

THE EXPERIENCE OF POLISH ORGANIZATIONS UNDER HUMANITARIAN AID

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Purpose: Evaluation of the experience and operational preparedness of Polish entities involved in humanitarian aid.

Design/methodology/approach: The research was carried out using a diagnostic survey method, with PAPI (paper and pencil interview) and CAPI (computer-assisted personal interview) survey techniques. The survey included organizations involved in humanitarian relief activities, represented by individuals working in managerial positions with long years of work experience.

Findings: The organizations surveyed do not have significant experience in organizing and implementing humanitarian activities, but among them many have participated in international humanitarian operations. The organizations provide a positive assessment of their stock strategies and the resources required to secure the distribution process during humanitarian aid.

Originality/value: The results of research can be addressed to those involved in public crisis management, both local authorities and public entities as well as blue light organizations and non-governmental organizations.

Keywords: humanitarian aid, humanitarian logistics, crisis situations, crisis management, hazards.

Category of the paper: research paper.

1. Introduction

Events don't always unfold as expected – in a crisis situation, this is a generally accepted rule. Humanitarian operations are dynamic, requiring participating organizations to exhibit flexibility in delivering effective assistance and protection, often within a matter of days or even hours. Thomas and Kopczak (2005) and Hovhannessian (2012) conclude that the main challenges in humanitarian aid can be caused by a lack of ability to recognise the importance of logistics, a shortage or absence of staff, underutilization of technology, insufficient institutional learning, and the need for improved cooperation and experience.

Crisis situations are characterized by many unpredictable factors, including time pressures, lack of information and the complexity of logistical processes (Marzantowicz, 2015). In such a turbulent environment, organizations need to manage their resources efficiently, including developing the necessary skills and experience of staff. In the PWN dictionary, experience is explained as:

- a set of knowledge and skills acquired based on observations and personal experiences,
- an event, especially an unpleasant one, that has an impact on someone's life,
- inducing or reproducing a phenomenon under artificial conditions,
- in philosophy: the entirety of the process of perceiving reality or the totality of perceived facts.

Experience is "the spontaneous cognition of something that exists; the result of the act of cognition, expressed in empirical judgments (judgments, sentences); a psychological state resulting from acts of experience" (Krapiec, 2001, p. 673). Experience is associated with conscious activity of obtaining information about an object through its direct apprehension, as well as the cognitive result of this activity, formulated in the form of an empirical judgment or sentence; colloquially - experiencing, going through something, or undergoing trials and their consequences (such as knowledge and skills), as well as participation in something (Filipowicz, 2012, p. 45).

Learning through experience (experiential learning) is reflected through various formulations that capture its essence and specificity, such as "window to the real world" or "bridge to the real world" (Chen, Shen, 2012, p. 30). It is emphasized that learning through acquiring experience is highly effective. Therefore, the concept of David Kolb's experiential learning deserves special attention, emphasizing that first, the learner must be provided with an opportunity for direct experience so that they can draw conclusions from it and relate it to theory, which will help them better understand it (Łaguna, 2008, p. 40).

Rescue operations require experienced individuals, and these professionals are urgently needed to improve the overall execution of operations (Rifai, 2018). The experience of these individuals does not bring material benefits, but through them it is possible to protect human lives and reduce the suffering of those affected (Rifai, 2018). Therefore, there is a need to develop the issue of operational preparedness of humanitarian actors and to assess their experiences in humanitarian operations. This will be achieved by seeking answers to the following research questions:

1. What international humanitarian operations have Polish organizations been involved in?
2. Do Polish organizations have experience in organizing humanitarian activities?
3. Do legal regulations allow for effortless cooperation with international entities during humanitarian actions?
4. How do respondents assess the competences of management bodies?

5. How do respondents assess the level of training for humanitarian operations?
6. What are the stock strategies securing the distribution processes of relief items?
7. Is the allocation of resources for humanitarian aid operations adequate?

The answer to the above research questions is based on surveys conducted in 2021 using PAPI and CAPI in Poland.

2. The importance of humanitarian aid

Humanitarian aid (Latin *humanitas* - humanity, human, humane - humane, humane) refers to any action aimed at saving lives, alleviating human suffering, providing adequate material conditions (medicines, food, resources, water), temporary shelter and security. Activities also include the reconstruction of damaged infrastructure to facilitate the arrival of aid and prevent the deterioration of living conditions (Bonilla, 2011).

Humanitarian aid has traditionally included support for the reconstruction of infrastructure. Unfortunately, today's reality shows that sometimes post-conflict or post-disaster emergency interventions do not include measures to restore the area to its pre-disaster state, thus failing to put people back on a development path and instead placing them in a maintenance structure (Walker, Hein, Russ, Bertleff, Caspersz, 2010).

Weiss (2013), author of the provocative book *Humanitarian Business*, discusses this very aspect of humanitarian aid in more detail. However, as Grzebyk and Mikos-Skuza (2016) rightly point out, the accusation that a humanitarian aid industry has emerged cannot undermine the idea of humanitarianism and solidarity with those in need. For a century and a half, the humanitarian sector has been a symbol of empathy, selflessness and often heroism. This image still holds true today. One only has to think of humanitarian workers and volunteers who have been killed and injured in armed conflicts, as a result of aftershocks from major earthquakes, or infected with difficult-to-treat diseases (Grzebyk, Mikos-Skuza, 2016). In such a situation, humanitarian aid has imperceptibly become part of the so-called 'winning of hearts and minds', which aims at public recognition of military and humanitarian efforts and the achievements, desired outcomes and strategic objectives of a given mission (Fitzsimmons, 2008, p. 340).

International humanitarian law was developed in response to the needs of soldiers wounded on the battlefield. The main sources of international humanitarian law are international custom and treaties. The first multilateral treaty was the Convention for the Amelioration of the Condition of the Wounded and Sick in Armed Forces in the Field, adopted in Geneva in 1864. Since then, there have been more than 100 significant international agreements in this field, the most important of which today are the four Conventions for the Protection of Victims of War, adopted in Geneva in 1949 (Grzebyk, Mikos-Skuza, 2016). They are universal in nature, having been adopted by 196 states, i.e. all sovereign territorial organizations recognised as

states by the international community. In 1977, the Geneva Conventions were supplemented by two additional Protocols, and in 2005 a third Protocol was adopted, dealing with additional protective signs. The protocols also have fairly broad (though not universal) coverage, with 174 states being parties to Additional Protocol I on the protection of victims of international armed conflicts, 168 states having accepted Additional Protocol II - on the protection of victims of non-international armed conflicts - and 72 states being bound by Additional Protocol III (Grzebyk, Mikos-Skuza, 2016). The Geneva Conventions and their Additional Protocols, as well as customary norms, are crucial for defining the legal framework for humanitarian assistance in situations of armed conflict, whether interstate or internal, and for assessing the principle of humanitarian access, which may facilitate or hinder the provision of humanitarian assistance (Grzebyk, Mikos-Skuza, 2016).

The embedding of humanitarian aid in the Polish legal hierarchy is quite complicated. According to Jagielski (2016), next to international law, administrative law is the most authoritative as a determinant of the legal framework for the main aspects of humanitarian aid. In legal-administrative norms, one has to look, for the regulation of legal-material aspects related to the definition of what humanitarian aid is, as well as the establishment of possibilities and conditions for the implementation of such activities (Jagielski, 2016). Administrative law also provides basic references for norms that serve to shape Organizational forms of humanitarian aid. Finally, possible procedures for organizing and providing such aid can be found in legal-administrative regulations (Jagielski, 2016).

Aid is classified as direct, meaning the provision of services and goods to a population in need, or indirect, i.e. that which includes the transport of such goods and personnel, as well as infrastructure support, e.g. road repair, provision of electricity, which are necessary for the effective distribution of aid (United Nations Office for the Coordination of Humanitarian Affairs, 2006). It is also important to remember that the cost of delivering aid should be as low as possible in relation to the cost of the aid itself, in order to get as many goods as possible into the hands of those in need (Drewek, 2013). The role of logistics in humanitarian aid is highly emphasised as it is an essential component of emergency response plans and humanitarian assistance to ensure that the right goods are available in the right location, at the right time and in the right quantity (Iqbal, Mehler I Yildirim, 2007). According to Bujak (2014), logistics plays an increasingly important role not only in economic terms, but mainly in the area of improving the quality of life of societies. The application of logistics is becoming more and more widespread, and opportunities for its use in crisis management and humanitarian aid are increasingly being identified. In general, the following essential undertakings can be distinguished in the process of logistical security of humanitarian action (Kmieciak, 2015):

1) Logistics services.

- Specialised services. Mainly transport services. They include evacuation, resupply and transshipment. Includes planning the number of transport resources, taking into account resources obtained from the national economy through relevant contracts or defence benefits.
- Economic and subsistence services. Includes the provision of basic necessities to the civilian population - food, water, clothing, hygiene products, cleaning products, medicines, etc. This category also includes efforts to provide shelter for the affected population. This may be done in holiday resorts, hotels, schools or by accommodation with civilians remaining outside the disaster area.
- Other services. These include services that Nowak (2009, p. 62) describes as: "social assistance, transport of deceased and killed persons, burial services, disposal of solid waste and rubbish, disinfection, deratisation, special treatments for the removal of chemical and radioactive contamination, disposal of dead animals and contaminated food, clothing, medicines".

2) Medical services (first aid, qualified first aid, emergency medical operations, medical assistance, qualified medical assistance, specialised medical assistance).

In the humanitarian logistics sector there is a lack of knowledge of logistics and management sciences in general, which would be particularly useful for those responsible for directing humanitarian operations and managing operations during emergencies. The increased demand for Organizational and professional competences is due to the increasing number of disasters, both environmental and civil (Sienkiewicz-Małyjurek, 2014). In addition, standardisation in each field will lead to improved interoperability of humanitarian operations (Paciarotti et al., 2021).

3. Research methodology

The aim of this paper is to assess the experience and operational preparedness of Polish organizations providing humanitarian aid. This objective was achieved by analyzing the results of a survey conducted in 2021 using the diagnostic survey method, a PAPI (Paper and Pencil Interview) and CAPI (Computer Assisted Personal Interview) survey technique. The survey questions were prepared on the basis of a critical literature review. The theoretical part presents the importance of humanitarian aid and highlights the role of logistics in these activities. Empirical part based on the survey that utilized a 7-point Likert Scale, allowing respondents to indicate the extent to which they agree or disagree with a given issue: strongly disagree (1), disagree (2), somewhat disagree (3), undecided (4), somewhat agree (5), agree (6), strongly agree (7). Responses were provided by 101 individuals from 75 organizations.

Non-governmental organizations (3.8%) made up the smallest proportion of the survey, as they were unwilling to participate, citing a lack of knowledge in the areas surveyed or a lack of time. In addition, representatives of the crisis management centers of the provincial offices (10.4%) and other units that wished to remain anonymous (23.5%) participated in the survey. The largest group are the units of the State Fire Service (62.3%). The State Fire Service is the leading unit in the national rescue and firefighting system (Bujak, 2014). The State Fire Service is a professional and uniformed formation with specialized equipment (Ciekanowski, Żurawski, 2022, p. 21). In addition, the State Fire Service, as the organizer of National Rescue and Firefighting System, fights fires and other natural disasters and deals with technical and chemical rescue (Dz.U. 1991, No. 88, item 400, art. 2). According to the law in Poland, as in most countries, when a unit of the National Rescue and Firefighting System participates in a rescue operation, its commander is automatically in charge of the rescue operation and thus the commander of all services, including medical services (Ciećkiewicz, 2010, p. 31). In all scenarios, except in cases of terrorist acts falling under police jurisdiction, the ultimate authority lies with the fire commander. In addition, if the commander of the operation designates a danger zone - only State Fire Service rescuers and firefighters operate in this area (Ciećkiewicz, 2010, p. 31).

The study involved individuals with extensive knowledge in crisis management and humanitarian aid: Chief and Deputy Chief - 21.9%; Specialized positions - 14.3%; Commander and Deputy Commander - 13.3%; Manager and Deputy Manager - 8.6%; Commandant and Deputy Commandant - 7.6%; Section Head - 6.7%; Officer and Non-Commissioned Officer - 4.8%; Technician, Senior Technician - 3.8%; Director and Deputy Director- 3.8%; Officer - 3.8%; Inspector, Senior Inspector - 3.8%, others - 7.6%. Furthermore, the average work experience of respondents in organizations engaged in crisis management and humanitarian aid activities is 17 years. The results of the survey were statistically analysed. The measures used for the analyses were dominant, median, first quartile (Q1), third quartile (Q3) and mean. These measures allowed an objective evaluation of the information obtained.

4. Results

4.1. Experience in humanitarian operations

Getting a job in the humanitarian sector is often challenging. Even entry-level positions frequently require several years of experience in the field. Internships and volunteering can provide valuable experience in the humanitarian sector (Li, 2022). One participant shared experience volunteering at a local NGO that worked in refugee support in Africa. The participant told that “the volunteering brought me many skills and knowledge that were

beneficial for me until today, and through the volunteering experience, I expanded my professional network and gained contextual knowledge, which helped me find a job later on in the humanitarian sector” (Li, 2022, p. 29). More than half a million people are estimated to work in humanitarian sector, the majority being locally engaged staff. Increasing the skills, knowledge and experience of leaders and managers of humanitarian responses is a critical need to ensure the most effective recovery in communities as well as use of resources (Clarke, Perreard, Connors, 2019, p. 1665).

Table 1 shows what percentage of Polish organizations have experience in humanitarian operations.

Table 1.
Participation of Polish organizations in humanitarian aid

Multiple choice questions (% data)							Position measures					
definitely not (1)	not (2)	rather not (3)	I do not know (4)	rather yes (5)	yes (6)	definitely yes (7)	Q1	Median	Q3	Mode	Standard deviation	Mean
Has your organization participated in international humanitarian actions?												
10,89%	31,68%	5,94%	8,91%	13,86%	13,86%	14,85%	2	4	6	2	2,08	3,84

Source: own research.

The data in table 1 show that the majority of organizations do not participate in international humanitarian actions – 48.51% of negative responses. The dominant is 2 (response: “no”). A group of 8,91% respondents do not have opinion in this area. A group of 42.57% of organizations participated in international humanitarian operations and these organizations pointed out hazards and crisis situations that required multinational intervention and were the source of their experience in international humanitarian actions (Table 2).

Table 2.
Experience of Polish organizations in humanitarian operations

Event	Location	Year	Number of responses
Earthquake	Albania	2019	2
	Nepal	2015	3
	Haiti	2010	3
	Sweden	2008	1
	Algeria	2003	1
	Turkey	1999	1
Floods	Montenegro	2010	1
	Germany	2002	1
	Czech Republic	2002	2
	India	2001	1
	Hungary	2000	1
Forest fires	Sweden	2018	5
	Russia (Moscow)	2010	3
Covid-19	International reach	2019-2022	3
War	Lebanon (Beirut)	2020	3
	Afghanistan	2001-2021	1
	Iraq	2003-2011	1
	Balkans	1999	1

Cont. table 2.

Industrial incidents (ammonium nitrate explosion)	Lebanon (Beirut)	2020	3
Tsunami	Sri Lanka	2004	1
	Maldives	2004	1
	Indonesia	2004	1
	Malaysia	2004	1
Illegal migration and border security	Multi-country support - Frontex missions	2004-2021	2

Source: own research.

Furthermore, respondents were asked whether, in their opinion, legal regulations allow for cooperation with international entities during humanitarian actions. The majority of respondents found it difficult to determine their opinion – 54.46% of respondents are undecided. A group of 31.68% of respondents believe that legal regulations enable international cooperation, while 11.88% believe that such conditions have not been established, making cooperation more challenging. In addition, the surveyed organizations expressed opinions regarding the alignment of national procedures with international procedures in the context of delivering humanitarian aid. It turns out that the majority of respondents do not have an opinion on this matter (62.38%). Nearly one-third of the respondents believe that the procedures differ, while 5.94% are of the opinion that the procedures are aligned (Table 3).

Table 3.

Legal regulations and procedures under humanitarian aid

Multiple choice questions (% data)							Position measures					
definitely not (1)	not (2)	rather not (3)	I do not know (4)	rather yes (5)	yes (6)	definitely yes (7)	Q1	Median	Q3	Mode	Standard deviation	Mean
Do legal regulations allow for free cooperation during humanitarian actions with other international organizations?												
0,99%	3,96%	6,93%	54,46%	21,78%	6,93%	2,97%	4	4	5	4	1,01	4,27
Do the procedures of international organizations in the context of providing humanitarian aid differ from national procedures?												
0,00%	1,98%	3,96%	62,38%	16,83%	11,88%	2,97%	4,00	4,00	5,00	4,00	0,93	4,41

Source: own research.

The next area under examination pertains to the experience of Polish organizations in organizing activities during humanitarian operations (Table 4).

Table 4.

Experience of Polish organizations in organizing activities during humanitarian operations

Activities	Scope of experience				
	Once a year	Once every 1-2 years	Once every 3 to 5 years	1-3 total actions	Lack of experience
Experience in organizing field kitchens	15,84%	8,91%	10%	17%	49%
Experience in organizing field hospitals	9,90%	10,89%	18%	15%	47%
Experience in accommodation of medical staff	5,94%	15,84%	7%	8%	63%
Experience in search operations	17,82%	8,91%	14%	21%	39%

Source: own research.

The survey shows that Polish organizations have reported a lack of experience in organizing humanitarian activities. Group of 63% of organizations don't have experience in accommodating medical personnel, 49% in organizing field kitchens, 47% in organizing field hospitals and 39% in search operations. Organizations have only some experience in these activities as they participate in them occasionally.

4.2. Organizational competences and training

Respondents were asked whether the management bodies (village head, mayor, city mayor, district governor, governor) have adequate competences in the context of humanitarian aid activities. The most common response was "rather yes", as indicate by the dominant. Group of 13.86% respondents indicate that competences are not sufficient and 11.88% of respondents avoided answering.

Another question concerned interorganizational training. The majority of organizations (42.57%) indicated that training was insufficient, although one in four organizations considered the frequency of training to be adequate. Thus, the extent of interorganizational training in Poland is insufficient, and even if such training takes place, the organizer is the provincial level and the other administrative levels are only participants (NIK, 2017). The results on level of competence and interorganizational training are presented in table 5.

Table 5.
Competence and interorganizational training

Multiple choice questions (% data)							Position measures						
definitely not (1)	not (2)	rather not (3)	I do not know (4)	rather yes (5)	yes (6)	definitely yes (7)	Q1	Median	Q3	Mode	Standard deviation	Mean	
Do the competencies of governing bodies (Mayor, City Mayor, City President, County Governor, Voivode) in the context of humanitarian aid and crisis management activities are appropriate?													
1,98%	1,98%	9,90%	11,88%	36,63%	35,64%	1,98%	4	5	6	5	1,2	4,94	
Are interorganizational training sessions in the field of humanitarian aid and crisis situations are sufficient?													
3,96%	15,84%	22,77%	29,71%	19,80%	6,93%	0,99%	3	4	5	4	1,3	3,7	

Source: own research.

The planning and preparation of activities within humanitarian aid require transparent leadership principles. Leadership and decision-making are crucial in crisis management and humanitarian aid, and they are linked to an individual's personality, attitude, and experience. However, they can also be shaped through training, such as simulation exercises (Sobol, Faccincani, Khorram-Manesh, 2017). In recent years, local and state authorities have begun to establish positions for resilience: resilience strategists, resilience planners, and resilience analysts. Research conducted by Ross (2013) provides some guidance on effective interorganizational resilient leadership (Alshayhan, Yusuf, 2021). Resilient leadership encompasses improvisation in identifying solutions; coordinating resources to meet community needs; engaging the community to gain support from key stakeholders; resilience; and an emphasis on long-term solutions. Therefore, resilience-oriented leadership in

interorganizational environments entails several skills and competencies (Alshayhan, Yusuf, 2021): flexibility and adaptability to enable improvisation; coordination; persuasive communication to enhance support and engagement; and strategic thinking.

4.3. Inventory and Resource Strategies for Ensuring Efficient Aid Distribution Processes

Neglecting logistics during humanitarian actions can lead to chaos, for example, a lack of ability to manage humanitarian aid resources (Perry, 2007). Own research indicates that 51.49% of organizations implement a inventory strategy designed to minimize stocks throughout the supply chain. However, the most common response to this question was "I have no opinion" (dominant – 4). Every fifth respondent believes that their organizations do not employ a safety stock minimization strategy.

In addition, 63.37% of respondents say, although mostly without conviction (dominant 5 – “rather yes”), that their organization's inventory strategy is to maintain buffers of cheap but critical stock. Group of 15.84% of organizations do not rely on such a strategy and one in twenty organizations did not express an opinion in this area. According to Kieżun (1998), stockpiling can have a significant impact on operational efficiency.

Regarding the physical resources needed for humanitarian operations, 74.26% of respondents say that the physical resources held by their organization are sufficient, but among these positive responses, the highest number of responses expressed uncertainty (dominant 5 – "rather yes"). Group of 18.81% of organizations consider the level of physical resources to be insufficient. The survey also shows that 55.45% of organizations consider the financial resources available to carry out humanitarian activities to be sufficient, but again the majority of respondents are not sure of their opinion (dominant 5 – "rather yes"). Almost 1/3 of the organizations (30.69%) think that the financial resources are insufficient.

The respondents were asked about the technological equipment of their organizations. It turns out that 87.13% of organizations have technological equipment, while 7.92% don't have it, 4.95% did not express a specific opinion on the matter. Respondents who gave a positive rating to their organization's technological equipment indicated the technological equipment and software they use during humanitarian operations:

- desktops, laptops,
- video equipment,
- video conferencing equipment,
- cameras,
- video screens,
- remote desktops,
- telephones,
- Internet network,

- Zimbra (groupware, email, calendar, database, etc.),
- Cisco (networking, cloud and security solutions),
- Webex (collaboration),
- Teams, Zoom, Skype,
- OneDrive,
- Decision Support System (DSS),
- Electronic Document Management,
- Integrated Information System for County and Municipal Authorities (pl. EWID),
- communication tools.

Besides almost all organizations (95.05%) have an emergency power supply, although 4.95% of organizations do not have an emergency power supply. The results on inventory and resource strategies to secure aid distribution processes and accessibility to emergency power supply are presented in table 6.

Table 6.
Resources for ensuring efficient aid distribution processes

Multiple choice questions (% data)							Position measures					
definitely not (1)	not (2)	rather not (3)	I do not know (4)	rather yes (5)	yes (6)	definitely yes (7)	Q1	Median	Q3	Mode	Standard deviation	Mean
Does the inventory strategy in your organization has been developed to minimize stock levels throughout the supply chain?												
0,00%	5,94%	13,86%	28,71%	24,75%	24,76%	1,98%	4	5	6	4	1,22	4,54
Does your organization create inventory buffers based on the principle of maintaining low-cost but critical supplies?												
0,00%	10,89%	4,95%	20,79%	31,69%	28,71%	2,97%	4	5	6	5	1,31	4,71
Do the physical resources held by the organization suffice for the needs of humanitarian aid activities?												
0,99%	5,94%	11,88%	6,93%	33,67%	25,74%	14,85%	4	5	6	5	1,45	5,02
Are the financial resources allocated for conducting activities within humanitarian aid sufficient?												
3,96%	9,90%	16,83%	13,86%	34,66%	15,84%	4,95%	3	5	5	5	1,5	4,32
Does your organization have computer equipment and collaborative work software?												
0,00%	0,00%	7,92%	4,95%	11,88%	51,49%	23,76%	6	6	6	6	1,1	5,78
Does your organization have emergency power supply?												
0,99%	1,98%	1,98%	0,00%	1,98%	27,72%	65,35%	6	7	7	7	1,1	6,44

Source: own research.

5. Summary and conclusions

Humanity is the foundation of humanitarianism, and impartiality is a fundamental principle of humanitarian action. To ensure impartiality, humanitarianism must adhere to principles of action such as neutrality (i.e. not taking sides in a conflict) and independence. If humanitarian

actors are not neutral actors in the conflict, it will be very difficult for them to act impartially (Grzebyk, Mikus-Skuza, 2016). We can divide humanitarian aid according to three basic criteria: financial, in-kind and technical. Financial aid usually takes the form of donations, loans or debt relief. It can be given directly to the country in crisis, to people in need, or to national aid agencies. In-kind aid takes the form of goods such as food, water, hygiene items, medicines or clothing, while technical assistance can include the provision of specialised equipment or experts in a range of fields (Ficoń, 2015).

Participation in national and international humanitarian operations provides valuable experience that results in better prepared staff. Own research derived from the feedback received from 101 individuals representing 75 entities shows that organizations involved in international humanitarian operations have identified many countries around the world where they have gained experience, mainly in Europe and Asia. This partly agrees with research Paciarotti et al. (2021), where the most frequently cited geographical regions for gaining experience in humanitarian aid are Africa 71%, Europe 41%, Asia 37% and the Middle East 31%.

In order to effectively carry out the humanitarian aid mission, organizations must operate in an integrated manner, conducting regular exercises and participating in training programs for all blue light organizations and coordinating bodies. Therefore, training positively impacts integration, synergy, and a common language necessary for systematic collaboration.

In addition to interorganizational training programmes, which mainly focus on collaboration between independent organizations, professional training for public authorities dealing with humanitarian aid is another important element. Altshuler and Elran (2014), who analysed training issues in Israel, found that there is no mandatory training programme for emergency and humanitarian managers in local authorities. The researchers emphasise that this type of training is extremely important, as many local emergency managers, as well as officials in the Ministry of Defence, do not have an academic background in emergency management and humanitarian aid (Altshuler, Elran, 2014). In Poland, there is an even greater lack of organizational competence. Following an audit by the Supreme Audit Office (NIK) (2017), it was found that civil protection tasks in the Legnica Starosty were performed by an organizational unit that was essentially unrelated to the crisis management and humanitarian aid – Education and Promotion Department. In the course of the same audit, it was assessed that employees of district and municipal offices entrusted with civil protection tasks were poorly prepared in terms of content, and one of the reasons is the lack of educational and professional experience requirements for persons employed in such positions (Supreme Audit Office, 2017, p. 13).

Altshuler and Elran (2014) state that training programs need to be developed for the public, private, and non-profit sectors, and academic courses should be established. This is because professionalization in the field of crisis management and humanitarian aid is necessary, along with the creation of a structured professional identity in this domain that goes beyond

affiliations with any specific organization. In conclusion, all types of training are needed to increase organizational competence. However, it can be concluded that the most important types of training for humanitarian action are those that build the organizational capacity of the different actors and those that enable joint interorganizational training. As McLachlin and Larson (2011) conclude, relationship building is a key skill in humanitarian aid. Interorganizational training builds trust, is an arena for gaining experience, new knowledge and sharing good practice, and improves the quality and scope of communication.

The final area examined was the stock strategy and level of resources that secure aid distribution processes. When planning distributions, it is necessary to bear in mind the limited nature of all the resources used in humanitarian operations. Both the number of drivers and vehicles and the amount of goods they can carry are limited (Sukany, Stefaniak, 2005). Efficiency, speed and reliability are particularly major in humanitarian operations, so it is important to support this with information systems (Day, Melnyk, Larson, Davis, Whybark, 2012). Efficient use of limited resources requires the use of system-wide data with optimisation models (Day et al., 2012).

Sometimes resources are not properly coordinated and congestion, overstretched forces and equipment become a crisis in themselves (Safarpour, Fooladlou, Safi-Keykaleh, Mousavipour, Pirani, Sahebi, Ghodsi, Farahi-Ashtiani and Dehghani, 2020). For example, during the COVID-19 pandemic, medical companies, foreign institutions and many other organizations donated medical supplies and equipment to hospitals and humanitarian organizations (Chen, 2021). These donors should be classified to manage the distribution of their donations, but most donors provided assistance according to their own preferences (Chen, 2021). Agarwal, Kant and Shankar (2020) highlight the phenomenon of convergence of humanitarian relief items, which only exacerbates bottlenecks in supply chains and hinders the efficient flow of essential items. In addition, humanitarian organizations are not well equipped to deal with surplus humanitarian supplies due to insufficient transport resources, limited loading facilities and low storage capacity. The management of misplanned relief supplies is referred to as a second disaster (Agarwal et al., 2020).

As well as being sent in excess without control, resources can also be stolen. According to research by Maghsoudi and Moshtari (2021), resource theft was a problem during the 2017 Kermanshahz earthquake. Many facilities, such as mosques and schools, were converted into warehouses. A significant number of items were stored in these local warehouses, which were organized on an ad hoc basis and had no security personnel (Maghsoudi, Moshtari, 2021). Warehouses are strategic locations during humanitarian operations (Sedeh, Ardalan, Torabi, Khorasani-Zavareh, Allahbakhshi, 2020). Therefore, it is important to secure them properly and to have an appropriate stock strategy. When managing supply chains configured during humanitarian operations, it is advised, in line with Cankaya, Ekici, and Ozener's (2019) recommendation to strive for the highest possible minimum level of safety stock. Own research shows that more than half of organizations have a stockholding strategy that aims to minimize

stock across the supply chain, and the stockholding strategy of most organizations is to maintain buffers of cheap but critical stock.

Matopoulos, Kovács and Heyes (2014) used secondary data analysis to determine what resources are needed and how these resources evolve in the delivery of humanitarian aid. Based on a resource-based view of organizations, the authors assessed the impact of local resources on the configuration of supply chains. The results indicate that the use of local resources in humanitarian aid has a positive impact on overall supply chain performance. At the same time, it was found that local sourcing is often associated with a number of problems, such as a shortage of local supplies (Matopoulos et al., 2014).

Gavdia (2017) recommends the use of Enterprise Resource Planning systems in humanitarian aid, as they allow the optimisation of material flows and resource use through analytical selection and optimisation models implemented by integrated software with a single database. Another important factor affecting distribution efficiency is the equity of relief distribution (Chen, 2021). Distribution of aid may lead to surpluses in certain affected areas while causing shortages in others. If the distribution of aid is inequitable, downstream events may occur in parts of the affected area (Chen, 2021). As an example, the World Health Organization has made a commitment to extend immunization aid to impoverished nations, aiming to guarantee a fair allocation of COVID-19-related resources.

The own research shows that three out of four respondents claim that the physical resources held by their organization are rather sufficient. This uncertainty, expressed by the respondents, is confirmed by the assessment of the Supreme Audit Office (2017), which, following an inspection, indicated that the equipment of the organizations involved in humanitarian actions and emergencies is incomplete and outdated. Many years of neglect in this area as well as, insufficient funding for the tasks have led to this situation (NIK, 2017). Own research confirms that organizations lack money, with almost one in three organizations believing that financial resources are insufficient.

The own research shows that the organization's technological equipment is adequate. Respondents mentioned laptops and video conferencing equipment among these technologies. The most advanced systems mentioned by respondents were EWID and DSS. At this point, it is crucial to emphasize the necessity for change and to allocate additional resources towards the advancement of humanitarian aid. In view of the growing hazards it is worth considering higher funding, as technology and innovation are associated with high implementation and usage costs (Fox, 2015).

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