



# 7<sup>TH</sup> AFRICA LOGISTICS CONFERENCE

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OCTOBER 2019 | NAIROBI, KENYA

## INTRODUCTION

The theme of the 7th ALC was

**'Physical Infrastructure and Digital Network Changes and their effect on humanitarian/development supply chains'.**

This ALC brought together local and regional researchers, business leaders and professionals from humanitarian, government, donor, academic and private sectors to share and exchange knowledge related to supply chain networks across Africa with a specific focus on humanitarian assistance.

This 2-day interactive conference examined supply chain issues in the context of major infrastructure and digital changes; with leading experts discussing, how supply networks in Africa are changing in response to these trends and what this means, in particular, for humanitarian and development supply chains.

The conference considered 4 themes, as follows:

### Theme 1

#### Physical Infrastructure

What changes will impact on transport and logistics infrastructures in Africa? How will these affect humanitarian and development supply networks?

### Theme 2

#### Digital Infrastructure

How will digital platforms and new analytical models enable humanitarian and development supply chains to lift people out of poverty?

### Theme 3

#### People Networks

How will future networks of people be enabled to ensure positive impact? How will industry link to academia to ensure the right talent comes through and ensure gender equity?

### Theme 4

#### Thematic Networks

How will organizations who strive for better food security, improved medical supply chain effectiveness and sustainability engage with infrastructural and digital changes?

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## OPENING REMARKS

**ENG. FRANCIS GITAU, INFRASTRUCTURE SECRETARY  
IN THE MINISTRY OF TRANSPORT, IN THE STATE DEPARTMENT  
OF INFRASTRUCTURE OF THE REPUBLIC OF KENYA**

Infrastructure is key to ensuring the efficient and effective delivery of goods. Improved infrastructure increases intra-regional and international trade; reduces the cost of doing business; enhances Africa's competitiveness on the continent and on the global stage; while acting as a catalyst for economic transformation and diversification through industrialization and value addition. Across Africa, programs for infrastructure development aim to close the gap in order to power the continents' economic prosperity and sustainable development.

On the digital side, the Internet of Things, powered by the phenomenal advancement of digital technology is enabling the fourth industrial revolution and radically changing how the world interacts with individual, social and corporate spaces. In government, its impact on policy, statutes and legal legislative frameworks is seen as significant. People refer to a digital single market with the potential to significantly impact on job creation, growth and commercialization. However, Africa has a deficit of the tools and capabilities needed to actively engage in this digital



Conference delegates arriving for the 7th Africa Logistics Conference



Eng. Francis Gitau, Infrastructure Secretary in the Ministry of Transport, in the State Department of Infrastructure of the Republic of Kenya

market, and requires huge investment in research and skill development. The capacity for Africa to connect seamlessly on a plug-and-play basis and develop the appropriate products to thrive in the Internet of Things eco system is limited so it is critical to consider how to bridge this South-North divide through strategic investments to empower Africans to develop innovative applications and platforms to diagnose issues and provide solutions for their continent.

In recent years, a number of platforms have grown and transformed Africa. Such platforms use infrastructure to transform people's livelihoods and support organizations to optimize their supply networks. But the continent's large infrastructure deficit holds it back. Africa's road access rate is below 40%. In parts of Africa, transportation costs can be double the global average. Internet penetration rate is approximately 6% compared to an average of 40% in other parts of the developing world.

Within Africa, disparities between countries and in the urban-rural divide; skew the narrative so there is not only one physical infrastructure or one stage of digital development

across the continent. For example, although there is only 1 internet provider in Eritrea; there are 24 in Kenya and approximately 1200 in South Africa. Africa is not a unitary continent. For technological developments to ensure equitable impact, all these narratives must be adequately catered for.

In government, now is the time to align our policies, legal and governance frameworks to the intelligent platforms powered by smart applications and big data. Fortunately, here in Kenya, the Government of Kenya has plans in place like a national fiber optic infrastructure plan to ensure improved access to technology across the country or the connection from northern Kenya to Southern Sudan, currently underway and supported by the World Bank. The Government of Kenya will continue to support the delivery of quality infrastructure, and champion closing the infrastructure gap so that African businesses and institutions, benefit now and in the future, from the infrastructure they need in order to thrive. And with those remarks, I send appreciation from our principal secretary, Professor Mwangi Maringa, thank all delegates and declare the ALC7 officially open.

## OPENING REMARKS

### MR. MATTHEW HOLLINGWORTH, REPRESENTATIVE AND COUNTRY DIRECTOR, WORLD FOOD PROGRAMME, SOUTH SUDAN

WFP relies on logistics. We buy and move 3.6 million tons of food every year, feeding 48 million and working in 43 of the 54 countries on this continent. 40% of that food goes through 5 or 6 ports - all in this region. And if we want to achieve Sustainable Development Goal (SDG) #2 - of zero hunger in the world - we need to improve supply chain management to ensure better utilization of resources and create a better impact on the countries, communities and people we serve, in the face of complexity caused by issues like climate change and on-going conflicts.

In logistics and supply chain management, we all share the same values; efficiency, quality, timeliness. We want to get things to

the right place in the right time, in the right quantity. In doing so, we can reduce hunger (SDG#2); support job creation and economic growth (SDG#8); support industry, innovation and infrastructure (SDG #9); support climate action (SDG #13); support peace and prosperity (SDG #16); and bring partners together (SDG #17) to do our jobs better, reach more people and solve many of these critical issues.

In South Sudan, as elsewhere, enormous technological advances are causing huge changes. Two decades ago, we were lucky to have a cell phone and they were huge. Today, we can track and trace almost every shipment, truck, plane, and helicopter down

to the consignment and back up to where they are going. Digitalization has brought the ability to optimize supply chains; to consider seasonality to get commodities in place at the right time; to buy from farmers at the right time; to use linear optimization systems and demand supply modeling to improve the way supply chains work. However, despite the benefits of digitalization, the biggest gap in South Sudan, remains the infrastructure deficit. Today - like 20 years ago - if you are dropped in Malakal nobody might pick you up for a month. Nonetheless, we are constantly improving. Through optimization tools, we are saving money, putting food in place, prepositioning ahead of rainy seasons or forecasted conflict to minimize expensive emergency logistics like air drops.

In 2018, for example, reliance on air deliveries in South Sudan decreased by 79% because of a shift to barge, boat, road and rail transport. This saved almost 100 million dollars, which can be used to buy more food or support farmers to grow more food locally. These advances help us do better with less; or more with the same. And this

is important, because while WFP supports 80 million people globally - there are still 820 million people who suffer from food insecurity. So, the faster we do ourselves out of business in one theatre, the faster we can move on to others - to make zero poverty a reality in our lifetime.

We have an amazing amount of issues to discuss and learn from at the ALC7 and we need more of these opportunities to lean forward and learn from one another to create solutions so that 'nobody is left behind'. In this region there are not enough supply chain people so we must also grow to achieve the enormous tasks ahead of us.

I am delighted to have been invited to come and be part of these discussions. I'm delighted to listen to the speakers; engage in these discussions and share insights on what we've done in South Sudan over the last year, and intend to continue doing. Because the one value that is important in logistics is consistency - you can only resolve issues we face if you consistently solve them, because by consistently solving them, they won't be there anymore.



Mr. Matthew Hollingworth, Representative and Country Director, World Food Programme, South Sudan



Conference delegates arriving for the 7th Africa Logistics Conference

## THEME 1: PHYSICAL INFRASTRUCTURE | SESSION 1

# SPEAKERS DESCRIBE TRANSFORMATIONS IN PHYSICAL INFRASTRUCTURE IN AFRICA AND/OR SURROUNDING REGIONS THAT IMPACT ON THE AFRICAN ENVIRONMENT AND CONSIDER HOW SUPPLY CHAINS RESPOND TO SUCH CHANGE.

### SPEAKERS

**Mr. Adrian van der Knaap**  
Farm-to-Market Alliance

**Dr. Sun Mengxin**  
China Communications  
Construction Company

### MODERATOR

**Mr. John Sibi-Okumu**

### THE VALUE CHAIN APPROACH

Mr. Adrian van der Knaap, Managing Director of Farm-to-Market Alliance, discussed the question, 'how can physical infrastructure transform people's lives for the better?' He illustrated the relative ease with which big physical infrastructures could be built but emphasized that the actual purpose of the infrastructure is what determines if it will transform the lives of the people for the better. He described the Value Chain approach (which seeks to understand the firms that operate within an industry – from input suppliers to end market buyers; the support markets that provide technical, business and financial services to the industry; and the business environment in which the industry operates) as a process to be undertaken when considering all aspects related to the building of physical



Mr. Adrian van der Knaap, Farm-to-Market Alliance

infrastructure in order to ensure that it meets the needs of the people, and has a positive impact on their lives. He expressed the need for both the public and private sectors to work together in order to spread the heavy investment across, and make the physical infrastructure projects commercially sustainable. Posing the question, 'how can supply chain initiate the necessary

changes?' Mr. van der Knaap challenged the humanitarian sector's supply chains to proactively get engaged with the physical infrastructure projects; to help de-risk the investments, in order to encourage the private and public sectors involved in order to ensure that these infrastructure actually lead to positive transformation in the lives of the people in the community.



Moderator Mr. John Sibi-Okumu



Dr. Sun Mengxin,  
China Communications  
Construction Company

### A RAILROAD AND THE CHANGES IT HAS BROUGHT ABOUT

Dr. Sun Mengxin, Executive General Manager, China Communications Construction Company, Regional Center for East Africa, spoke about the Standard Gauge Railway (SGR) project in Kenya. He described the basic parameters of the Mombasa-Nairobi SGR, indicating that 2 million passengers have been transported on it since June 2017, and 14 freight trains carrying 197,000 TEUs daily average have operated in the first half of 2019.

In reference to changes brought about by the SGR physical infrastructure, he described some of the social and economic benefits that have been gained from the SGR; such as shortened travel times between Mombasa and Nairobi (from 10 to 5 hours); job creation (80% of the staff are local) and transfer of technical and technological knowledge to Kenyans; improved efficiency of cargo transportation; lower transportation costs and promotion of Kenya's foreign trade. Dr. Sun also mentioned the Corporate Social Responsibility projects

that the SGR project has undertaken since the construction phase, with emphasis on 4 targeted areas: Education and Children Welfare, Health, Environment, and Youth Empowerment.

Dr. Sun shared insights from the SGR project, quoting a Chinese proverb that 'if you wish to get rich, build roads first'. With this, he illustrated the need for improved physical

infrastructure that is fitting for the local conditions, in order to create the conditions for greater economic wealth. He discussed the need for deliberate technology transfer as the SGR is the first of its kind in the region, as well as the need to incorporate the 'railway economy' into the existing economic framework so that the railway works in favor of the overall economic development of Kenya.



Question from the audience,  
Dr. Gladness Salema, University of Dar Es Salaam



Delegates from HELP Logistics, Kuehne Nagel and Kumwe discussing digital food supply chain systems.

## THEME 1: PHYSICAL INFRASTRUCTURE | SESSION 2

# WHAT CHANGES WILL IMPACT ON TRANSPORT AND LOGISTICS INFRASTRUCTURES IN AFRICA? HOW MIGHT THESE AFFECT HUMANITARIAN AND SUPPLY NETWORKS?

### SPEAKERS

**Prof. Banomyong Ruth**  
Thammasat University,  
Thailand

**Mr. Abhishek Sharma**  
Trademark East Africa

**Dr. Thokozani Simelanet**  
Human Sciences Research Council,  
South Africa

**Dr. Giuliano Punzo**  
University of Sheffield,  
United Kingdom

### MODERATOR

**Mr. John Sibi-Okumu**

### THE BELT AND ROAD INITIATIVE AND ITS IMPACT ON ASIA: LESSONS LEARNT

Prof. Ruth Banomyong, a professor and lecturer at Thammasat Business School, Thammasat University in Thailand, shared the experience of the Chinese Belt and Road Initiative (BRI) in Asia, and some lessons learnt so far. He explained that the BRI is a land and sea connected network whose aim is to link China to Europe, other parts of Asia and Africa, and that it also has a maritime component in which any ports under Chinese management or Chinese ownership are included in this Maritime Silk Road. Within South East Asia, the land connectivity is from Yunnan Province through to the tip of the peninsula in Singapore. He stated that the amount of Chinese investments or loans to the South East Asian region is almost up to 740 billion USD spread in varying amounts across Indonesia, Vietnam, Cambodia, Malaysia, Singapore, Lao, Brunei, Myanmar, Thailand and the Philippines.

Discussing some of the issues arising from the BRI in this region, Prof. Banomyong highlighted the 'debt trap' issue, where

Chinese government backed banks prefer to offer high-interest loans to build the BRI physical infrastructure instead of taking equity in the investment - a challenge for participating countries that don't have sufficient negotiating power for their own benefit, particularly if the agreement has already been made at the highest political levels, and the relevant ministries have to find a way to make it happen.

Other issues he identified included: the lack of clearly defined geographical borders in the region that were affected by the building of the BRI infrastructure; no-benefit scenarios such as in Lao People's Democratic Republic; where very limited benefit will be locally accrued from the railway and where large-scale influxes of Chinese contractors and laborers for the railway line construction are impacting on demographics.

He suggested that the multi-lateralization of the BRI was a possible solution in order to encourage fair negotiations and mediation between the China and the ASEAN countries, to make the project's operations more



Prof. Banomyong Ruth,  
Thammasat University,  
Thailand

transparent and economically, socially and environmentally sustainable for both China and the participating countries. Professor Banomyong stated that although there were benefits to increased international trade and access, countries across Africa should consider the full remit of topics and issues when engaging in the BRI project.

### TRANSFORMATIONS IN PHYSICAL INFRASTRUCTURES AND HOW SUPPLY CHAINS RESPOND TO SUCH CHANGES: CASE STUDY FROM EAST AFRICA

Mr. Abhishek Sharma, Trademark East Africa, shared some of the lessons on infrastructure development that Trademark EA has learned from their work in the East African region. He stated that when the GDP of East Africa stagnated, the region's transport infrastructure was reduced to a road-based network with many bottlenecks. However, a recent increase in GDP has led to new infrastructure developments such as the improvement of road, rail and water (lake)



Mr. Abhishek Sharma, Trademark East Africa

infrastructure. As a result, supply chains, particularly along the Northern Corridor, are reconfiguring so that domestic containerized freight moves by rail to Nairobi, and transit containers will move by rail to Naivasha when that rail link is completed. This in turn implies that business as a logistics hub will likely shift from Mombasa to Nairobi and Naivasha.

He discussed some of the positives resulting from this new infrastructure push: significant potential reduction in carbon footprints because of the shift to rail; multi-modal transport options if and when investment on water-based lake infrastructure increases. On the other hand, he pointed out that delivery of physical infrastructure without operational plans can lead to negative effects like increased vessel-waiting time due to lack of clarity on the amount of equipment required at the port or rail yards, and for shuttling the containers from one location to the other in the case of the SGR originating from Mombasa.

Mr. Sharma described the work Trademark EA did in collaboration with Kenya Railways and partners to create a system that integrated their systems to provide real-time information on the location of containers; as well as other systems in the works like the new port management and customs management systems that have significantly reduced the time spent at Mombasa port from 21 days (2010) to 5 - 8 days (2019). Discussing the vast potential for development that the Africa Continental Free

Trade Agreement represents, Mr. Sharma highlighted policy harmonization issues as a challenge: like the need for transshipment when cargo crosses borders between countries where drivers drive on the other side of the road, or where language barriers are a concern - all adding to restrictive costs of transportation along the supply chain. Mr. Sharma also described issues with uncoordinated infrastructure developments; such as the example of Port Kisumu in Kenya which is complete while the corresponding Port Bell in Uganda is not, rendering this infrastructure unproductive for now.

Mr. Sharma finished by describing the need for more logistics hubs in secondary cities in the region, stating this requires a level of donor support to de-risk the investment and for private and public capital to come together to ensure progress.

Dr. Thokozani Simelane,  
Human Sciences Research Council,  
South Africa

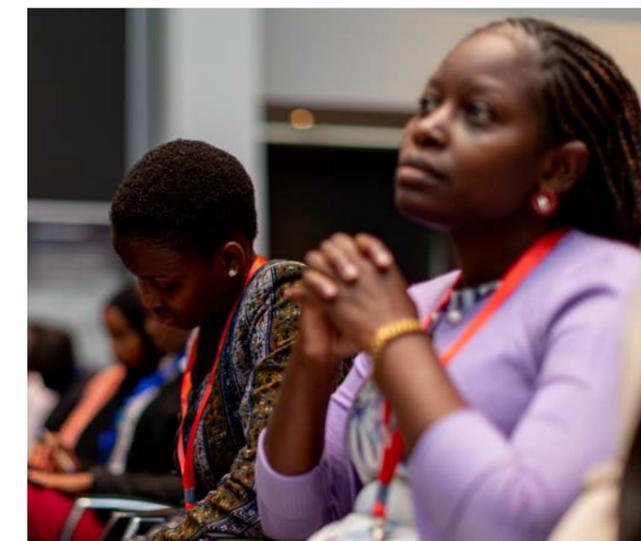
### LOGISTIC IMPEDIMENTS LINKED TO RAIL AND ROAD INFRASTRUCTURE DEFICIT IN AFRICA

Dr. Thokozani Simelane, Human Sciences Research Council - South Africa, based his presentation on the premise that those regions in Africa which are closely linked to their colonial past act as the main impediment of logistics services in the continent because barriers with language, design of the infrastructure and the legal framework; mean that the infrastructure deficit in all its diverse forms doesn't provide good logistics support, and acts as a slow-down to Africa's economic potential. Dr. Simelane discussed further challenges in the region, including traffic congestion causing the workforce to spend significant time outside the office. Such congestion is also a major hindrance to the provision of logistics services. Furthermore, compliance regulations can limit logistic capability, like the Mali regulations that only allow cargo trucks to move on the roads from noon to 5pm every day.

Dr. Simelane discussed the difficulties in travelling from one side of the African continent to the other, citing the shortage of direct and/or affordable flights from southern Africa to West Africa as a major impediment; and the incomplete Pan African Highway as a missed opportunity. Dr. Simelane discussed the reduction in human capital development as another challenge resulting from shortage of the infrastructure where,

for example, students cannot get practical industrial experiences that are a prerequisite for productive field deployment.

In his closing remarks, Dr. Simelane stated that despite Africa's massive infrastructure deficit, the global transportation industry can't afford to ignore its market; its natural resources and growing consumer base; and that this international system must play a more systemic and vital role in supporting the continent's effort to gear up infrastructure development, enabling supply distribution networks, providing mobility, and creating market-based employment for Africans.



Over 130 organizations were represented at this 2 day event.



Dr. Giuliano Punzo,  
University of Sheffield,  
United Kingdom

## PINCH-POINTS IN THE TRANSFORMATIONS IN PHYSICAL INFRASTRUCTURES IN EAST AFRICA

Dr. Giuliano Punzo, lecturer, University of Sheffield, spoke on pinch-points in the transformation of physical infrastructure in East Africa. His research used in-depth analysis to understand how such changes were impacting the communities around, and affected by, the Northern Corridor - demonstrating that such infrastructural changes can be understood from a variety of contexts.

Dr. Punzo cited Northern Corridor Observatory data that suggest Mombasa port and border crossings to be the pinch-points in the corridor that most influence travel time

and efficiency, and described the measures he used to analyze this: describing the degree centrality that shows how many links (which represent roads) join each node (which represents a city); the closeness centrality that shows how close each node (city) is to other nodes; the between-ness centrality that shows the number of shortest paths between all possible node pairs that pass through a given node; and the Eigenvector centrality that assigns node's importance based on the closeness to focal nodes.

For all 4 measures, his analysis results indicated the nodes at the geographic center of the corridor to be particularly sensitive to possible issues, even before considering the fact that they correspond to the Kenya-Uganda border region. The first conclusion

he drew was that the corridor is 'faulty', not simply because of what happens in each node, but because of the structure of the corridor that presented some vulnerability rooted in the way it was shaped, featuring a high density of nodes that cumulated at the Kenyan-Ugandan border.

He described how he went further in the analysis and considered trophic depth and its coherence in order to determine the distance from a primary source, and came to the conclusion that even without considering

the specific nature of each node, it was clear that the network structural properties identify the Kenya-Uganda border as the sensitive region, and everything gets worse if the effect of political events and economic processes such as custom checks and the delays at the border are considered.

As a possible solution, he suggested that the inclusion of the Lamu Port - South Sudan - Ethiopia Transport corridor (LAPSSET) may increase robustness and resilience of the logistic routes in the region.



The ALC creates a creative networking space with a wide range of actors in order to enable new cross-learning.

## THEME 1: PHYSICAL INFRASTRUCTURE | SESSION 3

# SPEAKERS DESCRIBE TRANSFORMATIONS IN PHYSICAL INFRASTRUCTURE IN AFRICA AND/OR SURROUNDING REGIONS THAT IMPACT ON THE AFRICAN ENVIRONMENT AND CONSIDER HOW SUPPLY CHAINS RESPOND TO SUCH CHANGES.

### SPEAKERS

**Mr. Agayo Ogambi**  
Shippers' Council of Eastern Africa

**Ms. Maria Martinez**  
International Federation of Red Cross and Red Crescent Societies

**Mr. George Fenton**  
Humanitarian Logistics Association

### MODERATOR

**Mr. John Sibi-Okumu**

## HOW PAST, CURRENT AND FUTURE CHANGES IN LAWS, REGULATIONS AND REGULATORY ENVIRONMENTS THAT APPLY TO CROSS BORDER LOGISTICS OPERATIONS IMPACT ON SUPPLY CHAINS

Mr. Agayo Ogambi, Head of Advocacy and Membership Development with the Shippers' Council of Eastern Africa, shared his thoughts on the impact on supply chains due to changes in regulations applying to cross-border logistics operations. He described how, for a long time, the Least Developed Countries and Developing Countries were focused on market, development issues in the World Trade Organization meetings, when it should also have deliberated more on trade facilitation (and logistics infrastructure), as the region's costs of production are enormously high due to logistics.

Mr. Ogambi discussed the World Bank's Logistics Performance Index for logistics services provisions, considering the impact of indicators like customs procedures;



Mr. Agayo Ogambi,  
Shippers' Council of Eastern Africa

infrastructure; international shipments; tracking and tracing; and timeliness. Citing the 2018 rankings of key African countries such as Kenya, which ranked at #68; Uganda, which ranked at #102; and Nigeria, which ranked at #110; he described how much improvement is required from the logistics sector across the continent. Mr. Ogambi noted that this was not only in the area of physical infrastructure but also on softer issues, related to digitization, such as automation as well as more general soft issues like the availability of competent human resources.

Mr. Ogambi described the key working relationship between the Shippers' Council and the Government of Kenya in ensuring that the policies and regulations being put in place are supportive of businesses and create the optimal operating environment. He mentioned that the launch of the Rail Freight (SGR) and the expansion of the inland container depot has changed the logistics environment in Kenya. He encouraged relief agencies to join hands in advocating for an improved business environment through the Council. The roll out of the Regional Electronic

Cargo Tracking Systems by the Uganda Revenue Authority, Rwanda Revenue Authority and the Kenya Revenue Authority for transit cargo had positive impacts. Mr. Ogambi averred that the roll out of the Integrated Customs Management Systems (ICMS) by the Kenya Revenue Authority, to replace Simba Systems would revolutionize customs clearance and risk management in Kenya.

With reference to the Africa Free Trade Agreement, he cited the critical need for improved customs processes and infrastructure in order to reduce turnaround times for goods' transportation, and praised the Single Customs Territory as a policy supportive of such integration that has brought positive change to logistics systems; enabling development in the region. This policy introduced single declarations and single bond payment for goods transported across the region, and significantly reduced documentation processing costs. Furthermore, an electronic tracking system encouraged faster delivery lead times, and a regional revenue tracking system ensured no leakage of revenue as goods are transported across borders. Mr. Ogambi highlighted challenges still outstanding, such as the un-harmonized ICT systems that are unable to efficiently communicate to each other across borders; increasing 'downtime' in systems operations; the cost and right of choice for businesses with regards to railway vs. road, where domestic containerized freight is currently automatically being shipped by rail to Nairobi, regardless of the owner's transportation mode preference.

Overall, Mr. Ogambi described the Single Customs Territory as showing the way for further development; particularly for the Africa Free Trade Agreement.

## LEGAL FRAMEWORKS FOR THE FACILITATION AND REGULATION OF CUSTOMS CLEARANCE IN HUMANITARIAN OPERATIONS

Ms. Maria Martinez, Disaster Law Programme Coordinator for International Federation of the Red Cross and Red Crescent Societies (IFRC), spoke about the impact of legal frameworks in custom clearance of humanitarian goods and equipment in operations. She defined disaster law as a new branch of law that encompasses the laws, regulations and policies for all the phases within the disaster management cycle.

Ms. Martinez described this body of law as being primarily dedicated to supporting governments review their legal and institutional frameworks for effective disaster risk management. She pointed out that while international humanitarian law has a comprehensive legal framework such as the Geneva Conventions and protocols dealing with the law of war; disaster risk management has no such framework. Instead, some aspects of it are covered within some international treaties, like the Chicago Convention on Civil Aviation that provides for priority of landing for flights carrying humanitarian assistance, or the Kyoto Convention's Annex J5 that contemplates special provision for relief consignments in terms of customs procedures. Ms. Martinez shared the two regulatory problems often observed: entry and operations barriers; and a lack of quality and coordination. She described some of the key challenges faced by humanitarian organizations in terms of the supply chain, based on research conducted by IFRC 2001 – inconsistency of customs procedures and lengthy customs clearance processes; prohibitive legislation; complex and inconsistent bureaucratic procedures; weak coordination both within state actors and with external international community.

Ms. Martinez stated, that as an output of 5 years of research, IFRC has drafted the International Disaster Response Law guidelines. These guidelines are a compilation of the best existing international law in practice and also include the best practices from IFRC and its partners' operational experiences. These guidelines have been recognized by UN Resolutions. In addition, IFRC has produced a checklist on the IDRL guidelines; developed a model governmental act based on the recommendations of the guidelines that can be used by countries to facilitate



Ms. Martinez taking questions on the space between IDRL and humanitarian supply chains



Mr. George Fenton, Humanitarian Logistics Association

implementation of the recommendations in their respective domestic legal frameworks; as well as a model emergency decree that can be taken into consideration by countries without legislation in place when adopting ad hoc measures in event of a disaster.

Ms. Martinez strongly recommended that nations need to proactively strengthen their legal frameworks with regards to disaster response management; working with regional and sub-regional bodies such as the AU, ECOWAS, IGAD and SADC to draft regional legislation; while ensuring close collaboration between public and private sectors, and better coordination between government bodies and local/international aid actors.

## RECOGNISING BEST PRACTICE AND UNIVERSAL STANDARDS FOR [CROSS BORDER] HUMANITARIAN TRANSPORT & LOGISTICS

Mr. George Fenton, Chief Executive Officer, Humanitarian Logistics Association (HLA), discussed the importance of recognizing best practices and universal standards for humanitarian transport and logistics. He argued that while there are already standards in the humanitarian space such as the SPHERE standards and Donor Procurement

Standards, there is both a limited understanding and a limited awareness of them both within the aid sector and outside of it, and that therefore there is a need for a common approach and understanding to improve issues around accountability, coordination and to ensure consistent outcomes to humanitarian action.

Mr. Fenton shared one of the outcomes from an evaluation of ECHO's global logistics and transport strategy that he was recently part of, recognizing the need for an approach that could be taken to recognize common minimum standards for humanitarian logistics and supply chain in particular, which for instance, the SPHERE Standards do not cover.

Mr. Fenton explained that this is why the HLA is putting together a project to look at the issue of standards, with the aim of assessing and verifying what good practice in humanitarian logistics looks like; aligning existing standards; and ensuring broad access to knowledge in this space. In line with the localization agenda, he identified actors at the local level that are new to the humanitarian space, or actors that only enter this space when there is a need and which don't have access to knowledge or awareness of what good practice looks like; as the main intended audience of the outcomes of this project.



Ms. Maria Martinez, International Federation of Red Cross and Red Crescent Societies

## THEME 2: DIGITAL INFRASTRUCTURE | SESSION 4

# SPEAKERS DESCRIBE CHANGING SYSTEMS AND CAPABILITIES IN THE DIGITAL LANDSCAPES IN AFRICA AND DISCUSS HOW SUCH CHANGES PRESENT CHALLENGES AND OPPORTUNITIES FOR SUPPLY CHAINS.

### SPEAKERS

**Mr. Jean-Louis Ecochard**

The Center for the Digital Nonprofit,  
Nethope

**Dr. Nasiru Taura**

University of Bournemouth,  
United Kingdom

**Prof. Bitange Ndemo**

University of Nairobi, Kenya

### MODERATOR

**Mr. John Sibi-Okumu**

### HOW DIGITAL CHANGES BRING CHALLENGES AND OPPORTUNITIES TO SUPPLY CHAINS IN AFRICA

With over 20 years' experience in accelerating the mission of large non-profits using technology, Mr. Jean Louis Ecochard, Chief Innovation Officer, Nethope, described the vision and mission of the Nethope network and explained how it connects 60 of the major non-profits with some of the largest technology companies in the world. He spoke against using an old approach to technology that involved teaching people to use automated existing processes that tended to end in failure. Instead, he argued for a more human-centric and increasingly popular approach that designs technology based on listening to the needs and requirements of people.

He underscored some of the complex challenges brought by digital changes to the African landscape, such as the high cost of partaking in digital technology by the most vulnerable populations; the risk of losing African identity as most of the



Mr. Jean-Louis Ecochard, The Center for the Digital Nonprofit, Nethope

internet is written in English vs. local African languages; ethical issues around storage of African data outside the continent due to a lack of data centers with enough capacity for the job; and safety issues with regard to the ease with which divisive information can, and is accessed, and its potential effects on religious, ethnic and national unity.

On the flip side, Mr. Ecochard described the opportunities afforded by digital changes to the region. He spoke of improvement in digital connectivity that allows for better logistics and communication, both economically and socially; and the chance to create common data models and processes for organizations with an aligned way of thinking. Mr. Ecochard also spoke about how data is now a commodity to be shared and exchanged between organizations to bring out positive social changes and he pointed out the possibilities, and benefits, of investing in up-skilling digital skills in the African workforce to make complex or routine tasks more efficient - illustrating this with an example of a young woman from Kisumu who won 2nd place in the Google Technovation Challenge in 2017. Using examples like Oxfam's block chains for aid delivery and the first drone-port in Rwanda, Mr. Ecochard demonstrated how technological opportunities were readily available and already very impactful in this context.

### CHANGING SYSTEMS AND CAPABILITIES IN THE DIGITAL LANDSCAPE IN AFRICA, AND HOW SUCH CHANGES PRESENT CHALLENGES AND OPPORTUNITIES FOR SUPPLY CHAINS

Dr. Nasiru Taura, a lecturer at Bournemouth University whose research is largely centered on digital entrepreneurship in Sub-Saharan Africa, talked about how digital systems are changing, and the challenges and opportunities they present for humanitarian supply chains. He described how Africa could leap-frog the high costs needed for physical infrastructure investment and prioritize investment in the digital space. He further discussed the opportunity for Africa to take advantage of the comparatively restrictive legislative environment that exists in the western world and which limits companies with highly advanced and mature technologies, in fields like robotics, Artificial Intelligence and drones from easily testing out their application; explaining that this represents a further opportunity that the humanitarian sector could use to leapfrog into a more technologically advanced space.

To illustrate this, he asked why Africa is becoming a testing ground bed for commercial drone services for the distribution of medical supplies, and gave examples of companies

like Afrotech's spin off, Red and Blue; UPS, Zipline and others that are partnering with African countries to acquire, in total, up to 10,000 km<sup>2</sup> airspace in order to test the drone-technology's humanitarian application, like airlifting blood and supplying it to destinations as needed. He hypothesized that it is because these cutting-edge technologies and the African continent are evolving at the same time, creating an opportunity for Africa to change the narrative about being a passive recipient of knowledge and engage, especially within supply networks, co-create leadership of knowledge. This is a form of leadership knowledge where companies create knowledge alongside their stakeholders, like suppliers, buyers and in this case, nation-states.

Dr. Nasiru Taura stated this is a time of enormous opportunity for the African continent, because the abundance of humanitarian issues like floods and diseases, means that



Dr. Nasiru Taura, University of Bournemouth, United Kingdom

companies that use their technology for social good have a chance to scale significantly within a space of 5 to 10 years if launched and well accepted in Africa. He closed out by indicating that physical infrastructure and digital technology shouldn't be considered to be in a dichotomous, 'either/or' relationship, but rather, they should be seen as complementary partners and enablers of the greater good.

### KEY ASPECTS OF THE FOURTH INDUSTRIAL REVOLUTION AND OPPORTUNITIES FOR AFRICAN DIGITALISATION.

Prof. Bitange Ndemo, professor at University of Nairobi, asserted that where Africa missed out on the first and second global industrial revolutions and almost missed out on the third ICT revolution, the continent has one last chance to actively engage and become involved in the fourth revolution that is about the intensification of the use of ICTs such as Artificial Intelligence and block chain to improve on productivity. He mentioned the initiative that the Kenyan and some other African governments have taken to draw up roadmaps on utilizing these technologies for the benefit of their people.

Given the hesitant but highly successful adoption of the internet across many parts of Africa, towards the end of its maturity, and the many lessons learned in the region as a consequence, Professor Ndemo predicted that block chain is going to be the next big digital technology to be adopted on the continent. He described the beneficial impact this would bring to supply networks in the region and he illustrated that by digitizing, for instance, the customs clearance process and using created multiple ledgers in block chain technology, instances of duplicated roles and opportunities for corruption can be eliminated as clarification of tax payment can be done at the click of the button. He further demonstrated that because any changes to one of



Prof. Bitange Ndemo, University of Nairobi, Kenya

the ledgers must be confirmed and approved by all parties to the block chain, and are thereafter added to the chain vs. eliminating the old records, there is absolute visibility and traceability along the supply chain. Professor Ndemo described examples of companies already utilizing this technology in their supply chains, such as Maersk - whose use of the technology enables an importer to get the clearance documents before the ship docks at port, and therefore clear customs for goods from Europe within 3 days. With reference to other examples of harnessing technology, he described the Kenyan company Twiga Foods that has streamlined its processes, and added increased value, to its supply chain by

eliminating middlemen or brokers through the use of Artificial Intelligence.

Professor Ndemo highlighted some of the challenges to the utilization of this technology in the region: resistance, as influential people are worried about job losses to the technology; the need for data protection; and regulations that can stifle innovation. In closing, he stated that much of Africa is already covered with fiber internet that is an enabling infrastructure for digital technology and now the continent must simply leverage it in order to gain the enormous benefits that far outweigh the problems of digital technology, for its people.



Questions from Dr. Rogers Matama



Questions from the floor during the presentations

## THEME 2: DIGITAL INFRASTRUCTURE | SESSION 5

# INTERACTIVE WORKSHOP TO EXAMINE THE TECHNOLOGICAL CAPABILITIES, CAPACITIES AND ISSUES THAT IMPACT ON FRONTLINE HUMANITARIAN LOGISTICS.

### FACILITATORS

**Mr. Jean-Louis Ecochard**  
The Center for the Digital Nonprofit,  
Nethope

**Mr. George Njeru**  
Inter-Agency Working Group,  
East and Central Africa

### MODERATOR

**Mr. John Sibi-Okumu**

### THE LOGISTICS OF THE HUMANITARIAN LAST MILE

Mr. Njeru of the Inter-Agency Working Group and Mr. Ecochard of NetHope's Center for the Digital Nonprofit led a design-thinking workshop with the objective to create a common understanding of current capabilities of frontline humanitarian logistics; where things are working well and where they are not; and where there is opportunity to accelerate the sector through harnessing technology. It started with a definition of the boundary of frontline humanitarian logistics and the presentation of a typical frontline logistics journey. In general, the focus of frontline humanitarian logistics engages the movement of stock between the in-country warehouse (national/regional level) and the hands of beneficiaries, including rapid feedback loops across the supply chain to ensure that supply meets urgent demand. The workshop continued with an interactive portion that consisted of three phases:



Mr. George Njeru, Inter-Agency Working Group, East and Central Africa



Mr. Jean-Louis Ecochard, The Center for the Digital Nonprofit, Nethope

1. Participants individually shared what is working particularly well with frontline humanitarian logistics in a way that created collective inspiration.
2. Groups identified relevant pains, needs, technology and trends throughout a prototypical frontline humanitarian logistics journey.
3. Each group voted on a pain point and co-created solutions using a brain-writing methodology.

During the workshop each group reported on their findings and the solutions they developed. From the audience, 54 elements emerged, representative of what is currently working well in frontline logistics; with 65 pain points; 52 articulated needs; and 50 technologies and trends.

At the conclusion of the workshop, a brain writing exercise enabled all participants to contribute to the co-creation of solutions to 11 pain points as summarized below:

#### Accessibility

##### • *Lack of security:*

There is an acknowledgement that information is essential for risk planning and monitoring. However, real-time updates depend on power and connectivity being present - which are often found to be occasionally lacking during disasters or in remote areas.

##### • *Insecurity and language barriers:*

Participants proposed that engagement of the community and local leaders could go a long way to mitigating risk as local people hold knowledge of the current context and proficiency of spoken languages and dialects. Planning for the scenario ahead of time (e.g. have security personnel contracted) was suggested as a mean to improve preparedness. However, when the situation is too risky, participants advised that it may be best to call on governing bodies (e.g. police, armed forces) to restore safety.

• *Poor infrastructure:*

The contributors proposed that an important part of the solution would be good communications capabilities, leveraging of technology (e.g. drones), as well as continuing to invest in strengthening national infrastructures.

• *Improper mapping:*

Crowdsourcing the production of maps was proposed as a solution, with the recognition that internet access may be a limiting factor to participation.

Cost Issues

• *Bureaucracy and duplication:*

The proposed solution was to increase standardization and focus on optimization.

• *Negotiation under high pressure:*

Solutions emphasized the importance of negotiation skills training, and displaying proper situational behaviors (calmness for example), as well as the need for deep engagement/relationship with affected communities. There was a recognition of the contextual risk that when people are upset as a result of a crisis they may not behave rationally and/or may take advantage of the situation - hence making negotiations more complex.

• *High operational costs:*

A path to resolving this issue could be that stakeholder selection and engagement be combined with data analytics and pre-negotiated contracts to make the process more efficient.

Governance/Co-ordination Issues

• *Late government response/declaration of disaster hence financial delays:*

The audience recommended that better pre/post disaster information and government/community engagement must be complemented by adequate funding to be effective.

• *Customs Clearance Delays:*

It was recommended that flexibility should be built into policies/laws for emergency situations (e.g. Government exemptions, legislation governing humanitarian goods), and to use technology to make humanitarian imports easy.

• *Sub-Optimal coordination:*

The group addressing this pain point offered that the formation of consortiums, and government/cluster coordination can address this pain point; as would good data and coordination from one single point, not multiple points.

• *Lack of coordination between teams*

People identified team building and training, and a streamlined chain of command as essential elements to address this challenge.

This workshop represented an example that the real problems faced by African nations can rapidly find solutions through the diverse collaboration of a broad spectrum of stakeholders. A comprehensive report and data from the exercise is located on Nethope's website:

[https://solutionscenter.nethope.org/assets/collaterals/ALC7\\_FHL\\_report\\_FINAL.pdf](https://solutionscenter.nethope.org/assets/collaterals/ALC7_FHL_report_FINAL.pdf)



Participants defining the various stages, and concerns, along the humanitarian logistics frontline.



Delegates defining core issues in ICT for humanitarian frontline logistics.



Delegates discussing solutions to core ICT/frontline humanitarian logistics issues.

## THEME 3: PEOPLE NETWORKS | SESSION 6

# EMPOWERING FUTURE SUPPLY CHAIN PRACTITIONERS.

5 ACADEMICS FROM UNIVERSITIES ACROSS EAST AND SOUTHERN AFRICA WERE BROUGHT TOGETHER TO SHARE INSIGHTS ON FUTURE SUPPLY CHAINS WORKFORCES IN AFRICA AND HOW TO ENSURE THE OPTIMUM TRANSITION OF GRADUATES FROM UNIVERSITIES TO THE WORLD OF WORK. THEY WERE EACH GIVEN 5 MINUTES TO INTRODUCE THEMSELVES, FOLLOWED BY A MODERATED QUESTION AND ANSWER SESSION ON THE TOPIC.

### PANELISTS

**Dr. X. N. Iraki**  
University of Nairobi School of Business,  
Kenya

**Dr. Matama Rogers**  
Makerere University Business School,  
Uganda

**Dr. Gladness Salema**  
University of Dar Es Salaam,  
Tanzania

**Dr. Steve Wando**  
Strathmore Business School, Kenya

**Dr. Lester Brian Shawa**  
University of KwaZulu - Natal, South Africa

### MODERATOR

**Mr. John Sibi-Okumu**

### DR. X. N. IRAKI

Dr. X. N. Iraki is an associate professor and the coordinator in charge of research and publications at the University of Nairobi's School of Business in Kenya. His teaching and research interests include research methods, business economics, innovations & technology management and Sinology.

### DR. MATAMA ROGERS

Dr. Matama Rogers currently heads the Department of Procurement & Logistics Management at Makerere University Business School in Uganda. His main research/consultancy efforts look at sustainability of financing and of supply chains within businesses. He is also partial to family firms that formed the basis for his PhD research: he has authored 3 books and made a film on the topic of family business governance.

### DR. GLADNESS SALEMA

Dr. Gladness Salema is a lecturer in logistics and supply chain management at the University of Dar es Salaam Business School in Tanzania. Her interests are in research and consultancy in the field of supply chain management, currently focused in the health care supply chain. She has published in peer-reviewed journals such as the International Journal of Procurement Management in January 2016 and January 2018, and recently has been involved in the holistic review of the National Medicines' supply chain in Tanzania.

### DR. STEVE WANDO

Dr. Steve Wando is a lecturer at Strathmore Business School in Kenya with an in-depth experience in health system strengthening. His interests are currently focused on Health Systems Strengthening with a Markets Systems Development approach, capacity building, Hospital Management, Maternal Child Health, HIV/AIDS programming, and Community health systems and Public-Private Service models for health financing and health marketing.

### DR. LESTER SHAWA

Dr. Lester Shawa is Senior Lecturer in Higher Education Studies and coordinator of the Postgraduate Diploma in Higher Education at the University of KwaZulu Natal in South Africa. His research interests include: Higher Education policy praxis, Higher Education curricula and pedagogy, quality discourses in Higher Education, Teacher Education and international development.



Dr. X. N. Iraki, University of Nairobi  
School of Business, Kenya



Dr. Matama Rogers, Makerere University  
Business School, Uganda



Dr. Gladness Salema,  
University of Dar Es Salaam, Tanzania



Dr. Steve Wando,  
Strathmore Business School, Kenya



Dr. Lester Brian Shawa,  
University of KwaZulu-Natal, South Africa

## QUESTION AND ANSWER SESSION WITH PANELISTS:

*Q1: How are students in this region prepared to enter an evolving supply chain workforce?*

Dr. Shawa, senior lecturer and coordinator of the Postgraduate Diploma in Higher Education at the University of KwaZulu-Natal, South Africa, expressed his concern that plenty of students entering university are not prepared for the rigorous demands of the courses offered. He suggested that newer, more innovative modes of teaching need to be adopted as a means of preparing students for the workforce – in line with the rapidly changing and digitizing world.

Dr. Salema, lecturer at University of Dar es Salaam, Tanzania, agreed with Dr. Shawa, adding that the challenge stems from students coming from education institutions with differing qualities of education, which makes it hard for universities to recruit along similar standards, and therefore difficult to gauge their coping abilities prior to admission.

Dr. Iraki, associate professor at the University of Nairobi's School of Business, countered, stating that universities should ensure that they are able to communicate with students of varying levels and strive to bring them to the required stage necessary for the courses and thereafter the workforce.

Dr. Matama discussed the importance of ensuring Uganda's readiness when it comes to efficient supply chain management. He contended that Uganda's plentiful, natural resources and high interest from multinational companies; combined with infrastructural challenges and low scores on the World Bank Logistics Performance Indicator

Index; mean that much of its logistics systemic improvements will depend upon the capacity of its current student population. Consequently, Dr. Matama discussed how Makerere University, one of the oldest universities in Africa; progressively adapts to market-responsive student needs.

*Q2: What are African universities doing to ensure that we change our course content to reflect what is happening in the industry?*

Dr. Wando, pharmacist and lecturer at Strathmore Business School, stated that in order to reflect current industry happenings, Strathmore Business School has incorporated 2 approaches. The first is the 'pracademia' approach to teaching, where practitioners who understand the theory and also practice in the field are brought into the classrooms to share with students. This enables students to benefit from current real-world understanding. Secondly, they establish incubation hubs able to incubate and implement student projects – providing support for students to create, experiment and develop their responses to real-world challenges. Dr. Wando contended that changing the syllabus and bringing competency-based curriculums is the only way to keep up with the industry.

Dr. Iraki added that consulting with all stakeholders (including industry) is now a necessary Commission of University Education requirement in Kenya before changing curricula, ensuring that industry input is included in course content. Dr. Iraki was confident that this new direction will ensure that universities create students who better understand, and are therefore, well prepared to engage effectively with the business world.

*Q3: How can professional associations and universities collaborate to ensure the right kinds of knowledge in the workforce?*

Dr. Salema was of the opinion that industry practitioners should see academia as partners, and create an environment where the two can work together to understand the others perspectives and create an environment of dynamic trust. She mentioned opportunities for knowledge sharing in terms of co-teaching classes; contract-based or applied research opportunities that could inform teaching directly; and lastly, an opportunity for both practitioners and academia to engage in challenge-driven learning where the industry provides real-life challenges faced, and practitioners, academics and students work together to find workable solutions.

*Q4: What do you see as the choke points for Supply Chain education in Sub-Saharan Africa?*

Dr. Matama, the head of Department of Procurement and Logistics Management at Makerere Business School in Uganda, highlighted the dominance of finance, marketing, and accounting within the fields of knowledge - contending that these tend to overshadow logistics - and that this is one of the choke points for Supply Chain education in the region.

Dr. Wando added that as Supply Chain is still considered in the region to be a young or new discipline, it doesn't yet have the kind of clout that attracts 'top tier' students, compared to other areas within the business academic world. He also identified the

subject breadth of Supply Chain as a challenge because it requires a lot of knowledge from other disciplines.

Dr. Iraki described two additional and key choking points. Firstly, slow economic growth that leads to low demand for logistics services, and subsequently for logistics professionals, is something that needs to be countered with an increased awareness of the exciting possible futures for supply chain professionals. Secondly, the wrong attitude to Supply Chain where the general mindset is that if the Supply Chain is very efficient, jobs will be lost needs, to be reframed in such a way that students understand that this field is one that is constantly evolving and developing and therefore full of interesting opportunities.



A wide range of delegates from the commercial, humanitarian, development, government and academic spheres came together to discuss the strategic concerns raised in the ALC7.



Many delegates sought to gain a clearer understanding of how the academic world could be better linked with the corporate sector; for internships, cross-cutting analysis and research.

*Q5: What research concerning SC topics in Sub-Saharan Africa is critical?*

Dr. Iraki offered 4 areas in which regional research is critical. He talked of supply chains for small businesses that have been so far ignored in favor of big companies, and agricultural supply chains that are crucial given that most of the region's economic backbone is agricultural in nature. He also spoke of the need for research on how the behavior of employees and users of supply chains impacts on results; as well as how regulatory environments enhance or hinder supply chains in Sub Saharan Africa.

Dr. Salema suggested this area of research needs to focus on more specific sectoral supply chains, like medical or public health

supply chains. She also argued for the need to have more applied and implementation research vs. theoretical, so that research project outcomes can be proven and evaluated for impact, and policies can be made/adjusted based on evidence.

Dr. Matama noted that Uganda is an interesting testing ground for logistics providers to interact with logistics systems in new, innovative ways - for example, using digital systems for bodabodas (motorcyclists) to deliver consumables like a beehive of delivery drones. Currently, students in Makere are examining such issues. Additionally, an Artificial Intelligence research body works from the university; and there may be opportunities to link AI and supply chains in this region to see how service delivery can be optimized.

## THEME 3: PEOPLE NETWORKS | SESSION 7

# ENSURING GENDER EQUITY TO ENABLE SUCCESS.

COMPOSED OF 5 WOMEN IN SUPPLY CHAIN LEADERSHIP POSITIONS, THESE PANELISTS DISCUSSED HISTORIC, CURRENT AND FUTURE CHALLENGES, AND ASSOCIATED OPPORTUNITIES, RELATED TO THE TOPIC OF GENDER EQUITY IN AFRICAN SUPPLY CHAINS. THEY WERE EACH GIVEN 5 MINUTES TO INTRODUCE THEMSELVES, FOLLOWED BY A MODERATED QUESTION AND ANSWER SESSION ON THE TOPIC.

### PANELISTS

**Ms. Roselyn Opel**  
Humanitarian Logistics Association

**Ms. Eva Mwai**  
North Star Alliance

**Ms. Phoebe Kung'u**  
International Rescue Committee

**Ms. Samira Low**  
DHL

**Ms. Hellen Kalili**  
Africa Resource Centre

### MODERATOR

**Mr. John Sibi-Okumu**

### MS. ROSELYN OPEL

Ms. Roselyn Opel is the Kenya National Coordinator for the Humanitarian Logistics Association, Kenya Chapter. With 24 years' experience in logistics and supply chain (19 in the humanitarian sector), she provides leadership and organizational capacity building through transformational leadership, coaching and mentoring to build a high-achieving and effective organization.

### MS. EVA MWAI

Ms. Eva Mwai is the Regional Director, East Africa for North Star Alliance. With over 20 years in strategic, organizational and program management, her experience includes strategic planning, resource mobilization, human resource, organizational change and financial management. She possesses excellent skills in people management, building strategic partnerships and advocacy at national and regional level.

### MS. PHOEBE KUNG'U

Ms. Phoebe Kung'u is the Regional Supply Chain Director for Horn East Africa & Zimbabwe (HEAZ) region and West Africa (Sierra Leone, Nigeria and Liberia) for International Rescue Committee. With 20 years' supply chain experience in Humanitarian, Research & Development organizations, she provides oversight for compliance to procurement policies and procedures, and develops proactive supply chain strategies and manages chain capacity building GSC initiatives.

### MS. SAMIRA LOW

Ms. Samira Low is the head of Aid and Relief Sub-Saharan Africa for DHL. With over ten years' experience in the logistics sector in various industries, she has proven organizational and leadership skills and is geared towards developing and managing teams to consistently deliver solutions within agreed timelines and conditions.

### MS. HELLEN KALILI

Ms. Hellen Kalili is a public health supply chain expert and currently leads Africa Resource Centre-Kenya's strategic and operational activities, focusing on establishing and managing an ecosystem of cross-sector alliances and partnerships with a vision of stimulating new ideas and approaches which improve availability of medicines at the last mile.



Ms. Roselyn Opel,  
Humanitarian Logistics Association



Ms. Eva Mwai, North Star Alliance



Ms. Phoebe Kung'u,  
International Rescue Committee

## QUESTION AND ANSWER SESSION WITH PANELISTS:

**Q1: How have you ended up working in this traditionally male-dominated sector?**

Ms. Roselyn Opel, Kenya National Coordinator of the Humanitarian Logistics Association, told the story of how she started in supply chain because her mother asked her to source fabric for her tailoring business and for her to perform the inventory counting – illustrating one of many non-traditional or informal ways that people can enter into the sector.

Ms. Eva Mwai, Regional Director – East Africa, for North Star Alliance, told of how she got into the SC sector because somebody in the organization believed in her capabilities and trusted her to do what the job entailed regardless of her female gender. She shared that it wasn't about competing with the men, but rather about delivering on her targets in order to be a valuable contributor to the team.

Ms. Phoebe Kung'u, Regional Supply Chain Director for International Rescue Committee indicated that she got into this profession by chance, as she looked for other opportunities aside from secretarial administrative duties. She described how an opportunity with International Committee of the Red Cross introduced her to the practical side of SC, which in turn, drove her to seek further education opportunities to solidify her knowledge base in SC.



Ms. Samira Low, DHL



Ms. Hellen Kalili, Africa Resource Centre

Ms. Samira Low, Head of Aid and Relief Sub Saharan Africa for DHL, likewise shared that she ended up in the SC sector accidentally, with a role setting up the diplomatic desk in the logistics company she worked with at the time as her launch pad into the space. She credited DHL for empowering her and giving her opportunity to learn a lot more about logistics and supply chain.

Ms. Hellen Kalili, Head of Africa Resource Centre Kenya, shared that she started her SC career working in the warehouses as a pharmacist before moving on to forecasting, planning, distribution and production of medical commodities-drugs. She indicated that the challenges caused by poor visibility across the medical supply chain pushed her to cross over to the SC sector, with the aim of helping Ministries of Health to figure out their SC gaps, and what transformative SC investments to make in order to improve the lives of the populations in need of medical assistance.

**Q2: Challenges of being a woman leader? Have you experienced the perception that you are not a strong enough leader because your leadership style is different?**

Ms. Opel shared her experiences with male bosses that encouraged her to reach her full potential even when some of her male colleagues occasionally underestimated her ability in the role. She mentioned that she leverages on her assertiveness to ensure that her demands are clearly understood and met.

Ms. Low shared her own challenges with men in her team having issues with getting their instructions from women. She mentioned her experience with being willing to get her hands dirty and do the same things she expected her team to, so earning their respect.

**Q3: What advice can you give younger women to prepare them to enter the SC sector?**

Ms Kung'u encouraged was in agreement with Ms. Mwai. Furthermore, she encouraged young women to take care of themselves and be unapologetic about their choices to get married and start families, as this is their right. She encouraged women to really accept that it is possible to blend both aspects of personal and professional life; and that the two should be allowed to complement each other, rather than compete.

Ms. Low stated that of the supply chain students graduating now, only 39% are women, and only 5% of those women move into leadership positions. Therefore, she advised young women in the profession to truly believe in their own capabilities and not rely on approval from males in the sector. A significant benefit that women bring to the table is that women are collaborators who make things happen through building long lasting relationships that bring about mutual benefits.

Ms. Hellen Kalili, counselled young women on the importance of seeking out mentors, in the technical field of supply chain, to get advice on career progression as required – on both personal and technical levels.

Ms. Opel advised those wanting to move from entry level to management level need to work hard and demonstrate willingness to take risks and develop in order to show the current and potential value they bring to the organization.



Over 30 students from senior classes and post-graduate courses, from a variety of universities, were invited to get a snapshot of topical supply chain issues.

*Q4: How do you respond to the perception that the supply chain space is male-dominated?*

Ms. Kung'u contended that supply chain is a profession like any other that can be very rewarding if one has the passion for it. She observed that when her organization recruited more women into the transport department, the female drivers had less incident/accident levels than the male drivers; illustrating that women have the ability to work in this space, and just need the opportunities to do so.

*Q5: What are your organizations doing to empower women in countries where their activities are restricted?*

Ms. Low illustrated the changing narrative that is allowing women to do more in some of these restrictive countries by pointing out

that Saudi Arabia, for instance, now has a female pilot. She further stated that women with the capabilities are actually working in challenging environments such as the female logisticians working in places like Somalia.

Ms. Kalili gave the opinion that if a strong, supportive community was created where women are able to come together and share their learnings, knowledge, and experience; a community of practice spanning across different countries and continents would result; empowering women to be able to carry out their roles in very different environments.

Ms. Mwai, added that women empowerment within organizations needs to be deliberate, where women that are passionate and who have the necessary capability are given opportunities to develop in conducive environments.

*Q6: How can men support equity in the sector?*

Ms. Mwai was of the opinion that for men to support improved equity in the SC sector, it must begin with respecting and recognizing the competencies in each person regardless of gender, and identifying how they can help to improve the outcomes.

*Q7: What is being done to make field working conditions safer and more conducive for women in humanitarian supply chain positions?*

Ms. Kung'u spoke of humanitarian response programs now being designed in such a way as to reduce the gender gap in implementation. She spoke of the need for

organizations to have policies that inform what gender equality is; what acceptable personal conduct is; particularly with reference to harassment policies, so as to empower women both in the workplace, and those being supported as beneficiaries of programs.

*Q8: How do you deal with the demands of your family and your work place?*

Ms. Opel stated that female employees need to be deliberate about setting boundaries with their employers regarding work times, in order to be able to meet all demands. She highlighted the need for organizations to be understanding and flexible, to enable their female employees to ensure all their responsibilities are met.



Creating a space, away from busy operations, is critical to allow supply chain practitioners to consider the impacts of large-scale trends and how this affects their supply chains.

## THEME 4: THEMATIC NETWORKS | SESSION 8

**DIGITALIZATION NARRATIVES IN AFRICAN SUPPLY CHAINS.**

THIS PANEL WAS COMPOSED OF 6 INDUSTRY PROFESSIONALS THAT HAVE DIGITIZED SUPPLY CHAIN PROCESSES WITHIN THEIR ORGANIZATIONS. THEY DESCRIBED THEIR PERSONAL, AND PROFESSIONAL STORIES DISCUSSING THE IMPACT OF DIGITAL TRANSFORMATION ON THEIR SUPPLY CHAINS. THEY WERE EACH GIVEN 5 MINUTES TO INTRODUCE THEMSELVES, FOLLOWED BY A MODERATED QUESTION AND ANSWER SESSION ON THE TOPIC.

**PANELISTS****Mr. Stephen Kinuthia**

Mezzanine/Vodacom/Safaricom, Kenya

**Mr. Cyril Khamsi**

Kumwe, Rwanda

**Mr. Mathew Mganga**

PO-RALG, Government of Tanzania, Tanzania

**Mr. Fred Kiio**

DigiFarm, Kenya

**Ms. Codou Ndiaye**

Dimagi, Senegal

**Ms. Yasmin Chandani**

inSupply Health, Kenya

**MODERATOR****Mr. John Sibi-Okumu****MR. STEPHEN KINUTHIA**

Mr. Stephen Kinuthia is the Regional Manager at Mezzanine, a Vodacom owned company in Kenya focused on delivering digital transformational mobile solutions within the Vodacom group in Africa. With major emphasis in Agriculture, Health and Education, he has been instrumental in driving successful initiatives including DigiFarm in Kenya, a solution that enables farmers to access multiple services that improve their yields; and MVaccination in Tanzania, a solution that has helped improve vaccination rates for children in Tanzania.

**MR. CYRIL KHAMSI**

Mr. Cyril Khamsi is the founder and CEO of Kumwe, a Rwanda-based company providing transport, logistics and handling services focused on agricultural value chains. He founded Kumwe in 2016 after graduating from the MIT's Supply Chain Management program. Prior to this, Cyril worked across more than 50 countries with the Clinton Health Access Initiative organizing private sector investment and cost reductions in essential global health commodities, including in Rwanda.

**MR. MATHEW MGANGA**

Mr. Mathew Mganga is the head of Health Commodities and Diagnostic Services at the Tanzanian President's Office of Regional Administration and Local Government (PORALG), Directorate of Health Social Welfare and Nutrition Services, Tanzania. With 11 years of experience in the public health supply chain management working in the public sector, he is a registered pharmacist and holds an MBA in Corporate Management and MSc. Procurement and Supply Chain Management.

**MR. FRED KIIO**

Mr. Fred Kiio is the head of m-Agri Business at Safaricom PLC (Kenya), which has oversight over the transformational agricultural digital platform dubbed DigiFarm developed to support small scale farmers to become better and to support the entire value chain. He has over 15 years working experience in the telecommunication industry and is passionate about developing life transforming solutions to resolve social problems.

**MS. CODOU NDIAYE**

Ms. Codou Ndiaye is a Technical Project Manager at DIMAGI, a firm which delivers mobile technology solutions to underserved populations around the world. Passionate about finance, she previously worked in financial markets before deciding to return to her home country of Senegal in order to support projects that were helping the continent. She is currently managing projects to pilot and scale mobile technologies utilization in various sectors: Agriculture, Microfinance, Health and supply chain management.

**MS. YASMIN CHANDANI**

Ms. Yasmin Chandani is the CEO of inSupply Health - Kenya, with over 20 years supporting and advising national governments, NGOs and multilateral partners in the strategy, design, implementation and measurement of strong, sustainable supply chains for health. inSupply Health, a Nairobi-based public health advisory firm, aims to transform the lives of people and communities by pioneering innovative solutions for improving people's access to essential health products and services.



Mr. Stephen Kinuthia,  
Mezzanine/Vodacom/Safaricom, Kenya



Mr. Cyril Khamsi, Kumwe, Rwanda



Mr. Mathew Mganga,  
PO-RALG, Government of Tanzania, Tanzania



Mr. Fred Kiio, Digifarm, Kenya

## QUESTION AND ANSWER SESSION WITH PANELISTS:

*Q1: Where you have tried to digitize, what are the biggest challenges and impediments that you experienced?*

Ms. Ndiaye, Technical Project Manager at Dimagi, responded that Dimagi utilizes user-centric design processes where they consult with the potential users which means that ultimately, they will build something that will make the work of such users much easier. In this way, because the final user sees the value of the technology and is engaged in creating much of the impetus that drives the process, there is minimal resistance, if any.

Mr. Stephen Kinuthia, Regional Manager at Mezzanine, mentioned that while focusing on last mile deliveries, challenges to do with data sharing along the SC were observed. He spoke of the need to share data more; to embrace and understand that solutions made in Africa are the ones that will work for Africa.

Mr. Mathew Mganga, Head of Health Commodities and Diagnostic Services at PORALG, Directorate of Health Social Welfare and Nutrition Services, Tanzania, identified one major problem caused by poor use of newly implemented e-Logistics Management Information System (eLMIS): special projects (that typically last 3 - 4 years) that procure medical commodities themselves without using historical data from the national Medical Stores Department (MSD) as the



Ms. Codou Ndiaye, Dimagi, Senegal



Ms. Yasmin Chandani, inSupply Health, Kenya

basis of their procurement. Because these projects then request the MSD to distribute these commodities on their behalf, MSDs are very likely to then have issues with the stock forecasts and experience occasional stock outs, which is something that should ideally have been fixed if the newly implemented software technology was correctly used.

Mr. Cyril Khamsi, founder and CEO of Kumwe, shared that often the biggest concerns with starting digitization process, was to do with limited financial resources, which meant

that organizations cannot always spend a lot on a big investment project in technology that then went wrong. This invariably means that there is pressure for the right design of technology to be created for the context. To combat user resistance to the digital system, aside from letting the users see how much better the results were when they used the system, Mr. Khamsi added correct data input into the system to their performance matrix and tied compensation to it, so incentivizing employees to adopt the system wholeheartedly.



Panelists engaged in describing human-centered design as a key strategy for designing solutions from the perspective of the user.

*Q2: As new technology is implemented, what are you doing in your companies to prevent job destruction and ensure sustainability?*

Ms. Yasmin Chandani, Chief Executive Officer at inSupply Health, started the discussion by contending that well-designed technology doesn't necessarily lead to job destruction. She described how human-centered design processes take into account the entire context from the outset - focusing on the needs of users and beneficiaries - in order to create technological systems that are both useful and efficient. Ms. Chandani also spoke of demonstrating commercial applications for other outputs from such processes, including data, where revenue gained from it could possibly sustain business models.

Ms. Ndiaye argued for the criticality of the commercial sustainability perspective, describing the importance of ensuring beneficiaries are able to take ownership of technology that has the financial resources or potential capacity required to maintain it.

Mr. Fred Kiio, Head of Digifarm, empathized with how development agencies needed to engage with this commercial sustainability perspective and suggested they include private sector partners in the process, from the beginning of social development projects. He stated that as much as Digifarm is using digitization to address social issues, it still needs to prove commercial value to its stakeholders, and therefore considers sustainability as key.

Mr. Stephen Kinuthia, Regional Manager at Mezzanine, agreed that, in his experience,

the private sector was keen to ensure sustainable solutions to critical issues related to development. Often, Mr. Kinuthia stated, commercial organizations have relevant skill-sets and organizational know-how; and that very often, they are willing to partner with development agencies on these areas.

Mr. Khamsi shared his findings that the more they have been able to digitize processes in the company, the more competitive they become and therefore the more people they hired as opposed to jobs being destroyed. He talked of the high costs involved in finding, hiring, and training people, which in turn works as an incentive to retain them through the digitization process, either through up-skilling them or finding other roles for them.

*Q3: Have you internalized the journey you took during this process?*

Mr. Kiio mentioned that clearly identifying the social issues they were trying to resolve - poor farmers and food insecurity - meant that the social good motivation was a strong personal factor in ensuring success and that this internalized the reason behind the digitization journey.

Mr. Mganga described the digitization journey of the MSD's eLMIS platform that culminated in 2017, stating that because of the platform now fully in place, there is better visibility of the entire SC for the MSD across all of Tanzania's health facilities, which in turn is reducing the MSD's problematic high inventory costs.



Speakers responding to delegates questions concerning the road to digitization; and the journey they took themselves on, during this process.

*Q4: What excites you about digital SCs? What are your thoughts on block chain and artificial intelligence (AI)?*

Mr. Kiio predicted a future with a lot of disruption to the agricultural space with precision agriculture which is an approach to farm management that uses information technology to ensure that the crops and soil receive exactly what they need for optimum health and productivity. This will depend extensively on supply chain data, and will ensure much more efficient production.

Mr. Kinuthia shared that Mezzanine is considering using block chain, and consequently is running background experiments to determine fitness-of-use. He mentioned the critical value of AI to tackle corruption, and discussed how to work with various governments to see

how certain technologies can be enforced to drive change which includes eradicating corruption and promoting integrity.

Ms. Chandani was of the opinion that it is important to have a clear vision for what the supply chain is trying to achieve in order to determine which technology to use. She stated that if, for instance, the vision is accountability; then block chain could be utilized, and is indeed being explored for use by some ministries. She stressed the importance of the overall vision and that it should drive how technology comes into the SC and what purpose it serves.

In their closing remarks, the panelists agreed that technology doesn't replace humans in the supply chain; because technology accelerates transformation, but humans create it.

## CLOSING REMARKS

# CONNECTION, COLLABORATION AND TRANSFORMATION AT THE ALC

BY MR. SEAN RAFTER, MANAGING DIRECTOR,  
HELP LOGISTICS AG, SWITZERLAND

The Kuehne Foundation was established in 1976, with HELP Logistics being set-up in 2010. The Foundation's vision is that supply chains can transform economies, communities and people's lives. In today's dynamic, complex and often challenging environment, this conference creates a space where expert speakers and participants come together to share information, ideas and solutions. Our hope is that delegates will leave this conference feeling more connected and with renewed motivation to promote the positive transformative change the Foundation aspires to.

Our speakers discussed large-scale infrastructure projects, sharing experiences of ensuring positive impact from projects like Belt and Road; considering policy harmonization and single customs territory development. The opportunities for global trade and development are clear. Lessons from Asia tell us

that nations working together can better ensure sustainable economic benefits while providing opportunities for local people and protecting the environment.

A key take-away is that the next digital revolution has momentum in Africa where the breadth of talent, experience and enthusiasm is inspiring. Speakers made it clear that digitization is not about losing jobs but about re-skilling and creating new opportunities. Technology is not a panacea for all problems. It has the greatest potential when people remain at the heart of the solution.

During the people network panels, there were many opportunities discussed for increased success through gender equity and online learning to upskill competencies. It was clear that higher education institutes must update their curricula to reflect market needs; and to strengthen connections to

Mr. Sean Rafter,  
Managing Director, HELP Logistics AG,  
Switzerland



industry. Both humanitarian and commercial employers asked academia to listen carefully to better understand the competencies and skills needed now and in the future.

The success of local technology companies demonstrated that innovation is happening at a fast pace. Panelists' personal stories showed the importance of adopting a business mindset to attract the growing increases in private donor funding. CFOs and CEOs respond to strong business cases, even in social and humanitarian sectors. Proposals should address profit, return on investment and equally the impact on humans, society and environment. Moreover, we should not be discouraged when we fail. We generally only hear about successful global companies like Apple and Google, but approximately 1 in 50 technology projects fail. We have an imperative though to keep trying.

The ALC is here to connect you with experts and encourage you to collaborate with them to move your ambition and goals forward. Logistics is one of the oldest professions. It will remain a critical industry in the evolution of people, societies and the sustainability of the planet. It has incredible potential to strengthen economies and support the welfare of communities in a sustainable, environmentally friendly way. All of us here have a part to play shaping and leveraging the role of logistics in our own communities and countries. Each of us can influence transformation. As our opening speaker Matthew Hollingworth said, we ask you to take up the challenge, be bold, and grow old in this industry, so we can one day look back and be proud of our contribution to a better world.

## CO-FACILITATORS FOR THE AFRICAN LOGISTICS CONFERENCE 2019



HELP Logistics provides best-in-class logistics and supply chain management knowledge to enhance the effectiveness and efficiency of humanitarian organizations. HELP Logistics operates with more than 30 partners in over 30 countries.



The Kühne Foundation promotes education and training; as well as science and research in the fields of transport and logistics, including humanitarian logistics.



The Inter Agency Working Group (IAWG) for East and Central Africa is a leading regional forum for networking, technical information sharing and coordination.



The HLA is a global membership association for humanitarian logistics professionals who respond, to take relief to, and create infrastructure for those affected by global emergencies.



The University of Nairobi (UoN) is a collegiate research university based in Nairobi. It is one of the largest universities in East Africa.



The International Federation of Red Cross and Red Crescent Societies (IFRC) is a worldwide humanitarian aid organization that reaches 160 million people each year through its 190-member National Societies



The World Food Programme (WFP) is the leading humanitarian organization saving lives and changing lives, delivering food assistance in emergencies and working with communities to improve nutrition and build resilience.

## THANKS

The Co-Facilitators of the ALC7 thank the delegates, expert speakers, our moderator Mr. John Sibi-Okumu and especially our key note speakers, Engineer Francis Gitau, Mr. Matthew Hollingworth, Mr. Adrian van der Knaap, Dr. Sun Mengxin, Professor Bitange Ndemo and Professor Ruth Banomyong. Our sincere thanks to Mr. Kuehne and the Kuehne Family for supporting the ALC.

Over the last 6 months a group of dedicated co-facilitators have put in considerable time and energy to make this conference a success. Thank you to:

### Interagency Working Group (IAWG)

Mr. George Njeru

### Nethope

Mr. Jean Louis Ecochard

### International Federation of Red Cross and Red Crescent Societies (IFRC)

Mr. Rishi Ramrakha

### University of Nairobi (UoN)

Dr. X. N. Iraki

Mr. Onserio Nyamwange

### World Food Programme (WFP)

Ms. Barbara Vanlogchem

Ms. Brook Dubois

Mr. Tarek Keshavjee

### Humanitarian Logistics Association (HLA)

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