Episode 6 Humanitarian Supply Chains - 16.3.2022, 14 (1)
Length of recording: 35 minutes

Transcription notes

GB:	Gautam Basu
GK:	Gyöngyi Kovacs

wo-	an unfinished word
(word)	an uncertain passage in speech or an unrecognised speaker
(-)	an unrecognisable word
(--)	unrecognisable words
[pause 10 s]	a pause in speech of at least 10 seconds
, . ? :	a grammatically correct punctuation mark or a pause in speech of less than 10 seconds

---

[intro music]

GB: The Operations Leadership Podcast with Gautam Basu provides insights for today's business leaders on creating value through operations improvement, process excellence, digital innovation and organizational leadership.

This episode's guest is Dr. Gyöngyi Kovacs. Gyöngyi is a professor of humanitarian logistics and supply chain management at Hanken University. She has done extensive research and fieldwork in this topic and this is quite a timely topic to discuss, especially in light of the Ukraine conflict and the impact of the refugees.

During this conversation, Gyöngyi discusses about the similarities and differences between humanitarian supply chains and normal business supply chains. She talks about the attributes in terms of flexibility and responsiveness and agility of humanitarian logistical operations as well as the different phases in a disaster relief operation, and some best practices and insights that she's gleaned over the years in this discipline. So we hope you enjoy this conversation.

[intro music ends]

GB: Hello, Gyöngyi, and welcome to the Operations Leadership podcast.

GK: Thank you for having me.

GB: Great. Well, today we want to discuss about a very important and current topic around humanitarian supply chains and logistical operations. And maybe we can start out with the question around, maybe you can describe what are the main differences between humanitarian versus normal business supply chains and logistical operations?

GK: Thanks for that question, it's a really important one. Let me maybe start by saying that we can discuss the differences, but there are more commonalities. We talk about the same logistical principles, we talk about the same kinds of supply chains, we talk about the same concepts, the same tools, the same everything. But there are of course differences as well. I just wanted to make sure that, yeah. Basically let's start with, it's the same thing, it's logistics, it's supply chain management, but the context is different.

With the context being different, there are two things that stand out. One is of course that we talk about beneficiaries or end users, and not consumers and customers. Now, why is this important? Beneficiaries don't necessarily have the same voice. We tend to want to attribute more and more voice to beneficiaries, but nonetheless, it's not often them choosing what they want. They can't vote with their feet. It's being items provided to them. That's really quite a big difference. It's a bit like when you think about healthcare and patience. There is limited choices for patients of what kind of healthcare provision there could to them.

The other thing from a supply chain perspective is that the organization providing services and products cannot choose away areas that would not be, for example, profitable. Say, in a retail setting, in a supply chain setting, you can say that I'm not going to set up certain stores in certain areas because just the sheer transportation there doesn't pay off. Here it's the opposite. Those are going to be the areas you want to focus on. So, that makes it quite different and possibly a bit more challenging from a supply chain perspective.

GB: Right. And I guess, you know, it's interesting what you said about this whole beneficiary concept, and of course with business, profit maximization is kind of the objective function. Whereas here, I can imagine it's saving of lives, this type of objective function. So in that sense, quite different from the goals.

GK: Spot on. I mean, the idea is not to make profit. That environment and context is of course also different. What you exactly want to achieve with your operations is definitely different and the main idea is humanitarian logistics. So you serve people, you save lives, you sustain lives.

GB: Mm, mm. And could you tell us a little bit more about how the supply network of humanitarian aid, i.e. the donors, the aid agencies, the NGOs, governments, even the military, how are they coordinated in a disaster relief

situation? Is it usually conducted in a centralized manner, or a decentralized manner? So maybe you can, it's two questions. So, how is the supply network, who do they consist of, and how are the coordination principles actually structured?

GK: I guess you are referring to a very old article of ours in this [laughs] -

GB: [laughs] Yes I am -

[laughter]

GK: No, uh... It's really great, because there are many different levels where coordination happens. There is coordination across the same organizations, say, if I'm Save the Children Finland, I coordinate with Save the Children UK and so forth. So like, it could be the same kind of network of one organization to start with. Then if it comes to larger disasters, the coordination mechanisms also need to be beyond one's own organization. So then the question becomes how do I make sure that things are not duplicated, versus other areas are not overlooked.

So then there are certain coordination mechanisms that have evolved. For example, in the logistics scene there is the logistics cluster, that is a coordination mechanism that can be called upon to do this kind of job. On the other hand, in an area very often it's under a government. So for example whatever happens in Finland, it would be the Finnish government that would have that coordinating role and anybody else would need to still also relate to them of what will be happening.

Now when I say anybody else, that's a huge array of organizations. So, you have the mom and pop, little donors who want to give their t-shirts and shoes to the next disaster. You do have the more institutional organizations, the UN agencies, the Red Cross movement, the NGOs. But as you also pointed out, I mean, there is the whole supply chain behind it. So suppliers is a really big part of it. Logistic service providers is a really big part of it. And then depending where you are, it could be to say, the military for example.

The donors, as you said, are also two different types of donors. There are us, people, who donate, and there is, again, institutional donors. It could be really big foundations or it could be states that donate as well.

GB: Right. So, for example, I know there's many different types of disasters. So if it's a regional disaster like for example in South-East Asia, a flood or hurricane or what have you, there's multiple national governments responsible. Is there one government that kind of takes the lead, or is it, you know, a UN or a World Food Programme that kind of comes to the, you know, the coordination mechanism specifically?

GK: So, within their own regions, governments will have a say. So I mean, if it's a pandemic, the half authorities will coordinate the things within their own region. Then sometimes there might be supranational coordination. So when you look at the Covid-19 pandemic, where we are now here in Finland, you would have the Finnish government and the mandated organizations, half organizations, playing a very important role. But then they also coordinate with the EU. So the vaccination campaigns and things like that were also coordinated, like okay, who is buying in for everybody? So there is a lot of purchase in power to be gained with doing things together.

GB: Right.

GK: When it comes to for example a different disaster that we are currently witnessing, and that is the war in Ukraine and all the repercussions of it, again, you have in a war situation the disaster in the country. But then you also have the repercussions outside. All the refugees and the refugee movement and the refugee response. Here, the coordination can be, again, within countries, but across countries the coordination starts to be exactly this kind of cluster system. That you have several different clusters, very often thematic ones, so there is for example a water and sanitation cluster. There is an emergency telecoms cluster.

From our perspective, probably the more important one is the logistics cluster, because that would be the one looking at the flows. Even just saying, like, okay, organization A covers this area, organization B covers that area. Or organization A delivers these types of items, organization B those types of items. Again, to be more effective and to avoid duplications.

GB: Yeah, that makes sense. And I guess with any type of disaster, whether it's kind of man-made wartime situation, natural disaster, I mean, how are the, let's say, the needs assessment when something actually happens? How are they typically conducted within a humanitarian crisis? I mean, what's the, let's say, the lead time from the actual event to getting the needs assessment on the ground? How does that typically happen?

GK: There are many different ways. And the typical way is basically just asking people, what is it that you need? I mean, for that to go around, have a survey of like, okay, in this area, what has happened? What are you running out of? Oh, the water system has gone down, then we probably need to kind of re-establish it. So that's one thing. It's a really important aspect, like, ask the people themselves.

But then there are other things as well. So, nowadays there is a lot of emphasis put on social media and what comes up in social media, and like okay, people posting that this is happening, that is happening, this is what we need. From a

humanitarian perspective, what is almost more interesting is to see what is not said. Which part or region might be completely out of telecoms communication? So, listening to the silence is a really big aspect of it. So, that might be where the people are the most vulnerable.

Because when we are talking of beneficiaries, we also look at who are the overlooked, who are the most vulnerable? They are not necessarily the ones that shout the loudest. And we come back to concepts such as aid equity, vulnerability capacity assessments, and even questions like disability inclusion, gender aspects, who in which society can actually express their needs in certain ways? So it is quite a multifaceted way of assessing needs.

GB: Right. And I do remember a long time ago, you were mentioning that sometimes the donors, while they might be well-intentioned, sometimes they'll send the wrong types of materials. Or, for example, clogging up the supply chain with sweaters and clothing, where they actually need fresh water and malaria medication or, you know, pharmaceutical medicine. So, when do you typically do a needs assessment? How long after the event do you do that? How long does it last?

GK: I will say that there is not one needs assessment. Because needs also develop dynamically. So you do need to assess needs, reassess things, as the context develops. In a conflict area especially things develop dynamically all the time. That today, there is still food in the region, in a week it might have run out. So, those kinds of things also really play a role. Then when it comes to donors sending the wrong stuff, yes. There is a huge problem with that when people, out of the goodness of their heart, want to help, and it's wonderful to see that so many people always want to help, but don't take a step back and say like, okay, what is it that that person, on the other hand, actually needs? What is their highest priority?

So, depending on what has happened to someone, the highest priority could be finding their family and communication. The highest priority could be just safe drinking water. It could be electricity. So it's not necessarily what we might think. Just as we don't want other people to tell us what we need, it is the same thing in this context.

GB: Right.

GK: From a supply chain perspective, it can actually cause problems if we send the wrong items. So, what we see in the current Ukraine crisis is also that, especially as you mentioned, people like to send their sweater. Now, I'm not saying the sweaters are not needed, but are they needed now? And are they needed there, where they are being sent? So, at this point in time we have locations full of sweaters and full of this and that. There they are out in the rain

and in the snow, and actually go to waste. So that's probably not what you intended to do when you sent your sweater.

GB: Sure.

GK: Secondly, they clog up warehouse space. They might clog up ports and airports. So then with that, the things that are priorities, don't get through anymore.

GB: Right, right. Yeah, that's a problem. And so, if I understood you correctly, I mean, one of the best ways to do a needs assessment is just to ask on the ground what is needed. Are they leveraging technology, you know, within this humanitarian supply chain, or this needs assessment? I.e. drones, UAS systems, GIS systems, to kind of survey if it's a natural disaster or even if it's a war torn, the movement of people, the damage that's been done? Are they using those type of technological components, leveraging those?

GK: There are many technological components being used, but again, let me just start by, okay, first of all, you look at where is there a patch where there is complete technological silence. Because that's something, there something bigger may have happened. So say, a typhoon has swept through an area and you don't get communication with a certain island anymore, you wouldn't know what their needs are because the telecoms is down. But that telecoms is down is an indicator for you that this is an area that has been hit substantially. So, these things are really important as well.

In other things, I mean, you can look at population movement through satellite pictures. You can deliver phones to a community that has been hit with a drone, and by that, establish the communication and be able to ask them what they actually need. So, those kind of things can be done. Drones are a bit of a two-edged sword, though. Because as they might work, for example, in a pandemic, they might work relatively well in a natural disaster. They do not work in conflict settings. Because how can anybody say that this drone is the one that delivers me aid, versus that other drone is the one that is going to shoot at me.

GB: Right, right. That's a good point. Yeah, maybe a question around the phases, the typical phases of a disaster relief cycle. Could you describe kind of what are the typical phases around a relief cycle, and maybe give us some color, some detail around how that happens?

GK: So, in the disaster management literature, one talks of four different phases. That is mitigation, preparedness, response, and reconstruction. Sometimes there's nuances of what you call them. In logistics, we typically only talk about from preparedness to response to reconstruction, because there is very little that logistics does in mitigating against potential disasters.

That said, that has changed. Because now more and more there is an acknowledgment that for example, climate change does become a very strong factor in how disaster patterns also change. So our logistical choices, even like greening the humanitarian supply chain, will make a difference in how that plays out. So, those kinds of mitigation aspects have started to come back even in humanitarian logistics. But that's fairly new.

On the other hand, when we talk about the other three, so preparedness is a really important part, and that includes, like, not just prepositioning stock. Which means, you have certain items you know will be commonly needed. And even though I said that, for example, you ask beneficiaries first, there are certain items you kind of know will be commonly needed. From painkillers to certain food items like long-lasting food items, things like that. Certain water and sanitation aspects, so etcetera. So you can preposition those. You can preposition entire field hospitals, as in Finland is being done as well, that there are field hospitals in warehouses that can be sent out.

So those are the kinds of things you can do. Preparedness though also means training. And training is a very important aspect of it. Because even though we could be the best logisticians in the world, if we haven't been trained to, for a certain context and setting, we might not operate well in it. And with training, I mean, actually in that sense two things. Like the context and knowing what you are going to do from a humanitarian perspective, but even just the systems. Humanitarian organizations have their own ERP systems. Their own this and that, their own logistics information systems.

It does require a bit of training to know, okay, like how do I punch it in there instead of, say, the commercial one that I'm using everyday. So, those kind of trainings are important, plus the coordination of people. So, having met someone in a training, you may be able to much easier then reach out to that person in an actual operation as well. So, just recognizing the face, know that we can work together effectively. So these are really important things in preparedness. And globally, by the way, the preposition stock exists as well. So it's not just nationally, but also UN agencies, bigger humanitarian organizations have come together to say, like, there are certain locations in the world that make more sense, they have a better outreach to other geographical coverages.

They typically are at sections where you have prime intermodal transportation, supports in the airports, possibly somewhere where it's very good port hinterlands and connectivities. So those are quite important there. But also they tend to be in locations that are not very conflict-prone. They tend to be in locations that are not natural disaster prone, so that they are not going to wiped out the first thing in a disaster. So those kind of things play a role. It's a bit

different from facility location in a commercial setting, but nonetheless, very many similar principles apply.

Then, let me come to disaster response. That's when it becomes super agile, have to mobilize, get out, have your feet on the ground, send out people and actually start to deliver. And yet, the biggest issue is not, we are sending people and we are sending stuff. The biggest issue is, what is needed? Whom shall we send? What is the best response here? There is a huge movement nowadays from sending stuff to sending cash. Because most people don't, I mean, if you have everything available in your neighborhood, you don't need stuff. It might even disrupt the local economy. Instead, you might need cash or access to cash, because you don't have it, because you have lost everything, to be able to buy those items again.

GB: Right.

GK: So those are kinds of things as well, like you know, take a step back, what is it that you deliver and how do you deliver it?

GB: Mm-mm, mm-mm.

GK: Now, at the end of the day, if there is something that is not available in a setting, then you do need to deliver. So that's where logistics again kicks in. Like, you know, everything from the warehousing to the transportation, to coordinating all of these efforts. All the material flows, as you know in commercial settings as well.

Last but not least, there's reconstruction. When the first immediate needs have kind of been met, and you need to just think ahead, okay, so... Say, this school has been destroyed, we might need to reconstruct a school. This area has been, this bridge, this port, this airport, people's housing, and how do we best go about it? Sometimes we don't reconstruct in the same place, sometimes you say, okay, this has been on a flood plane forever, maybe we move the entire city. That has been done, for example, in Australia many times. So even that kind of step back, like okay, what makes really sense also in the long run. And learning from all of these events and disasters.

GB: Right, right. Yeah, I do recall that you mentioned that humanitarian supply chains are among the most agile around, because they have to be set up quite quickly and be very responsive. Have you seen, you know, kind of in your work and experience an evolution to being even more agile or less agile? How would you rate the performance of humanitarian supply chains? I know it's a broad question, but you know, you mentioned training, so I can imagine that during the course of the last ten, fifteen, even twenty years... Because it's a relatively new kind of, not new, but recent concept within logistics and supply chain

management or operations management literature. So have you seen an increase in performance, i.e. lives saved? What is your view on that?

GK: So, let me start with the agility question here. We do talk about agility quite a bit, and we do talk about humanitarian supply chains being the most agile in the world. I mean, frankly, which other supply chain do you know that from something happening to something being delivered, in 72 hours anywhere in the world, you would get really, like, from zero to a fleet hospital operating somewhere? So that is quite a feat that you can achieve here.

That said, agility might not be always the best concept to use, because it's not something that you need to be agile all the time. So, there's a bit of a discussion, like okay, at which point are you more on the lean side? When do you activate, when do you mobilize? So maybe things like responsiveness, supply chain resilience even, flexibility, they might be somewhat more useful concepts in the long run. Because you do have to balance it out and you don't want to have costs where there are none.

Because also in preparedness, it is a fine balance between saying, well, I have these items in stock, but what if they are never needed? What is it that we are preparing for? Which scenarios are we considering? To saying, well, we look at the items that are commonly in use across various disasters, to saying, that okay, even though we are preparing, we want to have inventory turnover. So is it something where we just kind of like, we have a buffer stock but it is still first in, first out, and we just keep that buffer. So there are many mechanisms that you can play with here.

In contrast, between the humanitarian and commercial setting, we sometimes have also been looking at, okay, we focus very much on dynamic flexibility in a commercial setting. How to quickly add certain capacities, how to sometimes change the supplier, things like that. Versus in the humanitarian setting, what there is, is in addition to that, structural flexibility. That there are different organizations that can jump in, different locations that you are supplying from. You build up that full structure and you carry that structure.

People don't tend to want to finance that part, though. So that is kind of the biggest challenge here. Because whenever a disaster happens, people are happy to donate. There are lots of events, lots of movement behind it and traction. Whenever it comes to, like, preparing for the next disaster, the same willingness is not necessarily there.

GB: Right, interesting. Yeah, and this kind of leads logically to my next question. Obviously there are many different types of disasters, so what are the kind of primary differences between, let's say, humanitarian logistical response to a natural disaster, such as a hurricane or a flood or an earthquake, versus one

maybe that we're facing now, the Ukraine situation based on a wartime situation? I think you alluded a little bit to that in the sense that if you're doing, let's say, mitigation strategies, you know that roughly this area is prone to a flood, so you have visual controls that, say, move to higher ground. Or simple things like that. But are there any other differences between, let's say, a man-made situation, i.e. wartime refugee crisis, versus a natural disaster situation?

GK: There are again probably more commonalities than differences. I mean, you do have the human impact and suffering and you do need to deliver aid to people. I mean, that is fairly common. Then the other things also, like all the supply chain principles we've been discussing, are still again the same. So I mean, there are many, many commonalities. When it comes to humanitarian organizations, they do respond to conflicts. They respond to natural disasters. Or actually, let's put it like, to the implications of natural hazards. They do respond to also pandemics and epidemics. I mean, there are lots of other things as well, I mean, when it's, say... an ebola outbreak, you still also respond. So that is also a typical humanitarian setting.

Now, when it comes to the natural ones, many of them can be also very well predicted. I mean, you already see that okay, the second harvest is failing somewhere, there will be a food crisis. Not all of it is sudden onset. And this is actually maybe something that we focus on more, to say like, okay, what's the prediction time and what can you do from the first warning to the next, to the next? If it comes to those kinds of, like, food crises that you are predicting for a longer term, there is a moment when you say that okay, second harvest falling hard. We are active in procurement, we are starting to deliver certain food products. I'm talking about the ready to eat types of food products to hospitals. Nutrition items for babies. So you start activating those supply chains.

It's not always this super agile thing, because you just have these early warning indicators. When it comes to typhoons, when it comes to earthquakes, I mean, some of them have better warning times than others. Again, with that you can evacuate for example, or not. So I mean, there are different issues you can do. What is quite different, though, sometimes when it comes to a conflict, and let me just maybe also remind you: the vast majority of humanitarian activities and conflicts, if you look at all the money that goes to humanitarian activities, all the items that are delivered, all the people in need, the top ten of the humanitarian crises that we are looking at in the world, not a single one of them is a natural hazard related issue.

Okay? So now we are talking about Afghanistan, we are talking about South Sudan, we are talking about, you know, bigger, bigger environments, where there are conflicts. Some of them have been protracted conflicts and crises, so a lot of it is going on in these kinds of areas. I mean, how many years have we been talking about Syria now? We just had another anniversary of that. So, that

is a huge chunk of humanitarian aid. Where it is a bit different in the conflict environment from a natural disaster is the kind of access.

Both types of disasters can destroy infrastructure, and from the infrastructure perspective that a bridge is down, that is normal. So vehicle routing might be a bit more difficult, if you don't know which routes can be accessible in that sense. But in conflict situations, you also have to negotiate with warlords. We are looking at in some research that even like job advertisements for humanitarian logisticians, negotiation skills with warlords is surprisingly often mentioned.

GB: Wow.

GK: But of course, now also in the Ukraine war, one of the biggest things we see in the news is how difficult it is to evacuate people, which is actually a mandate of the International Humanitarian Law, that has to be granted in a war situation. How difficult it is for humanitarian convoys to get through, which also is mandated in International Humanitarian Law. And yet, negotiations can sometimes be very, very challenging. So that is different maybe in a conflict. Not everybody is let in either. So all the humanitarian principles of being neutral, humanity, impartiality, neutrality, and many others, they all prevail in such a situation as well. So that is maybe a bit trickier than in a natural disaster.

GB: Right. Yeah, no, it's fascinating. I mean, obviously you've been experienced in a number of, let's say, different types of disasters. And also kind of over time now. So, could you give some insights into, perhaps some best practices on how to handle... Does any come to mind? It could be, let's say, a conflict or a natural hazard, natural disaster, does anything come to mind? You've mentioned a lot of stuff around prepositioning of inventory and the agility of the response and also even the mitigation planning, but any one or two kind of best practice examples, where you can say that wow, that was a really great response and we were very successful in what we did?

GK: There are many best practices on many different levels. I mean, let me start maybe with the level of individuals. I mean, us who might or might not experience disasters anytime. We can practice our own resilience, we can think about it, we can prepare for things. SPEK has come out in Finland as well with a leaflet, to say like okay, what are the items you might want to have for the next 72 hours, if something hits you? Also now, we've been working, and a lot of other organizations have been working with Heureka, the science center, to put up an exhibition on natural disasters. In fact, what you can practice there is your own resilience. So that is something to maybe go by. Because it goes through what are commonalities here, what are the five to six points, as key take-aways to think of, like what happens in this kind of disaster? What can you do better as an individual, as a community? So, that we can practice a lot.

When it comes to governments, I mean, there has been a wonderful example of Bangladesh for example, when it comes to all sorts of cyclones and cyclone preparedness and response. Where from the same magnitude of cyclones, they have really managed to get down how many people die in a cyclone drastically. Because they had hundreds of thousands to, like, very few each, because they put so much effort into both mitigation, evacuation routes, training people... And none of that is high tech. It can be people in bicycles with megaphones running around, telling people that they can leave their house. Enabling people in a society where earlier on women couldn't leave the house before the husband permitting, to say that in certain situations, you are leaving your house. To, at this point, even like evacuating the livestock of people, because people wouldn't want to leave without it, because long-term survival wasn't going to be possible.

So there are very good examples there. From a logistical perspective, the best examples we've seen usually have to do with preparedness. There are even studies looking at how much money you save in response if you've prepared well. And the ratio is anywhere between one to seven to one to nine euros, so any euro we put into preparedness gives you seven to ninefold the saving in response.

GB: Wow, yeah. It's great payback.

GK: So, exactly. It's a huge return on investment.

GB: Yeah, wow. Interesting. Well this has been fascinating, Gyöngi, and a very timely topic. I think a very important one as well. So, I want to thank you very much for your time and the insights that you've imparted on the listeners. So thanks again, Gyöngi.

GK: Thank you so much.

[outro music begins]

GB: That's it for this week's Operations Leadership Podcast. We hope you enjoyed it, and until next time.

[outro music ends]