sustainability initiatives.

Our finding of institutional uncertainty further extends our knowledge on how and why organisations fail to provide their expected contributions to society. This study have made contributions from cross-sectorial (region, supplier chain partner and relevant stake holders)

perspective (Quarshie et al., 2016); following discipline traditions, used institutional theory lens to explore social sustainability strategies and practices in LSP supply chains (Huq and Stevenson, 2020) and answered call from multiple stakeholders such as research community and united nations to explore ethical and social sustainability issues which are important to communities, social equality and inclusion of marginalised stakeholders (Kelling et al., 2020). This study and its novelty and originality further enabled us to design a theoretical framework for social sustainability initiatives and practices in a HTAR which open avenues for further knowledge creation.

### **Practical Contributions:**

This study broadens managerial understanding of their operating institutional context and relevant pressures for social sustainability practices in a HTAR. This study provides valuable strategies to benchmark for management processes to respond to increased institutional pressures by engaging in cooperative relationships and adopting innovation orientation. Case companies can manage their institutional pressures by information sharing and communication, capacity sharing and development, building partnering relationships with their supply chain partners as well as competitors. This research highlights learning opportunities for case companies to evaluate their existing organisational structures and culture which is causing coercive and mimetic pressures. Thus, information sharing, communication and building relationships within and across supply chain will help in creating an open and agile culture and newly established communication channels will enhance internal and external integration. A more collaborative approach to partnering relationship within and across the supply chain will be instrumental in managing capacity and resources shortage related challenges and foster more innovation orientation through learning and knowledge sharing within and across the supply chains.

This research helps LSP in a HTAR that their organisational design and institutional uncertainty can cause coercive and mimetic pressures for social sustainability initiatives. Consequently, management processes were designed as response to deal with coercive and mimetic pressures. However, response categories within management process (cooperation and innovation orientation) also requires management to take initiatives to reduce institutional uncertainty by institutionalisation their operations and structures. without institutionalisation, it is highly unlikely that the overall frequency and magnitude of coercive and mimetic pressures will be reduced because the case companies are already under huge pressures from their organisational design perspective.

### **Limitations and future research directions:**

We acknowledge that due to an inductive exploratory qualitative research its findings cannot be generalised to other companies in the industry and across industry and, thus, only valid and true for the research participating case companies. Future research can focus on foreign based and much larger companies to explore role of institutional pressures on shaping organisational and managerial processes for social sustainability initiatives and minimising the impact of institutional uncertainty. This could be done by adopting diverse analytical methods

to test our proposed framework and from theoretical perspectives such as agency theory, transaction cost economic and dependency theory. Similarly, future research can also explore the role of institutional pressures for social sustainability initiatives in other terrorism, wars and conflict areas such as Iraq, Ukraine, Nigeria and Sudan. This will help a cross-comparison from regional perspective and explorations of contextual peculiarities enabling researchers to explore new strategies which can be benchmarked by the corporate Professionals.

This study explored that institutional uncertainty is mainly due to lack of institutionalisation of LSP in the research context region. Consequently, coercive and mimetic pressures for social sustainability led to unethical practices such as corruption, bribery and price fixing and making cartels to control industrial behaviours. Future research can add a more diverse set of participating firms such as legal and law enforcement, asset recovery organisations and law and order maintenance as potential cases to explore impeding factors and challenges for institutionalisation of LSP institutions and, consequently, reducing uncertainty and ensuring legal enforcement and establishing a more socially sustainable regulated industry. Future studies could also explore the role of corporate governance, top management team and board of directors in influencing the social sustainability of LSPs.

This research finds that case companies engaged in coopetitive relationships and processes. However, empirical research reports that such coopetitive relationships and processes need governance mechanisms to managing tensions for balancing such paradoxical relationships. Future research can shed a light on managing tensions and governance mechanisms in coopetitive relationships and processes in the supply chains of LSP in a highly terrorism affected area. Such research would require identifying those LSP companies who cooperate and compete at the same level and within same temporal boundaries and willing to collaborate for the research purpose. Although it is beyond the scope this research, role of modern innovative digital technologies for social sustainability initiatives in relation to institutional pressures can also help us better understanding of how technology-human interface can add or impede social sustainability performance and contribute into social development goals set by united nations and advocated by community and corporate executives.

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