

In your opinion, seen in a global perspective, which are the three major problems of humanitarian logistics and infrastructure?

Sean Rafter: Unfortunately, there are plenty of statistics and evidence to show that humanitarian disasters are happening on a bigger scale and more frequently than ever before. You can look at the Asia-pacific region as a clear example to see the reality and the impact on livelihoods, economy, public health, education, etc. The scale of natural disasters more often exceeds the capacity of a country. The complexity of humanitarian disasters is also increasing. There are many complex political situations like those affecting Yemen, South Sudan and Afghanistan to mention a few where it is increasingly difficult to access affected people. This is one of the major problems: complexity, scale and frequency of humanitarian events, both natural and man-made disasters.

Another challenge is the local capacity to respond in terms of trained personnel and adequate infrastructure. International aid agencies respond when invited by a country if their own capacities have been overwhelmed. More and more this is the case because infrastructure is often not disaster resilient and emergency preparedness levels insufficient. We've seen some countries prepare very well such as Japan; for example, constructing earthquake-resistant bridges, roads, buildings, etc. but there is a lot more that can be done in many countries. Nepal was a case where we saw wide-spread infrastructure damage. In fact, the airport runway became so unstable that for a time it prevented international assistance from coming in with its heavy loads.

Perhaps a third point would be investment in preparedness. We see huge peaks of interest from the public and donors during an emergency. There is a great surge of funding when a humanitarian event happens. But what is really needed is much more investment in preparedness which requires a change in how donors fund programs. UNDP state that for every dollar spent reducing people's vulnerability to disaster, you save around seven dollars in economic losses, so there is a very strong case for more investment in preparedness.

How do you rate the work of the international community of states regarding humanitarian logistics and infrastructure in the recent years and decades? And which would you identify as the key tasks for the upcoming years?

Sean Rafter: The Global Logistics Cluster presented a paper at the recent World Humanitarian Summit in Istanbul. One of the key challenges that were mentioned was access to beneficiaries and protection of humanitarian staff. There is a lot that still needs to be done in order to provide safe corridors for humanitarian agencies to move goods and services into the country. Syria is an obvious example, where political will is required to ensure staff and population protection and access to reach the vulnerable communities.

Since the earthquake in Haiti, when there were huge numbers of actors arriving to respond, coordination has increasingly improved. The number and diversity of actors is growing. There is an increasing military presence in humanitarian response, civil society actors and the local private sector. Collaboration and investment in strengthening local actors and civil society will be key in the future for the very reasons outlined in the first question: Because of complexity, scale and frequency, national actors are going to be a key component of future responses.

Donors contribute significant amounts to INGOs, governments and bilateral agreements, but often it is rather time-bound. It would be good to see actions begun in an emergency continue with additional investment so that we can move towards building appropriate and resilient infrastructure for future disasters. Expanding the establishment of local networks and aligning these to humanitarian preparedness scenarios, could greatly contribute to future response effectiveness.

So now we have talked about the community of states, and our perspective is pretty much focused on the German Federal Government. Do you have an opinion of its role, its work in the recent years as well?

Sean Rafter: I have to apologize about that. Being Irish and living in Switzerland since only a year, I'm not able to comment on that.

Regarding humanitarian logistics and infrastructure, which problems need a) economy, b) NGOs and c) scientists to address in your point of view?

Sean Rafter: One key-area – and one of the reasons why the Kühne-Foundation started the HELP Logistics program – is to provide access to logistic capacity-building programs. I believe there is an urgent need to develop a bigger pool of logistics personnel with management competencies in the humanitarian sector. There has been a lot of investment in capacity-building, but mainly in relatively short-term courses that has not always achieved sustainable outcomes. Our approach is to start with organisation assessment and capacity gap analysis to identify clearly defined issues. We then tailor our training and education packages to make and immediate impact and sustain the effectiveness.

We're also looking at qualifications in the humanitarian sector in terms of certification, accreditation and professional status. We believe there is a need for an equivalent qualification framework (e.g. ESL) in terms of skills, competences and experience that is recognised globally and locally and across sectors (e.g. commercial companies).

There is really no structured career path in the humanitarian sector which allows logistics staff to be recognised and developed, to get the right learning, development and experience to advance their career and take up senior leadership positions. Generally, commercial companies are much more advanced in human resource management than the humanitarian sector – identifying and recruiting staff, retention, managing performance, developing and guiding their careers – this is not happening consistently in the humanitarian sector.

We also see an important role for academia. We held a recent workshop in Schindellegi and heard from universities about how research is carried out, how it can be applied to the humanitarian context, etc. Operational Research is a really interesting area that can be applied to solve complex operational problems, for example optimisation of prepositioning emergency stocks.

So this is a common task for NGOs and economy, one could say?

Sean Rafter: At the moment, I believe technology offers potential solutions and challenges. It is changing so fast that many organisations are not able to adapt the technology easily or quickly enough. It can be complex and unsuitable to humanitarian contexts and many organisations are fearful of investing limited funding. Perhaps some kind of working group is needed with all stakeholders that can adapt technology for the humanitarian sector.

Often technology is deployed in insecure environments where there is a lack of or broken infrastructure, resulting in none or intermittent power and internet. These other constraints need to be considered in the architecture and design of hardware and applications.

As important concept that is being talked about more and more is that of shared services. Organisations will need to evolve to meet humanitarian challenges and there are opportunities to share, consolidate and rationalise operations. The cost of emergency operations is growing and the demands increase, therefore international organisations will need to rethink their supply chain and logistics to thrive. I believe shared services in transport, offices, etc., and more horizontal collaboration could have significant impact.

So you see the role of science in giving advice and testing new things?

Sean Rafter: Yes, absolutely but they should collaborate with the humanitarian sector to understand the constraints. It's very important that all the technology is field-tested. An analogy is to look at 4x4 vehicles – they have evolved into robust, reliable and essential tools in humanitarian operations. It is not just that a vehicle can be ordered with all the appropriate kit fitted for any operational environment but, that the maintenance and service is clear and highly available to ensure the highest possible utilisation. Also, training for drivers and mechanics is standardised and delivered globally.

I think we need a similar mind-set and approach when it comes to developing technology solutions so they work in field operations.

In your opinion, which major mistake regarding humanitarian logistics do NGOs – German as well as international as well as local NGOs – make still too often?

Sean Rafter: We are a big advocate, of course, for supply chains and logistics. Our team has worked with many different organizations, and in our collective experience, we still find that many humanitarian organizations undervalue supply chain management and logistics. For example, you often find a supply chain manager sitting on the board of directors in a commercial organization because the function is considered an integral part of the core business. In the humanitarian sector, the position sits alongside other support services. It is potentially a decade behind the commercial sector in recognising the importance of logistics.

This is often reflected in the capacity and investment in logistics staff and in their ability to progress their careers. There are limited opportunities and a ceiling to how far they can advance in the organisation. Talented and ambitious logistics personnel often move into other functions in order to stay in the humanitarian sector while progressing their careers. That's a shame and we cannot afford to lose that talent. Considering that in emergencies 60-80% of funds is passing through supply chain functions, it would make sense to ensure a supply chain manager or director is on the senior management team to influence strategic decision-making.

Also, we see again and again, at the onset of an emergency the responsiveness and agility of humanitarian logistics is really impressive. However, over time without a bigger pool of well-trained senior personnel to relieve fatigued staff, gaps start to appear. A recent paper which was done by the Kühne Logistics University (KLU) for the World Bank Group on competencies, skills and training demonstrated that middle management is an area both in the commercial and humanitarian sectors that is struggling to have enough resources. This is certainly the case in the humanitarian sector and so we really need to encourage more people to come into supply chain and logistics by improving the standing of logistics, providing better career paths and creating a mechanism for personnel to transfer to equivalent positions in commercial and humanitarian organisations.

To what extent do you regard the commercial logistics companies capable of supporting humanitarian logistics? And where are the boundaries of this cooperation?

Sean Rafter: There are already good initiatives such as the Logistics Emergency Teams (LET), a partnership with UPS, Agility and Maersk which work together to support the Logistics Cluster led by United Nations World Food Programme. These companies provide pro-bono support to the humanitarian sector during emergency response. Ericsson Response started 15 years ago to provide telecommunications connectivity. Fast connectivity for all responding agencies improves effectiveness. The technology also assists refugee populations by helping them find loved ones using the REFUNITE platform. The Kuehne Foundation itself is a non-profit organisation and supports

humanitarian logistics, through its programme HELP Logistics. We offer pro-bono supply chain specialists who can support emergency preparedness, capacity assessments, training and education, etc. So there are already some good initiatives from the commercial sector that have proven valuable to the humanitarian sector.

Looking at it from a commercial perspective, the humanitarian sector is growing and offers opportunities to commercial companies to enter new markets through shared service partnerships. One benefit to humanitarian organisations is the technical skills of commercial staff. For commercial companies personnel deployed in humanitarian environments develop soft skills, competencies and cultural behaviours that enhance their value to companies.

Another area the humanitarian sector could learn and benefit from the commercial sector is how logistic companies tackle fraud and corruption. The problem is a global challenge but it can be especially difficult during humanitarian emergencies when infrastructure and procedures have been weakened and high volumes of relief items need to move fast to save lives.

Are there any boundaries for this cooperation?

Sean Rafter: I don't think so. I think there have been some boundaries in the past, such as collaboration with military or delivering goods and services to beneficiaries (last-mile delivery). Humanitarian organizations specialise in working in remote field areas working closely with communities to earn trust and listen to their needs. Certainly the skills and competencies that staff learn, in terms of cultural awareness and ability to perform under stressful conditions is unique and well-earned. For example, being able to carry out needs assessments with affected populations are very important skills in the domain of humanitarian actors.

Traditionally commercial companies have provided more of the upstream services, such as international air and sea freight, port operations, customs, etc. However, this is slowly starting to change. For example, there is more cooperation with military to use their assets which are far too expensive for INGO's to purchase and maintain. Save the Children, for example have developed a rapid-deployment emergency surgical platform in partnership with the National Health Service (NHS), UK government and British Military. I suspect the boundaries will be less clear in the short-term. Humanitarian organizations may have to evaluate their existing principles and codes of conduct in order to partner with academia, military and commercial organisations.

Which opportunities for humanitarian logistics and infrastructure do you see that new digital technologies might provide?

Sean Rafter: In parallel to the heavy goods movements and logistics, there is now another form of delivery to beneficiaries, which is cash transfer programming. There are different modalities, but this can be in form of vouchers or cash given directly to the beneficiary or to local market suppliers. This stimulates the local economy and is also a more dignified form of assistance, because you are giving people the ability to choose and purchase what they need. This is a very interesting model and it has proven to work very well in parallel with traditional supply chains moving goods.

There is a technology requirement and opportunity here too – obviously cash needs to be safeguarded and vouchers need to be securely printed with barcoding, hieroglyphics or other fraud-proof technology. Tracking and tracing goods, cash and voucher disbursements, beneficiary or supplier data all needs to be managed in databases, delivered through hand-held devices in any environment. The World Food Programme believes it will increase its expenditure on cash transfer programming to 20 per cent in future years. This will be good for the environment too.

Looking even further into the future, there are a lot of things to be done with 3D printing and drone technology. It's very hard to predict what this will look like, but if you have insecure environments, drone technology offers the potential to deliver items without the potential risk of harm to staff. There is a question mark whether this is an appropriate delivery mechanism, in the same way air drops have been criticised, but the conversation and technology will develop for sure.

3D printing offers huge potential in cost-savings as well. If you imagine a field hospital being set up, right now containers are shipped and delivered by air, sea and road transport. In future these medical items could be manufactured on site. Of course the raw materials for the 3D printer are still needed but they could be available locally. Parts for vehicles could be replaced immediately with 3D printing. There could be significant operational efficiency improvements and cost reduction.

The use and benefits of mobile phones is well documented. We see their huge proliferation all over the world. They are one of the few possessions available across the wealth gap. In fact mobile phones are as important to people and communities everywhere now, just as much as shelter or warmth.

Mobile phones can give access to stock-market information to check commodity prices of rice or sorghum thereby empowering local producers to fairer prices from buyers. M-Pesa in Kenya uses mobile phones to transfer money securely from cities to the remotest towns and villages.

There's a long way to go but it will be really interesting to see the evolution of the applications and how they can support humanitarian responses.

Do you think one of these technologies might even have the potential to have a lasting effect, to be a game-changer?

Sean Rafter: Technology is changing at an incredible pace and the humanitarian sector is evolving also. I think the more investment that can be done locally, the better. 3D printing and drones will certainly play a part to improve efficiency of future responses. Tracking and tracing technology will improve safety (e.g. GPS on vehicles) transparency (e.g. bar coding) and accountability (e.g. exchange of needs and delivery by mobile phones).

Which is the biggest danger linked to the use of digital technologies?

Sean Rafter: I've mentioned already the speed of change in technology. One application or one technology organization surpasses the next very quickly and you are left with legacy systems that might not work soon after investment. Also, you have specific requirements, such as power and internet which can be unavailable or intermittent.

Hopefully, solar, wind and battery cell technology improves and is more environmentally friendly. Technology also needs to stay inclusive so it can be owned, operated and maintained by the local communities that it aims to serve. My personal opinion is that a lot of technologies today feel like marketing solutions to problems that we didn't even know we had before. So we want technology to be relevant and affordable to the community we are trying to serve.

Which best possible state of humanitarian logistics and infrastructure do you regard as realistic in ten or twenty years from now? Can you make up a scenario here?

Sean Rafter: There was a very relevant concept discussed in a paper entitled "Delivering in a Moving World" published for the recent World Humanitarian Summit. It said: „We want to be as local as possible and as international as necessary“. I think this captures where the humanitarian community

would like to see investment in preparedness and strengthening of human resources. We don't want future large scale emergencies to have dependencies on international intervention. More investment at local level in preparedness will reduce loss of life, support affected communities more efficiently and make economies more resilient. That would be my hope for the future, and I think we already get a sense of that when we see what is happening in Europe in terms of environment or migration issues. These are global issues that require global initiatives, but it is local people and communities that can provide immediate response and also be the catalyst for recovery and change.

Which myth of humanitarian logistics and infrastructure needs to be done away with from your point of view?

Sean Rafter: That's a good question. I would say the myth that humanitarian logistics is less capable or competent than logistics in other sectors. I don't believe it is at all, it is just that technical competence is a subset of much broader skills and competencies that are required. The goal of moving goods as efficiently and effectively as possible is the same. Humanitarian Logistics needs staff with technical ability at all levels. However, just as important are personal skills such as leadership, communication, adaptability, decision-making, resilience, cultural awareness, etc. Then there is the need to adapt to the physical environment and understand its geography, climate, politics and infrastructure. In addition one must know donor policies, international and national rules and regulations, human rights laws, etc. And it's all changing constantly. It's incredibly challenging, and of course very rewarding. Hence, we need to do better at recruiting, retaining and developing more people into the logistics sector. I believe these skills and competencies will be needed more and more in the future, and by the private sector also.