Humanitarian Logistics Training Needs: A Systematic Review in Relation to Sri Lankan Humanitarian Sector

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Abstract

In the light of increasing attention and the precedence of humanitarian operations, logistics have taken an unprecedented turn in the humanitarian sector. Humanitarian Logistics (HL) has now become one of the significant factors in assisting any disaster. Statistics indicates that, increasing disasters have become a major concern for the international community. A large part of the success of humanitarian operations is directly attributable to the effectiveness and efficiency of logistics. Training of logisticians is necessary for effective management of supply chain in a disaster.

The recent issues that are being faced in regard to humanitarian logistics at each disaster in Sri Lanka emphasize the need for research into the area of humanitarian logistics. A number of researches have been carried out to find training needs of humanitarian logistics professionals (‘humlogs’) in order to accomplish efficiency and effectiveness of humanitarian supply chains at global level. However, to date there has been limited discussion on the training of ‘humlogs’ in Sri Lanka.

A systematic literature survey was conducted in order to find the gaps indicated by scholars in the humanitarian logistics training at global level. Articles were selected from two major publication sites. They were further reviewed and analyzed to find gaps that are applicable to humanitarian logistics training. These gaps were further applied to the SL humanitarian sector.

This paper offers a literature survey and an insight of ‘humlog’ training in the Sri Lankan humanitarian landscape. Results show the gaps that exist in training of ‘humlogs’ and the significance of such training for future disasters in Sri Lanka. Additionally, this paper also indicates future research requirements to the field of humanitarian logistics.

Keywords: Education, Humanitarian logistics, Skills, Sri Lanka, Training

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*An individual who work for any private, public, government, non-government or non-profit organisation to achieve humanitarian logistics objectives.
INTRODUCTION
In recent years due to phenomenal interest, attention and precedence of humanitarian operations, logistics took a new turn into humanitarian areas (Kovács & Spens, 2011). There is a chain of activities engaged in humanitarian logistics from procurement to distribution of aid to the recipients. However, inadequate planning, ineffective operations and lack of cooperation between teams are important issues that connect directly to humanitarian logistics (Lu & Xu, 2015). The humanitarian crisis review over the last four decades (Balcik, Beamon, Krejci, & Muramatsu, 2010) has concluded that humanitarian operations have become a big business for major concerns in the international community. According to Van Wassenhove (2006), 80% of the costs in humanitarian operations are included in Logistics. Hence, a large part of the success of the humanitarian operations is directly attributable to effectiveness and efficiency of the logistics. There are many challenges being faced by the humanitarian logistics industry on a daily basis (Kovács & Spens, 2009). Lack of professional logisticians is one of the key challenges. An effective and efficient SCM (Supply Chain Management) process will enable humanitarian organisations to make the best use of resources, by matching the available supplies with the highest priority needs within the shortest possible time, and limited funding (Wassenhove, 2006). Thus, the development of the relevant skills is primarily important to handle such SCM processes in an effective and efficient manner (Bo¨lsche, Klumpp, & Abidi, 2013). The purpose of this article is to carry out a systematic literature survey in peer reviewed literature with a view to identify existing gaps and drawbacks in training of Sri Lankan humanitarian logisticians. Whilst, finding the current training requirements, this article is also proposing further research areas to be considered.

Sri Lankan Humanitarian Logistics Sector Although, Sri Lanka is not considered as one of the most disaster-prone countries, the 2004 tsunami, which devastated livelihood across South East Asia caused not only a profound shock but also a warning that Sri Lanka is also vulnerable to low-frequency high impact events which
cause extensive damage (Bannon, 2006). Although not effective, due to the increasing disasters, prior administrations have taken many initiatives to mitigate such damages (Jayawardane, 2007).

In May 2005, the Sri Lanka Disaster Management Act No 13 of 2005 was enacted in parliament with a view to provide solid legislative and institutional arrangements for Disaster Risk Management, establishing a powerful National Council for Disaster Management under the President and the Disaster Management Centre (DMC) as the lead agency for disaster risk management. In November 2005, the Ministry of Disaster Management (MDM) was established to provide a strong leadership. The ‘Road Map’ of 2005 proposed a number of disaster risk management initiatives including policy, institutional mandates and developments, hazard vulnerability and risk management, and training and education etc. (MDM, 2005). It is expected that proper implementation of this Road Map will go a long way ‘towards a safer Sri Lanka’ from natural disasters (Bannon, 2006). Between the years 2000-2011, more than 3 million people have been affected in Sri Lanka by various natural disasters such as tsunami, epidemics, floods and storms (UNDP, 2014). This shows the significance importance of having a robust disaster management system.

**Necessity of Training in Humanitarian Logistics** There is a vast development of humanitarian logistics during the last decade (Kovács & Spens, 2011). This is true in terms of both practices as well as the development of literature. Thomas & Mizushima, (2005) pointed out some gaps in initial training. However, there have been many training programmes and certifications conducted across regions that include training and internship programmes with the aim of improving the competencies required by the ‘humlogs’. Nevertheless, research still indicates a gap of skills that affect effective performances (Kovács & Spens, 2011). Many researchers (Walker & Russ, 2010; Swords & Emmens, 2007) have conducted studies on development of skills and training methodologies in the humanitarian field.
Although, these studies have not been specific to humanitarian logistics, they identify the demand to improve the current learning practices across all areas of humanitarian field.

**METHODOLOGY**

**Selection Criteria** Although humanitarian logistics is a new research area that has evolved in the last decade or so, there are a large number of publications that have been published on the subject. The maturity of the subject is evident with the new journal published in 2011 (International Journal of Humanitarian Logistics and SCM). Although, this journal has published many articles on training, authors expanded the search to other related journals to maintain the rigor of the findings. Thus, the selection criteria included all the journals that are available in Emerald Insight and Google Scholar.

**Search Methodology and Results** The search was initiated in finding the articles that have the term ‘Humanitarian Logistics’ in the publication title, where 644 articles were found. Thereafter, the search was refined to find the word ‘Training’ in the abstract of each article. In the final refining methodology 16 articles were found. Having gone through the articles it was revealed that 5 of those 16 articles do not contain any direct relevance to training of ‘humlogs’. The selection process is given in figure 1. However, it is obligatory to mention that there may be other articles that researched ‘Training’ of ‘humlogs’. In this research only 11-articles were found based on the selection criteria.

![Flowchart showing the methodology process](chart.png)
The analysis was conducted to find the relevance of these findings to the SL Humanitarian Sector, where training and education of ‘humlogs’ can be improved. It is opportune to mention that this search did not have any chronological order.

Following the literature review the details are summarised according to the objectives, methodology adopted and the key findings. The table 1 illustrates the objectives and the key findings of the articles. Consequently, at the discussion the key findings were elaborated considering the common objectives of the authors. The final section was dedicated to elucidate the findings and to elaborate the future research areas in relation to SL humanitarian and disaster field.

**Table 1- Summary of research conducted in the field of HL training**

<table>
<thead>
<tr>
<th>Author/s</th>
<th>Objectives</th>
<th>Key findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gralla &amp; Goentzel, 2015</td>
<td>Analyzing training programmes for future training.</td>
<td>Develop HL training programme as a classroom exercise through LRT.</td>
</tr>
<tr>
<td>Allen, Kova´cs, Masini, Vaillancourt, &amp; Wassenhove, 2013</td>
<td>Identifying skills required.</td>
<td>Confirmed the humanitarian logistics skills following the T-shaped skills model.</td>
</tr>
<tr>
<td>Goffnett, Helferich, &amp; Buschlen, 2013</td>
<td>Integrating service-learning and training.</td>
<td>Showed the significance to link Service-learning to humanitarian logistics training.</td>
</tr>
<tr>
<td>Bo¨Ische, Klumpp, &amp; Abidi, 2013</td>
<td>Identifying various skills required in HL</td>
<td>Indicated levels of skills that are required with an insight as to how the education programmes should be developed.</td>
</tr>
<tr>
<td>Authors</td>
<td>Title</td>
<td>Summary</td>
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<tr>
<td>Lu, Goh, &amp; Souza, 2013</td>
<td>Identify learning mechanism.</td>
<td>Identified and developed a theoretical framework for a learning mechanism that in HL with process improvement and knowledge management to improve skills.</td>
</tr>
<tr>
<td>Kovács &amp; Spens, 2011</td>
<td>Explore areas that required further research and training.</td>
<td>Indicate the necessity of empirical research in the area that included development of training methodologies, skills identification, syllabus development and improving the academic partnerships.</td>
</tr>
<tr>
<td>Wassenhove, 2006</td>
<td>Significance of HL training.</td>
<td>Showed the significance of the participation of academics to develop training programs between commercial and HL.</td>
</tr>
<tr>
<td>Kovács &amp; Spens, 2011</td>
<td>Finding gaps in HL research, education and practice.</td>
<td>Highlighted gaps in practice, research, education and development of skills in HL.</td>
</tr>
<tr>
<td>Barbara S. Tint, Viv McWaters, Raymond van Driel 2015</td>
<td>Practicability of Using Applied Improvisation (AI) for HL training.</td>
<td>AI simulations showed that aid workers are better prepared when they are given unknown situations.</td>
</tr>
<tr>
<td>Gyöngyi Kovács, Peter Tatham, and Paul D. Larson 2012</td>
<td>Explore skills are required by the humanitarian logisticians.</td>
<td>Listed number of additional skills that was initiated by the ‘T-Shape’ skills that are provided by Mangan &amp; Christopher, (2005).</td>
</tr>
</tbody>
</table>
DISCUSSION

There has been an increase in the humanitarian logistics publications in recent times (Kunz & Reiner, 2012). However, only a limited number of studies have been conducted in the field of skills identification and performance improvement with regard to HL (Kovács & Tatham, 2010). Kovács and Tatham (2010) highlighted that logistics skills are important for management, career development and education. This was the first such study conducted to explore the relationship between skills and performance of logisticians. Researchers considered Mangan and Christopher’s (2005) T-shaped model of logistics skills.

Gralla and Goentzel, (2015) in their article on Case study of a HL simulation exercise and insights for training design have analysed training programmes to see the feasibility by practical and theoretical implications to HL. World Food Programme’s Logistics Response Team (WFP’s LRT) training was the focal point in this research. The authors recommended LRT as a successful training programme that can develop a universal model of training for all ‘humlogs’. They evaluated the LRT in order to generalise and develop the whole programme as a simulated classroom exercise. Although, the key requirement of a successful training exercise was achieved, the design aspects are complicated and hard to adopt at every level. Therefore, further research is required to find a methodology to identify the achievements of each program with continuous monitoring of participants’ progress. Despite availability of
several programs for various other areas in SL humanitarian sector, we could not find any logistics specialised training being conducted (DMC, 2014).

Allen, Kova´cs, Masini, Vaillancourt, & Wassenhove, (2013) have conducted research to explore the link between the humanitarian logisticians and training needs. Requirement of further research in education and training needs were indicated with prominence to practical training. The authors evaluated the skills required by ‘humlogs’ and identified the areas for further improvement. Researchers have confirmed HL skills following the T-shaped skills model from Mangan and Christopher (2005) and listed a number of skills that are required by the ‘humlogs’. This gives an indication to all organisations about the areas to concentrate when conducting future training on ‘humlogs’. Additionally, research indicates the different skills that are required in various career levels. More research in finding training needs to professionalise the sector was highlighted with an enhanced emphasis on technical issues involved in training. Although, there is an agreement on specific skills such as warehousing, transportation management, inventory control and purchasing as top level skills, the authors emphasized on the significance of the other skills such as needs assessment, safety and security, monitoring and evaluation. Further, since the HL sector has a high turnover due to various demands (Wassenhove, 2006) there should be an elaborated methodology of testing these skills in the humanitarian sector. In Sri Lanka, no specific skills have been identified in the HL sector. At present, basic degrees of finance or management and diploma in SCM are key entry qualification to the sector (DMC, 2014). Although, some further training is being conducted at various organisations, no specific attention is given to the areas identified by the authors. Additionally, the present SL SCM institutes also lack subjects of HL in their syllabi.

Goffnett, Keith Helferich and Buschlen, (2013) have searched literature and course details in relief agencies and training institutes to identify the integration between practices and ‘Service-learning’. This is an educational method that balances learning
in class room with pragmatic situations, where live, learn and serve are the main concepts. Research emphasised on the need for developing training and research on practical learning integrated to ‘Service-learning’ concepts. The authors further included the requirement of a training institutes and educators in developing practical disaster logistics response courses with the view of responding more professionally in the future. They also focused on ‘Service-learning’ aspect that is new to HL. The authors not only showed the practical application of the concept but also elaborated the challenges and possible method of developing courses to the relevant institutions and personnel. Although, authors have not elaborated how learning inputs can be developed into fully fledge ‘Service-learning’ courses, they concluded the integration between ‘Service-learning’ principles and HL education as vital. However, the article lacks details of training issues being faced as impediments in ‘Service-learning’. This study can be considered as the ‘initial spark’ to begin more elaborated research to have a practical connectivity of the concept. Furthermore, considering the coordination issues that occurred in the past (Davidson, 2006), ‘Service-learning’ based training could be the best method in addressing these issues seeking solutions towards more competent ‘humlogs’.

Bo¨lsche, Klumpp, & Abidi, (2013) conducted research on specific competencies in HL education. The significance of professionalism in HL sector and various skills that are required in career development was researched by the authors. Research indicated the necessity of having specially designed training programs for ‘humlogs’. Logisticians were used from different sectors and areas to find out the education, skills and competencies. Researchers showed the methods of enhancing skills through such specialised training programs towards professionalism. The European Qualification Framework (EQF) was taken as the model when surveying these skills and competencies. This research also indicates the requirement of having adequate training budgets towards effective supply chain management. Further, they explained the inefficiencies in developing skills and competencies along with issues faced in
terms of application in live environments. Research was conducted by considering the ‘Berufswertigkeit’ method, which uses comparative evaluation of the competences of different individuals from different education backgrounds. This concept tests the competencies of individuals against the organisational achievements and vice versa. The authors indicated two avenues that humanitarian education should be aligned into; one is the professional education methodology that comprises of graduate and post graduate programmes and the other is the Continuous Professional Development (CPD), which are being followed by logisticians throughout their career. However, it is impractical to implement this ‘Berufswertigkeit’ concept since there is no notable humanitarian education system in Sri Lanka. Nevertheless, as recommended, it can be applied to the SL concept for further research with acceptable adaptation.

Goh, & Souza, (2013) conducted their research on learning mechanisms for HL. The authors identified three levels of knowledge available, such as in the ‘field’ (local knowledge is important), in the ‘supply chain’ (procedures and manuals of various organisations are recognised as knowledge) and ‘theatre’ (macro level of operational context knowledge). As a result, they discovered a learning mechanism that can be used to improve HL, where organisational learning theory was used to identify the processes and mechanisms available in humanitarian organisations describing different methods of learning through hiring, doing, observing, and searching. Researchers also proposed further empirical validation to this theoretical framework. They indicated that this method can be used to improve processes, skills and manage knowledge where they are not “mutually exclusive and can happen simultaneously”. Even though this learning method was criticised as learning and adaptation are two distinct processes (Fiol & Lyles, 1985) this is a comprehensive study into the HL in the form of organisational learning theory application. This can be adopted in the SL humanitarian sector where a lot of small scale humanitarian organisations can adopt most of the methods such as learning by hiring and doing. However, further research
is needed to explore whether the learning theory is effective, when considering the high turnover, low pay, lack of funding and other various constraints that are being experienced (Van Wassenhove L., 2006) in the sector.

Kovács & Spens, (2011) identified diverse areas that required further research in HL. Among those areas, researchers have given special attention to training and skills development of HL. Data was collected through an email survey among the journals’ editorial board as well as senior academics and practitioners in order to find the future research areas. HL being an emerging field, authors indicated the necessity of more empirical research. Specific areas such as development of training methodologies, skills identification and syllabus development were also highlighted. The authors mainly concentrated on improving the academic partnerships among various training institutions and practitioner organisations to develop HL skills. There have been only a few researches in the field of HL with regard to SL context. Natural and manmade disasters are on the increase (UNDP, 2014) in Sri Lanka. Hence, there should be more research conducted with practitioner and academic integration, to develop the sector.

V. Wassenhove, (2006) showed the developing trends in disasters and the prominence of HL. The author considered the theoretical framework of logistics and drew parallels with commercial logistics to show the commonalities and differences in both sectors. He indicated that, private sector logistics can be used to improve the HL by exploring cross learning potential for both sectors where, private sector logistics service providers can also include the humanitarian activities to their agenda as Cooperate Social Responsibilities. Demand of academics in developing a broad base theoretical and conceptual need in order to develop the HL though training and development is conjointly highlighted. In Sri Lanka, commercial logistics sector is more established in terms of training and development than HL. Therefore, there is an opportunity to establish different levels of approaches to humanitarian logistic
training such as integrating with commercial logistics programs, including commercial logistics practitioner experience in developing new programs and using the existing established logistics training institutes to achieve economy of scale in HL training with more empirical research.

Kovács & Spens, (2011) conducted a gap analysis with regard to HL research, education and practice. Secondary data such as bibliographies and web sites of humanitarian organisations were used for this research and primary data was gathered through practitioner workshops and conferences. The authors highlighted gaps in areas such as practice, research and education. In view of education, the researchers indicated the deficiency in concentration at strategic level supply chain design and improvement, specialised training (such as medical and healthcare logistics), skills based training and on the job training programs in order to identify the practical aspects on the field. As to date, some of these issues are addressed. However, most of these training courses are based on European countries. Conversely, there is no indication of such programmes in the SL humanitarian sector. Moreover, the community level participation should be considered since there is evidence of community based participation during the recent disasters in Sri Lanka (Rajakaruna, Wijeratne, & Yan, 2014).

In disaster management, Applied Improvisation (AI) is defined as “the process of adopting the experience of improvisational theatre to create a breakthrough in preparation or in response to disaster” (Tint, McWaters, & van Driel, 2015). Considering AI as a training method/tool, the researchers conducted a study on AI training for disaster readiness and response, concentrating on preparing humanitarian workers and communities. An interview based analysis was carried out into personnel who undergo the AI training, where application of critical decisions in demanding situations were concentrated. Although, this research was not focused only on HL, it provides a theoretical framework and understanding of the necessity of
specific skills and various factors of humanitarian work which includes HL. Simulations show that aid workers are “better prepared when they are given unknown situations”. The authors further highlighted the significance of generating group cohesion among different groups of humanitarian workers in these simulated exercises. Although the chaotic atmosphere of a real disaster situation could not be simulated, these types of training are an innovative method of verifying the skills of logisticians. Further, such AI trainings will also improve many areas where more systemic developments are needed in HL. Even though, Disaster Management Centre of Sri Lanka (DMC, 2014) carries out simulation exercises, they mostly concentrate on early warning and emergency rescue operations. Consequently, such AI training methodology can be used in Sri Lanka to increase the logistic efficiencies in order to eradicate future problems as in the case flash floods in May 2016 (FloodList, 2016).

Kovács, Tatham, and Larson conducted a study in 2012 to analyse what skills are needed to be a Humanitarian Logician? The authors analyzed the job advertisements listed in the different sources and conducted a content analysis, considering the Haiti Earthquake as a case example. Authors listed down a broad spectrum of functional skills which are required by ‘humlogs’. They have initiated this list from the ‘T-Shape’ skills that are provided by Mangan & Christopher, (2005). The authors additionally listed a set of contextual skills that are further required with extensive knowledge in donor regulations. It is evident that logistics researches in the skills of the logisticians differ among actual skills, attributes, experience, competencies, and knowledge areas (Kovacs, 2011). Gammelgaard & Larson, (2001) described the differences between context-independent skills and context-dependent competencies. However, they indicated that both skills and competencies are important in logistics and SCM. According to Myers, et al., (2004) there is a distinction between logistics knowledge that is acquired through education and skills that acquired through work experience. Consequently, they suggest training programmes in the field should have more concentration in these areas when
developing future training. This research is an excellent starting point for the skills that are required for ‘humlogs’. However, there is a need for further research to identify the applicability of these skills in different disasters in various regions. There can also be further researched comparing the existing skills and the skills listed in this research to develop appropriate training.

From Logistics to SCM: The Path Forward in the Humanitarian Sector studied the various disasters that have occurred before 2005. The main objective of Thomas and Kopczak (2005) was to find the way forward with regard to HL. Authors conducted a descriptive study, considering the chain of disasters that have occurred. Statistics from those events were taken as the main area of analysis and identified the major impediments to the HL such as; inadequate use of technology, lack of institutional learning and limited collaboration. The Paper illustrates the current state and the limitations of HL with regard to knowledge and performance, training and education including inefficient coordination between aid agencies and donors with governments. The researchers have recommended five strategies that together define a path forward for aid agencies with regard to logistics such as; professionalising the logistics community, standardized training and certification, metrics and performance measurement, communicating the strategic importance of logistics and flexible technology solutions. It is identified that these strategies that are recommended by the authors as a way forward are interlinked with standardized training and certification. Hence development of such standard in training and certification may also support the other factors. However, future research is required to further investigate the precedence and the interconnectivity of these factors. Also it is apposite to mention that all these factors are lacking in the SL humanitarian sector. Therefore, it is significant to cater to these requirements in order to achieve a ‘safer Sri Lanka’.
Upon literature review of the aforementioned articles, the key recommendations for the existing HL training issues are observed as;

- Training programmes have to be focused on right the skills of ‘humlogs’.
- HL has to be as professional in commercial logistics.
- Current training and certification programmes have to be standardised.
- Specialised training such as simulation exercises and internship training should be arranged with practical sessions in HL training programmes.
- Awareness of advance studies such as Masters and PhD programmes should be increased to develop more research into HL.
- Cross learning opportunities among commercial and HL sectors should be developed to enhance skills on both sectors.
- Community based and simulated type training should be carried out with the involvement of the general public considering the existing nature of the HL.

Being a country that is exposed to frequent natural disasters (UNDP, 2014), Sri Lanka faces lots of challenges. There are many issues that Sri Lanka faces in the aftermath of various disasters (Rajakaruna, Wijeratne, & Yan, 2014). Presently, there are large numbers of logisticians —engaged in humanitarian operations in government, international organisations and NGOs. During the informal interviews carried out through a sample of these practitioners (Rajakaruna, Wijeratne, & Yan, 2014), it was revealed that most of them have not undertaken any international or national level comprehensive HL specialised training, instead some of them have participated in certain short-term programmes. Although, MDM carries out a lot of vital tasks with coordination of major international agencies, they are lacking in a system of coordination at times of disasters due to various logistical failures (Davidson, 2006). Further, there is no set methodology available to study HL in any of the logistics training institutes and universities that teach SCM and logistics and related subjects in Sri Lanka. As described earlier there are major distinctions in commercial and HL (Beamon, 2004).
Current Learning Facilities Available in HL

Sources revealed different levels of HL programmes and courses conducted by various organisations such as RedR, HL Association (HLA), Fritz Institute, Georgia Institute of Technology, Institut Bioforce, Logistics Learning Alliance and etc. These are recognized by the Charted Institute of Transportation and Logistics (CILT) UK and Charted Institute of Procurement and SCM (CIPS). These courses are presently recognized by many organizations that work in the humanitarian sector, such as United Nations, Medicines’ Sans Frontiers’, World Food Programme, Save the Children, Oxfam, Catholic Relief Services, International Committee of Red Cross, and US Aid etc. In addition to these professional courses in HL, some institutes conduct specialised courses for medical logisticians. Further, there are Masters and PhD programmes that are available in the HL field in many universities (University of Salford, Dublin City University, Florida Institute of Technology, University of Lugano etc. Some basic syllabi applied in these courses are summarised in the table 2. However, the course fees of such programs may be too costly, making them inaccessible to local ‘humlogs’. It was also noted that there is no mention about introductory process of disasters such as nature, types and causes etc. The syllabi are also lacking indication of skills of logisticians and performances of humanitarian logisticians and their organisations. These can be identified as current gaps in humanitarian logistics studies.

Table 2- Subjects available in HL Basic and Advanced Programmes

<table>
<thead>
<tr>
<th>Subject</th>
<th>Specialised area</th>
</tr>
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<tbody>
<tr>
<td>Humanitarian Supply Chains</td>
<td>The Cluster Approach and the Logistics Cluster; The Role of Interacting with the Media</td>
</tr>
<tr>
<td>Warehousing and Inventory</td>
<td>Block Stacking; Checking Goods Received; Order Size; Warehouse Safety; Disposal by</td>
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<tr>
<th>Procurement</th>
<th>Burning</th>
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<tbody>
<tr>
<td>Procurement Processes</td>
<td>Procurement Processes</td>
</tr>
<tr>
<td>Transport</td>
<td>Helicopters, Vehicle Drive trains; Route Planning and Scheduling; Container Capacities</td>
</tr>
<tr>
<td>Fleet Management</td>
<td>Fleet Management methods and the transportation management</td>
</tr>
<tr>
<td>Import/Export and International Commerce Practices</td>
<td>Kyoto Convention; International Trade Facilitation Organizations; Updated Inco terms</td>
</tr>
<tr>
<td>Managing a Humanitarian Supply Chain Response</td>
<td>Networking with Humanitarian Logisticians</td>
</tr>
<tr>
<td>Supply Chain Structures</td>
<td>Supply Chain Concepts; Decoupling Points; Supply Chain Processes; Supply Chain Types; Performance Management; Supply Chain Alignment</td>
</tr>
<tr>
<td>Supply Chain Planning</td>
<td>Assessment of the situation; Established policies and standards; The supply chain design; Supply chain resources required to operate; How the supply chain will be controlled for performance monitoring; Supply chain relationships and interfaces</td>
</tr>
<tr>
<td>Supply Chain Coordination and Operation</td>
<td>Monitoring and measuring supply chain performance; Reporting Supply chain performance; Structured supply chain problem solving and decision making; Special situations, such as transition or withdrawal; Project management of supply chains; Skills of providing advice and support to other logisticians</td>
</tr>
</tbody>
</table>
CONCLUSION AND FURTHER RESEARCH

In the wake of growing interest in the field of humanitarian research in response to the increasing number of disasters in the world, HL is in a paradigm shift (Bölsche, 2014). Thus, it is of paramount importance to carry out specialised training programmes in the field of HL with further research to explore the feasibility of conducting such programmes in Sri Lanka.

Thomas & Kopczak, (2005) have explained progressive training with a universal standard as one of the solutions where the whole HL locale is professionally able to meet the demands of organisations in the humanitarian sector. Authors (Thomas & Kopczak, 2005) have additionally highlighted several benefits available from such universal training such as; “Improved communication and cooperation across agencies and with donors as a result of standardized catalogs, terminology and processes increased career mobility and job satisfaction for logisticians in the sector, A pool of trained logisticians whose skills have been externally verified, providing agencies and donors with greater hiring flexibility and options”. However, there may be impediments such as organisational resistance, government and legal restrictions and asymmetric information. Hence, this type of solution needs further analysis within the SL humanitarian sector. Accordingly, future research is conjointly needed to look into the feasibility of such model within the SL humanitarian landscape.

The paper concludes inadequate light being shed on the humanitarian landscape in the Sri Lankan HL sector, that needs significant improvement, when compared to phenomenal interest with enormous efforts continued globally towards effective HL
training and development. Given the observations, it is a timely need to conduct more research into this area being an integral part in the Humanitarian field of the country in order to mitigate the underlying risk, considering the vulnerabilities and significant public funds being spent on the humanitarian and disaster logistics annually.
REFERENCES


