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So Much of Research Is Context: Fieldwork Experience in Humanitarian Logistics

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Introduction

For the last decade, humanitarian operations and supply chain management (HOSCM) research has received much attention together with several climatic extremes, complex crisis, and various global agendas discussed in the field of humanitarian, disaster risk reduction, and climate change adaptation. However, despite the growing attention from many scholars, arguably HOSCM still remains on the 'nascent' level (Edmondson and McManus 2007) as an emerging and interdisciplinary research arena in terms of the state of prior theory and research (Jahre et al. 2009). Consequently, there have been calls for the development of theory as well as research propositions in HOSCM to better understand and study the subject (Jahre et al. 2009; Jensen and Hertz 2016; Kovács and Spens 2011a; Tabaklar et al. 2015).

Field-based research has been suggested as an effort to advance theoretical contribution in supply chain management (Meredith 1998). DeHoratius and Rabinovich (2011) claim that field research is critical to the 'development of scientific knowledge' and for the deeper 'understanding of the operating phenomenon' that would advance supply chain management theory. This is particularly true when it comes to study supply chain management in a humanitarian context, where contextual specificities are crucial

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elements to be considered in designing and managing supply chain for humanitarian/development assistance (Jahre 2010; Pedraza-Martinez et al. 2013). In other words, more field research is required in order to develop research further based on ideas, phenomenon, and contextual specificities of the humanitarian world and to realise empirical, evidence-based, and practice-near research domain (Holguín-Veras et al. 2014; Jahre and Heigh 2008; Kovács and Spens 2011a).

Whilst there are studies relatively more focused on research design and the process of field research with particular emphasis on philosophical aspects, e.g. 'methodological fit' (Alvesson and Kärreman 2007; Edmondson and McManus 2007), the current chapter will focus on fieldwork experience and fieldwork as a method to conduct first-hand data collection of qualitative or quantitative empirical materials for the purpose of achieving a detailed understanding of the context and practice. Yet again, what this chapter will discuss is inherently related to abductive research process, in other words, empirical material as a result of completed or ongoing fieldwork iteratively interact with research ideas, problems, and questions.

First, the chapter aims to review HLSCM literature based on empirical materials collected in field sites to identify how previous studies conducted field research in different circumstances. It will examine the benefits and challenges of conducting field research, as well as relevant activities the previous studies have created during the course of field research.

Second, the chapter aims to provide HLSCM researchers with 'practical' insights concerning important considerations in the design and conduct of field research. Similar to Jahre (2010), which is to the author's knowledge, the first personal account that provides highly relevant insights into conducting field research, this chapter will present the author's field research experience of studying disaster logistics preparedness in Zambia. As the compelling story of Jahre that would encourage other researchers to 'get out there', the author also believes that the current chapter can provide good insights to research students and early career researchers.

The chapter is organised as follows. First, the definition of field research will be delineated drawing on literature that discusses the methodological aspects of field research from sociology and management studies. Next, to address the first aim, fieldwork experiences in HLSCM literature are reviewed. In doing so, article selection process, descriptive analysis, and the findings of the content analysis are presented, respectively. Lastly, the second aim of the chapter is addressed through the author's personal account.

Defining Field Research

What is field research? The term field research can be used very broadly in various ways, such as fieldwork, case study, or ethnography with a slightly different emphasis given to the work by researchers[1] (Burgess 2002). While Burgess (2002) defines 'field' as a circumscribed area of study in social research, it may not necessarily exist as a bounded entity as it is 'brought into being by social actors who collectively engage in their production' (Atkinson 2014). Consequently, field research incorporates an observational approach involving a relationship between the researcher and the research subject (Burgess 2002), driven by 'intrinsic curiosity' about distinctive lives and actions (Atkinson 2014).

In the arena of operations and supply chain management (OSCM), field research is considered as a methodology to understand the phenomena with the attributes, causes, and effects adhered to a process-oriented approach (Meredith 1998), rather than normative model/theory research, suggesting what and how things should be done based on idealised decision models (DeHoratius and Rabinovich 2011; Swamidass 1991).

Field research is often accompanied with interpretative procedures as the understanding of the phenomenon can only be made through the researcher's perceptual framework and be meaningful within that framework of assumptions specified by the researcher (Meredith 1998). Therefore, field research is not merely the adoption of a systematic and objective research technique but involves complex interaction between the research problem, subject, and researcher (Burgess 2002).

Schatzman and Strauss (1973) characterise a field researcher as '*a methodological pragmatist'* striving to clarify and understand the events of interest. Field research relies on primary data collection methods from real organisations in natural settings, considering temporal and contemporary aspects of the phenomenon being investigated (Meredith 1998; DeHoratius and Rabinovich 2011; Edmondson and McManus 2007; Scandura and Williams 2000). Sources of empirical materials can be both qualitative and quantitative, such as 'financial data, interviews, memoranda, business plans, organization charts, tools and other physical artefacts, questionnaires, and observations of […] (human) actions and interactions' (Meredith 1998).

[1] For more detailed discussion on historical roots and the science tradition of fieldwork, see Adler and Adler 1987; McCall 2006.

Therefore, activities, such as interviews, observations, demographic survey, or participations, in the environment of the phenomenon under study are essential to collect empirical materials while other forms of data gathering (e.g. desktop survey, interviews via telephone/teleconference, or even controlled laboratory experiments) can be incorporated to support field research.

In this regard, this chapter defines field research as:

Research conducted based on first-hand knowledge and empirical materials – qualitative and/or quantitative – obtained in the field sites for the purpose of achieving a detailed understanding of the context and practice.

In addition, this chapter adapts the term 'fieldwork' to particularise activities that unfold in the field and defined as:

A set of activities which are exploratory in nature in order to obtain first-hand knowledge and empirical materials in field sites.

Although separate definitions are given, the two terms are used interchangeably in this chapter in the context of conveying the main objective of two terminologies, which is the exploration of the phenomenon under study.

Also, it should be clear that the above definitions are narrower than suggested in the traditional field research literature, for example, Schatzman and Strauss (1973) use field research as an umbrella term for different activities that make a situation more understandable. Instead, this chapter's definitions intend to underline the 'being' in the field sites to scrutinise humanitarian contextual specifics of field research in HOSCM. As the chapter's aim is to appreciate more about field research in HOSCM, the focus should be the 'experience-based fieldwork' (Borneman and Hammoudi 2009).

Fieldwork Experience

Shaffir and Stebbins (1990) describe that fieldwork is 'usually inconvenient, to say the least, sometimes physically uncomfortable, frequently embarrassing, and, to a degree, always tense' (p.1). They further characterise fieldwork as being 'fraught regularly with feelings of uncertainty and anxiety (…and) accompanied by an intense concern with whether the research is conducted and managed properly' (p. 2).

Such experiences are typical for field research although it may not usually be reported in such ways. It is almost unavailable through other forms of scientific research methods, which may have strict procedures to follow or a controllable environment with certain assumptions of reality. Field research

is an intervention of other people's daily life and thoughts, where one should navigate without clear rules and signals (Schatzman and Strauss 1973).

Borneman and Hammoudi (2009) claim that fieldwork is a planned but dynamic encounter with people. In other words, many encounters are 'unintentional and accidental. Both planned and accidental encounters unfold under unpredictable conditions that nonetheless can result in fortunate outcomes…(through) on going relationships that intensify and multiply over time, resulting in knowledge that develops incrementally with the uneven accumulation of insights – a process that entails constant revision of what one has learned' (p.270). Critical aspects of field research are the 'constant revision' of 'accumulation of insights'. During the course of the research process, although it hardly is a linear process, researchers constantly doubt and learn from the ongoing experience of fieldwork full of unpredictable components.

While research 'encounters' can take place in various forms, such as reading written texts or screening films, Borneman and Hammoudi (2009) argue that the researcher's presence in the field is pre-conditional to explore the dynamics of connected episodes. Furthermore, they underline that fieldwork is not solely mapping of a place or personhood but it is an engagement of 'being there', also 'distancing' enough to be open to enrich understanding (Borneman and Hammoudi 2009).

It is important for researchers to recognise on-the-ground experience and expertise when conducting HOSCM research. Pedraza-Martinez et al. (2013) shared an anecdotal but very meaningful story as below:

> Following our first presentation at the Fleet Forum Annual Conference of 2007, the Fleet Forum Coordinator told our research team: 'the problem is that you look at us from an ivory tower. You should leave your ivory tower and go to the field to understand the way we work'. Another practitioner added: 'you do not understand our context'. Other practitioners repeatedly asked: 'have you been to the field?' Both the lack of trust of practitioners and of literature relevant to our subject motivated us to include field trips in our research project. (p.S58)

This highlights the fundamental importance of using fieldworks to ensure that the research is relevant in HOSCM.

Many studies in humanitarian logistics have pointed out the difference between commercial logistics and humanitarian contexts. Humanitarian contextual particularities were identified and enhanced our understanding of humanitarian logistics, yet many were made at a general and abstract level,

such as unpredictable demand and supply, level of urgency, chaotic environment, and deprived resources. Holguín-Veras et al. (2014) claim that 'a major issue that hampers research, development, and implementation of more effective PD-HL (post disaster humanitarian logistics) systems is that the realities of actual operations are poorly understood' (p.87); particularly, the transient and dynamic nature of the activities. Although Holguín-Veras et al. (2014) specified the context of post disaster, arguably fieldwork is a great opportunity for a researcher to characterise and collect data through access to real people on the ground as well as observing actual operations. Only a handful of publications discussed humanitarian logistics based on direct observation, in other words 'research community has only scratched the surface of the subject' (Holguín-Veras et al. 2014).

Fieldwork Experience in HOSCM: A Literature Review

The first aim of the chapter, to identify how previous HOSCM literature conducted field research, will be addressed in this section. For the last few years, there have been several calls from the major journal outlets for empirical research in the field of humanitarian logistics and operations management, including a call for a special issue in the *Journal of Operations* (2014)[2] and *European Journal of Operational Research* (2016).[3] Fieldwork may not be the only empirical methodology that these special issues call for, however it is the sine qua non of the studies that are 'well-grounded in practical foundation' and 'explore (new) humanitarian problems using rigorous case study research'. In this regard, content analysis of relevant literature will be discussed below.

Article Selection

Four major databases were used, including Emerald, Science Direct, Taylor and Francis, and Wiley to identify relevant studies in HOSCM. The keywords search was used mainly for the initial stage and then delimited the literature thereafter. The keywords used were: 'humanitarian logistics',

[2] Special issue on Empirically Grounded Research in Humanitarian Operations Management.
[3] Special issue on OR Applied to Humanitarian Operations.

'humanitarian supply chain', 'disaster logistics', and 'disaster supply chain'. These keywords were chosen to adequately filter the research related to logistics and supply chain management related to pre/post disaster management, humanitarian assistance, and disaster risk reduction. However, it is possible that this search may miss some relevant studies. The article selection process is shown in Fig. 5.1.

The initial search identified 556 articles in total. After reviewing the titles and abstracts to exclude irrelevant articles, conference papers, and editorials, the number was reduced to 262. Subsequently, literature review papers and conceptual studies were excluded after reviewing the contents, reducing the number of papers to 193. More in-depth reading of the contents was conducted in order to sort out papers that used secondary data, 'case studies' mainly for the validation of operations research (OR) algorithms, computational simulations, and numerical experiments. Some OR studies, which belong to axiomatic domain of OR, are often conceptualised based on optimal solutions focusing on mathematical correctness whereas empirical OR studies start from problems of context and situations (Bertrand and Fransoo 2002; Galindo and Batta 2013). Thus, particularly for the OR studies, this chapter focuses on empirical OR studies that are based on field research to decide relevant parameters and assumptions that are convincingly grounded in reality for defining problems and building models. These studies largely use first-hand knowledge and empirical materials rather than historical data of past cases or secondary documents. After this stage, 98 articles remained.

Lastly, studies that conducted fieldworks in the field sites were selected based on two criteria. First, 'being there', in other words, studies based on remote interviews, questionnaire survey, or Delphi method were excluded. Second, interest in a particular empirical setting or 'scene' rather than general system characteristics.

This process excluded some studies that were not clear in reporting and describing their methodology regarding data collection. Such studies without specification of empirical methods tend not to focus on the 'scene' or contextual settings but rather prioritise gathering required functional data and information to synthesise models, concepts, or frameworks at a systems level. These articles are excluded as the chapter's overriding focus is on field research and experience. However, there are a few exceptions. Some papers were included even though no specification was provided about methodologies related to field research: if the paper clearly indicated field visits, if the paper's fieldworks could be traced from the other publications, or if the paper contained research problems and models that are heavily empirically grounded. The four-stage selection process resulted in 55 articles for further analysis.

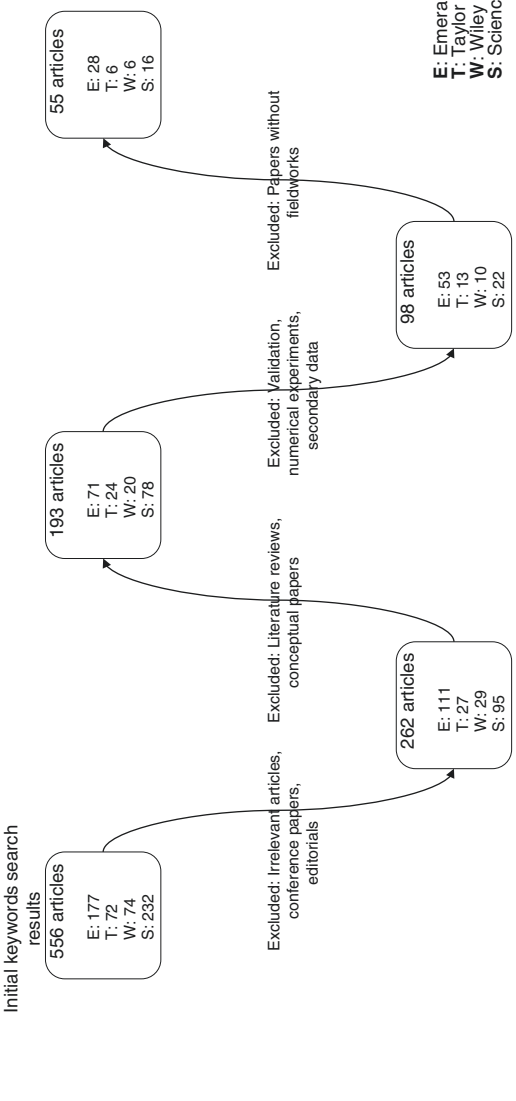

Fig. 5.1 Article selection process

Fieldwork Experience in HOSCM: Findings from the Review

The analysis of literature about the fieldwork experience is discussed in four sections as below. These four categories were developed through a series of questions during the analysis of the final list of articles such as: why did they conduct fieldwork, how did they organise it and what did they actually do, and what were the benefits and challenges? It should be noted that some articles provided a detailed description of their methodologies including fieldwork, while others only briefly mentioned their fieldwork or field visit.

- Motivations for conducting fieldwork
- Challenges for conducting fieldwork
- Activities in fieldwork
- Reflection on lack of field research

Under each heading, selected excerpts from the literature are shown in Tables 5.1–5.3 to bring in a live voice of fieldwork experience from the literature.

Motivation for Conducting Fieldworks

As researchers consider their aims and objectives in the design of their research strategies, they determine relevant and necessary methodologies that are aligned to their research strategies. Not all empirical studies conduct fieldworks, as manifested during the process of article selection. The particular motivation for conducting fieldworks can be for close observation, improved contextuality, and as a preparatory step.

Close Observation

Fieldwork enables researchers to make close observations of the subject and phenomenon under investigation. Being close to the field has several benefits. First, it gives a great opportunity for exploratory studies to investigate under-studied areas, producing in-depth textual data, including interviews, field notes and other data sources. Researchers can explore first-hand information and 'unheralded' aspects of reality, its complexity, dynamics, and real problems. As Holguín-Veras et al. (2014) asserted, research

development of HOSCM can be facilitated through a thorough understanding of the reality of actual operations. Research with actual experience in the field can reveal the specific mechanism by which things are organised in practice.

Second, the participative nature of research will be enjoyed in the field. For example, a researcher may participate in the daily decision-making process, routines of different operations, and some may engage in action research (Chandes and Paché 2010; Jahre et al. 2012). In addition, many studies have indicated that informal discussions become possible, not only with the arranged interviewees but also with others, such as the locals, working staff, government officials, or participants in exercises. The association with the local environment while staying in the field is an important aspect of field research in that a researcher can achieve a wide variety of evidence-based insights, increasing the credibility (Pedraza-Martinez et al. 2013).

Third, the instantaneous nature of disaster management research can be captured through fieldwork. Researchers who were in the field underlined the opportunities to obtain on-the-spot knowledge and understanding (Coles et al. 2012; Holguín-Veras et al. 2014; Holguín-Veras et al. 2012; Perry 2007). The immediate perceptions from the crucial initial phases by both humanitarian workers and researchers are inherently ephemeral (Holguín-Veras et al. 2014). Fieldwork provide researchers with distinct impressions based on the direct observation of the impact of disasters on the infrastructure, community, and people, whilst being available to interview individuals involved in the chaotic initial stage (Holguín-Veras et al. 2014). For example, field visits to Haiti right after the earthquake allowed the gathering of information that would characterise humanitarian logistics with an immediate impact and to capture subtler dynamics between agencies in the field (Coles et al. 2012; Holguín-Veras et al. 2012).

Increased Contextualisation

Fieldwork allows theoretical concepts and frameworks to be contextualised and understood in empirical settings. Conceptualisation of humanitarian logistics is often based on typical supply chain strategic traits manifested dependent on pre/post disaster events or one or more of phases within the disaster cycle. Such conceptualisation may provide a better understanding of the logistical processes required in disaster management and critical success factors. However, it is also important to remember that contextualisation

through empirical research is required to further develop the concepts to be more relevant and rigorous to humanitarian world. Particularly, fieldwork is essential to perform a research investigation spatially and temporally, for all disasters do have diverse and dynamic patterns (IPCC 2012). Many case studies of HOSCM are centred on particular disaster events (e.g. South Asian Tsunami, Haiti earthquake) or organisational operations of disaster logistics in some localities. These studies provide rich contextual information provided that they are empirically well grounded. Fieldwork can supplement the inadequacy of other data collection techniques (Akhtar et al. 2012) or enhance the existing secondary data to investigate a particular context (Jahre et al. 2012). Contextualisation can be also made in a deductive way from corroborating theory in a particular context (Ketokivi and Choi 2014), preferably in the field being away from the ivory tower (Pedraza-Martinez et al. 2013). In other words, pre-defined prepositions and theoretical concepts can be contextualised through fieldwork and be demonstrated with empirical materials (Kunz and Gold 2015; L'Hermitte et al. 2016).

Preparatory Step

Fieldwork provides useful and firm ground for further research objectives as a preparatory stage during the research project. Researchers can be more familiarised with the setting through the interviews and observations of the initial stage, in which development and revision of the interview guide, hypothesis, and propositions can be facilitated (Jensen and Hertz 2016; Kabra and Ramesh 2015). Formal and informal discussions provide opportunities to define relevant problems emerging from the field and to gain access to internal documents and other knowledge to broaden the understanding of the context (Cao et al. 2016; Jahre and Heigh 2008; Jensen and Hertz 2016; Kunz et al. 2015). In development of mathematical models, simulation, and decision support systems, such a preparatory step is appropriate in order for better empirically grounded research. Many studies explained that they identified important parameters and assumptions for incorporation into their model via interviews and observations during their fieldwork. Discussion with end-users and on-site inspections were essential to confirm the feasibility of the assumptions embedded in the decision model (Hadiguna et al. 2014). Beamon and Kotleba (2006) noted that mode of transportation, discrete intervals of demand, and other attributes of contextual elements that contribute to unpredictability in the relief supply

chain were identified and used for their model development. Input data were collected, and better understanding of locality could be realised (Green et al. 2013). Furthermore, collaboration between researchers and practitioners in the field could shape the simulation model to become based on real organisations (Beamon and Kotleba 2006; Ergun et al. 2014; Saputra et al. 2015) (Table 5.1).

Table 5.1 Motivation and benefits of conducting fieldworks – selected excerpts from the literature

Close observation		Excerpt from the literature
		1. Explorative nature
	Thompson (2015)	'Although time consuming, this research approach (field research) was chosen primarily because the disaster management literature on the region is small. The research strategy therefore relies upon the collection of rich textual data that could then be explored inductively'
	Holguín-Veras et al. (2012)	'The authors' field work identified, in contrast to these difficulties (as reported in the media), a number of unheralded relief operations that were able to deliver relief aid […] this paper is to identify the factors that explain these contrasting performances'
	Gralla et al. (2015)	(Fieldworks can) 'capture the extensive knowledge and experience that went into (training) development'
	Jensen (2012)	(To explore) 'actual experience in the field, […] how the cluster system has worked in practice'
		2. Participative nature
	Rietjens et al. (2014)	'possibility to participate in several meetings […]In addition to the formal interviews and participatory observation, many informal conversation took place through which information was gathered'
	Coles et al. (2012)	'Meeting agency representatives in person and conducting interviews in the field helped to increase research credibility, diversify the types of data shared, and increase the volume of information collected.'
	Pedraza Martinez et al. (2011)	'Although collected on a less formal basis, this data was recorded and stored using the same rigorous procedures outlined below'

Table 5.1 (continued)

		3. Instantaneous nature
	Holguín-Veras et al. (2012)	'This paper have looked into the real-life performance of humanitarian logistics […] (have collected) field data so soon after the event'
	Holguín-Veras et al. (2014)	'if (researchers) are not allowed to observe the operations, the opportunity to characterise and collect data about the initial stages gets increasingly difficult'
Increased contextualisation	L'Hermitte et al. (2016)	'our study is motivated by the need to understand a research phenomenon that has only been delineated conceptually'
	Rancourt et al. (2015)	'Not having spent time in the field would have resulted in a misconception of the problem, and some important realities would not have been identified'
Preparatory step	Jensen and Hertz (2016)	'to obtain an understanding of what questions were most pertinent to the field'

Challenges for Conducting Fieldwork

As Jahre (2010) documented in her personal fieldwork experience, undertaking fieldwork in HOSCM is a challenging process. Most of the reviewed studies have not presented in detail the challenges of fieldwork; however, several important traits were evident. Rancourt et al. (2015) remarked that the difficult task was more about defining the research problem and carrying out field data collection rather than developing algorithmic solutions.

It has been observed that often field sites are located in remote areas, hence difficult to access (Jahre et al. 2012; Pedraza Martinez et al. 2011). Meeting with interviewees and stakeholders is not a simple task due to the geographical distance (Beamon and Kotleba 2006). Not only the physical access but getting permission from the organisations and other research subjects was challenging. Kunz et al. (2015) referred to making good contacts in their longitudinal study as a particularly difficult process, unless organisations were partnered or co-involved in the project they would not have a strong willingness to collaborate.

Security was another important challenge; for example, researchers were not allowed to go out of the military camp, thus limiting their direct contact with people outside the camp. Instead, researchers could participate meetings within the camp where people from the outside were invited by the military reconstruction team (Rietjens et al. 2014).

Table 5.2 Challenges and impediments of conducting fieldworks – selected excerpts from the literature

		Excerpt from the literature
Remoteness	Jahre et al. (2012)	'The field context was challenging, with 5,000 km at a speed of 30 km per hour on dirt roads, wearing bulletproof vests, and helmets'
	Pedraza Martinez et al. (2011)	'we travelled approximately 750 km by road, over the course of a 2 days round trip to observe field fleet in action'
Security	Rietjens et al. (2014)	'The security situation made it impossible for the research team to leave the camp'
Real-life complexity	Holguín-Veras et al. (2014)	'At some point it is no longer possible to document the operations as memories fade, data are lost, and the ability to identify and find the individuals involved evaporates'
Local constraints	Soneye (2014)	'The administration was […] with limited challenges (although) the enumerators were residing in the communities, could speak the local language and had adequate communication skills […]'

Other challenges include the dynamics and urgencies embedded in disaster studies (Oloruntoba 2013; Thévenaz and Resodihardjo 2010). Given that the limited and chaotic time in the aftermath of the disaster, examining real life complexity is highly challenging (Holguín-Veras et al. 2014). Also, there is some restraint related to a particular locality where languages and cultural issues can be difficult. In some cases, the purpose of the research can be misconstrued politically and information is unattainable or sharing it becomes impossible (Soneye 2014) (Table 5.2).

Activities in Fieldwork

In addition to the benefits and challenges related to fieldwork, the findings from content analysis include several purposeful activities that the studies have created. These purposeful activities could be a good point of reference for those who have conducted fieldwork to reflect on or for those who are planning HOSCM fieldwork.

Many studies have a host organisation or organisations who are in collaboration in terms of conducting research in the field. These organisations are located in the field and play a crucial supporting role for researchers, such as opening the way for access to the site, identifying the main stakeholders and

contacts to interview, and providing real data (Beamon and Balcik 2008; Coles et al. 2012; Jahre et al. 2012; Kretschmer et al. 2014; Rancourt et al. 2015; Rietjens et al. 2014). There are some common concerns in disaster management field that it is unsafe or unhelpful for people other than first responders to enter the field. Coles et al. (2012) described how they overcome such concerns with the pivotal support from the host organisation in Haiti who provided researchers with the legitimate role of coordinating logistics operations in the aftermath of the disaster. When it comes to close collaboration, some research projects involve active interaction between theory and practice, thus, develop into a form of action research or co-authoring a paper about the detailed investigation of the organisation's system (Kunz et al. 2015; Mohanty and Chakravarty 2013; Saputra et al. 2015).

Studies have highlighted that maintaining a good rapport with interviewees and other practitioners is important in field research. Committed field visits could increase the mutual trust between researchers and practitioners, demonstrating the researchers' commitment to understanding the context (Pedraza Martinez et al. 2011). This could be appreciated by interviewees who would trust the researchers more, providing more detailed accounts and even, some contentious topics. Such credibility could be realised through getting help from a local venerated person, such as a pastor, working in the field when building relationship with local agencies (Coles et al. 2012).

When planning fieldwork for a particular disaster or a particular organisation as a case, relevant secondary data has been collected alongside the fieldwork. Depending on the research subject, pre-examining the information related to the field cannot always be possible. However, Holguín-Veras et al. (2014, 2012) have created a 'timeline' of relevant incidents related to the case disaster through different sources of media and organisations involved in disaster management. Such efforts could help researchers to better understand how things evolve in the field and continue during their time in the field.

Data collection during the fieldwork can be overwhelming if careful measures are not made. An intensive field visit can cause some unexpected process and also create an overwhelming mass of unanalysed data. Such issues can be a large burden for a researcher. Thus, it is wise to briefly reflect on the research process as well as the collected empirical materials. Researchers have noted that interview questionnaires were constantly updated as interviews progressed and discussion about preliminary findings with practitioners helped them to confirm and re-organise the research process (Jahre et al. 2012; Kunz et al. 2015). Also, it is worth referring to some of the structured approaches to adeptly handle the volume of data in the field. Pedraza Martinez et al. (2011) have carried out a series of activities for data collection

Table 5.3 Activities in conducting fieldworks – selected excerpts from the literature

		Excerpt from the literature
Host/partnered organisation	Coles et al. (2012)	'A pastor (from the partnered organisation) travelled with the researcher for the first week […] to assist the researcher in establishing credibility and connecting with (other) agencies'
Action research	Chandes and Paché (2010)	'One of the author […] has been involved in the management of logistical humanitarian operations. Taking full advantage of his status as an internal participant observer […]'
Planning	Holguín-Veras et al. (2014)	'(to facilitate understanding of the complex response) develop timelines of the key events, and a basic script that describes how the response evolved'
Ethical approval	Ibegbunam and McGill (2012)	'The ethical approval request included the following documentation: detailed application form, participant information sheet, informed consent form, interview instrument and approved research proposal.'

and storage in the field including daily debriefings, sharing field notes and impressions, revising and updating the interview guide, compiling detailed interview notes, and application to the theoretical framework.

Lastly, studies underlined the importance of establishing ethical guidelines for research concerning population affected by disasters and other impoverishment (Ibegbunam and McGill 2012; Oloruntoba 2013). Ethical approvals were required both internally and externally, the researcher's own institutions and local health research authority, respectively. To secure the approvals, Ibegbunam and McGill (2012) noted that they had to inform and complete the relevant documentation that underpin the research in great detail and even obtain certificates from online ethics courses. Pre-arrangement of such approvals is important so as not to delay the fieldwork process (Table 5.3).

Reflection – Why the Lack of Fieldwork?

This chapter reviewed previous studies with fieldwork and presented the benefits, challenges, and practical activities for fieldwork. Holguín-Veras et al. (2014) claimed that 'field research […] is key to develop new paradigms of PD-HL able to deal with the real life complexity of the operations.' Field research is essential to provide evidence-based insights and to better plan the future response in practice. Although field research will not be the only way

to attain such benefits, relevant and rigorous research is largely attributed to findings, knowledge, and experience from field research and will be even better when complemented by other types of methodologies.

Although previously pointed out as in Kovács and Spens (2009), Kovács and Spens (2011b), and Kunz and Reiner (2012), empirical research is still required as well as studies based on fieldwork to enhance the contextuality and relevance to the real-life situation.

There are a number of factors for the lack of empirical/field-based research. It was observed that some fieldwork, particularly for logistics research in the post-disaster response, was initiated in a short period of time as emergency fieldworkers are rapidly deployed in response to the unexpected onset of a disaster, e.g. Holguín-Veras et al. (2012). It could be that many researchers are not in a position to make such an immediate field visit. In addition, security issues discourage and constrain researchers from going into the field. A review of studies delivering humanitarian aid in a highly insecure environment revealed limited academic engagement (Schreter and Harmer 2013). Field visits also require dedicated time. Indeed, researchers may not be motivated to perform fieldwork but also may prefer or be required to use their research grant for quantitative studies rather than 'soft data' from fieldwork. Moreover, field-based research may be difficult to get published (Borgström 2012). The chapter also highlighted that the importance of fieldwork experience is not widely shared in the literature with a few exceptions, such as Jahre (2010) and Pedraza-Martinez et al. (2013), who reflected on their field experience. This may be due to a number of factors including limited space in journal publications for detailed descriptions about field research, a tendency to report the research process overly formalised as linear and concise, and an interest in generic system levels.

Therefore, this chapter is an exceptional opportunity to engage in an in depth discussion about field research. To add further to previous fieldwork accounts in HOSCM literature; and to complement the limited formal outlet to describe fieldwork experience, the next section will elaborate the author's field experience based on a case study conducted in Zambia.

Field Research in Zambia

The author's field research experience is based on the case study of disaster preparedness logistics in Zambia. As aforementioned, the focus is to deliver some practical insights through the author's confessional tale. For this

reason, the current section is organised in a successive sequential manner as often appears in traditional fieldwork textbooks. However, such linear conceptualisation is more of a heuristic device rather than what and how actual engagements unfolded during the field research (Gubrium 1990). Most of the author's engagements and encounters in the field were constantly rearranged and renegotiated throughout the course of the field research.

Gaining Entry

The author's field research was a part of a large two-year research project. The overall purpose of the project was to strengthen the societies' resilience to climate hazards and to enhance the climate change adaptation research in Zambia. The author's field research focused particularly on the use of weather information and early warning systems for humanitarian supply chains.

It must be noted that being within the large project, the author's fieldwork process has been largely facilitated by its pre-determined scope of the subject and geographical range. Other researchers might have different starting point than the author. Also, the Zambia Meteorological Department (ZMD) as a partner of the project could host the author during the field visit. Preparation for the field visits was realised based on secondary sources and communication with the ZMD.

Some of prominent actors in the field were identified through desk research. About three weeks before the field visit, the author contacted them via email to arrange meetings and reminders were sent after two weeks. However, many interviews were arranged in the field via telephone and interviewees were identified through snowball sampling.

In general, gaining access to the government and public sector was difficult. These institutions tend to have a rather hierarchical bureaucracy, in which official requests are strictly required, preferably from the higher hierarchical level of the requested side. The author managed to get assistance from the ZMD, hence, official letters written by the chief of the ZMD were sent to authorities concerned, which played a crucial role for entry to the government authorities. However, this was very time consuming, that being so, many encounters with the government authorities were at the end of the field visit period. Considering that some information gained from one actor

can be very used for the others, the process of official requests could have been made ahead of time, particularly if the stay in the field is limited.

One useful tool to convince interviewees to participate was the one-page document, which was sent together with the interview invitation email. The one-page explains the project and purpose of the interview in brief. During the interviews, many interviewees mentioned what they already understood from the one-page. Otherwise, the author handed it out on site for their perusal.

Getting Organised

As the author became engaged and more adapted into the field, the methods had to be reassessed, reflecting and improving on what had been done. After each interview, the author made a brief summary before updating the interview guide. The initial interviews were decisive to alter the initial focus of disaster response to disaster preparedness.

Also, the author closely studied the map of Zambia, particularly the southern province which often experiences droughts and floods. Interviewees often mentioned place names in their accounts of a disaster or some issues related to weather variability. It was crucial to recognise such place names and their location on the map so that the author could comprehend the context and to prompt related questions.

An accidental meeting with one of the initial interviewees over lunch led to an informal conversation about general topics but he also provided a detailed picture of Zambia disaster management, his thoughts on the system, and other weather-related issues. From then, the author took the opportunity to invite interviewees to lunch as it was culturally acceptable in Zambia, according to a local colleague.

Maintaining Relationships

The author's fieldwork experience consisted of many 'short-term encounters' (Gurney 1990). It involved intensive interviewing of different managers in governmental, non-governmental, United Nations, and private sector organisations. Engaging in short-term encounters meant that the researcher's intrusion into the settings of the research subjects was relatively brief in comparison to long-term field research (Gurney 1990). Consequently, participants were

less reluctant to accept the author's interview invitation. On the other hand, the author had to cope with the anxiety of not getting 'good' and 'enough' information from each short-term encounter. During the interviews, although most were about an hour-long, different impressions are made which will influence rapport, trust, and other expectations between the researcher and the participant. Hence, the author has to play different roles. Beyond the control of the author, the author's image was perceived by the research subjects as a logistics expert, meteorologist, research student, or sometimes a sort of programme evaluator. Rather than providing them with a 'correct' image of the author, if it ever exists, the author had to role-play depending on the contingencies to enable subjects to put down their guard and to help conversation flow. Shaffir (1990) described such role-playing as 'the tactic of self-presentation' and this never became static during the author's fieldwork.

Similar to role-playing, the research partnership with the ZMD should not be overlooked. The involvement of the ZMD hugely supported the project and the author's fieldwork, yet at the same time, it had repercussions for the research subjects' attitudes. For example, although the interviews were confidential, subjects were rather hazy about the quality of weather information or hesitant towards being critical of the early warning systems. The author's tactic was to establish, naturally during the conversation, the rather clear division between the researcher and the government's role, as well as highlighting the importance of end-users' viewpoint from the subjects' perspective.

Reflection – Coming Back from the Field

Although this chapter is based on the author's field experience in Zambia, fieldwork is not necessarily associated with visits to exotic or unfamiliar parts of the world. As can be seen from the example of (Burgess 2002), fieldwork can be conducted at 'home', such as in local schools or neighbourhoods. Nonetheless, the intensive nature of the fieldwork experience, regardless of the location or the duration, will be transformative and will be followed by a pronounced change in one's routine. Thus, it is useful to ask questions before 'leaving' the field, as Cupples and Kindon (2003) have suggested:

> How am I going to manage my data? Do I need time for transcribing and data analysis before writing can commence? What should I include and what should I leave out? Is a return visit to the field possible, if necessary?

Other relevant questions that the author asked were:

> Are there any materials that I did not obtain that I could go back and find? How should I close or maintain the relationship with the people I met in the field? Where would I start with my data and what should I prioritise?

The author believes that these questions and thinking about the scenario are worth considering before vivid field impressions fade away. They will also be helpful in providing a new perspective on the field by 'zooming out' from the data while remaining physically in the field.

Analysis and writing following fieldwork is extremely challenging. The author's case was no exception, as the author had to digest a vast amount of messy data. Interviews, field notes, organisational reports, and other relevant secondary data were reviewed and analysed. Soon after the field visit, the author was required to compile a report on the project. The report consisted of preliminary findings from the field that were mainly based on the author's memories and field notes. While the output was worthwhile, the author would like to point out that there are some risks of being bound by a few initial thoughts.

Fieldwork is an ongoing process that includes the analysis and writing stages. One would never consider 'writing it up' as a disparate and unproblematic activity (Berg and Mansvelt 2000). The author spent several months reading the data and other materials to analyse and find meanings. The author's interest was disaster preparedness as a practice and related decision making, but a concrete theoretical approach was not determined prior to the fieldwork. Hence, constructing a theoretical perspective was another challenging process, and many of the author's attempts were reconsidered and refined.

In addition, the author often sensed that the data were incomplete. This is completely natural, although such feelings can cause anxiety and discourage one from analysis and writing. The author is convinced that a firm belief in a common axiom 'writing is a way of knowing' will help to overcome any writing blocks or obstructions. Small field notes, photos, or local newspapers can sometimes be very useful in the analysis and representation of data.

Conclusion

Despite the fact that many studies have argued for considering humanitarian specificities when studying HOSCM, there is still a need for HOSCM research based on fieldwork. This chapter offered some practical insight for

those who have conducted fieldwork to reflect on or for those who are planning HOSCM fieldwork. HOSCM literature was reviewed to identify the benefits and challenges of conducting field research, as well as relevant activities that previous studies have undertaken during the fieldwork. In addition, the author also reflected on his previous fieldwork experience. Reports of field research in the literature are often constrained by editorial policy and restricted to a formal report on methodological accounts, limiting more detailed dialogue on the fieldwork experience and actual implementation. Together with the literature review, the author's personal experience was intended to underline the practical aspects and to provide some guidance on the actual implementation of fieldwork.

Despite the importance of field research, there are some acknowledged pitfalls in conducting field research, particularly in the area of HOSCM. Lee-Treweek and Linkogle (2002) contended that the nature of field research or qualitative inquiry may pose a potential danger and unexpected threat to researchers. They identified four key areas of danger in the field: physical, emotional, ethical, and professional. These risks are highly relevant to the context of HOSCM field research, particularly those set in disaster affected and humanitarian crisis areas. Physically, field researchers need to ensure their own safety as well as the safety of others. Emotionally, it is important to develop coping strategies for the unexpected effects on researchers after their field experience. In some post disaster environments and complex disasters, researchers may experience feelings of frustration, powerlessness, and emotional deprivation. Ethically, it is critical to have ethical responsibility for the management of the research project, protecting participants within ethical guidelines, e.g. research on vulnerable population or humanitarian aid in an unstable regime. Professionally, researchers may be confronted with the consequences of being in the minority by challenging the existing 'occupational dynamics' of the discipline or by pursuing the 'unfashionable' topics and methodologies. Indeed, this is in fact an inevitable aspect of the subject field of OSCM, although the boundaries of acceptable methodology in this field have certainly changed.

Apart from such areas of 'danger', what may seem like practical and mundane activities will occupy an enormous portion of researcher's time and effort in conducting field research. These mundane, practical issues should not be regarded as trivial but require careful planning and preparation well in advance (Barrett and Cason 2010; Stiffman 2009). In other words, fieldwork requires researchers to consider 'a host of issues that are simultaneously pragmatic, ethical, and scientific' during the course of field research (Stiffman 2009).

Many have called for well-grounded empirical research in HOSCM and indeed studies have been carried out to acquire theoretical and practical insight. Not all empirical research in HOSCM requires field research. However, if we aim to take account of contextuality and to be deeply involved in the episodes of practice, fieldwork will be very useful and have a profound effect on researchers. The close interaction, including conversation, observation, or participation, with research subjects can provide detailed dynamics of their pursuits, e.g. thoughts, commitments, motives, and other associated rationalisation (Dodge and Geis 2006). On the other hand, fieldwork should not be romanticised. There is no one right way or easy way of conducting field research yet recognising the meaningful contingencies will be critical in every fieldwork experience.

Appendix 1

Recommended Reading for Fieldwork Experience

Most of the books in the list below are referred to in the main text; however, a short introduction is presented here.

Borneman and Hammoudi (2009)

Eight essays of reflective writing on their fieldwork experience from an anthropologists' point of view. This book critically reviews 'textualism' while underlining fieldwork encounters 'in which experiential insights are arrived', particularly in interlocution.

Burgess (2002)

A good introductory book for a researcher looking to explore how to conduct field research. As this book is a sort of 'how-to' book, it is helpful in designing research strategies. This book contains suggested readings in each chapter. The author of this book exemplifies his own field experiences of a contemporary school setting in which he said researchers have 'come home' to study.

Johnson (1978)

An author's reflection on his own field experience, providing a detailed description. The critical appraisal of several field research text books are interesting to read.

Schatzman and Strauss (1973)

A classics field research text book that describes a hypothetical setting of a researcher involved in field research. Although the book is dated, it is read easily. Selectable reading of each chapter can be made with ease depending on the reader's interest.

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