

## CHALLENGES OF LOGISTICS OPERATIONS IN TERMS OF HUMANITARIAN AID

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**Abstract.** *The article delves into the intricacies of humanitarian logistics and explores the challenges faced in procurement, distribution of essential resources, emphasizing the significance of strong operational logistics functions and offers insights into strategies for supporting logistical business processes to achieve the goals of such vital projects.*

In the context of humanitarian aid, logistics refers to a set of supply chain services that can be consolidated and managed by a specialized organization, which includes activities like procurement, transportation, warehousing, and delivery, rather than being individually carried out by multiple organizations. As logistical function is key for any humanitarian operational intervention the approach to logistics should be comprehensive and well-coordinated. It involves strategic planning, efficient resource allocation, effective communication, and collaboration among humanitarian organizations and partners. Effective humanitarian logistics can significantly enhance the overall impact of relief efforts and aid in mitigating the suffering of affected populations during crises. The main difference between Commercial and Humanitarian Supply Chains is that the nature of demand of the second type is uncertain and grounds for ensuring quick and lifesaving responses. The complexity of the demand would include location, time, type of emergency, and needs assessment. Regarding operational conditions and lack of access to affected areas, proper infrastructure and security measures significantly influence on effectiveness of launching logistics support [1].

Humanitarian logistics can be categorized into two main types based on the nature of the operation and the goals they aim to achieve: emergency humanitarian logistics and development humanitarian logistics. These two types of logistics serve different purposes and have distinct characteristics. Humanitarian logistics infrastructure in case of emergency consists of three stages that are shown in Fig.1.

The initial phase in any humanitarian logistics process involves acquiring and procuring the essential items and equipment. Relief organizations are obligated to secure these necessities from either local or global suppliers, employing various procurement methods like direct purchases and tender processes. This stage presents several key challenges,

including cost reduction in procurement (taking into account potential price inflation in local markets following disasters), guaranteeing the timely availability of supplies, minimizing lead times, and effectively coordinating in-kind donations in alignment with other procured items [2].

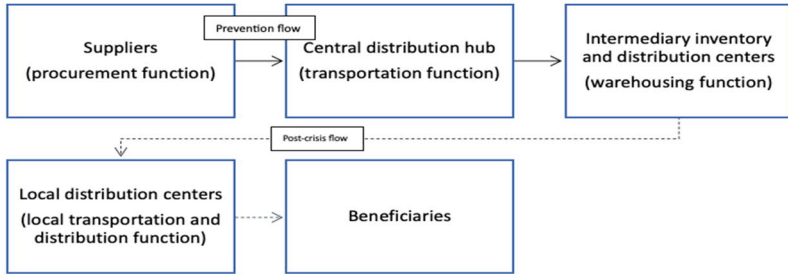


Figure 1- Humanitarian logistics infrastructure [1]

Once the necessary items and equipment for both pre-disaster and post-disaster periods are acquired, responsible relief organizations are obligated to strategically pre-position and store these resources in suitable locations, taking into account the vulnerability of disaster-prone areas. Challenges at this stage encompass the high costs associated with establishing and operating permanent warehouses [2], ongoing expenses related to inventory management, and the potential degradation of stored items. Additionally, there is a considerable risk that warehouses may be damaged or destroyed during disasters. Consequently, warehouses used for humanitarian logistics must be constructed to withstand disasters and strategically located.

Finally, transportation represents the last critical phase in any humanitarian logistics chain. It involves the deployment of human personnel, equipment, and essential items to predefined central distribution centers (CDCs), intermediary distribution points, local distribution centers, and ultimately, the disaster-affected regions. Transporting goods during the post-disaster period is often the most challenging aspect of humanitarian logistics, despite the consideration of various preventive measures and plans [2]. This is primarily due to the widespread damage and poor condition of transportation infrastructure and equipment following a disaster. Moreover, the geographical and weather conditions, as well as security concerns in the affected regions, may limit the types of transport vehicles and their usage methods.

Considering the wartime conditions, many humanitarian organizations work in Ukraine, including the company Plan International. It is an independent organization dedicated to promoting children's rights and gender equality, with a strong focus on girls. Plan International consists of 20 National Organizations (NOs) that are members of PI Inc., as well as two

potential members, Brazil and Indonesia, both of which are currently subsidiaries of PI Inc. Plan International is actively involved in the response to this crisis in several countries, including Burkina Faso, Ethiopia, Haiti, Kenya, Mali, Niger, Somalia, and South Sudan. They scale up their efforts by providing food distribution, cash and voucher assistance, school meals, malnutrition screening and nutritional supplements. In addition to humanitarian and development activities, Plan International is actively involved in advocacy at the local, regional, and global levels [3].

Plan International in Ukraine is implementing projects through partners across Ukraine, helping communities and local non-governmental organizations build the capacity for accessibility of different opportunities for children and their families both in emergency and for development purposes. At the moment there are 18 ongoing and 3 finalized implemented projects that are focused on Mental health and Psychosocial support (MHPSS), Cash and Vouchers assistance (CVA), Education and Child protection combining two-three components depending on needs assessments conducted before projects launch that is reviewed on a quarterly basis altogether with partners in order to deliver those services that have real impact on communities. Table 1 represents a part of the projects and their focus, provides transparency and clarity regarding the organization's priorities and areas of intervention.

One of the projects was launched in Ukraine in cooperation with the German initiative #WeAreAllUkrainians and the representative office of Plan International. The main goal of this project was to provide access to online education and support for younger schoolchildren, in particular vulnerable girls and boys who became victims of the war in Ukraine and are internally displaced persons.

The project was implemented by the BGV charity fund in Ukraine, which is a partner of the #WeAreAllUkrainians initiative. With the support of the Office of the Ombudsman of Ukraine, BGV gives 5,000 tablets to children who are in difficult life circumstances and belong to primary school age (from 6 to 11 years old). This assistance also extends to children with special educational needs. The project covers five regions of Ukraine: Kyiv, Zhytomyr, Chernihiv, Kharkiv, and Mykolaiv, where tablets will be distributed among children in need of help.

*Table 1 – Current projects implemented by Plan International in Ukraine*

№	Area	Components	Description
1	Kyiv region	MHPSS, Adults' teaching	Comprehensive psychosocial support educators and preparation of crisis intervenes for Kyiv schools during the war
2	Mykolaiv	Shelters' construction	Emergency measures to restore access to education in Mykolaiv

3	Kharkiv, Khmelnytska	Food distribution	Humanitarian Appeal, Phase 2
4	Vinnitska, Cherkaska, Kirovogradska, Khmel'niska	Rehabilitation Child Protection	Building, back, better (BBB) - Project for the rehabilitation and reconstruction of child-focused infrastructure in Ukraine
5	Donetska, Kharkivska	Winterization	Relief Items to Support and Protect Underserved Communities and Vulnerable Populations in Eastern Ukraine
6	Mykolaiv region	Digital Learning Spaces, shelters, Child Protection in Emergency	Increasing adolescents' resilience and improving access to education in emergencies
7	Mykolaiv region	WASH	Improving access to education opportunities in Mykolaiv city through WASH refurbishments
8	Kharkiska, Dnipropetrovska, Zaporiska	CVA, MHPSS (mobile teams)	Relief to Protect (R2P) - Project to improve the protection and MHPSS mechanisms for conflict affected children, adolescents, and their families

The logistics partner of the project is Nova Poshta, which took over the cost for the organization of delivery of tablets to the nearest offices in five regions of Ukraine. This collaboration helped ensure the efficient delivery of the necessary equipment for the project and ensured that the tablets reached their destination on time and safely. "Nova Poshta" is known for its high-quality logistics services and a wide network of branches throughout Ukraine, which makes it an ideal partner for similar projects.

Sourcing a large number of tablets and distributing them across multiple regions can pose logistical challenges, especially when the target population is vulnerable children. Collaborating with Nova Poshta simplified the procurement and distribution process inside Ukraine. Navigating customs and regulatory procedures for importing goods, ensuring that tablets reach their intended children in need was complex and time-consuming, potentially causing delays but Nova Poshta's vast network and expertise in last-mile delivery made them well-suited for reaching even remote locations.

Overall, M&E in humanitarian logistics is an integral part of ensuring that resources are used efficiently, the needs of affected populations are met, and the logistics response is continuously improved to better serve the goals of humanitarian assistance. As a conclusion implementation of the robust monitoring and reporting system, regular updates from Nova Poshta

regarding delivery status enable real-time evaluation of the project's success and prompt issue resolution.

### **Conclusions**

Addressing these logistical challenges, the importance of strong operational logistics functions in humanitarian projects like the one described cannot be overstated. Effective logistics is crucial for the success of such projects because it directly impacts the ability to deliver aid and support to those in need.

Finally, considering that humanitarian situations are often dynamic and unpredictable strong logistics systems are flexible and can adapt to changing circumstances, whether it's adjusting distribution routes due to road closures or responding to new needs arising during the project. Records and data tracking provide a clear picture of what was procured, where it went, and whether it reached its intended recipients. Supporting Logistical Business Processes would include strategic planning and collaboration with expertized partners, training logistics teams to identify potential challenges and develop mitigation strategies, maintaining open communication with partners, beneficiaries and stakeholders to continuously evaluate logistics operations.

By emphasizing strong operational logistics functions and supporting logistical business processes in these ways, humanitarian organizations can ensure that aid reaches the intended recipients effectively, and projects like the one in Ukraine can successfully achieve their goals of providing support to vulnerable schoolchildren.

### **References**

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