

# The State of Logistics and Supply Chain in the Humanitarian Context

Global Survey Findings

March 2022

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# Introduction

The Center for Humanitarian Logistics and Regional Development (CHORD), supported by the Kühne Logistics University and HELP Logistics, presents the first edition of The State of Logistics and Supply Chain in the Humanitarian Context.

This baseline report provides insights and opinions based on 532 experts from humanitarian organisations, government and commercial companies across different geographic regions. The respondents also represent different organisational levels, such as field, country, regional offices, and headquarters. With a representation of 78%, the survey gives local staff a strong voice and provides exciting insights into local trends and perspectives.

The report findings cover the period from January to July 2021. The respondents assessed how much costs and lead times in humanitarian supply chains changed compared to the beginning of 2021. Moreover, respondents shared their opinions about the importance of specific preparedness strategies and future supply chain risks. Ultimately, respondents shed light on key trends and practical measures within their respective organisations over the first half of 2021 regarding emerging issues such as environmental sustainability, localisation, the interconnectedness of supply networks, and innovation.

One year into the COVID-19 pandemic, the survey strongly recognises the value of logistics and supply chain management in the humanitarian context. Despite significant increases in lead times, procurement and shipping costs, and many risks such as funding gaps, security concerns and importation delays, respondents see optimistic improvement in supply chain activities. This overall positive perspective is demonstrated through the success of adopting supply chain technologies, including digital learning, systems and data analytics. Localisation and environmental sustainability are slowly entrenching in organisations' behaviour while pooling and interconnected approaches are increasing.

The report highlights discrepancies between different organisational responses on many issues concerning operations, preparedness, and sustainability. The findings provide decision-makers with important knowledge to consider in future strategy developments and implementations.

The findings in the current report are based on the first round of a bi-annual CHORD global humanitarian survey. They will serve as a baseline for longitudinal comparisons of perspectives and perceptions of humanitarians annually and across multiple years in the future. Therefore, your participation in the upcoming CHORD global humanitarian survey, covering the period of July to December 2021, is essential for understanding the dynamics in the sector and ultimately making humanitarian operations more effective, efficient, and sustainable.

532

experts from humanitarian organisations, government and commercial companies across different geographic regions and organisational levels



78%

contribution from local staff

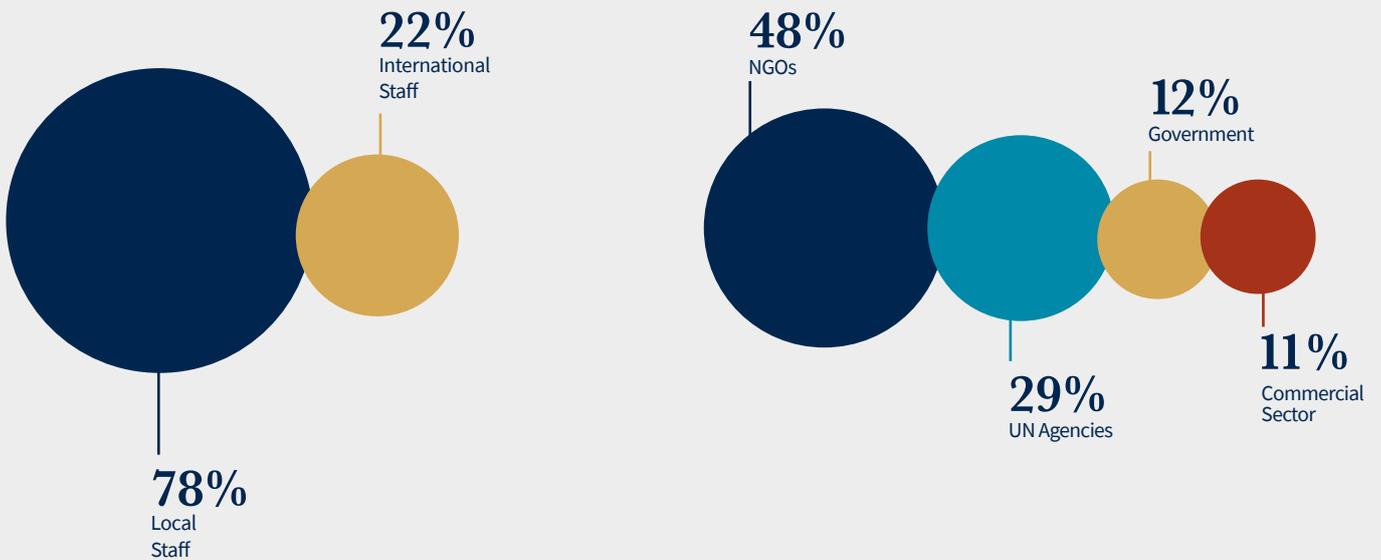
# Introduction

## Method

Experts from across the globe who directly engage in aid delivery received invitations to participate in the online survey. The final sample size was 532 respondents representing different sectors, geographies and organisational levels. Local and international staff responded from field, country, regional and headquarters offices (see Figure 1.1 and Figure 1.2). The survey was available in English, French and Arabic language. All survey questions were adapted from available measurement scales in the humanitarian operations literature and reviewed by humanitarians with extensive experience.

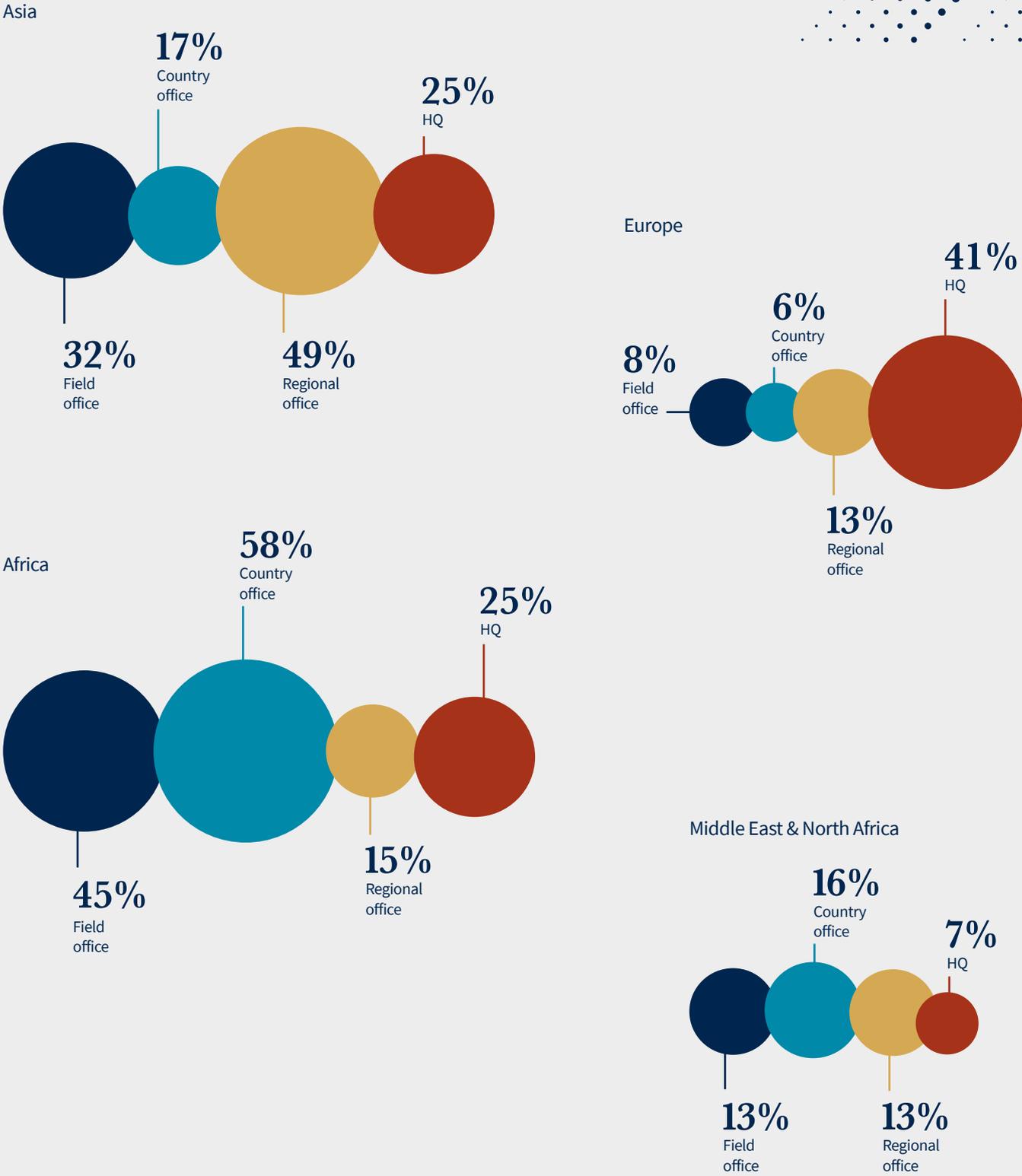
Figure 1.1: Affiliations of 532 online survey respondents

Of the 532 online survey respondents



# Introduction

Figure 1.2: Affiliations of 532 online survey respondents by organisational level across regions



# Supply chain operations

Cost efficiency and lead-time effectiveness are critical indicators of supply chain operational performance showing whether humanitarians use the lowest possible level of funding and resources to deliver aid at the right time to the beneficiaries.

A significant percentage of the respondents indicated positive changes in their organisations' level of cost efficiency and lead-time over the first half of 2021. Interestingly, when broken down into different organisational levels, respondents' perceptions in HQ differed from those in the field office. A notable 74 percent of field office respondents (vs. only 49 percent of HQ respondents) indicated positive improvement in their cost efficiency over the course of the first half of 2021. Likewise, 62 percent of

field office respondents (compared with only 38 percent of HQ respondents) suggested that their lead-time effectiveness has improved since the start of 2021.

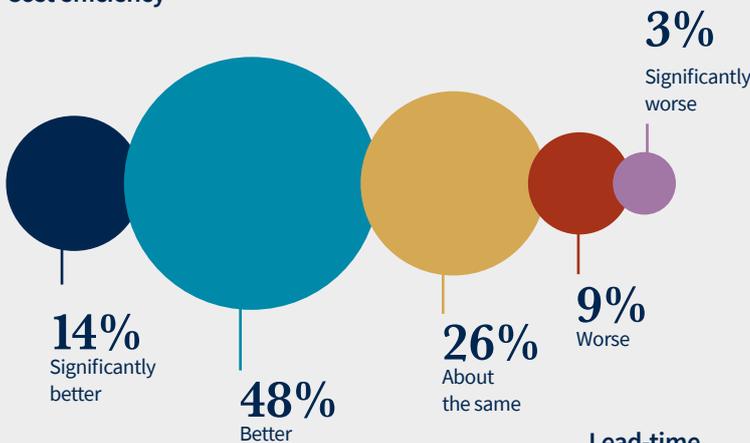


**74%**

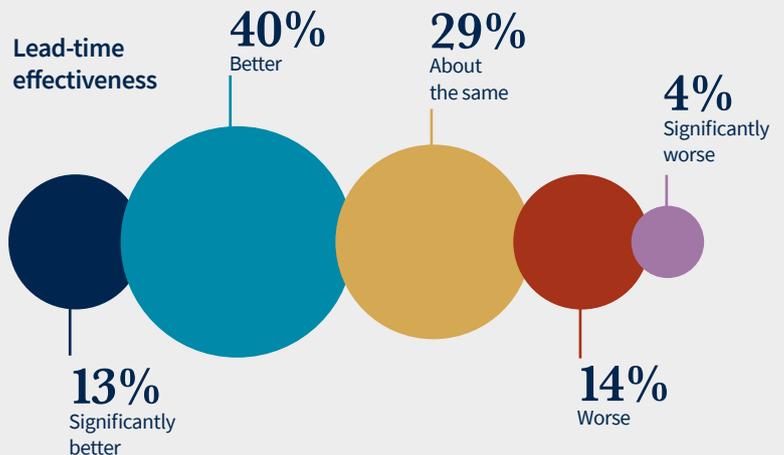
Of field office respondents (vs. only 49 percent of HQ respondents) indicated positive improvement in their cost efficiency

Figure 2: Improvement in cost efficiency and lead-time effectiveness compared to the beginning of 2021

## Cost efficiency



## Lead-time effectiveness



# Supply chain operations

## Procurement costs and lead-time

While costs have increased overall, many respondents reported local rather than international procurement costs increases. A significant 75 percent of respondents indicated that local procurement costs in their organisations increased between almost 5 percent to over 20 percent compared to the beginning of 2021. Likewise, 62 percent of respondents indicated cost increases in international

procurement. Interestingly, 34 percent of respondents reported decreases in international procurement costs versus 22 percent who showed decreases in local procurement costs.

While longer lead times are generally reported for local and international procurement, more extreme delays (over 20 percent increase) occurred when commodities were procured internationally (27 percent versus 10 percent).

Figure 3.1: Fluctuations in the procurement costs compared to the beginning of 2021

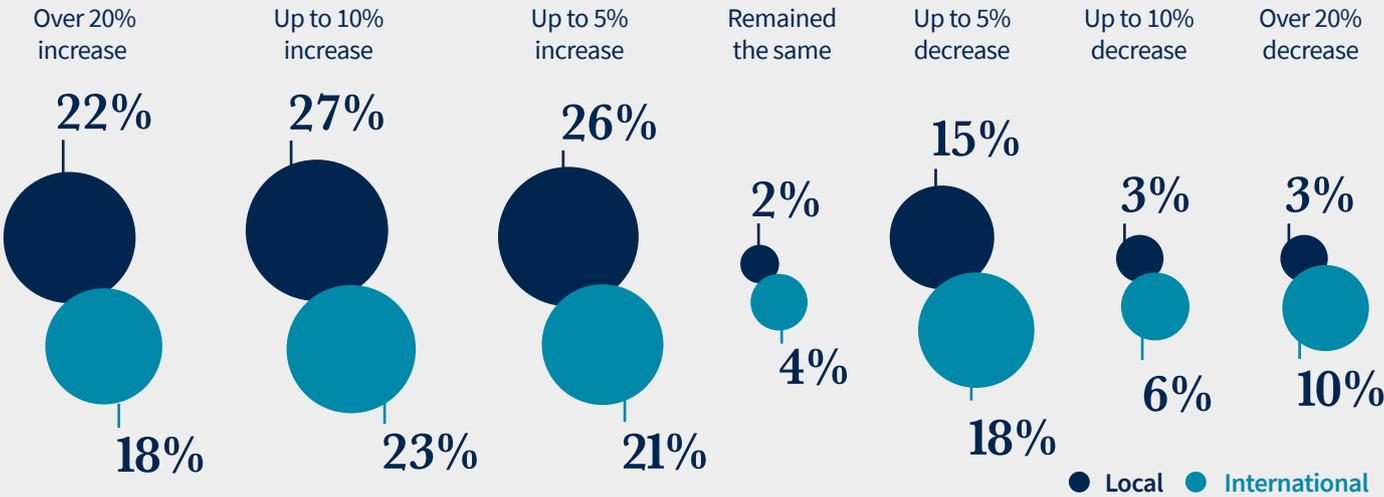
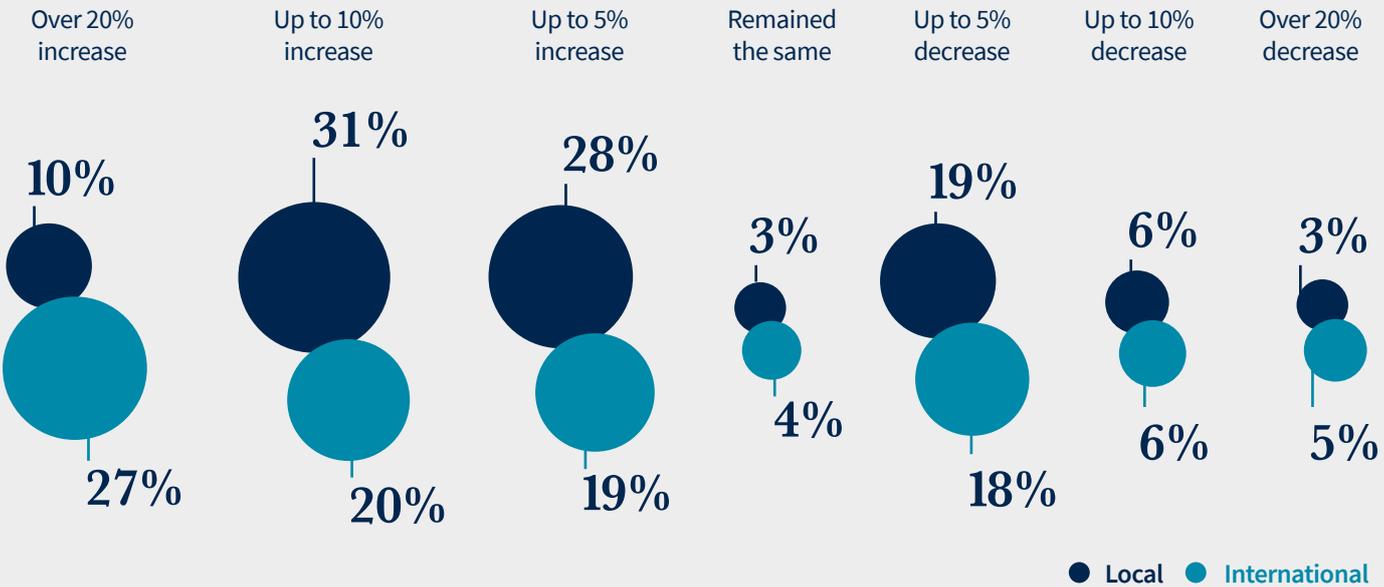


Figure 3.2: Changes in procurement lead-time compared to the beginning of 2021



# Supply chain operations

## Transport costs and lead-time

76 percent of respondents reported increases in local transport costs compared to the beginning of 2021. Concerning international transport, a smaller percentage of respondents, 64 percent, observed cost increases. Interestingly, more respondents indicated cost decreases in their international than local transport.

Moreover, a relatively similar percentages of respondents, 69 and 66 percent reported increases in their lead-times for local and international transport respectively compared to the beginning of 2021.

Figure 4.1: Changes in the cost of transport compared to the beginning of 2021

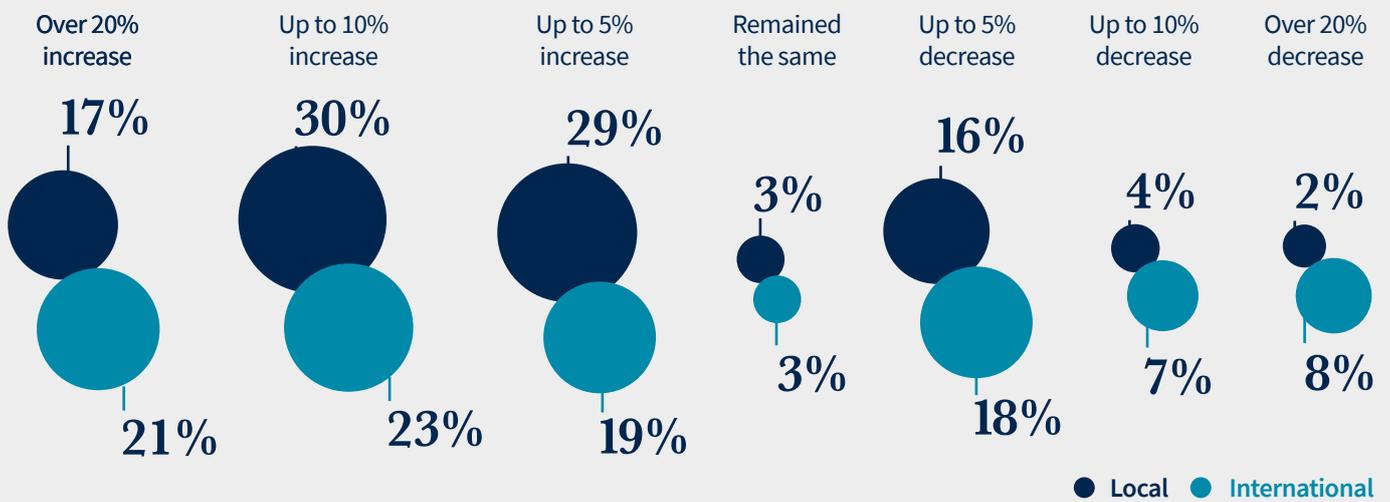
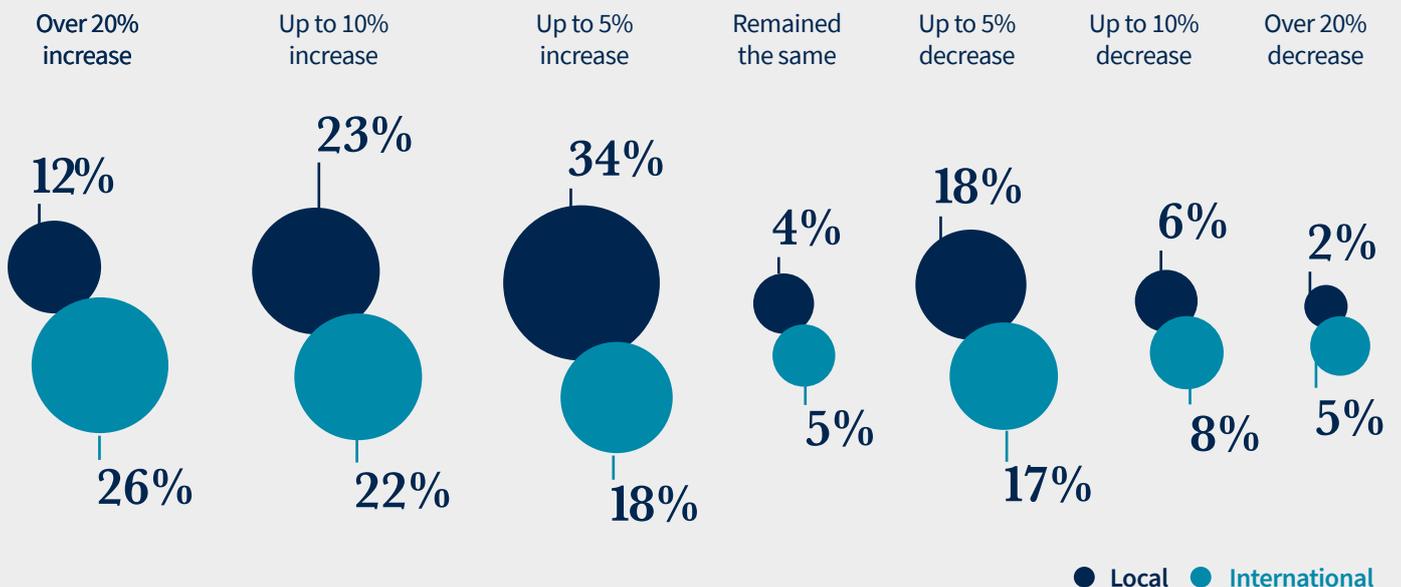


Figure 4.2: Changes in lead-time of transport compared to the beginning of 2021



# Supply chain environment

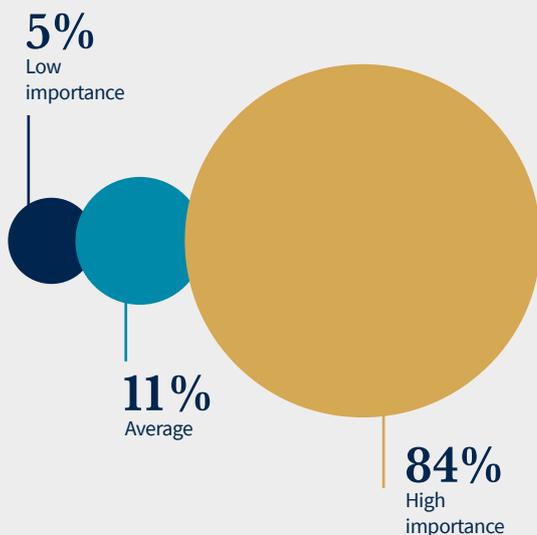
Respondents overwhelmingly indicated that their organisations consider supply chain and logistics an important function internally.

When broken down into different organisational levels, the high importance is reported consistently by HQs, regional, country and field offices.

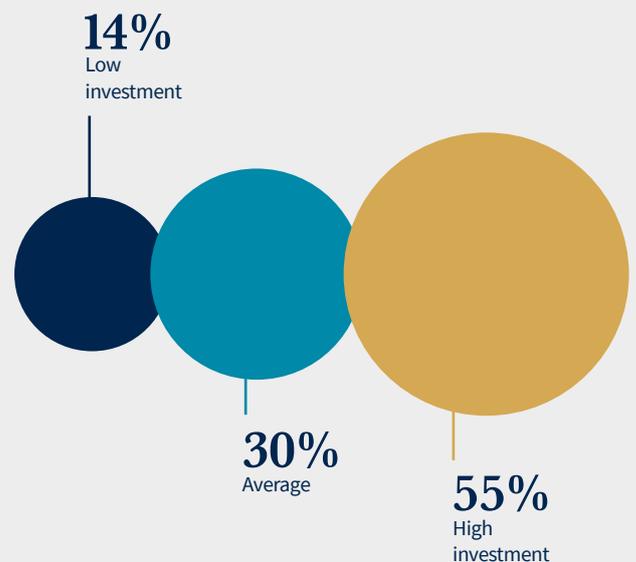
Furthermore, 55 percent of the respondents reported that their organisations make significant investments in systematically improving supply chain and logistics capacity.

Together, these findings show that more investment in supply chain preparedness is related to the strength of the appearance that the supply chain is a critical function in the organisational strategy. Therefore, the results highlight the importance of advocacy efforts towards ensuring that the supply chain receives the attention it deserves within the structure of humanitarian actors.

**Figure 5: Importance of logistics and supply chain in humanitarian organisations**



**Figure 6: Level of systematic investment in logistics and supply chain preparedness**



# Supply chain environment

## Preparedness strategies

Respondents received a list of the most common preparedness strategies\* to assess their importance for improving supply chain and logistics capacities over the first half of 2021 in their organisations.

While respondents suggested that all of the listed strategies are important, the top three overall preparedness strategies included implementing framework agreements with suppliers and contract renegotiations, improving supply chain operating procedures and manuals, and training of staff. Interestingly, when broken down in different types of organisations and organisational levels the implementation framework agreements and contract renegotiations and improvement of supply chain operating procedures and manuals have been consistently ranked as highly important.

Different perceptions can be observed on the importance of trainings. For UN respondents (91 percent) this preparedness strategy seems to be more important than for NGOs (71 percent). Also, 85 percent of field office respondents consider trainings as highly important compared to 72 percent of HQ respondents.

\*List of preparedness strategies included: Implementing framework agreements with suppliers and contract renegotiations; Improving supply chain operating procedures and manuals; Prepositioning stocks; Training staff members; Multi-sourcing and network diversification; Information and data sharing across the supply chain; Conducting process analysis and continuous improvement; Broadening the supplier base to identify alternative sources; Conducting market assessments; Conducting supply chain risk assessments; Investing on hardware and software technology; Strengthening capacities of supply chain partners in the country; Mapping end-to-end supply chain visibility; Planning for remote program and organisation management; Performing shared services coordination (i.e. joint procurement/pooling of demand or resources).

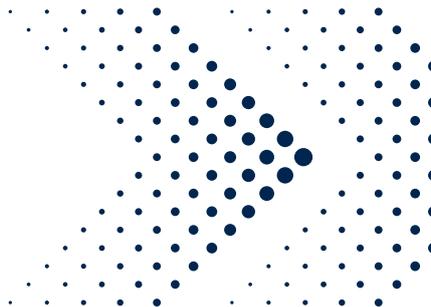
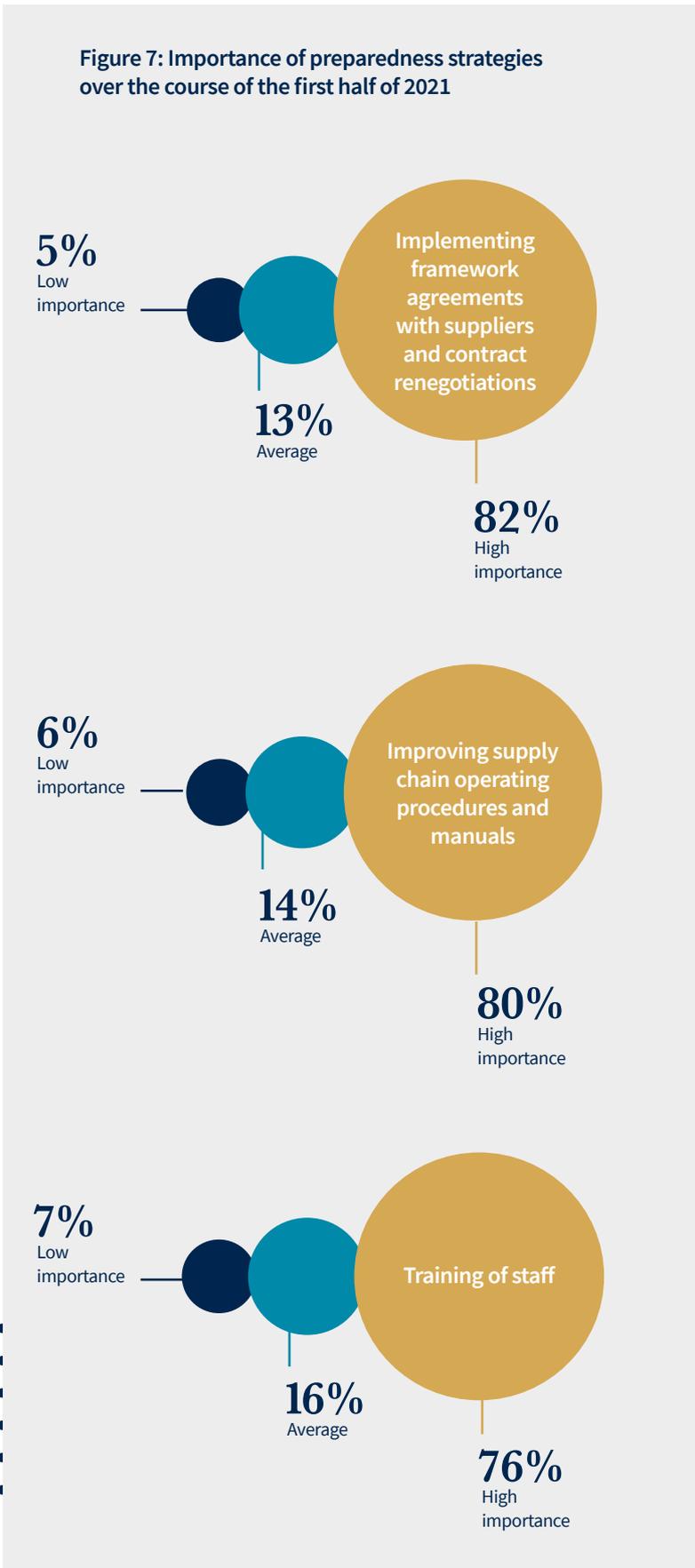


Figure 7: Importance of preparedness strategies over the course of the first half of 2021



# Supply chain environment

## Supply chain risks

Respondents identified the top three supply chain and logistics risks from a given list of potential risks\*. Of all respondents, the most frequently chosen risks include importation delays, security issues, and the lack of funds. NGOs and UN agencies identify and rank those three top risks in a consistent way. When broken down into organisational levels, field offices and HQs show different risk perceptions. While both agree on importation delays (identified as a major risk by 45 percent of field office and 42 percent of HQ respondents), the field offices consider security issues (40 percent vs. 28 percent) and lack of funds (47 percent vs. 36 percent) as larger risks than HQs.

\* The list of risks included: Security issues; Natural disasters; Regulatory environment; Supplier failure; Importation delays; Low visibility; Insufficient staff capacity; Insufficient staff availability; Poorly defined processes; Demand uncertainty; Lack of coordination (e.g., with government, service providers, etc.); Lack of funds.

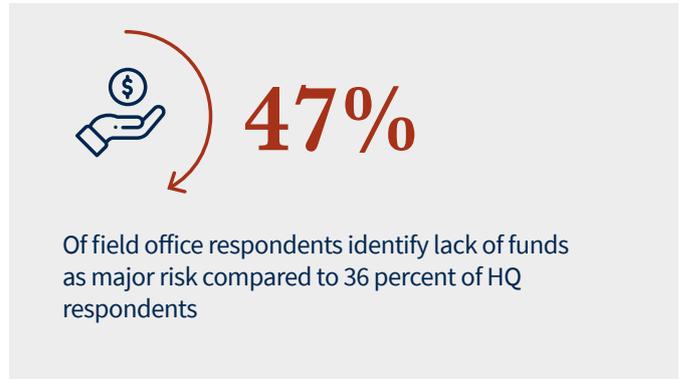


Figure 8: Top three expected risks as per number of respondents



# Supply chain development

## Environmental sustainability

### Level of sustainability improvement

Half of the respondents reported that the level of environmental sustainability in their organisations did not change over the first half of 2021. When broken down into different organisational levels, a significant 65 percent of respondents from HQs and more than half of the respondents from field and country office indicated that the level of environmental sustainability in their organisations did not improve compared to the situation at the beginning of 2021. Interestingly, a higher percentage of respondents from the regional offices, amounting to 54 percent, indicated a positive change.

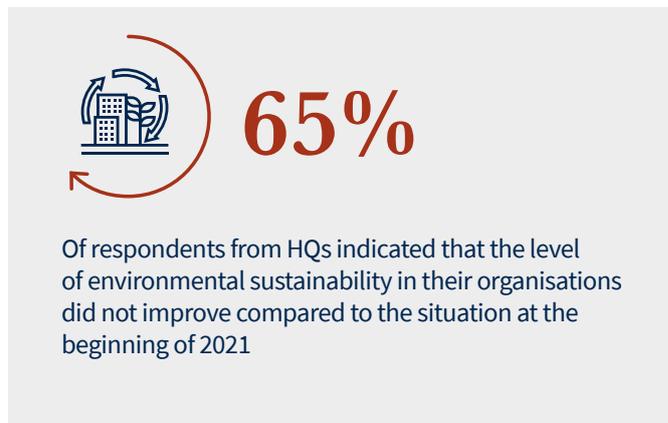
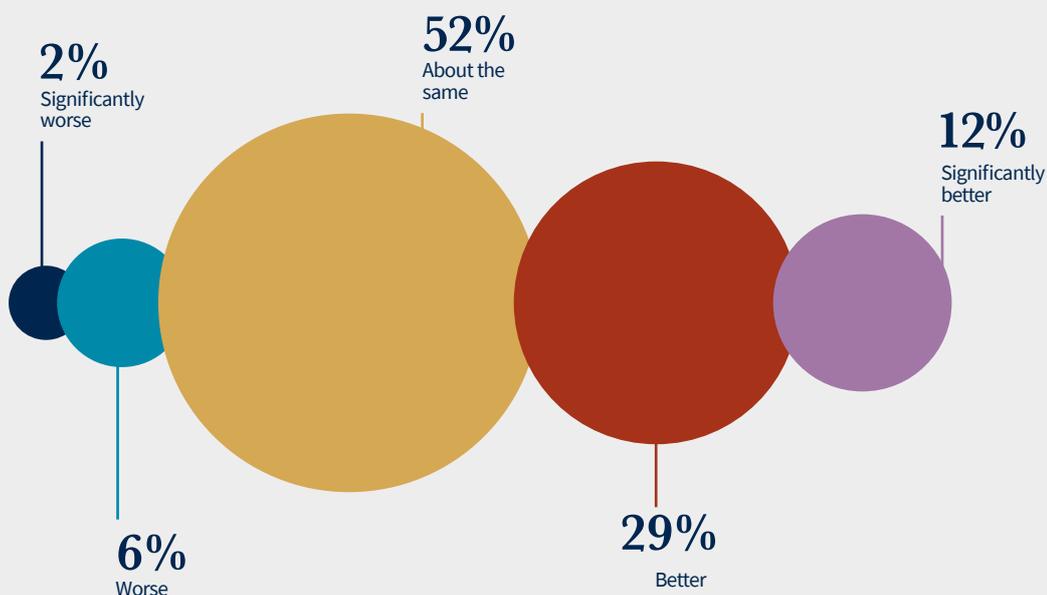


Figure 9: Improvement in environmental sustainability compared to the beginning of 2021



# Supply chain development

## Practical measures

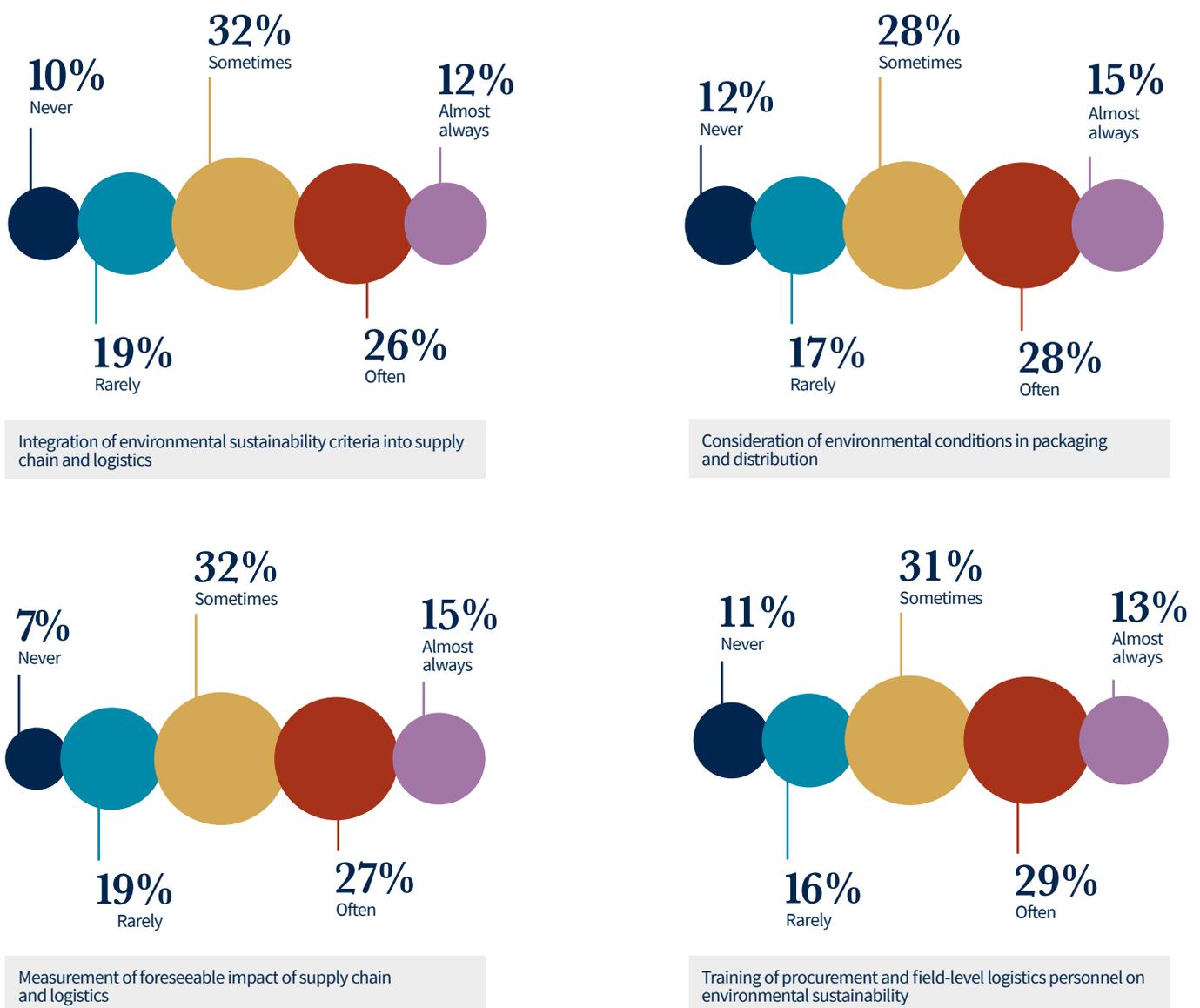
Respondents indicated the extent to which their organisations applied environmental sustainability measures to their operations over the course of the first half of 2021. Where 38 percent of respondents reported the frequent integration of environmental sustainability criteria into their supply chains, the strongest environmental engagement is shown on environmental consideration on packaging and distribution, highlighted by 43 percent of the respondents. However, a notable 30 percent reported to “never” or only “rarely” integrate environmental

measures, indicating little or no attention to sustainability criteria in their supply chains.

A similar percentage of respondents, i.e., 29 percent, with “never” to “rarely” responses for consideration of environmental conditions in packaging and distribution is likewise observed.

Noteworthy is that 58 percent of respondents indicate no systematic and continuous measuring of the environmental impacts in their organisations, while only 42 percent reported that their organisations generally train logistics and procurement staff on environmental sustainability.

Figure 10: Environmental sustainability measures over the course of the first half of 2021



# Supply chain development

## Localisation

### Level of local social impact

Overall, respondents indicated that the local social impact of their respective supply chains has improved over the first half of 2021. Interestingly, when broken down into different organisational levels, most respondents in the field and country offices (60 and 64 percent) reported a high local social impact. However, 51 percent HQ respondents indicated negative or no improvement in strengthening and tapping into local capacities during aid delivery operations.

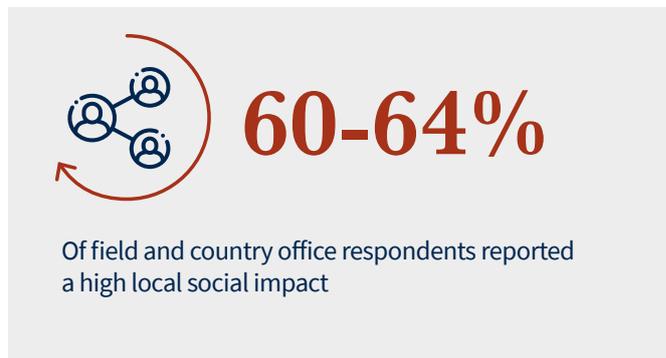
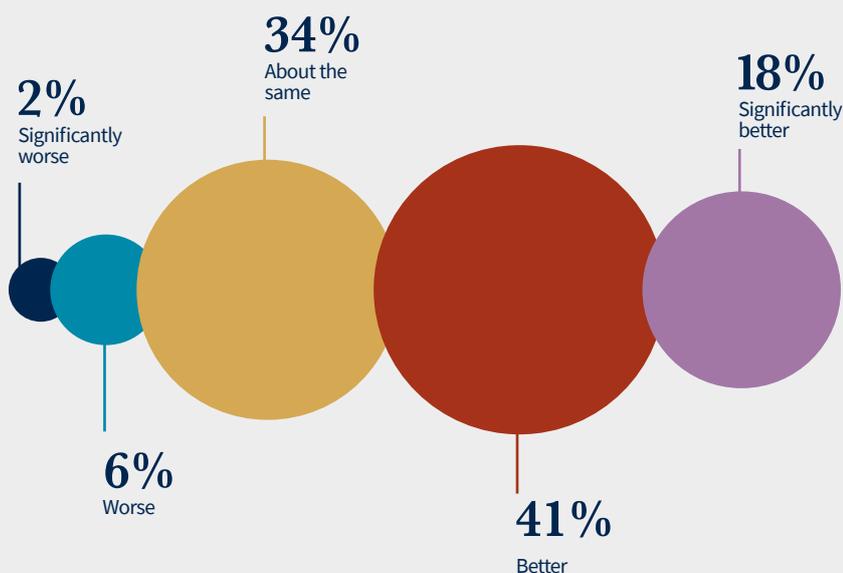


Figure 11: Improvements in local social impact compared to the beginning of 2021



# Supply chain development

## Practical measures

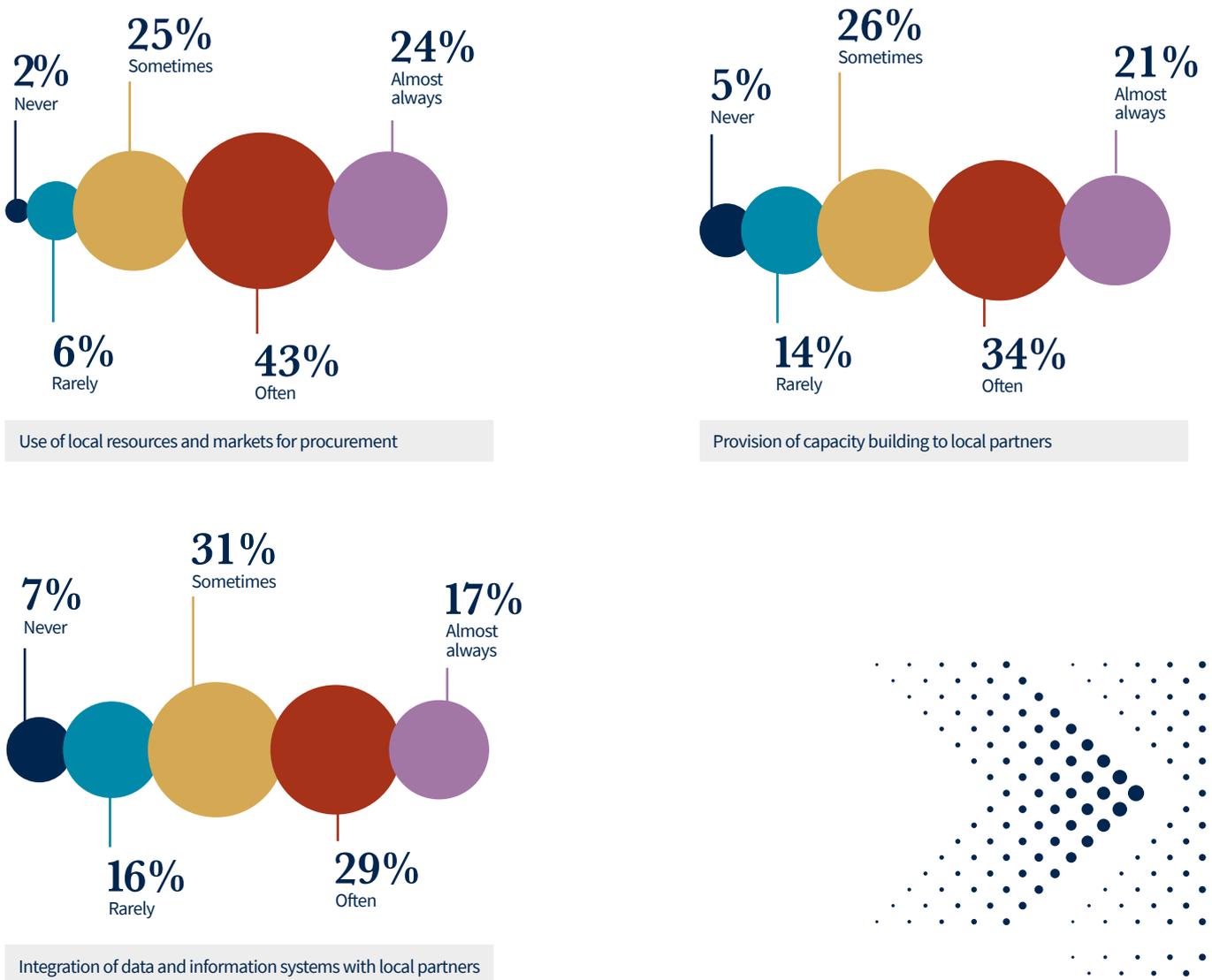
Respondents indicated the extent to which their organisations implemented actions and processes to localise humanitarian operations over the first half of 2021. A significant 67 percent of respondents indicated to frequently source through local resources and markets. Similarly, over half of respondents indicated that their organisations provided capacity building to local partners. However, less than half of respondents reported that their organisations integrate data and information systems with local partners.



**67%**

Suggested frequent use of local resources and markets for their procurement

Figure 12: Localisation measures over the course of the first half of 2021



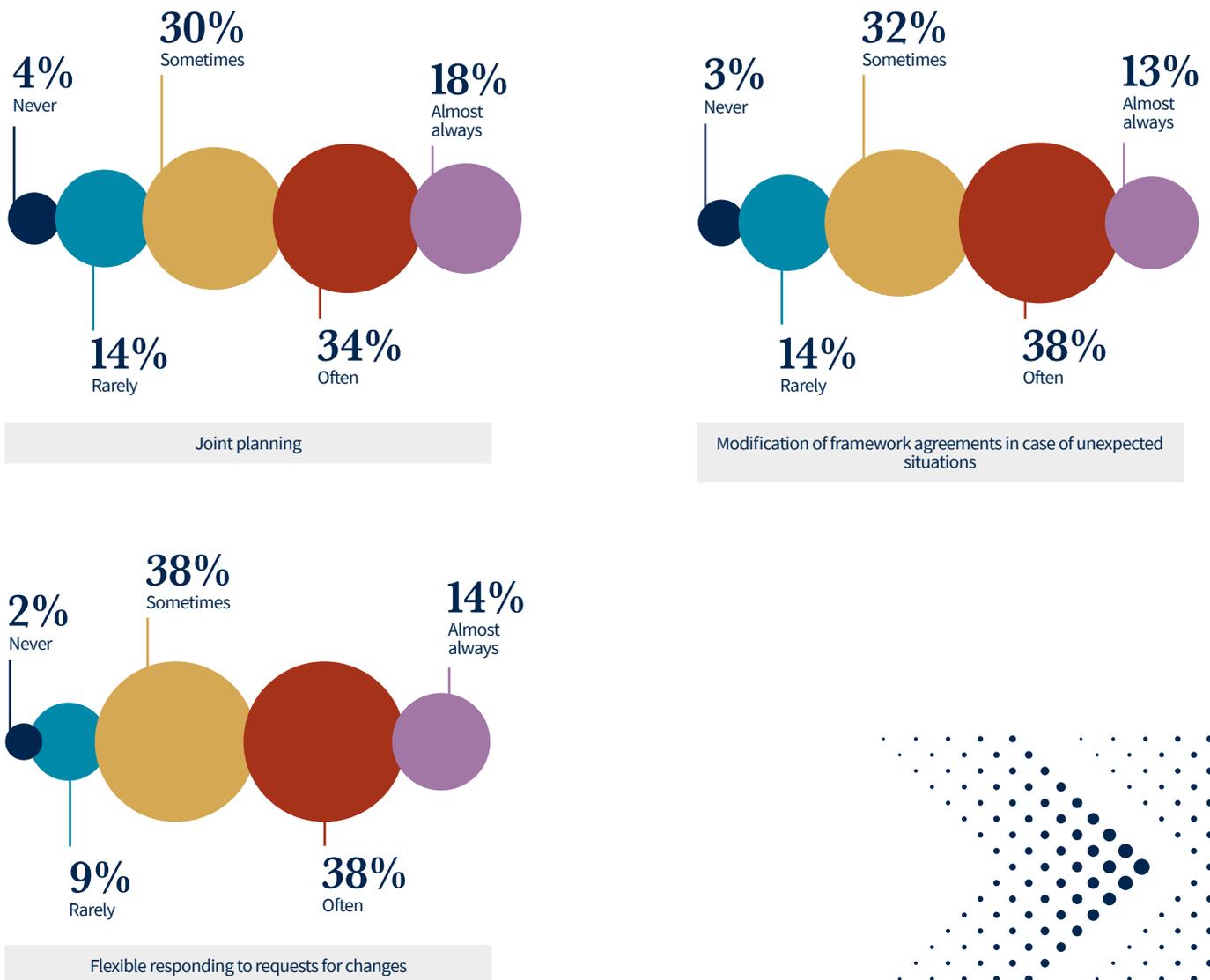
# Supply chain development

## Interconnected supply networks

### Collaboration with internal and external stakeholders

Respondents generally reported positively on the collaboration with other actors in the supply chain. Approximately half of the respondents suggested that their respective organisations frequently engaged in joint planning, that internal and external stakeholders reacted flexibly to changes, and modifications of agreements were possible when unexpected situations arose.

Figure 14: Level of interconnectedness of supply chains over the course of the first half of 2021



# Supply chain development

## Frequency of resource pooling

Respondents reported the frequency with which humanitarian organisations pooled their supply chain and logistics resources over the first half of 2021. Overall, a slightly higher percentage of respondents say resource pooling across transportation and procurement than less operational functions such as staff and information systems. Interestingly, when broken down into different organisation’s types, findings indicated that 57 percent of UN respondents (versus around only 43 percent of NGO respondents) reported frequent pooling of transportation.

When comparing field office and HQ level, there is significantly more resource pooling in the field (58 percent vs. 30 percent across all four supply chain resources).



**58%**

Of field office respondents indicate regular resource pooling compared to 30 percent of HQ respondents

Figure 13: Frequency of resource pooling over the course of the first half of 2021



# Supply chain development

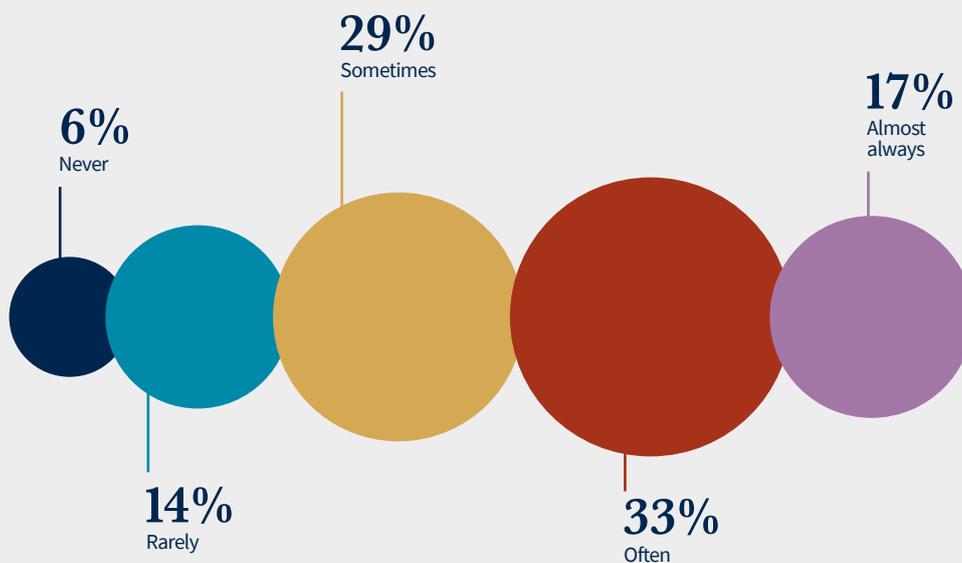
## Innovation

### Successful implementation

Respondents reported that their supply chains have successfully implemented innovations over the course of the first half of 2021. Overall, half of the respondents indicated high success in implementing innovations. Interestingly, when broken down into different organisational levels, 68 percent of respondents from HQs reported that their organisations have a low or average level of success implementing innovations.



Figure 15: Level of innovation success over the course of the first half of 2021



# Supply chain development

## Technology adoption

Respondents reported on the type of technology that had the most impact on supply chain and logistics over the first half of 2021. Most respondents identified digital learning, end-to-end supply chain visibility software, and advanced supply chain data analytics as the most impactful innovative technologies on supply chains. Interestingly, a notable percentage of respondents indicated that blockchain, autonomous driving, and drone technology had the least impact on their operations.

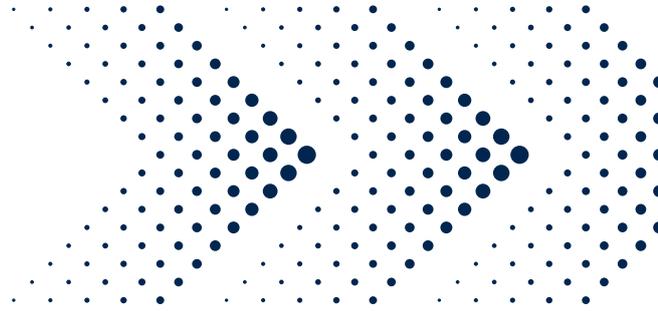


Figure 16: Adopted technology with the most impact on supply chain and logistics over the course of the first half of 2021

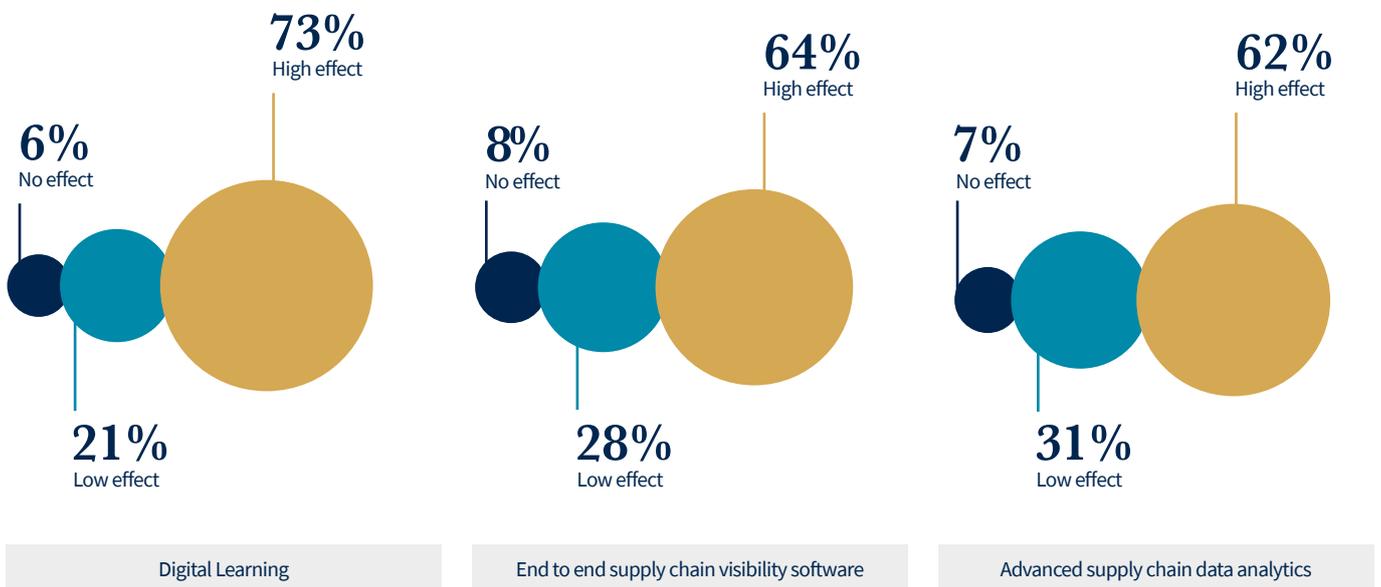
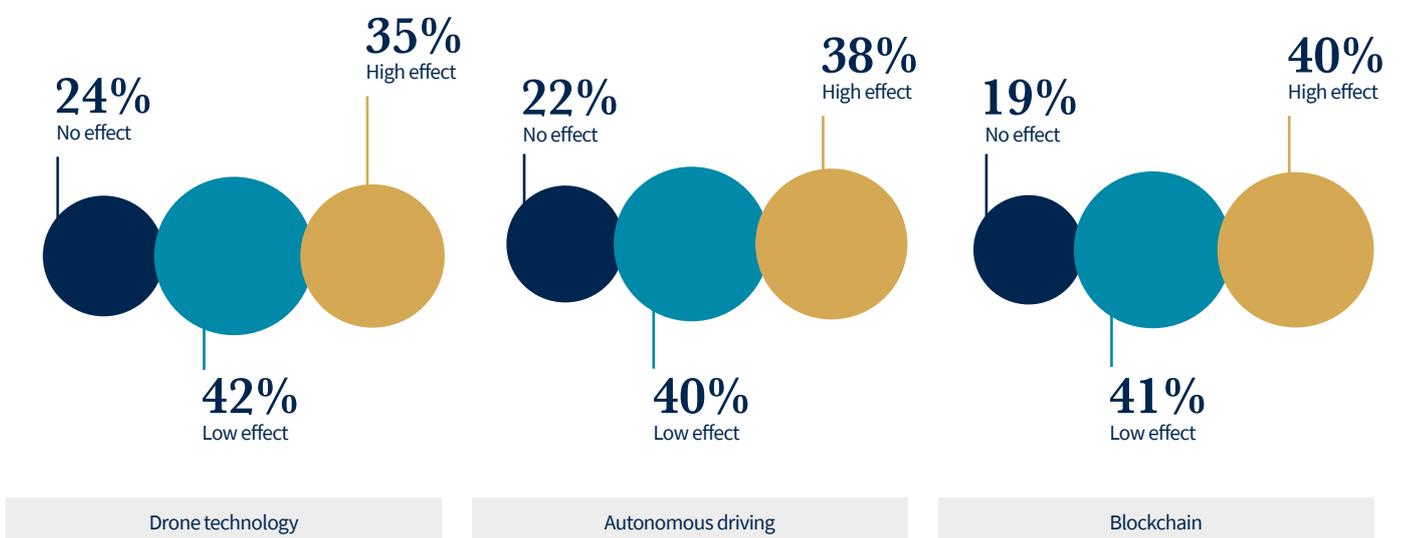


Figure 17: Adopted technology with the least impact on supply chain and logistics over the course of the first half of 2021



# Conclusion

Humanitarian operations are highly complex endeavours carried out in a rapidly changing environment. Through its far-reaching global survey, CHORD aims to assess challenges, explore opportunities and identify solutions that impact humanitarian operations now and in the future.

Overall, this initial survey indicates the importance of logistics and supply chain, which is reflected in the growing level of preparedness investment into supply chain capacities. Relatedly, the survey also shows an apparent interest of the respondents to engage in the practices that improve environmental sustainability, innovation, and localisation in their supply chains over the course of the first half of 2021.

Interconnected approaches such as resource pooling and joint planning also remain on the rise in the sector. Likewise, the survey highlights preparedness strategies such as framework agreements with suppliers, contract renegotiations, and improving supply chain operating procedures as the most important mechanisms next to the more traditional practices such as training of staff and pre-positioning stocks.

Respondents reported improvements in supply chain efficiency and effectiveness which may have partially enabled them to absorb cost and lead time fluctuations. These findings serve as a helpful resource for senior managers and operational decision-makers to help improve their organisations' logistics and supply chain operations.

We want to thank all respondents and partners who supported the survey. This report shines a spotlight on the challenges and continuous drive for improvement in humanitarian logistics through your contribution.



These findings serve as a helpful resource for senior managers and operational decision makers to help improve logistics and supply chain operations in their organisations



Overall, the survey indicates the high importance of logistics and supply chain, which correlated with a growing level of preparedness investment into supply chain capacities



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