International and local NGO supply chain collaboration

An investigation of the Syrian refugee crises in Jordan

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Abstract

Purpose – The purpose of this paper is to identify the key drivers and challenges to supply chain collaboration in the humanitarian sector; to appraise the relationships between international non-governmental organizations (INGOs) and local non-governmental organizations (LNGOs) during disaster relief; and to explore the humanitarian context in regard to supply chain collaboration.

Design/methodology/approach – Literature from both the commercial and humanitarian sectors is discussed in the context of vertical partnerships. A Jordanian study spanning a network of 26 international and LNGOs is explored via semi-structured interviews.

Findings – The research provides valuable insights on the challenges facing LNGOs and INGOs when developing partnerships. Contextual factors, including host governmental policies and the social-economic setting of a disaster directly affect the motivations for supply chain collaboration between LNGOs and INGOs.

Research limitations/implications – The research is built on interviewees with 30 humanitarian professionals working in one country during an extended crisis. The majority of the empirical data are only from one actor's perspective, thus further research into dyadic and network relationships is required. Approaches to addressing the diverse cultural and decision-making perspectives of LNGOs and INGOs warrant further investigation.

Practical implications – Recognizing the motives and challenges to vertical partnerships between LNGOs and INGOs will assist the managers, both at the strategic and operational levels, to find solutions and evolve strategies to build effective partnerships. Compromise and consideration for partner's drivers and cultural views are essential for effective joint humanitarian relief initiatives.

Originality/value – This paper extends supply chain collaboration to a humanitarian context. Overcoming the challenges facing collaborative efforts and complementary nature of the drivers provide a means to achieve effective partnerships. Despite the uniqueness of the humanitarian context, such as the secondary nature of cost and dynamic demand, the core principles of collaboration still hold.

Keywords Jordan, Supply chain collaboration, Humanitarian relief, International NGOs, Local NGOs

Paper type Research paper

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1. Introduction

The frequency and impact of disasters have increased almost threefold in the last four decades according to the records of the Emergency Events Database (Thomas and López, 2015). In response to the diversity and intensity of these disasters, humanitarian organizations are critical to delivering the right aid to the right people at the right place quickly to alleviate unnecessary distress (Chandra, 2006; European Commission, 2008). This is particularly important for the survival of displaced persons and communities. Therefore, there is a greater focus on the development of disaster response supply chains, which are charged with transforming resources into tangible products and services and delivering them effectively and efficiently to the multiple points of consumption (Larson and Halldorsson, 2004; Thomas and Kopczak, 2005).

Over the years, supply chain management has demonstrated its applicability in the commercial sector, but less so in the humanitarian arena (Fawcett and Waller, 2013). This is because commercial supply chains are driven by relatively predictable demand, reliable data, measurable outcomes and adequate capacities (Beamon, 2004). Humanitarian demand on the other hand is unpredictable, very time sensitive and often constrained by supply, thus sidelining any profit goals (Tomasini and Van Wassenhove, 2009). Moreover, funding is typically available over a short period (Balland and Sobhi, 2013), while the outcomes of the relief actions are hard to quantify and evaluate accurately (Tomasini and Van Wassenhove, 2009; Nikbakhsh and Farahani, 2011).

When the humanitarian system fails to deliver aid effectively and efficiently can lead to a huge loss of lives (Balland and Sobhi, 2013). For example, the 2004 Asian tsunami has revealed issues related to poor quality and inappropriate aid, capacity shortcomings, such as flight and warehousing capacity, as well as poor coordination among the involved humanitarian actors (Telford and Cosgrave, 2007), causing high inventory costs, long lead times, and fewer beneficiaries to serve (Yamada *et al.*, 2006; Tomasini and Van Wassenhove, 2009; Balcik *et al.*, 2010). To overcome the coordination risk, attain economies of scale, and improve the supply chain agility, Schulz and Blecken (2010) highlighted the importance of collaborative partnerships between the key humanitarian actors in order to exchange valuable resources, such as information, money, abilities, products, and manpower. This was also supported by Cooper *et al.* (1997), Porter (1998) who stated that collaboration is a silver bullet that allow organizations to achieve a better value, enhance the supply chain performance, and improve the resilience and recovery of affected communities (Chandes and Paché, 2010).

Collaboration initiatives in the humanitarian sector can sometimes be found between international non-governmental organizations (INGOs), local non-governmental organizations (LNGOs), the private sector, governments, and the military forces, each having varying motivations and missions. For example, non-governmental organizations (NGOs) collaborate to enhance their organizational capacities, alongside the effectiveness and efficiency of their relief operations (Snavely and Tracy, 2000; INTRAC, 2001; UK Charities Commission, 2009). Governments including military, collaborate when they lack the capability to deliver aid individually (Collier, 2007, 2010). Private corporations collaborate to strengthen their brand and expand their work (Martin and Darcy, 2011; Gray and Stites, 2013). These collaborations often entail significant challenges, such as lack of mutuality, poor communication, and resources uncertainty (Kovacs and Spens, 2010; Balcik *et al.*, 2010).

Recently, the collaboration between INGOs and LNGOs has received great attention. This is because INGOs have access to global resources, but they lack knowledge and experience about the new affected regions (Crowther, 2001; Svoboda and Pantuliano, 2015). LNGOs, on the other hand, have a strong knowledge relevant to their country's policies and beneficiaries' geographical distributions, but they lack resources (Libal and Harding, 2011; Charles *et al.*, 2014; Svoboda and Pantuliano, 2015; ICRC, 2017). Thus, collaborative partnerships and coordination within and between organizations can lead to improved efficiency and effectiveness in resource allocation, and benefits that cannot be achieved by individual organizations.

The application of supply chain collaboration to humanitarian relief is relatively new (Day *et al.*, 2012; Fawcett and Waller, 2013). Current literature has mainly focused on the applicability of the "commercial" sector supply chain practices in the humanitarian sector. The application of theories and frameworks from the commercial sector to humanitarian supply chains may not deliver similar improvements due to contextual differences (Oloruntoba and Gray, 2006). Therefore, operational failures, such as "lost time, wasted resources, increased deaths among the displaced persons and communities often result from a deeply disorganized supply chain" are still predominant in the humanitarian sector (Chandes and Paché, 2010, p.337). Therefore, this research investigates the applicability of supply chain collaboration in the humanitarian sector to achieve a competitive advantage, since the collaborative partnership frameworks deep-rooted within commercial supply chain have been transplanted into the humanitarian sector without ensuring their suitability and with inadequate examination of their applicability (Day *et al.*, 2012). This will be achieved by identifying the drivers and challenges that impact partnerships between INGOs and LNGOs.

The scale of disasters and the impacts of poor coordination in aid delivery has increased the attention regarding supply chain collaboration in the humanitarian sector (Thomas and Kopczak, 2005; Ramsden, 2014). Collaboration has been described as a silver bullet that allows organizations to achieve a better value (Porter, 1998; Cooper *et al.*, 1997). However, the application of supply chain collaboration to humanitarian relief is relatively new (Day *et al.*, 2012; Fawcett and Waller, 2013). Accordingly, the collaborative partnership techniques deep-rooted within commercial supply chain have been transplanted into the humanitarian sector without ensuring their suitability (Day *et al.*, 2012).

The applicability of commercial supply chain collaboration can be examined by using a range of empirical methods, such as case studies or surveys (Gupta *et al.*, 2006; Fisher, 2007; Craighead and Meredith, 2008). Since limited previous research in the humanitarian sector has used empirical research methods (Moshtari, 2013), our research will attempt to fill the gap by collecting primary data via 30 semi-structured interviews with humanitarian professionals. Jordon was selected as a research setting due to the ongoing refugee crisis. The interviewees were selected based on their humanitarian experience and involvement in joint INGO-LNGO projects. Equal proportions of respondents from INGOs and LNGOs were purposefully selected.

The results indicate a wide range of motives and obstacles to supply chain collaboration in practice, many of which are specific to the humanitarian context. The findings provide empirical evidence to back up many of the proposed drivers in the literature (UK Charities Commission, 2009; Snavely and Tracy, 2000; Waugh and Streib, 2006; Benedetti, 2006; Emerson *et al.*, 2012; Mitchell, 2014; Scobie *et al.*, 2013; Gray, 1985; Richards and Heard, 2005; Fleishman, 2008) and identify how the social-economic context motivate collaboration. In a similar way, the challenges proposed by Moshtari (2013) and others are reinforced by the primary data, but some are brought into question due to the extended period of crisis and humanitarian activity in Jordon.

The following section provides a comprehensive review of supply chain collaboration and its application in the humanitarian context by exploring the previously identified drivers and challenges. Then, the method is explained and justified together with an overview of the empirical sample. The findings section provides a summary of the most salient perspectives of the interviewees, whilst the discussion links the key findings to previous literature leading to the identification of three propositions. The conclusion then succinctly identifies the contribution of the paper and the future avenues for further research.

2. Literature review

More than two million Palestinian refugees have fled to Jordan since 1948, followed by many others from both the Iraq and Syrian wars (UNRWA, 2016). The Syrian crisis is one of the worst man-made disaster to date (ACF, 2016). The massive influx of refugees has led to a

10 percent increase in Jordon's population (Francis, 2015; IOCC, 2016), putting great stress on water resources and petrol supply (Harper, 2008). One of the main approaches taken by Jordanian Government to tackle these problems is working with NGOs through the Jordanian Ministry of Social Development (Tobin and Campbell, 2016). Initially, the large influx of NGOs providing aid was distributed somewhat randomly, resulting in some refugees receiving donations multi-times per day from different sources and many others going without.

NGOs are "self-governing, private, not-for profit organizations that are geared to improving the quality of life for disadvantaged people" (Vakil, 1997, p.2060). NGOs can be classified in different ways. For example, NGOs can be categorized into grassroots organizations or community-based organizations, support organizations, and intermediary organizations (Rahman, 2003). They can also be grouped into INGOs and LNGOs. NGOs deliver aid to refugees (Ferris, 2003; Libal and Harding, 2011) by working against hunger, poverty, diseases (CARE, 2017), resolving conflicts (Relief International, 2017), rebuilding devastated communities (IRC, 2017; The Lutheran World Federation, 2017), as well as reuniting separated families and protecting displaced people (Refugees International, 2017).

2.1 NGO Collaboration

Due to the large scale of disasters compared to the relatively short life cycle of funded projects, most INGOs are unable to sustain a long-term presence in countries affected by a refugee crisis (Libal and Harding, 2011). Their activities also rely on the culture and environments of the host countries. Many INGOs struggle with increased competition from the commercial sector and members' states, which hamper their effectiveness (Lewis and Kanji, 2009). Therefore, INGOs now work more often through LNGOs, supporting them with financial aid, in-kind donations and upskilling. This enables the LNGOs to serve the vulnerable people through the entire response and rebuild stages (Ferris, 2003). To achieve aid sustainability, Lewis (1998) warns INGOs' practices encourage a model of dependency, where local partners depend on the external resources of INGOs during project implementations. Therefore, Libal and Harding (2011) emphasized that INGO-LNGO partnerships should be collaborative where LNGOs have more power and decision-making authority.

It is critical for INGOs and LNGOs to collaborate in Jordan, a developing country with low levels of capacities and resources (Bromideh, 2011). In Jordan, "civil society has played a small role in social development, due in part to a history of state control of this sector" (Libal and Harding, 2011, p.167). Around 4,869 INGOs and LNGOs currently operate in Jordan (Jarrah, 2009; Libal and Harding, 2011; Alghad Press, 2016) in different fields, such as sanitation, camp management, protection, and shelter, and especially women and child rights, food and healthcare. The collaboration between INGOs, LNGOs, donors, and the government has resulted in many challenges including terminology misunderstandings, power imbalances, and restricted policies that undermine capacity-building efforts and the quality of project outcomes (Sukkar, 2015).

Supply chain collaboration can be defined in several ways, but is predominately either process or relational focused (Cao and Zhang, 2012; Oliveira and Gimeno, 2014). In both instances, it is considered an interaction or relationship between two or more supply chain members who work toward mutual objectives and gain join benefits, where members communicate openly and share data, resources, risk, and build trust over the long term (Burnes and New, 1996; Boddy *et al.*, 2000; Whipple *et al.*, 2002; Golicic *et al.*, 2003; Olorunniwo and Li, 2010; Soosay and Hyland, 2015; Boyce *et al.*, 2016). Creating and maintaining supply chain collaboration requires the sharing of accurate information in a timely manner (Cheung *et al.*, 2011; Soosay and Hyland, 2015; Boyce *et al.*, 2016), goal congruence (Lejeune and Yakova, 2005), decision synchronisation (Harland *et al.*, 2004;

Soosay and Hyland, 2015; Boyce *et al.*, 2016), incentive alignment in terms of costs, risks, and benefits (Grandori and Soda, 1995; Boyce *et al.*, 2016), resource sharing (Bowersox *et al.*, 2003; Gomes and Dahab, 2010) and joint knowledge creation (Malhotra *et al.*, 2005).

Humanitarian supply chain collaboration can be categorized as low (type I), medium (type II), or high (type III) (Lambert *et al.*, 1999). Each type includes a list of activities that are recommended during the preparedness, response, or recovery phases of disasters. It is thus important to identify the type of collaboration among INGOs and Jordanian LNGO and evaluate the authenticity of the partnerships, as well as to explore and compare the main drivers of collaboration and challenges facing humanitarian partners.

At the preparedness phase in type I collaborations, NGOs meet to identify potential partners, share information, build robust relationships for networking purposes (Moshtari and Gonçalves, 2017). At the response and recovery phases, they work together to develop solutions and share information about the current situation, such as the scale of demand and potential supply (McLachlin and Larson, 2011).

At the preparedness phase of type II, a set of initiatives is designed to prepare partners to conduct projects jointly through initiatives. Through these initiatives, partners develop guidelines, standards, or capability-building programs in different aspects, such as quality. This enables promotion of these guidelines among NGOs through training courses at a later stage. At the response and recovery phases of type II, the initiatives are used to facilitate project planning and capacity analysis (Van Brabant, 1999; Moshtari and Gonçalves, 2017). NGOs may also share knowledge such "the availability of supplies, schedules of aid deliveries and their routing" (Kovacs and Spens, 2010).

In type III collaborations, a long-term commitment accompanied with a high level of interaction between partners is required to increase their capacities and capabilities. Accordingly, they share and employ their supply chain processes across different events at the same time. This includes sharing knowledge, such as availability of resources (e.g. financial and/or in-kind resources, local or international connections, and technical expertise in logistics) (Kovacs and Spens, 2010; Moshtari and Gonçalves, 2017). Moshtari (2013, p. 28) suggested that NGOs collaborate, regardless of the collaboration level, to benefit from activities, such as "information management, fund mobilization, relationship building, technology and innovation management, human resource management, and quality management."

2.2 NGO collaborative challenges

The complexity of challenges facing NGOs operating in developing countries is varied, but most common are the obstacles relating to the host government restrictions and their desire to control the NGOs' activities (Bromideh, 2011). The power imbalance, accompanied with a poor distribution of responsibilities for each partner, is another common challenge (Campbell and Hartnett, 2005; Tchouakeu *et al.*, 2011; Knudsen, 2011; ICRC, 2017). Particularly, tension usually happens between managers and local staff who are looking to be treated equally in the decision-making process (Bromideh, 2011). Another challenge is the poor governance of the NGOs and the absence of a governance board (Mukasa, 2002). The stability of partnerships is also endangered by staffing issues, such as human resource development and administration (Vilain, 2002), as well as high staff turnover and by the employment of new and inexperienced humanitarian managers. The latter often lack adequate knowledge to manage partnerships effectively (Rawal *et al.*, 2005; Stoddard *et al.*, 2007; Balcik *et al.*, 2010; Dolinskaya *et al.*, 2011; Tchouakeu *et al.*, 2011; Oliveira, 2015; ICRC, 2017). They may also not have the ability to plan, implement, or evaluate joint programs (Moshtari and Gonçalves, 2017). Furthermore, paid staff often receive indifferent trainings and lower wages than their commercial counterparts, which can lead to a lack of understanding of the broader context (Mukasa, 2002; Bromideh, 2011).

International NGO face a wide range of challenges when collaborating with LNGOs, including: funding restrictions during the preparedness phase (Moshtari and Gonçalves, 2017) and when funds are available they are typically focused on short-term projects (Cooley and Ron, 2002; Cairns, 2012; Oliveira, 2015; ICRC, 2017). They also face limited institutional capacity specifically during peak seasons that brings about intense competition over media (Van Brabant, 1999; Weiss, 2013; Apte *et al.*, 2016); poor communication and coordination among NGOs (Balcik *et al.*, 2010; Kovacs and Spens, 2010; Tigist, 2016); and an absence of mutuality at both the strategic and operational levels (Dolinskaya *et al.*, 2011; Akhtar *et al.*, 2012; Svoboda and Pantuliano, 2015).

Moshtari and Gonçalves' (2017) four categories of challenges (inter-organizational, organizational, external, and donor-related) facing the NGOs' partners operating in development countries is used to classify the previous literature presented in Table I. All of the indicators in Table I are important after a disaster strikes, whereas only those shaded in gray are critical before a disaster. Some less common challenges identified in the literature include: structural growth problems, sustainability, lack of performance accountability (Lewis, 2002; Mukasa, 2002), independency (Schulz and Blecken, 2010), identity (Tchouakeu *et al.*, 2011), missions (Minear, 2004), evaluation, effectiveness, economies of scale (Lewis and Kanji, 2009; Mukasa, 2002), uncertainty of resources and demand that affect the participation of NGOs in collaborative projects (Sommers and Watson, 2000; Cooley and Ron, 2002; Balcik *et al.*, 2010; Saeyeon *et al.*, 2015; Tigist, 2016).

2.3 NGO collaborative drivers

As with the challenges, there is a wide variety of NGO collaborative drivers (see Table II). Political effects have been highlighted as one of the main reasons for collaboration among NGOs (Sowa, 2009; Scobie *et al.*, 2013). NGOs unite to reinforce their position and to develop a focal point to facilitate the communication with governments. They also collaborate to increase their influence in debates, enhance political standing, and lobbying (Richards and Heard, 2005; UK Charities Commission, 2009; Incentivising Collaboration Workshop, 2012). "NGO coalitions can work together strategically to shape discourses, both internally inside collaborating organizations and externally shaping political and economic outcomes of their advocacy work" (Dütting and Sogge, 2010, p. 351).

NGOs also collaborate to maintain security and the safety of their employees because of their reach and closeness to vulnerable people (Michael, 2002). They also initiate partnerships to share resources (Emerson *et al.*, 2012; Mitchell, 2014), since sharing can lead to the creation of knowledge (Hardy *et al.*, 2003), greater fundraising capacity, economic efficiency (UK Charities Commission, 2009), and organizational sustainability (INTRAC, 2001; Chang *et al.*, 2011). Effectiveness is also expected to be achieved from both sharing resources and political influence (Scobie *et al.*, 2013), as partnerships allow NGOs to enhance reliability (Ferrari, 2011), and potentially increase competitiveness (Hardy *et al.*, 2003).

Reduced competition over scarce resources is a driver identified by Ferrari (2011). Ferrari (2011) suggested that NGOs can work as a team, using fewer resources to achieve more. Gazley and Brudney (2007) mentioned that NGOs collaborate to achieve "greater service quality, diffusion of risk, improved public accountability, ability to buffer external uncertainties, and conflict avoidance." Some of the less mentioned drivers include: initiating partnership to solve complex problems especially when the traditional methods have been used unsuccessfully (Gray, 1985), collaborating because of the similarity in causes, goals, or values (Benedetti, 2006; Fleishman, 2008), collaborating because of the potential effect leaders within NGOs and networks may have in establishing and managing connections between possible collaborators (Fleishman, 2008).

There is a large range of possible drivers and challenges to humanitarian supply chain collaboration. Many of the previous studies have not identified the specific interaction

Challenge	Category	Indicator	Source
External	Context	Location and timing of disasters Availability of reliable information Political environment	Balcik *et al.* (2010), McEntire (2002), Sommers and Watson (2000)
	Demand	Quantity, characteristics, and needs of affected population Urgency of relief response	Balcik *et al.* (2010), Dolinskaya *et al.* (2011), Tchouakeu *et al.* (2011)
	Supply	Remaining local infrastructure Local and international resources Number and experience of involved NGOs	Balcik *et al.* (2010), Cooley and Ron (2002), Van Wassenhove (2006)
Inter-Organizational	Strategic compatibility	Shared organizational objectives, missions, mandates, cultural values, and language Level of trust and mutability	Akhtar *et al.* (2012), Balcik *et al.* (2010), Schulz and Blecken (2010), Thévenaz and Resodihardjo (2010), Van Wassenhove (2006), Zoraster (2006)
	Operational compatibility	Similar operational policies Similar program approaches, timeframes Similar standards and techniques	Akhtar *et al.* (2012), Campbell and Hartnett (2005), Dolinskaya *et al.* (2011), Steets *et al.* (2010)
	Competition	Competition for funds Competition for visibility and media	Dolinskaya *et al.* (2011), Stephenson Jr and Schnitzer (2006), Weiss (2013)
	Power	Similarity in power and resources Symmetry between parties	Campbell and Hartnett (2005), McLachlin and Larson (2011), Tchouakeu *et al.* (2011)
	Process	Mechanisms to allocate costs, benefits, risks Accountability over performance Clear roles and responsibilities Adequate access to tools and technical skills Transparent and responsible policies	Dolinskaya *et al.* (2011), Thévenaz and Resodihardjo (2010)
Organizational	Unclear benefits	Bureaucracy, accountability, flexibility Required speed of response Risks to own competencies Risks to humanitarian identity	Akhtar *et al.* (2012), Balcik *et al.* (2010), Cairns (2012), Campbell and Hartnett (2005), Houghton (2011), Schulz and Blecken (2010)
	Capabilities	Propensity toward command and control Management capacity and leadership style Staff capability (e.g. attitude, knowledge) Incentives toward collaboration	Akhtar *et al.* (2012), McEntire (2002), Tchouakeu *et al.* (2011), Thévenaz and Resodihardjo (2010)
	Resources	Availability of resources Stability of team leaders and focal points	Akhtar *et al.* (2012), Balcik *et al.* (2010), Dolinskaya *et al.* (2011), Rawal *et al.* (2005), Van Brabant (1999)
Donors related	Use of resources	Timing of resource availability Required burn rates Earmarked funds establish uses	Balcik *et al.*, (2010), Stephenson Jr and Schnitzer (2006)
	Incentive mechanism	Access to short-term and reusable contracts Competition over scarce local resource	Cairns (2012), Cooley and Ron (2002), Taylor *et al.* (2012)

Source: Adapted from Moshtari (2013)

Table I.
NGO collaborative challenges

Category	Indicator	Time Horizon	Source
Efficiency	Reduce cost Eliminate duplication Similarity in causes, goals, or values	Before and after Before and after Before a disaster	UK Charities Commission (2009), Snavely and Tracy (2000), Waugh and Streib (2006), Benedetti (2006), Fleishman (2008)
Service quality	Sharing and building capacity Increase effectiveness Tackle complex problems	After a disaster Before and after After a disaster	Emerson *et al.* (2012), Mitchell (2014), Scobie *et al.* (2013), Gray (1985)
Communication	A focal point to deal with governments Manage connections between possible collaborators	Before and after Before a disaster	Richards and Heard (2005), UK Charities Commission (2009), Incentivising Collaboration Workshop (2012), Fleishman (2008)
Environmental	Sustainability Security and safety	After a disaster After a disaster	INTRAC (2001), Michael (2002)

Table II.
NGO collaborative drivers

between LNGOs and INGOs. Thus, the aim of our study is to explore which of the drivers and challenges listed in Tables I and II are more pressing when large INGOs collaborate with often smaller LNGOs. This will be achieved by exploring the humanitarian response to the ongoing Syrian crisis.

3. Method

Qualitative research was conducted to investigate the drivers and challenges that constrain INGOs and LNGOs partnerships during a humanitarian response. This approach was deemed to be suitable since the flexibility of the process enables a deep understanding of the dynamics of collaboration *in situ*, and provides detailed insights on why and how things occur during specific events (Eisenhardt, 1989). Jordan was selected as the case country because of the high influx of war refugees and displaced people from Syria, Iraq, and Palestine (UNRWA, 2016). The flood of refugees has led to a 10 percent increase in population, which has exacerbated the challenges Jordan faces (IOCC, 2016; Francis, 2015). More than 4,869 LNGOs and INGOs are working to provide Syrians and Jordanians with basic aid and long-term development programs (Alghad Press, 2016). To increase the level of international operations within Jordan, several INGOs have initiated collaborative partnerships with LNGOs (Libal and Harding, 2011), such as partnerships between International Relief Development and Takaful, Save the Children and Jordan River Foundation, Care International and Atfalona.

Data were collected from 30 participants from 13 well-established INGOs and 13 Jordanian LNGOs. NGOs were identified from the United Nations High Commissioner for Refugees' (UNHCR) website and through a list provided by the Jordanian Ministry of Social Development. Later, a combined purposeful sampling procedure comprised snowballing and criterion sampling as well as key informant's method was followed (Vogt and Johnson, 2011; Lindlof and Taylor, 2011; Tremblay, 1957) in order to insure a comprehensive coverage (Table AI provides respondent information). Data collection was halted at 26 cases due to saturation and time limitations. The sampled NGOs provide a comprehensive range of aid (e.g. camp management, food security, child protection, shelter, nutrition, and so forth), thus avoiding over emphasis on a specific type (Palmatier *et al.*, 2007). Interviewees were selected based on their practical knowledge of the research topic and included a range of roles including project managers, country directors, logistics managers, and operations officers. The majority of the interviewees had at least six years of working in the humanitarian field and had been involved in the development and supervision of collaborative projects.

Over a six-week period, semi-structured interviews (Appendix 2 contains the interview protocol), focused on two primary questions, the drivers and challenges facing INGOs and LNGOs collaboration, were conducted. A semi-structured protocol was used because the organizations sampled had dissimilar abilities and operated in different contexts, thus allowing the researcher to appreciate the uniqueness of each organization and adapt the questions to suit.

Combined data from interviews, secondary sources, and observations were used to support construct development (Eisenhardt, 1989). After conducting interviews, follow-up questions were sent by e-mail, answered through phone calls, and 15 minutes' face-to-face discussions. Interviews lasted 45-70 minutes and were recorded. The interviews were translated, transcribed, and checked for accuracy. The interviews were supplemented by information from secondary sources (published guidelines and reports for partnering with LNGOs provided by leading INGOs, websites, published articles). The researchers were also fortunate to be invited to several formal meetings between INGOs and their local partners, thus allowing direct observation of the collaborative operations. To allow overlap of data collection and data analysis (Eisenhardt, 1989), the researchers preserved field notes based on their impressions and insights (Van Maanen, 2011). Ongoing modifications were made to the data collection instruments in order to investigate developing themes and to gain deeper insight (Eisenhardt, 1989), such as the addition of secondary sub-questions after each interview. A triangulation design (interviews, archival sources, and observations) allowed the researcher to improve reliability and validity (Yin, 1994). Using multiple participants and alterative data sources alleviates the biases of a single participant and facilitated the capture of a wide range of NGOs' perceptions (Pagell and Wu, 2009).

Case analysis is a process of data reduction and data management (Miles *et al.*, 2013). In this study, there were around 30 pages of transcripts per NGO, alongside published data and observation notes. The objective of case analysis is to "structure, define, reduce, and make sense of this information" (Pagell and Wu, 2009. p.45). Primary themes were identified through an open-coding procedure (Emerson *et al.*, 1995; Baldwin, 2008). Tabular displays of data include drivers and challenges of each NGO were used, as suggested by Leonard-Barton (1988), to organize, refine, and consolidate the very large pool of data, as well as to identify patterns and speed up cross-case comparisons (Eisenhardt, 1989). To verify themes, a pattern matching analysis technique was conducted (Padgett, 2016; Saunders *et al.*, 2012). The researchers divided the qualitative data by source (interviews, observations, and archival), so when the qualitative data from different data sources matched, the findings were considered stronger and the patterns more valid, while conflicting data were gathered in another group case to be analyzed, revised, or thrown due to inadequate verification (Eisenhardt, 1989). Later, the qualitative data were compared to the prior construct from previous literature to examine the differences and similarities and to identify the contribution of the study (Eisenhardt, 1989). For final analysis, Moshtari and Gonçalves' (2017) four categories of challenges were used (external, organizational, inter-organizational, and donor) together with eight subthemes. Regarding drivers, many themes were identified, such as capacity building, effectiveness, and access to private funding.

Diverse sampling of a specific population who occupy positions relevant to the research topic were selected to enhance external validity, reduce variation, and increase generalizability (Gersick, 1988). All the interviews were conducted under similar conditions to avoid bias and build reliability (Guba and Lincoln, 1985). The interviews were recorded and transcribed to ensure accuracy. The transcripts and research findings were sent to participants and industry experts for confirmation and comments to establish the validity of the results. Multiple data collection methods were triangulated in order to enhance reliability (Eisenhardt, 1989). The use of a coding scheme ensured consistency and independent checking of the coding scheme and interview transcripts was conducted to ensure data reliability.

4. Findings

The empirical data will be explored first in regard to the drivers and then the challenges of international and LNGO supply chain collaboration. Previous literature will then be cross-referenced with the empirical findings to identify the contextual effects on humanitarian collaboration.

4.1 Drivers

Several key drivers that encourage both INGOs and LNGOs to collaborate were identified. Many INGOs expressed their satisfaction with the fast approvals, in relation to decision making, that were granted when dealing with large LNGOs that have tribal authority and good connections with the ministries, or that can offer tax and custom exemptions on the donations received. Such LNGOs are normally sponsored by members of the Jordanian Royal Family. Many of the Royal LNGOs in Jordan are embedded in networks of newer and smaller LNGOs that act as service providers. Thus, Royal LNGOs and their international partners have the capability to steer their resources toward designing effective projects instead of spending excessive time on developing and monitoring new partnerships. A local manager described the partnerships between Royal LNGOs, INGOs, and fledgling LNGOs as bidirectional relationships. He explained:

> Younger LNGOs can also benefit from partnering with Royal LNGOs and INGOs. They can become eligible institutions in the eyes of INGOs and the Jordanian Ministry of Social Development because of such type of partnerships.

Participants working in some INGOs mentioned that collaborating with the Royal or large private LNGOs, who have an active board of trustees who meet frequently and work based on a structured decision-making system, led them to gradually develop project models in which local partners are the main leader and INGOs are the sponsor. It also allowed a more secure, effective, and efficient working environment. One LNGO participant's explained:

> We provide INGOs with free spaces for warehousing, operating daily activities, or training which minimize the international partners' need for outsourcing. We also have long-term agreements with 3P providers, thus allowing effectiveness and efficiency. In such cases, INGOs participate in monitoring these agreements to ensure their compatibility with international standards.

In addition, well-established LNGOs can also deliver fast and low cost operations as explained by the majority of local respondents, for example:

> We turned out to manage the daily field operations on behalf of INGOs, which allowed them to decrease their mission staff and the high overheads associated with them" and "The international staff is not required anymore to drive to remote areas. Hence, extra expenses of vehicle maintenance and petrol were reduced tremendously.

Most of respondents stated that collaborative efforts between INGOs and LNGOs led to a greater accessibility to hidden refugee communities. They explained that refugees, who live in conservative remote areas, refuse intervention by the international community, while they feel safe in dealing with LNGOs due to the cultural convergence. The following statements express the perspective of LNGOs:

> We have the local knowledge to facilitate communication with the vulnerable population to identify problems and to accelerate implementations". "Many refugees as well as locals refuse the white man mentality. Thus, several cases of physical abuse were recorded against the international workers, which led the INGOs to ask the LNGOs for help.

According to one LNGO's interviewee, the collaborative effort between INGOs and LNGOs to access refugees in hidden communities was first introduced during the Iraqi displacement in 2004. Hundreds of Iraqi refugees stayed unregistered because of their fear of being deported to their country. Thus, they settled down in hard-to-reach areas where few INGOs were able to determine their locations. Thus, a great number of partnerships with LNGOs were established. In such cases, INGOs design the programs, while LNGOs modify them to suit the local context. "It is a complementary work" as described by several INGOs.

The majority of respondents mentioned that LNGOs collaborate to reduce unemployment rates, an LNGO manager highlighted:

> Huge opportunities for promoting the economy, and reducing unemployment were achieved because of such type of partnerships.

Local and international respondents explained how liaison offices were established in remote areas to facilitate the communication between local and international partners and to create jobs for the locals. Some of the interviewees working with INGOs and LNGOs stated that, in most cases, initiating partnerships could enhance their reputation and opportunities for more grants, thus enabling organizational empowerment and sustainability. Three INGO interviewees stated:

> LNGOs bring an element of ownership that is preferred by funders.

> Collaborating with LNGOs has increased the INGOs' opportunity to access private funding provided specifically to back up social development projects implemented by LNGOs. Similarly, LNGOs rely on INGOs to apply for private funding since many LNGOs still lack the ability to write proposals.

> Nowadays, donors are giving more attention to the relief development projects that are managed by locals. We realised how important it is to align ourselves to donors' agendas. Thus, we started partnerships with local NGOs to gain advocacy.

The assertions made by the research participants provided evidence of a wide range of drivers that result in harmonious partnerships between INGOs and LNGOs. Table III compares the drivers identified from the existing literature and the empirical data, the most common drivers identified during the study are highlighted with a double XX.

4.2 Challenges

Several challenges affecting partnerships and collaborations between INGOs and LNGOs were revealed during the interviews. The main concerns of the participants included

Drivers	Key source	Before a disaster	After a disaster	INGO	LNGO
Efficiency	UK Charities Commission (2009)	X	X	X	
Effectiveness	Scobie *et al.* (2013)	X	X	X	
Eliminate duplication	Waugh and Streib (2006)				
A focal point to deal with governments	Richards and Heard (2005)	X	X	X	
Diffusion of risk	Gazley and Brudney (2007)				
Security and safety	Michael (2002)		X	X	
Sustainability	INTRAC (2001)		X		X
Reduced competition over scarce resources	Ferrari (2011)				
Greater service quality	Gazley and Brudney (2007)	X	X	X	X
Empowerment and ownership	Emerson *et al.* (2012)	X	X		X
Improved public accountability			X	X	
Decrease unemployment rate			XX		XX
Royal and smaller LNGOs cooperation			XX	XX	
Reputation and credibility			XX	XX	XX
Tribal connections			XX	XX	
Access private funding			XX	XX	XX

Table III. LNGO and INGO collaborative drivers conflicting objectives, priorities, and terminology that often resulted in poor communication between their organizations. In many cases, partners had not agreed upon the outcomes to be gained from the cooperation, the tasks to implement together, and the ones to achieve separately. Thus, some LNGOs had to utilize funding to enhance their goals with vulnerable people as a secondary priority. One LNGO gave an example:

> Objectives and priorities are not the same. Quality is the most important thing for LNGOs, whereas INGOs care about time and cost, then quality.

Often when INGO tried to build the capacity of an LNGO, both parties were surprised to discover their dissimilar viewpoints on how capacity would be built. For instance, one LNGO's participant defined capacity building as its capability to deliver people's needs, whereas the participant from INGO defined the LNGO's capacity based on its capability to align itself with the donors' agenda.

The barriers of culture and language were also recognized by participants as major reasons for miscommunication between partners. Many of the international participants described cultural differences between the international and local staff. They also cited a cultural clash between local staff from dissimilar tribal backgrounds. One manager in an INGO stated:

> Although ninety-eight percent of our staff are Jordanians, they sometimes belong to different tribal backgrounds. Tribal animosities may lead to personal animosities that affect the harmony between members of an organization, or between partners.

Regarding the differences in culture, another INGO manager said:

> Two years ago, an executive of an INGO came from Washington to make sure that everything goes well in Jordan. He went to one of the remote areas and talked to everyone except the female staff of the LNGO. He might be confused and did not know how to act properly. However, the LNGO sent a complaint to the Jordanian Government, and the INGO activities became limited in the country.

Overcoming this issue was cited as a big challenge by the INGOs. Therefore, the majority agreed on the importance of listening as a key factor for a successful relationship, as demonstrated by the comments of an INGO project manager:

> In the Azraq reserve, one of the INGOs, which is interested in wildlife conservation, requested help from its local partner, an organization with extensive experience in this field, in order to draw up a plan to convince donors to support their joint project. The LNGO was effective in its role, and knew how to attract animals by putting food in the right places at the right time during the donors' visit. The subsequent funding of the project was the successful outcome of effective communication between partners.

The asymmetry of power between LNGOs and INGOs remains unsolved in Jordan, with INGOs holding a controlling role, they typically set the goals and schedules, and the outcomes important to local partners are often overlooked. Many LNGOs stated that INGOs discuss the issues of local community and refugees away from beneficiaries. An LNGO expressed the asymmetry of power:

> Even when focus groups are employed by donors to evaluate local community needs, results will be manipulated until they become compatible with INGOs' and donors' agendas.

In 2010, a project was established in Wadi Rum (south of Jordan) to teach the local community how to use technology. Centers were established, fully equipped and funded by the INGO operating in the area, but 80 percent of the locals were illiterate and thus unable to use the computers. The issue is encapsulated by an LNGO manager:

> This is a result of the inaccurate proposals that are prepared by foreign managers, who consider themselves superior and know what is best for all.

As a result of the ethnocentric behavior of the INGO's several cases of physical abuse were recorded against international workers because the local community rejected the "white man mentality." Although managing power asymmetry was stated as a challenge by many small- or medium-sized private LNGOs, Royal LNGOs did not stress power asymmetry as a problem. In contrary, some INGOs complained about the over control of these Royal LNGOs. An INGO manager said:

> We cannot say no to Royal LNGO. Saying no means that we might be deported out the country.

Both local and international participants showed strongly held opinions regarding ongoing tension between partners in terms of trust, commitment, and respect. For LNGOs, underestimating their capabilities generates distrust. An LNGO manager stated:

> Out of the blue, our international partners send inspectors, without informing us beforehand, which shows that they do not trust our capabilities and way of implementation.

For INGOs, the uncertainties about LNGOs' resources have promoted a lack of commitment and disrespect. The majority reported their inability to determine the genuine LNGOs that are dedicated to spending funds in a proper way. Other INGOs pointed out that many LNGOs might falsify their work and pretend that they have the same agendas of INGOs to keep receiving donations. One INGO respondent stated:

> Many of LNGOs shut down after receiving the first payment. They are not real organisations.

The low level of trust between LNGOs and INGOs prevented many LNGOs from fully documenting the security challenges they face during project implementations, because they believe that funding might stop. For instance, an LNGO manager said:

> We know some LNGOs were under pressure to put their international partners' logos on the distributed parcels, although these INGOs were aware of the danger that local staff might face because some beneficiaries refuse assistance from the West.

Many LNGOs stated that inadequate participation of INGOs in assessing mutual projects is another problem that increased distrust between local and international partners. A local project manager said:

> INGOs do not have time to attend the activities we organize for beneficiaries because they do not have adequate number of caseworkers and they are the donors of multi LNGOs. Thus, they depend on our reports to evaluate projects' outcomes. We just want them to attend in order to discard the feeling of being treated as service providers only.

During interviews, the majority of international participants criticized the existence of inexperienced local managers who treat their organizations as private companies, aiming to achieve personal benefits without having a clear mission, vision, or resources. They also criticized the racist attitudes that local managers have toward refugees. Other respondents complained about the local managers' tribal connections, in line with which many of them impose conditions such as securing jobs for their relatives in exchange for getting work done. The following statement is typical of INGO's perspective:

> The root cause of this problem stems from the Jordanian Government's granting power to tribal authorities, in addition to the over-simplified requirements for establishing an LNGO. They only require a group of seven people to be registered, stating no restriction regarding their expertise.

Moreover, the vast majority of respondents reported that the Jordanian Government forces them to submit guidelines and periodic evaluation reports regarding project implementation. Their projects must also entail working jointly with LNGOs. According to INGOs, getting approval for these projects determines their eligibility to work in Jordan.

The difficulty of getting approval has been cited by many INGOs. One of them stated, for example:

> Before starting implementation, we should get approval from the Ministry of Social Development, the Ministry of Planning and International Cooperation (MOPIC), as well as from the Ministries of Health, Education, and so forth, depending on the project type". "In specific cases, further investigations are implemented by the Jordanian Intelligence for security reasons.

These restrictions are necessary to maintain the safety of the country, but not all of them are in favor of the aid work. An LNGO manager explained that huge opportunities for building LNGOs' capacities, promoting the economy, and reducing unemployment were lost due to these excessive safety practices. Many INGOs also stated that there is no tax or customs duty exemption on imports, which means lengthy and complex paperwork. A logistics manager in an INGO pointed out:

> Last year, a shipment was hold for four months in the port because of the high customs duty on medicines…At the end, the products expired.

To accelerate the work, INGOs deal with LNGOs which act as a government delegate. These LNGOs are more dominant and powerful in comparison to other local partners, but with less logistical capabilities compared to INGOs. In addition, other respondents reported that INGOs do not share 3PLs. In fact, everyone aims to get the job done individually, which resulted in the majority of respondents to highlight inefficiency and ineffectiveness as a major challenge facing INGOs in Jordan.

The majority of local participants also mentioned that due to the restricted access to funding, and the need to maintain their continuity, they sometimes align themselves with the INGOs conditions. Therefore, they are now accepting pre-designed projects. A program coordinator in an LNGO stated: "Many LNGOs shut down because of their inability to comply themselves with the INGOs funding conditions." For instance, a donation was available to provide Syrians with educational courses, where part of the fund was allocated to support homosexuality. Despite the significant conflict with the local culture norms, the LNGO was under pressure to implement the project.

Table IV summaries the most common challenges facing NGO collaboration in Jordan. The X symbol indicates the partner from whom the challenge emanates. The Royal LNGOs are the only local organizations that initiated partnerships with INGOs before the Syrian crisis.

5. Discussion

5.1 Comparison of empirical drivers with previous literature

Based on the research findings, key drivers can be categorized into those particular to INGOs or LNGOs and those common across both groups. Capacity building and its positive impact on local sustainability and ownership was the strongest empirical driver. Despite that, most of the local participants pointed out a lack of capacity-building initiatives. According to LNGOs, some initiatives are a façade to impress donors. Many participants also reported that even when INGOs try to empower LNGOs, their attempts are confined to training or workshops without giving adequate attention to strengthening technical, operational, and organizational capabilities.

The NGOs are like businesses which collaborate to improve brands and enhance reputation and credibility among stakeholders to attract more funding (Gray and Stites, 2013). Thus, attracting more donors and enhancing reputation are mutual key drivers. In this research, the presence of local partners determines the INGOs' eligibility to access private funding provided specifically to facilitate social development projects implemented by LNGOs (ACF, 2008). Similarly, LNGOs rely on INGOs to apply for private funding since many LNGOs lack the ability to write proposals.

Category	Challenge	Before a disaster	After a disaster	INGO	LNGO
Inter-organizational	Dissimilar objectives, missions, values		X		X
	Indifferent communication		X		X
	Level of trust among organizations		X	X	X
	Strength of sense of mutuality		X	X	X
	Similar operational policies		X		X
	Similar programming approaches, timeframes		X	X	X
	Similar standards and techniques		X		X
	Competition for fund				
	Competition for visibility and media coverage	X	X		
	Similarity in organizations' power, and resources	X	X	X	
	Symmetry between the parties	X	X	X	X
	Mechanisms to allocate costs, benefits, risks		X	X	X
	Accountability over performance		X	X	X
	Clear roles and responsibilities		X	X	X
	Adequate access to tools and technical skills		X		X
	Adoption of transparent and responsible policies		X	X	X
Organizational	Bureaucracy, transparency, accountability	X	X	X	X
	Required speed of response		X	X	
	Risks to own competencies				
	Risks to humanitarian identity				
	Propensity toward command and control focus	X	X	X	X
	Management capacity and leadership style		X		X
	Staff capability (e.g. attitude, experience)		X		X
	Incentives toward collaboration		X	X	
	Availability of resources	X	X	X	X
	Stability of team leaders and focal points		X	X	X
Donor-related	Timing of resource availability		X		
	Required burn rates		X	X	X
	Earmarked funds establish uses		X		X
	Access to short-term and reusable contracts				
	Competition over scarce local resource				
External	Location and timing of disasters	X			
	Availability of adequate and reliable information	X			
	Political environment	X	X		
	Quantity and needs of affected population	X	X		
	Urgency of relief response		X		
	Remaining local infrastructure				
	Availability of local and international resources	X	X		
	Number and experience of organizations		X		X

Table IV. INGO-LNGO collaborative challenges in Jordan

Although the efficiency was seldom expressly mentioned by INGOs, many LNGOs stated that it was distinctly felt. The majority of local participants cited that replacing the international mission staff with less expensive local ones is a reason for such partnerships (ACF, 2008). They also agreed that the free spaces of local partners minimize the international partners' need for outsourcing (IIP Digital, 2012). This was particularly true when warehousing is a secondary requirement for INGOs.

Effectiveness was also retained as a shared key driver. The INGOs identified the contribution of local knowledge in addressing complex social issues, such as hidden refugees' communities, enhancing visibility, and service quality. This finding is in line with the previous work of Hardy *et al.* (2003) and the Incentivising Collaboration Workshop (2012). Conversely, LNGOs depend on INGOs' funding to serve more beneficiaries.

5.2 Comparison of empirical challenges with previous literature

The organizational challenges which emerged in the empirical findings were linked to the managerial capabilities and bureaucratic behavior of NGOs. Our study confirms McEntire's (2002) findings that a lack of management capacity is the main reason behind instability in partnerships. In Jordan, many local managers lack experiences regarding building robust relations with donors or writing proposals. The root cause of this problem stems from the simplistic requirements for establishing a LNGO, where no expectations regarding experience in the humanitarian field are required. Many LNGOs, on the other hand, demonstrated that the bureaucratic behavior of partners could result in delays and thus instable partnerships, as postulated by Akhtar *et al.* (2012). Although the bureaucracy issue was widely expressed by LNGOs, some INGOs stated that they have also been affected by the inflexibility of their local partners' systems that endangers the sustainability of partnerships (Campbell and Hartnett, 2005). For instance, one international project manager stated:

> Some local partners have a very restrictive working environment as they are tied by the hierarchy. So, when something does not go well, we cannot skip the front-line staff and just contact the upper-management.

The issue of personnel turnovers was also highlighted as a challenge by the research participants in line with the prior study of Rawal *et al.* (2005). Many participants stated that their missions are managed by guidelines that new staff find easy to follow, but that they are facing a problem related to setting long-time priories and developing relationships between new staff and stakeholders.

The challenges related to donors appeared strongly in the empirical data. The majority of participants complained about the limited funding that generates competition over insufficient resources, as noted in the literature (Taylor *et al.*, 2012). The NGOs' attempts to secure donations have been described by Moshtari (2013) as the main reason why establishing authentic partnerships are secondary as they strive to survive. Most of the participants also criticized the pre-designed projects that are imposed by donors, and that prevent their organizations from creating effective partnerships (Steets *et al.*, 2010). The Jordanian Government, for instance, has refused different programs, such as the one that supports homosexual refugees, since these programs contradict the traditions and religious beliefs of the Jordanian community. Even when the pre-designed programs match the beneficiaries' needs and traditions, they are mostly short-term projects, up to one year, thus putting NGOs under pressure to continuously search for new donors.

The restrictive political environment of the host countries and its negative impact on the effectiveness and efficiency of the humanitarian work was criticized by both the research respondents and the study by Sommers and Watson (2000). At the beginning of the Syrian crisis, the Jordanian Government allowed INGOs to operate in Jordan with few restrictions on their work. Unfortunately, many INGOs spent funds on administration and designing projects that did not suit the context. Thus, the government imposed restrictions, such as frequent evaluation reports and tax on donations, to monitor the INGOs' work as well as to support the country's ailing economy. Furthermore, many of the international respondents complained about the proliferation and lack of experiences of LNGOs. In Jordan, around only five LNGOs are classified as qualified NGOs. These LNGOs were established by the Royal Family, which allowed them to develop as reliable organizations that have the power to contribute in the decision-making process, while the remaining LNGOs are considered tools to facilitate the INGOs' work. Thus, few authentic capability-building initiatives were observed in Jordan.

The findings stressed the negative impact that incompatibility or dissimilarity in operations, strategies, power, and process can have on partnership's performance, as was previously pointed out in Zoraster's (2006) study. The majority of INGOs cited the absence of mutuality in terms of operations led to strategic complications, such as low trust and commitment. Moreover, many LNGOs stated that the absence of mutuality in terms of power led to an unclear definition of responsibilities, miscommunication, and process failure. These recognitions have been confirmed by several scholars who emphasized the necessity of defining the inter-organizational challenges for more effective relationships (Akhtar *et al.*, 2012; Van Wassenhove, 2006; Tchouakeu *et al.*, 2011; Dolinskaya *et al.*, 2011; Thévenaz and Resodihardjo, 2010).

5.3 Contribution

The main differences between the drivers identified in the literature review and the findings was the development of a focal point and human security, stated by Richards and Heard (2005) as the most common motivations for collaboration. Many participants cited that the focal point motivation is only important for the projects that require direct approval from the Jordanian ministries, or for the LNGOs that attempt to work abroad. Human security was rarely mentioned by the respondents. This is because the security issues in Jordan are under the supervision of the military forces. Another difference is that coordinating work appeared as a key motivation (Richards and Heard, 2005), but was not stated by the respondents. In fact, this driver was reported as the UNHCR-Jordan main mission. These insights are summarized in the following proposition:

Proposition 1. Host governmental policies influence INGO-LNGO supply chain collaboration.

New collaborative drivers were identified in this study. INGOs collaborate with LNGOs because of the necessity of working with locals who have tribal connections that enable them to solve complex tasks. The findings suggest tribal connections as one of the workaround techniques that are used for accomplishing a task when the planned methods do not achieve the desired outcomes. Workarounds were mentioned by Koopman and Hoffman (2003). Competition was also suggested as a key driver for collaboration in Jordan. The Royal LNGOs that compete with INGOs in regards to capacities and resources is unusual in developing countries. Royal LNGOs achieve this via a network of smaller LNGOs that work as service providers empowered to deliver efficient, effective, and high quality services. The difficult economic situation of Jordan coupled with the well-educated population also motivated the LNGOs to enhance employment rates. These points are summarized in the second proposition:

Proposition 2. The social-economic context affects INGO-LNGO collaborative drivers.

The challenges identified in the study differ somewhat to previous literature. The main difference was access to reliable data about the disaster, which is normally very difficult to acquire (Day *et al.*, 2009; Schulz and Blecken, 2010). Many respondents stated that they did not face issues regarding data availability or accuracy during the response or recovery phases, since UNHCR-Jordan alongside the Jordanian Government are responsible for regulating the access of refugees across borders, as well as updating and sharing the related data among the humanitarian stakeholders. Additionally, the extended presence of the UNHCR in the region, over 70 years, allowed better estimates of beneficiaries' needs, thus our third proposition:

Proposition 3. Access to accurate humanitarian information can be alleviated by a central agency.

5.4 Implications for practice and refugee care

The research findings show the existence of inauthentic capacity-building initiatives, resulting from treating LNGOs as tools or at best service providers. Hence, INGOs should consider LNGOs as long-term investments requiring genuine capacity-building initiatives. These initiatives would go beyond the tangible resources into developing the financial and humanitarian resource management, strategic management, information systems, and external relationships (Allen *et al.*, 2011). INGOs should also allow LNGOs to participate in evaluating shared projects. This is because of the gap which exists between the performance measures developed by the INGOs and the aspects of the projects that should be measured. Furthermore, it is recommended that INGOs give more attention to field visits since this will improve levels of trust, commitment, and respect among partners. It will also decrease feelings of superiority over LNGOs.

LNGOs should organize periodic meetings to share their workarounds tactics to be reused in similar situations. Like Royal LNGOs, smaller and private LNGOs can also develop robust clusters (a network of LNGOs that share resources and operate as service providers) to enhance their position as credible entities in the eyes of INGOs and the government. These clusters could benefit from external mentors' experiences. For instance, the external mentors can teach the clusters' members tactics to enhance their internal systems (e.g. writing proposals, negotiations, brainstorming, exploiting the scarce resources effectively, and recruiting volunteers). Finally, donors should review and modify their restrictive policies to allow partners to invest in enhancing their relationships and capacities. The host government, for example, can employ a committee of advisors who can build robust relations with donors to ensure demand-oriented funding.

Findings from this study have several implications regarding the logistics for refugee care resulting from human slow onset disasters. Collaborations between INGO and LNGO would lead to a greater accessibility to hidden refugee communities. Often refugees who settled down in hard-to-reach areas due to fear of being deported to their country do not have access to aid facilities. Without local knowledge, it will be difficult for INGOs to reach these vulnerable beneficiaries. Within the context of this study, collaborative efforts with the LNGOs helped the INGOs to estimate the geographical distributions of refugees, their numbers, and specific needs. Likewise, the INGOs also identified the contribution of local knowledge in addressing complex social issues. LNGOs are able to work around issues relating to cultural differences, where refugees have often refused intervention by the international community, while they feel safe in dealing with LNGOs due to the social connections and cultural convergence. These efforts resulted into better aid distribution, enhanced visibility, and the provision of services to the vulnerable refugee group.

Resource sharing including, knowledge, skills, and funds between INGOs and LNGOs would facilitate effective coordination of activities for refugee care. INGOs have better access to global resources, and employ their connections in representing locals' issues in front of the international community, while LNGO can better identify and address the refugees specific needs within the local context. Resource sharing thereby allows the creation of value, increase efficiency, and a reduction of risks in logistical operations for refugee care. In addition, enabling flexibility in collaborative partnerships between INGO and LNGO would improve service effectiveness of logistics operations for refugee care. For instance, INGO and LNGO partners have to switch their operations from planning health trainings for locals, into organizing mobile clinics to serve refugees, due to an outbreak of disease and increased number of Syrian refugees to the Northern provinces where medical services are scarce. Flexibility to meet mutual objectives and resource reallocation between the two organizations helped to deliver focused need-based services for the beneficiaries in a shorter lead-time. Consequently, improving service effectiveness for the refugee care.

Partnerships between INGO and LNGO are not without the challenges for refugees care. Poor communication distorts the ability to create genuine partnerships. Without adequate communication and coordinated actions between agencies, refugees receive poor care and their access to wider support is hindered. Poor communication between INGO and LNGO partners results in poor planning, logistic process failures, and suboptimal outcomes for service delivery for the beneficiaries, especially when infrastructure and geography produce logistical hurdles. There is a need for improved information and documentation between agencies to support the design of management strategies for effective logistics and care of refugees.

6. Conclusion

The research seeks to identify the drivers and challenges that impact collaboration between international and locally based NGOs. This was achieved via an empirical investigation of NGO partnerships developed in response to the Syrian crisis, which began in 2011. The study provides an in-depth exploration of the humanitarian context in regard to supply chain collaboration. By identifying the shared and diverse motivations of the different NGOs, it enables greater transparency for the formation of collaborative partnerships. In particular, the study identifies the specific drivers for LNGOs so that international agencies can evaluate how they can jointly achieve their shared goals of serving beneficiary.

The research findings further extend supply chain collaboration research from the commercial field to humanitarian arena by investigating a range of challenges facing NGOs' partners while operating in Jordan. The research findings provide recommendations to assist strategic and operations managers in their endeavor to identify the major constraints and opportunities for collaboration between LNGOs and INGOs. The study also provides support in finding solutions and evolving strategies to build effective partnerships, for example, the value of local knowledge and tribal connections of LNGOs that can enhance responsiveness. Conversely, INGOs' expertise and external relationships can facilitate access to global resources.

Many of the drivers and challenges identified in the study reinforce previous research, with the exception of three additional insights. The role and policies of host governments direct affect the motivations for collaboration between LNGOs and INGOs. In a similar way, the broader social-economic context of the disaster influence the drivers for collaboration and the resultant form of any initiatives. Although several previous studies highlight issues around information availability and accuracy (Day *et al.*, 2009; Schulz and Blecken, 2010), this was not the case in Jordon, due in part to the extended presence of the UNHCR in the region.

The research is built on a single snapshot of the situation in Jordan during an extended humanitarian crisis. Thus, the research findings are limited to this context and the views of the research participants. Moreover, most of the LNGOs were located in remote areas and the effect of distance and cultural dissimilarities have limited the researchers' ability to present the perspectives of local respondents adequately. Few studies have explored the influence of culture on supply chain collaboration (Cannon *et al.*, 2010). Therefore, approaches to addressing the diverse cultural and decision-making perspectives of LNGOs and INGOs requires further investigation. The respondents were not selected according to direct organizational relationships, because of confidentiality requirements preventing them from identifying their partners. Future research could attempt to collect data from ongoing dyadic relationships to explore the dynamic drivers and challenges of humanitarian supply chain collaboration.

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Appendix 1

ID	Respondent position			Joint INGO-LNGO project experience		Humanitarian experience (years)	
	Project manager	Logistics manager	Country director	Yes	No	⩾6	< 6
INGO1	X			X		X	
INGO2		X	X	X		X	
INGO3		X			X	X	
INGO4	X			X		X	
INGO5	X			X		X	
INGO6		X		X			X
INGO7	X			X		X	
INGO8	X			X			X
INGO9	X	X		X		X	
INGO10	X			X		X	
INGO11	X				X		X
INGO12	X			X			X
INGO13	X				X		X
LNGO1	X			X		X	
LNGO2		X	X	X		X	
LNGO3		X			X	X	
LNGO4	X			X		X	
LNGO5	X			X		X	
LNGO6		X		X			X
LNGO7	X			X		X	
LNGO8	X			X			X
LNGO9	X	X		X		X	
LNGO10	X			X		X	
LNGO11	X				X		X
LNGO12	X			X			X
LNGO13	X				X		X

Table AI. Interviewee sample

Appendix 2. Interview Protocol

Lead questions/discussion topics

For the purpose of this research, what is your name, position, and responsibilities in relation to the current situation in Jordan?

(1) What are the main objectives of your organization? Mission?

(2) How many local/international key partners does your organization have? What challenges does your organization face during partnering with local/INGOs? Any benefits?

(3) What motivated you to get involved in these specific partnerships? What lessons have you learned? Any examples?

(4) In your opinion, did the level of collaboration between LNGOs and INGOs improved in the past two to five years? If yes, what factors have been important in bringing about this improvement?

Follow-up questions:

(1) Let us talk in details about a specific project, what is the type of this project (long, short, or medium term)? How do you define long-, short- or medium-term projects? What are the main activities and challenges under each type?

(2) Could you please explain the way the joint decisions are made in each project?

(3) What are the main factors that affect the decision-making process? How?

(4) How similar or different are the decision-making approach between you and your local/international partners?

(5) How do you describe your corporate culture? Do you think your corporate culture affects the relationship you have with your local/international partner? How? Any examples?

(6) In your opinion, are there any other local/international partners you think it would be better to cooperate with? Why?

(7) Did your organization save any money as a result of this collaboration? If yes, how did they do that?

(8) Did this collaboration help your organization to respond quickly to an emergency? How?

(9) What other elements do you think influences the performance of collaboration?

(10) How do you think your capabilities complement each other?

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