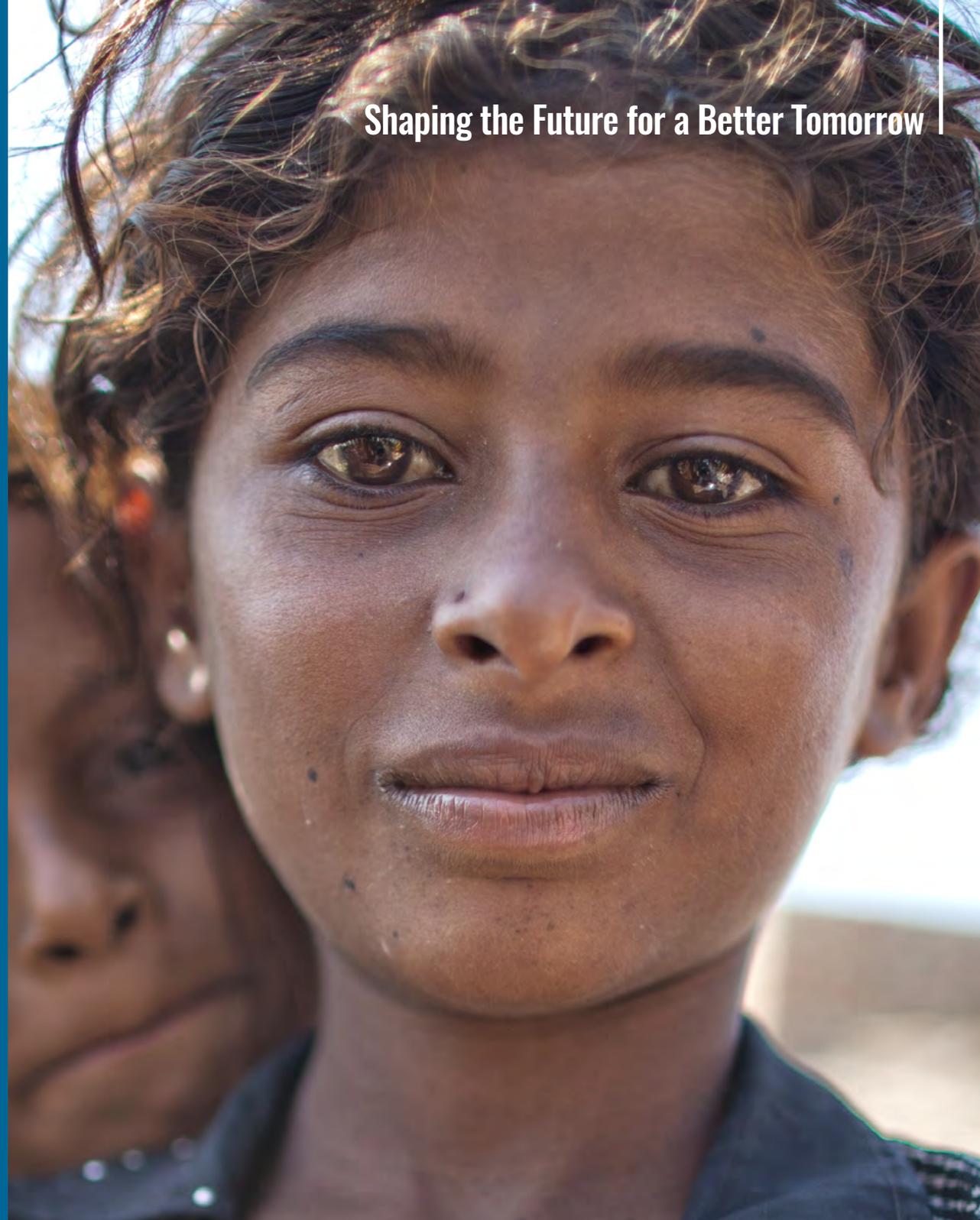




Shaping the Future for a Better Tomorrow

Outcome Report London, 2021



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About WHF

The World Humanitarian Forum brings together prominent leaders from the public and private sectors, as well as international thought leaders and pioneers. They engage in inspirational, thought-provoking, and future-focused dialogues that aim to shape the future of humanitarian aid and international development.

The World Humanitarian Forum knows that as we reach the end of the COVID-19 pandemic that has radically affected all of our lives that we must look forward to a reset in our economic and social systems. We need to recognise the scale of the existential challenges that we face, from climate and economic inequalities to technological advances and more. As we enter the decade of action, our focus has been firmly fixed on implementing an ambitious and transformational blueprint: what are the best ways in which we can achieve the global reset?

The pandemic has made us realise our interdependence on each other, we cannot look at global issues from global trade, innovation in green technologies and responses to natural events isolation. New investment is needed to close the nearly \$2.5 trillion annual gap between what is being spent today and what would suffice to meet the UN's 17 ambitious Sustainable Development Goals (SDGs). However, funding is not the only requirement for these advancements, further collaboration in the private sector to provide innovations is also a critical tool that we must take advantage of.

As noted by Secretary-General Guterres in February 2021, "Now is the time to reset. To reshape. To rebuild. To recover better, guided by human rights and human dignity for all." With the system underachieving by trillions of dollars, we, as a community, are not meeting the scale of the challenge. The inclusion of new forms of

collaborative arrangements and investments is imperative to enact meaningful change towards reaching the Global Goals.

WHF's mission is to inspire cross-sector dialogue and engagement in moving towards an engendering of interests, capacities, innovations and resources and accelerating both the scale and the speed of change.

We have taken a few steps towards accelerating progress towards achieving the SDGs by opening the gates of cooperation with our WHF London Digital Event. But as we often highlight, the international community mustn't shy away from taking more risks, creating authentic and complementary avenues and, most imperatively, including communities and local narratives that promote solution-making and build resilience.

As our CEO, Feraye Osfesciouglu said: *"We are now in the decade of action and we must act now."*

It is not a matter of not knowing what to do, but rather taking coordinated action in scale to face the challenges head-on. It is the World Humanitarian Forum's mission to enable this dialogue and coordinated action and all our efforts are directed towards affecting real change.

Additional information is available at:

<https://www.whf.london>
www.aidntrade.com/

Contact: info@whf.london

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About this Publication

This Outcome Report was elaborated as an outcome paper of the WHF's London Digital Summit. The report covers the two-day event and the sessions therein from 19 to 20 May 2021.

The views expressed in this publication, unless otherwise stated, are those of the participant(s) and their organisations and do not necessarily represent those of the World Humanitarian Forum or its advisory board members. This publication does not imply official endorsement or acceptance of the views expressed or the support of specific agendas.





Acknowledgment

This report is a result of the two-days digital event that took place on the 19th and 20th May 2021 joining together a broad group of public and private organisations and companies, including UN agencies, philanthropic organisations, private sector, thought leaders and changemakers.

With an eye to the decade of delivery and the need to push forward and intensify cross-sector partnerships, WHF London 2021 provided a platform of dialogue directed towards solution building and action. Each of our sessions was dedicated, catered and put together to allow different voices and opinions to together build a way forward in the most constructive manner.

By the end of these two days, it was evident that further collaboration is needed amongst all sectors of society to assist with building back better, from private sector and government to INGOs, IGOs and civil society, regardless of each stakeholder's mandates, corporate responsibilities and advocacy goals.

The World Humanitarian Forum would like to acknowledge and thank the commitment, the engagement, the advocacy and the openness of all our contributors, panellists, partner organisations and esteemed guests. It reaffirms our commitment to create and cultivate new ways to engage the public and private sector in the search for new, unprecedented and timely cross-sector action in the humanitarian and international development fields.

WHF would also like to express thanks to the advisory board members, who are an integral part of driving our mission and upholding our core values.



UNIQUE

STOP

WE ARE TOGETHER

IF YOU THINK
THE ECONOMY
IS MORE IMPORTANT
THAN THE
ENVIRONMENT
HOLD YOUR BREATH
AND COUNT YOUR
MONEY

FRIDAY SURF COAST
SOUTH AFRICA

*From the World Humanitarian Forum London 2019

Our Logo, Our Ethos

Seven colours represent seven continents of the world as a reflection of our global vision. Each individual triangle symbolises the individual responsibility, distinctive vision, and local action needed to create a better world and end global inequality.

Triangles represent a person, sector or issue—alone, each is valuable, unique and important. But seen together, they can tell a different story about the strength and worth of community, collaboration and partnership.



Foreword

"Excellencies, Ladies and Gentlemen,

Welcome to the World Humanitarian Forum London 2021.

I would like to start by thanking our advisory board, board members, partners, exhibitors and members of staff who made this forum possible.

We left a very challenging year, as 2021 is the year of hope, we have reasons to be hopeful, it is time to build back better.

Today's world has a unique opportunity to move from marginal changes to transformative redevelopment, using decentralised models of growth, building on opportunities provided by digitalization. Ensuring climate-friendly sustainable development with a more equitable distribution of wealth. WHF London will analyse the future of materialism, with re-definitions of concepts and what global reset will mean for humanitarian aid and international development.

We will be promoting critical thinking by interrogating global challenges, charting the practical steps required to create equal societies. We imagine a world beyond the pandemic.

This outcome report summarises and analyses all of the sessions during WHF London while calling for action on issues ranging from education and women empowerment to the impacts of climate change.

We hope that you find this report to be informative and encourages you all to engage further in WHF and our work towards supporting the UN SDGs"



Feraye Ozfescioglu,
CEO of World Humanitarian Forum

WHF Advisory Board Members



**Rt. Hon
Jack Straw**
Chair of WHF
Advisory Board &
Former Foreign
Secretary



Dianne Dain
WHF Advisory
Board Member
& Chief Innovation
Officer, WHF



Charlie Bronks
WHF Advisory
Board Member &
Head of Strategic
Partnerships and
Communications,
Crown Agents Bank



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WHF Advisory
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Chairman, Ritossa
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Sara Vaughan
Chief Sustainability
Officer, Marie Claire



**Jonathan
Brooker**
Global Head of
Private Partnerships,
Solidarites
International UK



Fatima Gailani
Member of Afghan
Peace Negotiations



Vivian Lopez
Executive Director,
UN EWEC



**Dr Márcia
Balisciano**
Head of Corporate
Responsibility,
RELX



Richard Hawkes
CEO, the British
Asian Trust

WHF London in Numbers

The World Humanitarian Forum set the agenda with the focus on the Global Reset Dialogue. The delivery of the Sustainable Development Goals by 2030 was at the centre of the discussion of our sessions continuing our commitment to “Shaping the future for a better tomorrow”.

85

Sessions

300+

Speakers

3000+

Attendees

105+

Countries





Main Stage Sessions

Session 1 - Re-definitions in the global reset dialogue

Introduction

As we are now in the decade of hope, the world today has a unique opportunity to move from marginal changes to transformative redevelopments. Building on the opportunities provided by digitalisation and climate-friendly policies with a focus on equity. Redefining our ideas of global reset are critical as we advance towards achieving the sustainable development goals, this not only requires us to think beyond the pandemic but to chart the practical steps required to create equal societies.



Feraye Ozfescioglu
CEO, World
Humanitarian Forum



**Rt. Hon.
Mark Lowcock**
Under Secretary-General
for Humanitarian Affairs,
UNOCHA



Jagan Chapagain
Secretary-General, IFRC

Key Points

A combination of climate change, pandemic effects and conflict have caused additional inequalities. The requirement for more humanitarian aid across the globe has been a reaction to variations in weather patterns caused by climate change and other problems such as conflict. This has resulted in the Interagency Standing Committee trying to raise \$35 bn this year to meet the needs of over 35 million children. While there have been improvements in childhood mortality rates and reductions in maternal mortality, throughout the pandemic we have seen a reversal, with over 30 countries facing chronic ongoing humanitarian problems. Examples can be seen in Nigeria where food security has caused more violence and instability, similarly, violence in Tigray in north Ethiopia has all of the ingredients to cause a rerun of the horrific famines in the 1980s.

The first critical element that we need to address is vaccine equity. Producing vaccines at a large enough volume, especially for least developed countries is vital. Other issues caused by inadequate levels of assistance and sovereign debt have highlighted the many weaknesses in our financial systems, in which more than 70% of the funds raised for the \$20bn which UNOCHA coordinates come from just four sources. This heavy reliance on small sources of financing needs to improve for the future.

“What we’re doing on climate change is mostly addressing the symptoms and there needs to be a stronger focus on the causes. The most vulnerable countries need to diversify their economies in a different set of conditions.” (Rt. Hon. Mark Lowcock, Under Secretary-General for Humanitarian Affairs, UNOCHA)

Promoting local action. International relief continues to be a drop in the bucket in comparison to the volume of aid that is required for multiple crises. Communities, local actors and local governments are the real first responders to most crises around the world. For IFRC there is a focus on community with over 14 million volunteers supporting the needs of vulnerable people before, during and after crises. Empowering local action through a network of volunteers and organisations is a powerful way for the international system to transform its approach to local humanitarianism, creating more effective and efficient aid systems. However, currently, many organisations have their actions determined by their institutional agendas and accountability to donors, rather than through the length of organisational strategies and priorities informed by local contexts.

Through this, we have three key lessons we need to learn. First, individuals must be at the centre of how humanitarian organisations act and they must adapt the system to them, not the other way around. Second, we must address the past failures of inadequate humanitarian and development investment in local communities by developing genuine partnerships between local, international actors and local authorities. Third, we must embrace the localisation agenda to achieve real impact through action empowered by local actors such as the National Red Cross and Red Crescent societies.

*“We must evolve beyond the silos and slogans that stand in the way of humanitarian assistance, that is driven by local needs and local action to empower local actors.”
(Mr Jagan Chapagain, Secretary-General, IFRC)*

Session 2 - Re-defining humanitarianism and system change

Introduction

The pandemic has fundamentally changed humanitarian action. It has had an acute impact on vulnerable populations receiving humanitarian assistance. The widespread loss of income and drops in remittances and limited access to safety nets combined with worsening climatic conditions requires massive system change in humanitarian organisations. At the same time, IGOs have had to scale the number of international staff due to travel and quarantine restrictions, placing larger burdens on local staff to undertake the delivery of programmes.



Moderator

Feraye Ozfescioglu
CEO, World
Humanitarian Forum



Dr Sara Pantuliano
Chief Executive,
Overseas Development
Institute



**Dr Ahmed
Al Meraikhi**
Special Adviser
to the UN Secretary-
General, UN



Mr Blair Sheppard
Global Leader, Strategy
and Leadership, PwC



**Dr Danny
Sriskandarajah**
CEO, Oxfam
Great Britain



Rt. Hon. Mark Lowcock
Under Secretary-General
for Humanitarian Affairs,
UNOCHA

Key Points

Climate change will cause additional crises. Climate is going to bring further disparities with increased natural events occurring, resulting in education and work disparities across the globe. At present, our economic system concentrates wealth, causing additional fractures across countries and societies. We have seen over the last few years the lack of trust placed in international institutions along with a lack of understanding of how they work.

"How we put people at the centre is critical and to me, the centre is still our programming, the way we work and how we execute our projects." (Dr Sara Pantuliano, Chief Executive, Overseas Development Institute)

Strengthening fundamental rights. At present, the humanitarian system is response, rather than resilience-focused. At the core of humanitarian actions is a deep concern for humanity and their basic fundamental rights that must include access to basic resources. Ultimately this requires us to change the structures and hierarchies of organisations as now we have the tools and technology to radically alter how we work. Additional importance needs to be placed on listening to and placing beneficiaries at the centre of how we operate to have a revolution in positive participation.

"Despite the suffering and pain that all of us are feeling during the pandemic, I see some hope, but a real opportunity for us to do things radically differently." (Dr Danny Sriskandarajah, CEO, Oxfam Great Britain)

SDG 17 for positive partnerships. SDG 17 on partnerships for the goals is particularly critical in gaining support from all sectors of society from private sector to civil society, local government and

international organisations. Therefore, we leverage the knowledge of the private sector and innovative solutions which will assist with resilience and responses to rising humanitarian challenges. One example of this can be seen in micro-finance, enabling beneficiaries to help themselves rather than having to rely on a UN agency, INGO or government.

"We have to make more partnerships in terms of improving collaborations with beneficiaries, to listen to them and ask what they want and how we can deliver ." (Dr Ahmed Al Meraikhi, Special Adviser to the UN Secretary-General, UN)

Redesigning responses. At the moment the humanitarian system is focused on responses to crises, starting with a premise that suggests that humanitarian organisations may now be better than local actors, at least in the way this is perceived by local communities. These beliefs cannot continue and must be reformed. With increasing crises, we have to be more proactive rather than reactive, recognising that individuals on the ground understand the challenges they are facing.

"Technology's job is to create thriving localities, not create an increasing concentration of wealth and dominance." (Mr Blair Sheppard, Global Leader, Strategy and Leadership, PwC)

Digitalisation for humanitarian action. Currently, many of the discussions around technology have been in small circles and do not bring emphasis on how technology will radically transform the way we operate. If we want to transform what we do, then we need to think about how we can support people to organise something better and focus on the primary respondent.

Session 3 - Re-defining equality

Introduction

Covid-19 has exacerbated inequalities, from digital divide to gender, from minority rights to LGBT rights, have we misunderstood the basis of the term “equality”? Equality is not only a fundamental human right, but a necessary foundation for a peaceful, prosperous, and sustainable world, but what does this term mean in the wake of the “Global Reset Dialogue”? Therefore, we should question the impact of new technologies, how to better support survivors of conflict and legal reform to ensure equality in all member states.



Moderator

Mr Simon Rodgers
People Director,
One Young World



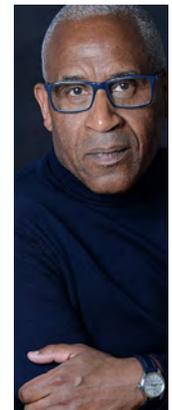
**Ms Tawakkol
Karman**
Nobel Peace Prize
recipient & Founder,
Peaceful Youth
Revolution Council



**H.H. Sheikha
Intisar Al Sabah**
Chairwoman & Founder,
Intisar Foundation



Dr Salma Nims
Secretary-General,
Jordanian National
Commission for Women



Lord Simon Woolley
Director & Co-Founder,
Operation Black Vote

Key Points

Women, peace and security. Promoting the role of women in conflict is critical for the building of peaceful societies, especially allowing women to become change agents. Women face all sorts of inequalities and violence, from sexual violence as a weapon of war to a lack of education. Implementing positive psychology can enable beneficiaries to empower themselves, irrespective of the effects of wars, conflict and other crises. COVID has resulted in other inequalities, with the global economy expected to shrink by 5% in 2022 with around 435 million women and girls living on less than \$1.9 a day, pushing 47 million people into poverty.

"We are all in the same storm, but we are not in the same boat, this is the reality of nations and for communities within nations" (Dr Salma Nims, Secretary-General, Jordanian National Commission for Women)

Technology and inequality. One of the key elements that can improve equality and accessibility is technology. As more individuals in developing countries gain access to technology, we recognise the fact that this should aim to be equal in all forms, critically enabling equality amongst citizens and rulers. Redefining equality in this context calls for access to resources for real democracy, especially in countries affected by conflict and authoritarian regimes

"Technology is one of the elements that we are looking to improve as people belonging to the third world want access to technology." (Ms Tawakkol Karman, Nobel Peace Prize recipient & Founder, Peaceful Youth Revolution Council)

Diversity and inclusion. Understanding the role of power is also critical to how we view equality, there is an understanding that COVID-19 has exposed many of the deep structural inequalities that were there in gender, race and disability. For instance, in the UK, the first 97 of 100 doctors who died were of colour, African or Asian. If you're black, you're four times more likely to die by COVID, three times more likely if you are Pakistani or Bangladeshi. The reasoning for these disproportionate numbers was that they were overly exposed to the disease because of social determinants such as low pay. Improving diversity and inclusion also requires an honest conversation on the role of Black Lives Matter, the enslavement of Africans and the colonisation of half the world by western countries, issues which still have an impact on the power structures of today.

"Positive psychology always says that the more people look at things from a different, more positive perspective, the more avenues they have to a better life." (H.H. Sheikhha Intisar Al Sabah, Chairwoman & Founder, Intisar Foundation)

"If you begin to understand where power lies and how it works, how you might democratically take it, then you begin to rebalance the inequity." (Lord Simon Woolley, Director & Co-Founder, Operation Black Vote)

AN INSPIRING STORY ON THE WAY
TO SHAPE THE FUTURE

World
Humanitarian
Forum



Rt Hon Tony Blair

Executive Chairman of Tony Blair Institute; Former Prime Minister, UK



Cherie Blair CBE

Founder, Cherie Blair Foundation for Women



Session 4 - Building Back Better and Equal

Introduction

Global interconnectedness has helped to create huge economic and social benefits, assisting with equality, but it has also facilitated the rapid global spread of the pandemic. With the precarious nature of long and complex value chains revealed, many countries are struggling to acquire medical and other basic supplies. Social inequalities have been exposed and rapidly exacerbated with more than 300 million jobs at risk according to the International Labour Organisation.

We must aim to move past a global economy that prioritises short term economic growth and efficiency over long term resilience. Although this is not the first economic crisis to demonstrate these inequalities, this is the first which has brought the issues of resilience and preparedness high into the public consciousness. From the loss of education with 11 million girls and young women not returning to school according to UNESCO to devastating impacts on poverty reduction.



H.E. Dr Mrs Olufolaka Abdulrazaq
First Lady of Kwara State, Nigeria



Photo by Christian Lue, Unsplash

Key Points

Empowering women and girls. Women and girls need to be strategically placed and equipped to be able to harness the opportunities that the global reset will present, equipping women and youth so that they are self-reliant in a world without COVID. This has been done in Nigeria through social and economic advancements in organisations such as the Educate People Support Centre, a charity founded which aims to encourage entrepreneurship and promote well-being. This resulted in the training of over 7,000 women and youth by bringing tools that range from sewing machines and hair dryers, baking and confectionery equipment through an educating skills acquisition programme.

“Governments must take this moment of crisis as an opportunity to build back better and reinvent constructing economies and societies that are fair, inclusive, resilient and that leaves no one behind.” (H.E. Dr Mrs Olufolaka Abdulraza; First Lady of Kwara State, Nigeria)

Eco-Friendly Alternatives. By equipping groups with modern tools such as drones to assist with the conversation, they promote the use of eco-friendly alternatives to discourage wood gathering and indiscriminate tree felling. By building on the opportunities provided by digitalisation and artificial intelligence we need to aim to ensure that climate-friendly sustainable development practices are supported with a more equitable distribution of wealth.

“It is only through this collective intergenerational sustained action and investment that we can truly transform the status of women and build back better” (H.E. Dr Mrs Olufolaka Abdulraza; First Lady of Kwara State, Nigeria)

Session 5 - Preparing for Localisation

Introduction

The localisation agenda that was initially promoted in the World Humanitarian Summit of 2016 has since advanced, but many questions remain with collaborations between local and international actors enhanced in part due to COVID-19 in which there has been more reliance on local entities.

There are still barriers to its implementation from the asymmetry of financial resources and technical-thematic expertise to dependence on foreign funding.



Moderator

David Peppiatt
Director of the
Cash Hub, British
Red Cross



Francesco Rocca
President, IFRC



Inger Ashing
CEO, Save
the Children
International



Asif Saleh
Executive Director,
BRAC Bangladesh



Manu Gupta
Co-Founder, SEEDS



Hibak Kalfan
Executive Director,
NEAR Network



**Prince Dr Ned
Munir Nwoko**
Barrister, Former
Minister and
Philanthropist

Key Points

Children's rights in localisation. Save the Children International has seen unprecedented threats to children's rights due to COVID, conflict and the climate crisis which is undermining decades of progress. By shifting power to children, communities and local actors, this will result in more timely, appropriate and effective outcomes for children and their communities. There is a recognition that national and local actors are often the most effective in supporting children in humanitarian action, by developing their skills, knowledge and access. All of this requires multiple changes, from amending business models so that funding can be directly accessed by local and national actors, to changing leadership to improve coordination so that local and national actors are directly involved in decision-making on response prioritisation and financial allocations.

"In fulfilling children's rights, we know that local and national actors are and always have been at the forefront of humanitarian response. Local and national human humanitarian action is not only necessary but non-negotiable" (Ms Inger Ashing, CEO, Save the Children International)

Crisis response. As demonstrated by refugee flows from Myanmar in 2017, over 1 million people arrived in Bangladesh with BRAC providing support to help these beneficiaries. The massive scale of the crisis meant that a humanitarian disaster was about to happen. By working with UNHCR, BRAC was able to initially provide interventions in the form of immediate relief and support such as WASH systems, shelter and food security. Four years later, the focus has been on supporting the ultra-poor through education and skills building. However, for many

member states, individuals relief on the informal sectors with approximately 90% of the economy stuck at home and in need of humanitarian relief and immediate cash support. Therefore more resilience and mobility of resources is needed, especially with fewer resources available in the form of less ODA.

"In recent years, this whole nexus between development and humanitarian actors is more in play to bring into this mix local, multilateral and international actors." (Mr Asif Saleh, Executive Director, BRAC Bangladesh)

Community resilience. We are today seeing that the humanitarian relief system remains as broken as ever with the number of people affected by disasters and in need of humanitarian aid increasing rapidly. As global temperatures rise we are going to see the poor and marginalised getting more marginalised. From inadequate health systems and gaps in societal social protection to structural inequalities and environmental degradation. By investing in models which work together with affected communities we can reframe our relationships with the natural environment to build resilience to future shocks and stress. Our system needs to recognise local leaders as part of the humanitarian architecture.

"The need for localisation in our thinking and our actions is now non-negotiable." (Mr Manu Gupta, Co-Founder, SEEDS)

"In 2021 we see conversations around decolonizing aid, reimagining the aid system and a wave of initiatives around shifting power. The question is, whether our aid ecosystem is ready and willing to change?" (Ms Hibak Kalfan, Executive Director, NEAR Network)

Session 6 - Re-imagining Education in the Global Reset Dialogue

Introduction

We have all witnessed disruptions to learning around the world caused by the pandemic with additional negative consequences from dropping out to social isolation, disruptions to school feeding programmes, bringing further deepening of already existing inequalities. We have also seen fantastic innovations emerging and being put into practice from games and WhatsApp groups to new educational portals. With this in mind, we need to rethink how education will work in future to better take advantage of new technologies, whilst also considering the digital divide.



Moderator

Vivian Lopez
Executive
Coordinator
Every Woman
Every Child, UN



**Dr Sonia Ben
Jaafar**
CEO, Abdulla Al
Ghurair Foundation
for Education



Shiv Khemka
Vice-Chairman,
SUN Group &
Executive Chairman,
Global Education
and Leadership
Foundation



Melati Wijsen
Founder, Bye Bye
Plastic Bags



**Noella Coursaris
Musunka**
Founder & CEO,
Malaika Foundation



Dr Salim Al Malik
Director-General,
ICESCO

Key Points

Changing educational values. The education system that we have inherited and adopted goes back over 200 years and was set up for a certain purpose. When empires were expanding they wanted to spread language with a certain architecture of learning. While this has worked for many years, we need to reset and relook at education today. Presently when there is a focus on maths, science and external work, we end up missing fundamental values for all students that are much harder to teach, this resulted in the creation of programmes that aim to instil ethics with Harvard University and Global Education and Leadership Foundation, now reaching over 3 million children in 15 countries.

"ICESCO is determined to better implement an all-inclusive education system for the mental health of leaders, teachers and communities, thereby building a strong and capable humanity with a collective desire to bring education to all." (Dr Salim Al Malik, Director-General, ICESCO)

"With my younger sister we founded Bye Bye Plastic Bags and it was clear to me the vision to create tangible change and that opened the door for me to see how important education played a role in our individual paths as changemakers." (Ms Melati Wijsen, Founder, Bye Bye Plastic Bags)

Education and the interconnected nature of the SDGs. As seen with the Malaika Foundation, schools are often a hub for multiple services from health care and electricity to food. Through Malaika's work, they've impacted thousands each year through the Leadership School for Girls, with other community centres they can bring clean water and impact over 30,000 people with the construction of wells. Each year they also

organise an agricultural programme that teaches sustainability to students. As we move forward into a world that has been drastically affected, keeping children in school still needs to be the focus.

"You need people searching through actions, not teaching only through words, and living those lives, which people can then model into their own lives." (Mr Shiv Khemka, Vice-Chairman, SUN Group & Executive Chairman, Global Education and Leadership Foundation)

Leaving no one behind. With more than 1 bn students affected globally, we must develop the tools and means to enable distance learning courses, especially for those students who do not have equal access to technology. One of ICESCO's programmes for this is on the creation of educational content as well as distance learning. Women in the health and education sector have been at the forefront of the crisis, this means that we have to look at the new technologies at our disposal such as AI and see how these can be implemented effectively and ethically. By collaborating with universities and scientific organisations we will be able to increase capacity and adapt to the changing landscape.

"We must adapt our curriculum approach to community development, to reflect what is happening for the world and to empower individuals with a strong focus on women and girls, while keeping investing in infrastructure to provide water and education to roads and food nutrition programmes." (Ms Noella Coursaris Musunka, Founder & CEO, Malaika Foundation)

"I'm reminded that we need to think of education as a passport to dignity, human development and a hope for stability for all our children and youth." (Dr Sonia Ben Jaafar, CEO, Abdulla Al Ghurair Foundation for Education)

Session 7 - Leaving No One Behind in the Global Reset Dialogue

Introduction

In the next two decades, two-thirds of the world will be living in the world's poorest, fragile and conflict affected countries. We need to ensure that all of these people are not left behind, therefore we need to promote inter-section collaborations between private sector, civil society and government to better support populations. Leaving no one behind also represents a commitment for all member states to eradicate poverty, end discrimination and reduce inequalities and vulnerabilities.



Moderator

Dominique Hyde
Director of External
Relations, UNHCR



**Princess Lamia
Bint Majid Al Saud**
Secretary-General,
Alwaleed
Philanthropies



Sherrie Westin
President,
Sesame Workshop



Lois Quam
CEO, Pathfinder
International

Key Points

Pandemic impacts on refugee children. Refugees were already amongst the most marginalised groups before the pandemic, they've been forced further into poverty and food insecurity with less access to services they need like health and education. This has been compounded by deepening gender inequality and more gender-based violence. Sesame Workshop has aimed to provide support during the pandemic to these children through their caregivers as they play a critical role in protecting children from stress and promoting healthy development. By working with IRC, they used WhatsApp to teach refugee and host communities to deliver awareness messages and learn at home resources.

"This speaks to the power of the media to give us a broader reach to positively affect children who are affected by crisis, displacement and conflict."
(Mr Sherrie Westin, President, Sesame Workshop)

Early childhood development. Reaching marginalised children in the early years is critical for a child's early brain development. Early experiences shape the architecture of a child's mind. Despite this, only 3% of all humanitarian aid is dedicated to education and with an even smaller fraction aimed at young children. Yet despite the pandemic and the loss of schooling, only 60% of countries have instituted remote learning policies for pre-primary levels, meaning that many children are left behind in their most formative years.

"We should be more vocal about empowering women and minorities. We can use creative philanthropy to find ways to reach, support and empower them." **(Princess Lamia Bint Majid Al Saud, Secretary-General, Alwaleed Philanthropies)**

Empowering women entrepreneurs. Numerous acute challenges are faced by women and their families in rural settings. Pathfinder International works with women entrepreneurs across rural areas to introduce family planning and other services such as education on safe farming practices as well as knowledge on vaccination. We know in each crisis that women are affected more than others and that by empowering them you will bring a better life to their families and communities by supporting them with educational tools, resilience strategies around climate, flooding and other issues. We need to recognize that marginalised people like women are disproportionately affected and have the exact skills that can assist us with being a more resilient international community.

"If the right services are available, if they're provided in ways that are culturally sensitive, if they're provided in ways that respect the religious beliefs of a community, then there can also be a moment of change." **(Ms Lois Quam, CEO, Pathfinder International)**

Session 8 - Paving the Way to COP 26: Mission Possible

Introduction

The core question of what has to happen next in the climate emergency is not as straightforward as it may seem. With competing visions of a green future and complex policy choices, there is a need to bring government, business and civil society together to derive action across key sectors of the economy to reduce emissions, adapt to the effects of climate change and build resilience for a more equal future.



Moderator

Feraye Ozfescioglu
CEO, World
Humanitarian
Forum



**Rt. Hon.
Alok Sharma**
President, COP 26



Nisreen Elsaim
Environmental
and Climate Activist



Cyrill Gutsch
Founder, Parley
for the Oceans



**Licypriya
Kangujam**
Founder, The Child
Movement

Key Points

Reaching net-zero. The race to zero campaign to reach net-zero emission by 2050 is critical for COP as businesses, international organisations and investors to keep the 1.5 C goal alive. Protecting people and nature is also a vital element of this, meeting communities, farmers and others who are struggling with the effects of climate from increased natural events such as flooding and drought to assist with increased resilience. Mobilising finance is key for all of these goals with an obligation to reach \$100bn in funding promised for developing countries to help them respond to the climate crisis.

*"We must make finance easier to access and increase the sums available to protect people and nature."
(Rt. Hon. Alok Sharma, President, COP 26)*

Climate conflict. Changes in climate have resulted in conflict with indigenous knowledge seriously hindered due to massive changes, meaning that indigenous practices are now at risk. While young people are more determined to take action on these points, the overall consensus is needed amongst governments, business, civil society and investors to provide the financing needed to enable better resilience and investment in new technologies which will enable a more sustainable future.

"We have a huge responsibility towards the next generations as people who have access and privilege to others who can't be with us today, who can't hear us or who can't access the basics of their lives." (Ms Nisreen Elsaïm, Environmental and Climate Activist)



Session 9 - The Voice of a River

Introduction

Changing our perception of climate and our role in it through education is critical for future generations. Similarly, the scale of change needed is at times too large to comprehend, from business and government to civil society and international organisations. Therefore bringing awareness of nature and humanity's relationship to it, or rather, as a part of it is fundamental in bringing back a reciprocal relationship to the natural world.



Moderator

Feraye Ozfescioglu
CEO, World
Humanitarian Forum



Claire Dubois
CEO, TreeSisters



Mark Dubois
Advisor, TreeSisters



Photo by Rolands Varsbergs, Unsplash

Shaping the Future for a Better Tomorrow ◀

Key Points

Reforestation. As an organisation, TreeSisters has aimed to shift our awareness of nature to bring back a reciprocal relationship with nature, one of the ways they have done this is through reforestation with the aim to reforest 17 million trees globally. Through campaigns such as International Earth Day, they were able to engage over 200 million people in 143 countries in 1990.

"I think we've forgotten who we are and what we are, as part of nature, I think we have forgotten that the consciousness of nature is in our bodies, that we are the oceans, and we are the forests, and we are the cosmos, we can't be because that's what we're made of."

(Ms Claire Dubois, CEO, TreeSisters)

Changing perceptions. Indigenous people all around the world, know how to be in a relationship with a living world. We have moved away from this way of thinking through the scientific revolution onwards, we've been taught to perceive our world as inanimate and unconscious, and our world is waiting for us to come back into relationship to take ownership, remove insecurities and focus on one activity: to restore nature and life.

"If we can listen to life through our bodies and our heart, then inside us, we have everything it takes to restore relationship, reverence of our planet because we are her."

(Mr Mark Dubois, Advisor, TreeSisters)

Session 10 - Paving the way to COP26: COPXX Special Launch

Introduction

One key goal for COP 26 is to encourage restorative and regenerative goals that can rapidly accelerate progress for climate change mitigation. This requires all sectors of society to reconsider their role with climate, from improving education on climate and empowering women to encouraging more ethical consumerism in which we aim to change behaviours.



Moderator

Dianne Dain
Chief Innovation
Officer, World
Humanitarian
Forum



Salem Avan
Director, Policy,
Strategy &
Governance
Division, UN



Jarvis Smith
Co-Founding
Director,
My Green Pod



Emily Cromwell
Sustainability
Director, Deloitte



**Antoinette
Vermilye**
Co-Founder,
Gallifrey Foundation



H.E. Aisha Babangida
Chairperson, Better
Life Program,
African Rural
Woman

Key Points

Empowering women in climate action. Women need to be given all round input, resulting in better outcomes with research showing that female parliamentarians lead to better climate policy and fewer emissions. We should be thinking about issues about men and women as a mix, we are not in an us and them situation. We're at a critical moment in time, where scientists are telling us that the clock is ticking. This means that we need all parties represented in decision-making because it affects all parties. By advancing gender equality we can add \$13 trillion to the global economy.

"My analogy is that I wear glasses to see clearly, so what we want is to bring in more men and women to look around and ask, where are the women? Where are the women if they're not here? Let's reach out together and find them."

(Ms Antoinette Vermilye, Co-Founder, Gallifrey Foundation)

"COPXX is trying to create a movement of people that can be energised with a positive set of attributes to encourage peace, security, equality, gender, human and climate rights."

(Mr Salem Avan, Director, Policy, Strategy & Governance Division, UN)

Consumerism and climate. As more individuals want to live sustainably, there is a need to produce things ethically to enable the transition. One of the ways to do this is to change our behaviour to get carbon back into its fundamental technologies that mitigate and become resilient, meaning forests, seeds and more. According to My Green Pod, 65% of the shift is going to come from behaviour change, resulting in changes in technologies and energy usage. In the UK alone there are 40 billion transactions each year, if we embedded restoration into each transaction, then we could promote growth of 40 billion trees, resulting in massive reductions in CO2 emissions over time.

"We are trying to educate people to buy items from organisations, services and brands that embed restoration into every transaction. Now, what does that mean? It means that if we are buying something, therefore we're taking from nature, we could give back to nature at the same time, at that point of sale." (Mr Jarvis Smith, Co-Founding Director, My Green Pod)

Climate education. Education is key to the global response to climate change. This requires educating women, children, adults and their whole communities to understand the impacts of global warming. Examples provided by African Rural Women can be seen in the usage of palm oil, trying to now educate individuals that palm oil is potentially dangerous because the burning of this can emit large quantities of CO2 when her whole life they've been taught by their parents, grandparents and others that this is safe is difficult to change. We need to advance education in this area as this will encourage young people to change their attitudes and their behaviour.

"Everyone knows the incredible potential the African continent has. One of our troubles is under development and insecurity, also well known that Africa has the potential not only to feed itself, but the world as well. " (H.E. Aisha Babangida, Chairperson, Better Life Program, African Rural Woman)

"I do see the really important and impactful change that corporates and global companies are going to have to make and are in a position to make a positive difference through having authentic policies by changing the way that they approach commercialism and consumerism."
(Ms Emily Cromwell, Sustainability Director, Deloitte)

Session 11 - Youth Leadership: The Role of Youth in Building Back Better

Introduction

Young people can provide innovative perspectives on how to drive change to result in a more sustainable and healthy future. By setting examples on how young people can be the ones to build back better, it is more important than ever to listen to their voices and invite them to actively co-design and shape the future. However, issues remain from a generational gap to a lack of young people in positions of leadership, therefore we need to question how we can get young people more involved in all aspects of sustainable development.



Moderator

Courtney Sunna
Manager, Global
Community
Investment &
Philanthropy,
AstraZeneca



**Jayathma
Wickramanayake**
UN Secretary-
General's Envoy
on Youth



Kenneth Kwok
Founder and CEO,
Global Citizen
Capital



Siddarth Satish
Youth Ambassador
Ariel Foundation
International



Vivian Onano
Founder & Director,
Leading Light
Initiative & Youth
Advisor, Global
Education Monitoring
Report, UNESCO



Kehkeshan Basu
Founder and President,
Green Hope
Foundation



Safoora Biglari
Director of Community,
One Young World



Apefa Adjivon
Canadian Commission
for UNESCO



Mete Coban
Founder and Chief
Executive, My Life
My Say



Sophie Daud
CEO, Future Leaders
Network

Key Points

Equipping young people. Getting more young people involved in leadership positions requires system change across all societies to enable young people to participate. First, this means ensuring that young people are fully equipped to take part in decision-making, this needs to be done through training and confidence building. Future Leaders Network has aimed to improve this by doing 3 months worth of intensive training to ensure they have skills and knowledge of policy-making, public consultation negotiations and presentation skills so that they can engage effectively in the Y7 and G7 process this year. On the other hand, working with governments and others is important so that they understand the ways they can most effectively engage young people by understanding that many young people are either working or in education, meaning that they cannot drop other commitments easily. The final element of this is in demonstrating impact, this year's Y7 and G7 have enabled more opportunities for young people to present their recommendations to decision-makers. By allowing young people to speak at these events and in ministerial meetings, decision-makers will demonstrate that their voices and recommendations are respected and valued.

"We genuinely need to have systems change, this can't be tweaked with one person or one individual or even one institution. This has to be a systemic change across all of society to enable and empower young people." (Ms Sophie Daud, CEO, Future Leaders Network)

"We are living through a pandemic, right now, unfortunately, young people will probably live with the subsequent economic consequences. But again, we're not involved in the conversation about how we can make sure we build that better how we have a greener recovery" (Mr Mete Coban, Founder and Chief Executive, My Life My Say)

Young people in decision-making. Providing young people with credibility is also important when improving opportunities given to them, therefore having brands and legitimate institutions attached to them makes a large difference as can be seen with One Young World. We must empower them to want to take leadership roles, based in countries where there are those opportunities. In countries where there are fewer of those, and there are more closed systems, there's an imbalance between the supply and the demand. A lot of these countries are going to be facing brain drain, with eager, talented, educated individuals who are seeking better opportunities will leave.

"Trust in young leaders, give them that opportunity and all they want is the time and space to prove that they can make a difference within business." (Ms Safoora Biglari, Director of Community, One Young World)

"A lot of programmes are emerging with a focus on low-income, racialized and marginalised young people, but they're not consulting young people during the creation of those programmes, workplaces and governments. The organisations that are leading these programmes are not doing the internal work to make sure that their workplaces are safe for young people to enter." (Ms Apefa Adjivon, Canadian Commission for UNESCO)

Systemic inequalities. We have systematic problems of inequality, where lots of young people are raised to not aspire or to have ambition, partly because of the socio-economic sort of circumstances that they're brought up in. We also have an education system that is disconnected from the future world of work. While the business world is moving 10,000 miles per hour, and a lot of work is changing, we've got an education system that is still probably 20-30 years behind.

By the time you finish your education, and you're out into the world to find a job, the world of work is completely different to what you've been educated about. We need to do more to improve the soft skills and instil transferable skills into young people at a very young age, particularly around critical thinking and teamwork, not necessarily through formal education but also in local communities

"We have to give them the tools and the capital. One of the things that I do with my engagement at the World Economic Forum, is I work with the uplink community, which is a great platform to crowdsource innovation, to deliver the SDGs." (Mr Kenneth Kwok, Founder and CEO, Global Citizen Capital)
"Educational institutions need to be more flexible, to meet the changing needs of the current era. While these institutions themselves are really important, their curricula and the models of delivery are actually archaic." (Ms Kehkeshan Basu, Founder and President, Green Hope Foundation)

"A lot of the time we see that existing infrastructure allows those who have access to technology and modern media to continue thriving, which is always a good thing. However, those who don't have that kind of digital access are left out." (Mr Siddarth Satish, Youth Ambassador Ariel Foundation International)

"You cannot create meaningful and lasting change if young people are not part of that process. There has to be ownership of the process, if I'm not at the table when you're designing the solutions, then you're creating all these processes for change then how am I going to take ownership?" (Ms Vivian Onano, Founder & Director, Leading Light Initiative & Youth Advisor, Global Education Monitoring Report, UNESCO)



Session 12 - Innovative Finance: New Models of Financing the Gap

Introduction

All issues that are being currently discussed under the SDGs require significant funding that goes beyond that governments can provide alone. Through new partnerships, philanthropy and the development of innovative financing solutions we can bridge the gaps and address the world's biggest challenges from food security and climate change to inequality, poverty and pandemic threats.



Moderator

Charlie Bronks
WHF Advisory Board
Member & Head
of Strategic
Partnerships and
Communications,
Crown Agents
Bank Speakers



Preeti Sinha
CEO and President,
Financing for
Development



Jurgen Rigterink
Acting President,
EBRD



Dr Mahmoud Mohieldin
Executive Director,
IMF & Special Envoy
on Financing the 2030
Development Agenda,
UN

Key Points

SDG Progress Setbacks. The global economy has experienced the worst recession in 90 years. Over 100 million people have fallen back into extreme poverty. Over 100 million jobs have been lost, tax revenues, foreign direct investments, trade and remittances have decreased and debt vulnerabilities increased along with debt levels. Crucially, the EBRD focuses on the private sector and creating the enabling environment for the private sector to thrive. As such, they look to commoditize investments in the sectors of countries where the funding gaps are the greatest, to apply ESG standards to crowding and mobilise private sector financing, followed by blended finance solutions to support market development.

“Innovative finance is not enough, in practice for what is holding back the achievement of the SDGs is not necessarily only the supply of finance, but the supply of bankable projects.” (Mr Jurgen Rigterink, Former Acting President, EBRD)

Capital serving humanity. The UN Capital Development Fund aims to focus on the 46 least developed countries, while we build back better we want to position these countries as the pre-frontier countries providing new investment opportunities. The question we need to answer is how to get capital into these countries. Building resilience in these economies means not only looking at the economic figures but looking at some of the key human indicators that are behind these, for example, 30 million people that live in LDCs are now living in extreme poverty. Presently at the moment, there is not the same level of interaction between capital markets and LDCs, therefore consideration should be placed on investment in regions that might be considered high risk but also high returns. Another area for improvement could be the creation of special purpose vehicles (SPV) between what capital needs and liquidity requirements, for example, what UNCDF looks at are

non-investment grade and non-liquid, meaning that a SPV could serve both sides by providing needed capital. The final idea would focus on human development tokens to provide tangible investment into human development by raising the number of people from extreme poverty to the basic standard of living.

“Least Developed Countries doesn't mean the least attractive countries, we want to position these countries as the pre frontier countries, the new last of the developed, finance frontiers, and focus attention on those.” (Ms Preeti Sinha, CEO and President, Financing for Development)

Financing gaps. Financial innovation is not the penicillin to solve all of the problems we have mentioned but it can be a massive enabler for development by enabling domestic resource mobilisation, better targeting and assisting with innovation between the private sector and governments. We also require innovation to improve the business environment and to make sure that various solutions are scalable but also applicable from the micro-level in rural situations to larger projects like those found in Egypt and Morocco. Presently according to UN estimates, there is a \$4.2 trillion gap in financing, therefore while bigger countries and blocks such as the US, EU and UK have been growing economically, developing countries have suffered due to a lack of vaccination and stimulus.

“We need to employ our knowledge, the advances in technology, the investments that we have been seeing in digital solutions, and get that with what we know about the needs for funding going forward. Otherwise, we'll be confronting a great deal of inequality across countries and within countries.” (Dr Mahmoud Mohieldin, Executive Director, IMF & Special Envoy on Financing the 2030 Development Agenda, UN)

Session 13 - Cross-Sector Partnerships: Creation of Value

Introduction

The question of how inclusive growth can be achieved is critical if we are to achieve the UN Sustainable Development Goals. As businesses cannot thrive in a failing world, we have to strive to implement business innovation throughout the humanitarian system to enable the support of vulnerable beneficiaries. COVID has demonstrated that building partnerships with the private sector can help achieve goals quicker and better through strategic partnerships with innovative organisations.



Dr Marcia Balisciano
Head of Corporate
Responsibility, RELX



Rachel Bale
Senior Vice-President,
Global Humanitarian
& Development
Team, Mastercard



Mariarosa Cutillo
Chief of Strategic
Partnership Branch,
UNFPA



Nicholas Logothetis
Executive Board Member
and Vice-Chairman,
Libra Group & Co-Founder
and Chairman, Concordia

Key Points

Private sector enabling technological advances. As one of the largest private foundations in the world, the Mastercard Foundation enables transactions and innovation between organisations to create transparency, efficiency and interoperability, principally assisting marginalised communities. By developing digital infrastructure, we can see a clear example of how the private sector enables the support of marginalised communities and now supports organisations such as Save the Children, World Vision, Mercy Corps and others with a further pledge to bring a total of a billion people, 15 million micro and small businesses into the digital economy with a further goal to bring 25 million women entrepreneurs.

"We work in health, agriculture, humanitarian response, and that's not our sector expertise. So we need partners to bring that expertise, the credibility, the understanding, and also the last-mile capabilities." (Ms Rachel Bale, Senior Vice-President, Global Humanitarian & Development Team, Mastercard)

Strategic partnerships with UN Agencies. When we talk about private strategic partners, we need to speak about wide-scale collaborations between private-sector corporations, philanthropic organisations, academia and civil society. By working with organisations such as UNFPA which has a presence at a community level in 150 countries, organisations can further innovation and impact. 20 years ago, the UN looked at partnerships with the private sector in a different manner, mostly focusing on financial resources. This has changed, especially if we consider last-mile logistics in which UN agencies have to work with the private sector to deliver key aid and support.

From resource mobilization and innovation to partner with media and civil society, private sector engagement has also resulted in the empowerment of women with small to medium-size enterprises.

"We need to have those honest conversations around our roles and responsibilities. Making sure that we are complementary to each other." (Ms Mariarosa Cutillo, Chief of Strategic Partnership Branch, UNFPA)

Connecting decision-makers. One of the biggest challenges faced in promoting public-private partnerships is finding that initial connection between the private sector and other institutions. Awards such as the P3 Impact Award between Concordia, US State Department and University of Virginia School of Business can allow for small and medium-sized charities and companies to create small partnerships which will have long term benefits such as the creation of 24 private medical clinics in Nigeria between Leadership Council members who met at Concordia Summits.

"Clarity on roles and responsibilities can enable partnerships that can blossom, we found quicker and better ways to build ecosystems of public and private partners to support our programmes in and during emergencies." (Mr Nicholas Logothetis, Executive Board Member and Vice-Chairman, Libra Group & Co-Founder and Chairman, Concordia)

Session 14 - The Future of Global Health and Leadership

Introduction

As we move past the pandemic the lessons of global health and leadership are critical for future generations if another pandemic were to arise. Innovation and a commitment towards global public health have enabled the administering of over 1.3 billion vaccine doses at the time of writing. However, other weaknesses remain in our humanitarian system with the scale of manufacturing still a limiting factor as well as ensuring that there is vaccine equity.



Moderator

Professor Donald Donahue
Professor of Global Health, University of Maryland, Baltimore



Moderator

Feraye Ozfescioglu
CEO, World Humanitarian Forum



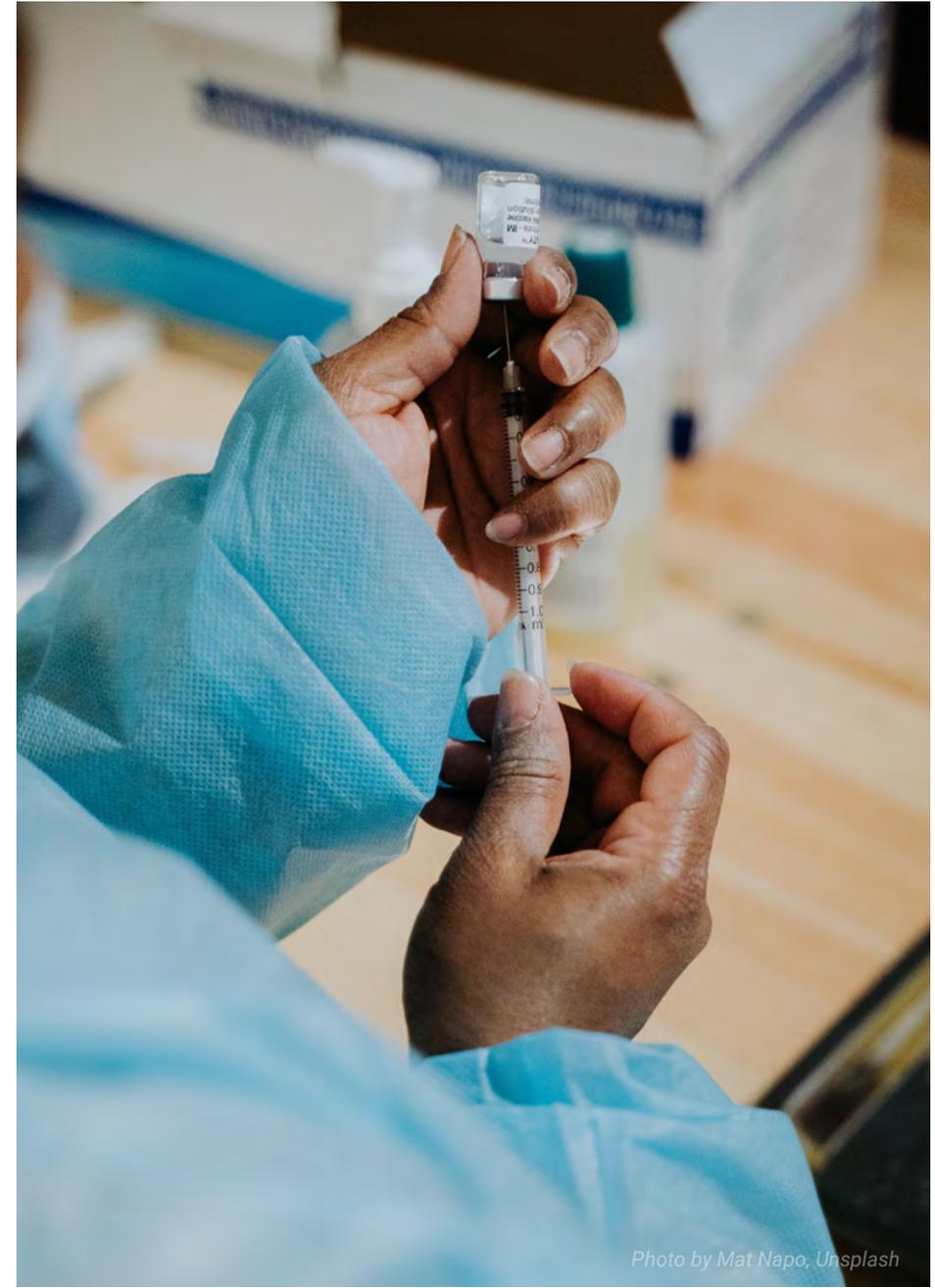
Ruud Dobber
Executive Vice-President, Bio-Pharmaceuticals Business Unit, AstraZeneca

Key Points

Vaccine supply. We are currently witnessing the biggest and fastest global vaccine rollout in history, it is extremely unprecedented that 18 months after the declaration of a pandemic that we now have highly effective vaccines. Along with this, there was the creation of numerous parallel supply chains with more than 20 partners in more than 15 countries, providing further scale and pace needed. Export restrictions have had impacts on delivery also along with vaccine hesitancy, therefore, leaders from all organisations have to reiterate that vaccines remain the safest, most cost-effective protection against COVID-19.

"We have highly effective vaccines together and this is a clear victory for science and innovation. But we can only do that when we are working all together across the world." (Mr Ruud Dobber, Executive Vice-President, Bio-Pharmaceuticals Business Unit, AstraZeneca)

Global health leadership. There have been some exceptional achievements in the last year in terms of providing vaccines across the world through COVAX. Low and middle-income countries are facing significant challenges in accessing treatments, rendered more complicated through new variations of the virus, the devastating impact of that can be seen in India. In line with a belief that vaccines should be equitably distributed and provided with affordable access regardless of income level, approximately 75% of vaccines through COVAX have gone to low and middle-income countries. Global health leadership ultimately relies on effective collaboration through multiple institutions bringing in partners from governments, private sector and civil society.



Session 15 - Unlocking the Potential: Harnessing Innovation and Technology for Good

Introduction

The crisis that we've been going through is essentially reshaping our future. This time, we have the responsibility to build the fairer world that our children expect, one in which innovation contributes to the common good. We've used the word innovation to refer to the role of technology products and processes from other sectors, new forms of partnerships, the use of ideas and the coping capacities of crisis-affected people. This great crisis brings many lasting transformations and digital transformation is not the least. However, the use of the term innovation in the humanitarian system has often lacked clarity and integration leading to misuse, overuse, and the risk that it may become hollow rhetoric.



Moderator

Dianne Dain
Chief Innovation
Officer, World
Humanitarian Forum



Alix Peterson Zwane
CEO, Global Innovation
Fund



Jocelyn Mackie
Co-CEO, Grand
Challenges Canada



Ambassador Jarmo Sareva
Ambassador
for Innovation,
Ministry of Foreign
Affairs, Finland

Key Points

Defining innovation. Innovation can be described as a positive, significant change. Innovation is a result of an outcome. Innovation is not necessarily a gadget or purely technological. Innovations can be service-related, they can be design innovations, they can be business innovations, and, of course, social innovations. Innovations can be and often are created in frugal contexts, meaning that there are significant opportunities in the South to South context. It also means that innovations can flow from the south to the advanced industrial countries. We can learn from the frugal innovations, for example, it was not too long ago that a country like Finland was innovating in a frugal situation, demonstrating that advancements in social innovation and wealthfare can remote citizen participation, the standard of living, health, education and more.

When advancing innovation, it is important to keep the end-user and should be seen with a human-centric context. Innovations, particularly in the social field are time and context-specific, meaning that different elements can occur in different countries with political, cultural and economic factors.

“We’re incubating an impact fund that will invest in women and children’s health technologies for underserved or unserved areas of health. And the fund is meant to focus on innovations that will impact the lives of women and children across the globe..” (Ms Alix Peterson Zwane, CEO, Global Innovation Fund)

Cost of investment in innovation. While investment in innovation can be seen as risky, improvements need to be made in impact analysis to demonstrate the policy case for continuing to bear this risk. Between 2015 and 2020, 5 of the Global Innovation Fund’s investments generated \$400 million in social benefits with

the cost of 38 investments totalling \$109 million, meaning that just five of these investments have returned social benefits equivalent to three-quarters of the portfolio cost. Presently less than 1% of humanitarian aid is focused on investing in innovations according to Grand Challenges Canada, meaning that we need to improve how the world responds to the needs of largely inaccessible communities in conflict and humanitarian contexts. Grand Challenges Canada has supported 53 innovations in 23 settings from Syria and Congo to Sudan and Yemen, working with local innovators in their settings whilst partnering with the private sector to meet the needs of local communities. One of these called Halla systems uses AI when looking at early warning systems to identify and predict the threats of incoming airstrikes by sending out messages through social media 7 to 10 minutes in advance to give warnings. This assists with the collection of evidence for certain war crimes to counter disinformation.

“Our most promising innovations by 2030 have the potential to save 1.7 million lives and improve 64 million lives. We develop these very robust models that look at assumptions, look at the evidence, at discount for failure. This helps us in our decision-making, which happens at an investment committee model, which brings those with lived experience.” (Ms Jocelyn Mackie, Co-CEO, Grand Challenges Canada)

Innovation integration. One of the larger challenges is to do with going past early-stage funding and joining the innovation to the financial ecosystem to help innovators de-risk their projects to make them more risk-averse and therefore more likely to get capital. Small amounts of money are put at risk for promising pilots that want to generate into more testing and transitioning mode, at this point more capital might be brought In that case, there needs to be a higher bar for rigorous evidence of impact.



World Humanitarian Forum

There are lots of other ways to generate evidence of impact, and particularly for innovations that are scaling through markets. If something passes a market test, and people want to buy it, that's a powerful signal, that impact is being generated.

"I've been working with a small Finnish gaming company, which has been doing work for several years in the area of gaming for health. They launched a successful game, to spread information through gaming on hepatitis C, now they are about to launch a new version of the game called Antidote to Spread, to spread information on COVID-19, what the virus is, how it works and why it's important to get vaccinated." (Ambassador Jarmo Sareva, Ambassador for Innovation, Ministry of Foreign Affairs, Finland)

Thematic Theatre: Tech for Good

Chair Foreword

Executive Summary

In May 2021, the Tech for Good Programme Board supported the World Humanitarian Forum (WHF) London 2021 event with a blistering programme of 80 panels sessions and fireside chats exploring how innovative technology is addressing some of the most pressing challenges for humanity today.

Firstly, I would like to take this opportunity to thank the entire WHF team who worked tirelessly to facilitate, moderate and debate with over 300 world experts, whilst caught in the whirlwind of a global pandemic. WHF London 2021 was an inspiring event, and it was an honour for us all to play our small part. It also shows how the WHF is playing an increasingly important role in the humanitarian ecosystem.



Charlie Bronks

Head of Strategic Partnerships, Marketing,
Branding and Communications,
Crown Agents Bank (Chair)

The WHF Tech for Good Programming Board is comprised of an incredible group of people.

Collectively, in designing the Tech for Good programme, the whole team were keen to bring to the agenda some challenging issues being faced by the humanitarian sector, often with profound disruption and deep uncertainty. In particular, we wanted to highlight how technology has made a real difference on the ground and how it has become a core part of the ecosystem for humanitarian response worldwide.

It was clear from many of the sessions that the pandemic has accelerated the transformative impact of technology; this has encouraged entrepreneurial organisations to develop and apply new solutions that are more readily accessible with measurable impact the world over as it provides access and democratises technology to those previously under-served.

This empowering entrepreneurship has enabled inspirational enterprise, creativity, and some ingenious solutions. We heard stories of a new confidence, collaboration and enabled communities who are empowered to develop their own solutions, create new jobs, and contribute to growing local economies. Some taking tiny careful steps, others giant strides to strengthen the underlying technology ecosystems for people often displaced, underserved, and facing extreme challenges.



Alice Piterova
Managing Director,
AI for Good



Ann Rosenberg
Executive
Sustainability Tech
Advisor &
Co-Founder,
SDG Ambition



Bernhard Kowatsch
Head, Innovation
Accelerator, WFP



Elizabeth Njoroge
International ICT
Business Partner,
Christian Aid



Nicola Strong
Managing Director,
Strong Enterprises



Sarah Spencer
Conflict and
Humanitarian Aid
Expert, The Good AI

Some highlights of the Tech for Good Thematic Theatre panels include:

- ▶ The importance of funding and implementation challenges of technology in humanitarian organisations and how we ensure that technology does not reinforce power inequalities, driving only positive change.
- ▶ Transforming humanitarian aid through Drone Technology with many applications from accountability, delivery of aid in FCAS environments to last-mile medical distribution with ethical considerations.
- ▶ Other key areas addressed drove a strong private and public sector collaboration especially looking at the Virtualisation of Humanitarian Operations with imaging and mapping technology, blockchain and modelling thereof for disasters.
- ▶ A key focus for our panellists and a passion for the WHF was leaving no one behind in Ed-Tech, looking at scalable solutions, expanding capacity and giving previously underserved communities access.
- ▶ Strengthening post-disaster connectivity through increased use of mobile technologies was another compelling subject touching on the regulatory components, governance, and standards regarding internet provision within refugee camps.
- ▶ Data analytics for social purposes was a hot topic with compliance at the top of the agenda delving into what is possible, 'taking the bias out of data,' the complexities of data collection and how to offer better service to displaced women and children.

- ▶ Technological impacts on global mental health and providing support for the critical and compelling discussion of well-being and suicide amongst young men and, interestingly, the technological responses to sexual violence.
- ▶ Impact measurements for Tech4Good initiatives, this is an area under considerable scrutiny and discussion; impact and measurement are paramount. This panel explored companies taking responsibility, GIIN's framework and looking for a common voice as well as predictive technologies.
- ▶ This comment from the World Bank in the digital development overview shows where we are and just how big the global digital divide is.

"With the potential of digital technologies to expand access to markets and opportunities, helping countries invest in digital development is an important aspect of the World Bank's work to reduce poverty and inequality. The numbers speak for themselves: the digital economy is equivalent to 15.5% of global GDP, growing two and a half times faster than global GDP over the past 15 years. Research shows that a 10% increase in mobile broadband penetration in Africa would result in an increase of 2.5% of GDP per capita. In a post-COVID-19 environment, digitalization efforts will accelerate across the globe, but most developing countries do not currently possess the right tools and environments for that.

What will it take for countries to reap the benefits of technological progress, and participate fully in the global digital economy?

Closing the global digital divide: Even though new technologies are spreading rapidly around the world, 4 billion people still lack access to the internet. "

We look forward to reading more in the outcome report!

Globally, we are at a pivotal moment as we navigate this pandemic; we are uniquely positioned to ensure tech is part of the solution dialogue. When organisations are scaling and making plans for emerging from the pandemic, there is an opportunity to (borrowing a phrase from the distinguished Jürgen Rigterink, EBRD First Vice President) to 'build new better' in a way that delivers benefit for everyone with more investment and emphasis on both new tech creation and application from healthtech and fintech to Net Zero and edtech.

But there is more to do. We are facing enormous challenges. There is a need for more formal, collective support and response from all sectors, including governments, to support and enable growth across the global technology landscape, we are seeing customers voting with their feet and making better sustainable investments with their money, considering the ESG commitments and choosing where to work, and technology companies are listening. We need to find a way to harness this energy.

We are grateful to all of our guests, including the 300 world experts, who participated in the WHF London 2021, sharing their wisdom and expertise.

Charlie Bronks,

*Chair of the Tech for Good Programming Board,
Member of The World Humanitarian Forum Advisory Board,
Head of Partnerships, Marketing and Communications, Crown
Agents Bank,
Member of the Board, UN GCN Network UK.*



Session 1 - Re-definitions in the global reset dialogue

Introduction

Innovations in technology and services have brought about fundamental questions on how to fund and implement system change in the humanitarian sector. From delivering support to young people, women and other communities around the world to understanding how large tech companies can support non-profit and UN agencies, there is a rapid pace of change in technology that needs to occur ethically while keeping in mind the beneficiaries of these programmes.



Moderator

Alice Piterova
Managing Director,
AI for Good



Dr Lauren Rumble
Principal Advisor,
Gender and Chief
of Gender Rights
Section, UNICEF



Erik Arnold
Chief Technology
Officer, Tech for Social
Impact, Microsoft



Ann Rosenberg
Executive Sustainability
Tech Advisor &
Co-Founder, SDG
Ambition



Bernhard Kowatsch
Head, UN World Food
Programme Innovation
Accelerator

Key Points

Accelerating innovation. Improving innovation across the humanitarian system should not only be focused on technological improvements but also new business models that can assist with disrupting global issues in the SDGs, tilting the curve towards achieving zero hunger for example. Accelerating innovation also requires private corporations to responsibly engage with UN agencies, and nonprofits to enable a cost-effective transition to more innovative technologies and services. This requires responsibility on how they're applied along with ESG factors key in design principles to ensure that any innovations are fit for the people that it's intended for, but also to avoid waste and loss of funds.

Innovating using artificial intelligence. First and foremost as noted by Microsoft, new developments in AI require a culture change. For Microsoft, this means that they have several different responsible AI committees that inform this leadership, engineering teams and set standards and guidelines for everyone around the company about how to apply this technology, whether it's in the humanitarian sector, or the private sector. Next, it's about tools and techniques that allow for better testing and better visibility for how AI and machine learning models are created. What biases could be in those models? How do you create engines and interpreters that can analyse the models in different ways to apply different points of view that the engineering team or the company think about when they developed them to help prevent things as we saw in the challenges with facial recognition technology.

Next, it's about tools and techniques that allow for better testing and better visibility for how AI and machine learning models are created. What biases could be in those models? How do you create engines and interpreters that can analyse the models in different ways to apply different points of view that the engineering team or the company think about when they developed them to help prevent things as we saw in the challenges with facial recognition technology. Next, it's about aligning and measuring impact to create accountability inside the organisations for the tools that are being published and having a shared goal to implement responsible AI personalised to individuals and setting individuals in the organisations to create solutions.

Capacity building. One of the largest issues currently is the lack of capacity, having the funding and structure necessary to build digital skills all across an organisation to effectively use modern tech. For companies like Microsoft, it isn't enough to simply develop the technology, equal investments need to be made into the capacity building to enable access to the software and provide training and certification to ensure users can apply that technology to specific problems. As a shareholder-owned company, Microsoft also has to consider responsibility to shareholders and the planet as a whole, therefore, business models working with the humanitarian sector need to enable reinvestment back into the grants that were initially invested in.

Session 2 - The Virtualisation of Humanitarian Operations

Introduction

When faced with a scale of humanitarian need, as we are today, in the midst of a pandemic and with complex, difficulty of access and more challenging contexts, then the question is, what do we need to do differently? What new technologies can better enable the transmission of information in difficult circumstances? How can we improve and how can we work more effectively with the men, women and children affected by disaster and conflict for better outcomes for them? We recognise the gaps between needing funding flows capacities to respond to preparedness, it's too slow and insufficient anticipation of an event.

Whilst we face challenges, as outlined briefly, and a sense of not achieving enough with and for the people facing such profound difficulties, there are nonetheless excellent examples of how technologies can and do contribute. SATCOM connectivity has massive potential to enable connectivity by linking better communications in disaster scenarios and more.



Moderator

Liz Hughes OBE
Chief Executive,
Map Action



Stephen Tompkins
Director of Market
Development, Inmarsat



Nabil Ben Soussia
CEO Asia, Middle East
& CIS, IEC Telecom

Key Points

When disaster strikes. Whenever there is a natural event or crisis, there are difficulties in disaster response and communications, SATCOM enables the usage of small form factor devices which provide 3G. Telecommunications are often wiped out with backpack devices that can enable 3G internet connectivity, these enable the coordinating of humanitarian response, sending emails, accessing platforms, whatever is needed to do to coordinate that response effectively. Other technologies such as specifically created phones can provide connectivity anywhere thanks to SATCOM. Machine to machine services can also be powered by SATCOM to enable environmental monitoring such as earthquakes and floods. Therefore, wherever there is a remote location, you can send data from one machine to another irrespective of terrestrial coverage.

Connecting teams. As more operations become virtual, there is a greater need to connect teams on the ground by connecting field teams from a distant location. Traditionally this is done through voice contact by using different systems within a vehicle such as a radio or terrestrial radio network that uses long range radio technology. However, this causes interconnectivity issues as users have different contracts with suppliers, meaning that with a fleet of 1000 vehicles this can become a logistical hazard. New technologies such as hybrid radio networks use edge and 3g to reduce the overall cost of system ownership by using public networks. Therefore if there are connectivity issues in the case of a natural event, then SATCOM can take over coverage.

The challenge of low bandwidth. A major challenge that needs addressing is low bandwidth, with more and more applications requiring high amounts of data, new technologies will enable the ability to get more bandwidth through smaller terminals. A key question to address this is mobility, mobility use cases can enable these terminals to be put on top of a vehicle or camera. Through this mobility and increased interconnectivity of technologies, one terminal can have multiple uses with low bandwidth, enabling video transmission and transfer of heavy files.

Session 3 - Transforming humanitarian aid through drone technology

Introduction

Drone technologies have vast operational use cases for humanitarian assistance. From enabling delivery in difficult last-mile conditions, that can enable the transport for food, to enabling data collection through mapping, collecting LIDAR data, multispectral imagery and connectivity to improve communications in times of disaster. Drones have enabled a reduction in costs, especially in post-disaster scenarios in that oftentimes helicopters were used to assess and provide aid, even COVID-19 vaccines in some casts in East and West Africa. In this session, we'll look at how drone technologies have changed humanitarian operations.



Moderator

Sarah Pannell
Lead, Emerging Tech and Innovation Team, Foreign, Commonwealth and Development Office



Anne Nderitu
COO & Co-Founder, Swift Lab Limited



Lye Ogunsanya
CEO, Didean



Nan Buzard
Head of Innovation, ICRC; Mr Patrick McKay, UAS Data Operations Manager, WFP

Key Points

Drones and natural events. One of the larger success stories in this area comes from WFP's work in responding to cyclone Irene and Kenneth in 2019. WFP worked to improve capacity in response to these events. Whereas typically response has been done through helicopter, WFP, therefore, put the drone pilots on the helicopter to better enable mapping of affected areas with high-resolution photography and shared this data with respondents. This means that other organisations like UNICEF could use this data and inspect the condition of schools without having to mobilise, enabling direct inspection instead of having to use resources to send workers to the location and assess the damage. Another example can be seen in the locust invasion in East Africa. Many drone companies in Kenya and East Africa helped with creating spraying drones, this proved to be very cost-effective, especially in fighting smaller locust swarms. Drones also have the potential to help improve food security through providing farming and data monitoring.

Changing the perception of drones. As drones were first developed with military usage in mind, many affected populations have a lack of trust towards these technologies as noted by ICRC. However, over the last few years, more humanitarian organisations are looking into their use cases to develop their understanding by using them for mapping big water and sanitation projects and precision farming to landmine detection which has been a major advancement in this field. The weapons contamination unit has been alert to sensor cameras, thermal sensing cameras for a long time. Infrared cameras have drastically reduced in cost over time, enabling the ability to detect different heat signatures between an object and its surroundings, including a mine. ICRC worked with Danish geographers to look at Denmark, which has WW1 and WW2

minefields on its coast. They recognised that thousands of mines were buried in the shifting sand dunes and drifting beaches meaning that a different type of clearing was needed. Through thermal imaging cameras, thousands of images were taken and applied using AI to create an automatic recognition of mines and other munitions, drastically improving the speed and accuracy of identification.

Data collection. When sharing high-level information for specific data, this needs to be done with governments and non-governmental counterparts. This includes the reason for the activity, what dates will be gathered, how and who will gather the data and what the benefits are for the gathering of this data. Local representation is also important when collecting data, ensuring that they speak the local language and that the community knows them so that there is trust. WFP has data protection guidelines in place which need to be followed. This ensures that there are measures in place that the data subjects know of what their rights are, the right to be forgotten, the right to request that they are removed from videos or pictures that have been captured by a drone. Another division in WFP looks at Aviation Safety which also includes policies on protection and production of data. In an emergency, the benefits of being able to save more lives would be much greater than the risk of a potential privacy breach. There is a balance that needs to be carefully achieved. WFP therefore works with different working groups including ethics technological working groups, this enables the bringing together of skills and experience to find best practices.



Session 4 - Enhancing responses to humanitarian crises through blockchain

Introduction

We will attempt to explore how blockchain technology can transform the way we respond to global disasters. For a moment, let's just imagine a world where refugees can store their digital identities, which include their education, health care, and even finance records, without fear of loss through displacement and disaster. We can imagine a world where humanitarian aid can reach people faster through a transparent and trustworthy system. This is the world blockchain evangelists envision, a world with a more dignified response to a crisis. Blockchain technology offers the world a more direct option for information and currency transmission through emergencies. With increased speed, traceability, and safety, this innovation has a promising future.



Moderator

Siddhi Trivedi
Founder, Beyond Identity



Maria Marengo
CEO & Founder,
Mentfort Ltd



Severiyos Aydin
Founder, AIDONIC

Key Points

Digital cash programming. Voucher assistance is a key area for development because the use of federal funds, the cost-savings, the transparency and compliance advantages are fairly obvious with blockchain. However, what's received less press is also extremely interesting with distributed ledger technologies that rely on blockchain, fleet management systems and alternative finance structures can be supported through this. The volcano catastrophe bond that's been issued by the Danish Red Cross using blockchain tech is worth looking at as an advancement in the sector. Along with unblocked cash programming supported by Oxfam in Australia and Pacific islands.

Building transparency. Ensuring full trust and end to end transparency that leads to trust within the humanitarian sector, is a massive challenge. Many great organisations suffer because of a lack of trust in the sector. However, AIDONIC uses blockchain and implements that within a feature called tokenization of aid. This enables the technology to tokenize any form of aid, that can be cash and voucher but also a product, or any kind of service that is being provided to people in need. This technology was just recently used in Lebanon, to distribute meals, daily meals to vulnerable people, or people that were affected after the blast, and are until today or are still affected by the financial crisis and the political unrest. Vouchers are distributed using blockchain to people in need, where they could go to the local kitchens or food kitchens in Beirut, and redeem the vouchers for a meal every day. Another case can be seen in the health distribution of medications where tokens can be created and used by beneficiaries. The organizations such as the local pharmacy would accept the QR code as a means of payment. Individual medications are tokenized for each

for each beneficiary, and since then, an entitlement to receive those medications through the blockchain. The ledger for blockchain shows transactions publically meaning that humanitarian actors, donors and stakeholders can live track the transactions in real-time.

Localisation and blockchain. Do distributed ledger or blockchain technology give local communities more control? The nature of decentralised technology such as blockchain is that it has trust built into the system. However, the applications that are built on top of this have the potential to translate power to beneficiaries, irrespective of whether they have proof of ownership of land, educational credentials or proof of birth. However, infrastructure presently does not support this, improved electricity and internet connectivity is needed. Therefore, building resilience and capacity for local communities is essential. Innovations in central bank digital currencies have the potential to disrupt the digital currency market. Another aspect that can assist with localisation is staking technology in which individuals essentially gain an interest or dividend payment. We can imagine a future in which individuals are paid with cryptocurrency, this is placed in a local fund that would earn additional interest on these funds over time.

Session 5 - Leaving no one behind in Ed-Tech

Introduction

COVID-19 has brought serious challenges to educational systems globally. While there have been many advancements in ed-tech over the last year, many students around the world simply do not have access to many of the digital tools that have been developed. Therefore, leaving no one behind has been exasperated because of school closures and students required to work from home. Internet infrastructure and digital literacy need to be improved along with parallel programmes that enable children who cannot access data and another tech to gain access to services.



Moderator

Elizabeth Njorge
International ICT
Operations Manager,
Christian Aid



Angie Madara
Founder, Growd.Ai



Elena Sinel
Teens in AI



Maxwell Kayesi
Ed-Tech Expert,
iEARN-Kenya



Twahir Hussein
Founder and CEO,
Lamuka Hub

Key Points

Educational overhauls. Education systems in general are still relying on older techniques developed during the Victorian era. Schools at the moment do not necessarily prepare children for the future with outdated methodology. Any technology that goes into a system that fundamentally doesn't work and is dysfunctional is going to perpetuate that system. The system is not designed to give equal opportunities for everyone. The pandemic has given us that opportunity for improvement and provided a spotlight on the very issues of what education is. A lot of teachers have found it incredibly challenging to teach and in many ways have been more of a facilitator due to a lack of 1 on 1 contact between the teacher and student. Therefore, to facilitate and help teachers, improving digital literacy and capacity is oftentimes the first step.

Technological reforms. Moving from the traditional approach of pedagogy to a more modern approach can focus on project-based learning. How can we bring in technology to try and bridge the gap? We have a scenario whereby in the 21st-century, a student is being taught by a 19th-century trained educator. There is a big gap between the educator and the learner. This takes us to the next frontier, are we doing enough to build the capacity of the educator? If we can address the capacity building of the educator to be able to support mainstream education, technology and classrooms can bring modern approaches to pedagogy, then we will be able to help these 21st-century learners to fit into the ever-changing world of employment.

Digital safeguarding. In reference to safeguarding digital literacy is a key solution. What does digital literacy really mean for students? Is it that the education system is globally adopting digital literacy in the curriculum? What are the standards? The emergency of social media and other platforms need to address how young people understand and navigate responsibility in the digital sphere. It's important to have a balance between having the digital space to express themselves and promoting safe environments. Many young adults fall prey to cyber bullying and identity theft online. There's the need for reforms in the curriculum that will lead to the adoption of a competency-based curriculum, where every learner who goes through the basic education develops key competencies, including digital literacy, to equip them with skills to safely and securely use technology while being able to assess information. Young people also need to be given the skills to distinguish between facts, opinions and fake news while taking into consideration the rights of citizens to consume and share online content.

Session 6 - Accessibility and inclusion through technology

Introduction

The mission is really to harness technology and innovation to build the full inclusion of people with disabilities is important. Staggering statistics demonstrate that around 80-90% of individuals with neurological disorders have serious issues gaining employment and getting integrated into society. Even though these individuals have the talent, skills and ability to perform complex tasks, many have difficulties in communicating and in emotional recognition that often results in many workplaces not being able to improve integration. Technology has the capability to improve these issues with many solutions now being developed.



Pete Horsley
Founder, Remarkable Tech



Yonah Welker
Expert Evaluator,
European Commission

Key Points

Improving inclusion in the workplace and education.

As all individuals with disabilities are citizens, we must provide them with support, employment and education. Neurodiverse individuals have the capability to view issues in a different way. For example with music, Mr Welker learned how to create music in a different way than is traditionally done in a class. This can help us to reimagine design, thinking about how we will work with technology, with apps and new platforms that have significant potential both for the technology world and for venture capital. In Australia, a National Disability Insurance Scheme was created, this notes that disability is caused at no one's fault, therefore, recognising that giving people the support they need is the first step to enabling them to become taxpayers, meaning that schemes such as this one, in reality, pay for themselves.

Remote work and driving innovation. COVID-19 has enabled a transformation in remote working. However, just a few years ago this was extremely difficult to find for any regular job unless you are a computer programmer. Similarly, in education, individuals can face all sorts of challenges, from chronic fatigue to difficulties in communication which means that traditional educational systems may not work, especially if they require in person attendance. Accessibility drives innovation for anyone, initially, we may try to serve the underserved in society, but in doing this we can improve society as a whole by democratising access, improving knowledge exchange and create cheaper and easier technologies that can support disabled individuals such as social robots which respond to adaptive learning, nursing and computer vision. One example of this is SMS, text messages were first developed by three Finnish developers to allow people who are deaf to communicate more easily.

Leaving no one behind. Large tech companies are incorporating accessibility into their programmes with Microsoft, in particular, having leaders who have hearing impairments, this means we now have role models with disabilities, who are not just incorporated into the workforce but are leaders of their teams. So on one hand, we see the beginning of actual programmes in the technology and corporate world. Second, education is doing more to promote integration, with startups looking at AI for dyslexia in Denmark and other Nordic countries. With this, educators can become evangelists for new technologies that can provide more inclusion with current issues such as a lack of funding and an inability to incorporate new technologies quickly. If you were not able to learn or work in a particular way, you were excluded. Now we're on the mission to achieve zero exclusion.

Session 7 - Strengthening post-disaster connectivity through increased use of mobile technologies

Introduction

Mobile technologies are tools for data collection, information gathering, and dissemination as well as communications. Innovative apps allow people to extend the use of their phones in ways we never envisaged from accessing food distribution to mobile banking and cash assistance to document storage, mapping and GPS functions. The ubiquity of mobile phone ownership and network access means mobile phones have become the default communications method and disasters. Facebook and Google provide services that allow people to post information about their status in an emergency and to try to find missing family members. WhatsApp keeps refugees in touch with their families and provides information on safe travels, roads, voice, SMS, and broadband when combined with citizen know-how to increase the range of opportunities for the use of mobile technologies in disaster settings. Yet recent disasters continue to demonstrate how unreliable and overtaxed mobile and terrestrial phone networks can be during and immediately after a disaster.



Moderator

Anne-Marie Grey
Executive Director, USA
for UNHCR



Melanie Kahl
Senior Leader, Design,
Facilitation & Partnerships
for Impact, Independent
Practice



Dagbjatur Brynjarsson
Program Manager,
Emergency Preparedness
and Response, Nethope

Key Points

Wireless connections as a vital resource. WiFi has become increasingly vital. Connectivity presently is not just about the technology, but it has enabled widespread interactions irrespective of location, it results in a sense of community, resources, safety and security. We have also seen how online content creation from reporting on airstrikes in Gaza to dis and misinformation have become critical issues for humanitarian response. Social media has become a critical part of reaching out to responders, connecting and coordinating in post-disaster scenarios. However, resilience needs to be built as in a crisis scenario there need to be different technologies that can enable communications, if there isn't it can result in miscommunication for the need of certain resources, causing an abundance of water in one location for example, which could be brought to other populations.

Human-centred design approaches to telecommunications.

In a post-disaster scenario, digital communities are created on social media which spread information online relating to the crisis while the ground response takes more time to manage. For example, a large breastfeeding group of mothers in India was created with nearly 200,000 members who are seeking information, support from other mothers and community leaders, these groups are often some of the first in coordinating responses. Ms Kahl worked with Facebook to find digital community leaders such as these to also spread the right information, to find where there is misinformation or gaps in knowledge to better assist communities. Another example can be seen in data analytics surrounding maps that can provide information on where people are evacuating, this helps with resilience to identify safe locations.

Community resilience. For every dollar spent on preparedness, \$4 is saved on post-disaster response. Therefore, providing preparations from telecommunications companies can strengthen collaboration between local responders, tech companies and the government. However, too often, communities wait for a disaster to occur when instead if we build partnerships in the right focus areas, local communities will be given more care, tools, capacity, compensation and connectivity. Community response itself can be a massive burden for frontline responders as we've seen in COVID-19 and Ebola response, causing fatigue and trauma.



Session 8 - Data analytics for social purposes

Introduction

Data analytics for social purposes has advanced significantly in recent years from aiming to create products that preserve digital privacy that can make a difference on social issues to sharing analytics and statistics that help with COVID-19 response. Other examples can be seen in humanitarian medical relief, particularly around supply chain access to medicines, looking at large scale mobility data to assist with humanitarian response.



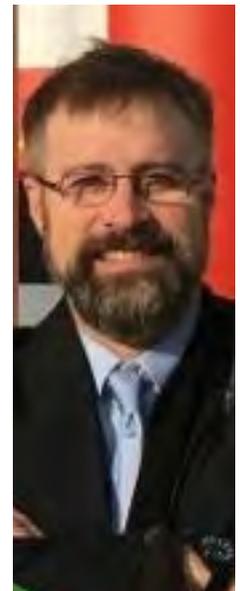
Jessica Fan
Principle Product Manager,
QuantumBlack



Laura McGorman
Policy Lead,
Data for Good, Facebook



Andrew Schroeder
Director of Research
and Analysis,
Direct Relief



John Crowley
Director of Information
Management
and Crisis Informatics,
Nethope

Key Points

Increasing data for good globally. Over the last few years, we have seen a massive increase in the use of data for social purposes, Facebook for example is not working with over 500 partners in nearly 70 countries. Most countries are using data in their responses to COVID-19, non-traditional data plays a massive role. This is due to non-pharmaceutical interventions such as social distancing and mass squaring being key policies internationally. This means that governments and others have had to measure information that doesn't go through the health system, an example of this can be seen in understanding how many citizens are staying at home during the pandemic. This can be seen in mobility data used from Facebook, Apple and Google that shows that areas of countries COVID might spread to or not. Similarly, with data on mask usage, social media companies like Facebook can rollout global surveys with millions of responses globally, this has become a critical data set that enables health institutes to measure and evaluate forecasts for each country responding to COVID.

Ethical considerations for data usage. There has been a move towards the passive collection of data generated for other reasons, one of the key ethical issues to deal with data in this regard is not necessarily to do with achieving scale, but about the conditions under which the data can be collected and used. Data is not used uniformly by all populations, in many locations, there are still bias issues in data as some individuals used digital tools more than others. To improve on this, surveys should aim to be more localised and ideally collected through partnerships with organisations such as the World Bank and others. By collecting data sets and combining them you're able to gain more granular insights into rapidly changing scenarios that are needed in humanitarian interventions.

Partnerships with the private sector. More partnerships are emerging between corporations and humanitarian organisations which enable access to non-traditional data sources. One of the bigger challenges is to do with building up scalability, custom agreements between organisations create difficulties with the number of licenses needed for data usage, making data analytics more difficult to implement. Another issue that emerged from this is how do we create a mechanism that vets the values that we want from the humanitarian sector, ultimately companies are responsible for quarterly deliverables and these inform decision-making cycles. This results in a situation in which there might fbe a transition of work in which short term results are expected, however, for many social issues it requires a long timescale that can be difficult to implement.

Session 9 - Technological impacts on global mental health

Introduction

We're living in an age where social media has taken over an enormous amount of human exchange and cultural discourse. Technology has had an incredibly positive and negative effects on people's mental health. From social media self-harm to amplifying conversations over systemic issues that we face, technology has changed how we communicate with each other. These have also had broad impacts on mental health in terms of amplifying the issue but also raising awareness.



Moderator

Pete Trainor
Chief Executive Officer,
Vala Health



Sanjay Joshi
Founder, Talk it Over



Lene Søvold
Clinical Psychologist
and Mental Health Advisor



Alice Piterova
Executive Director,
AI for Good

Key Points

Overall impacts on mental health. We know that there is a strong correlation between the amount of screen time and different mental health symptoms, but it's also a question about causality. We know that people who use digital devices a lot might have other addictions like substance abuse. It's very difficult to measure and control all of the variables. However, there are positive opportunities for connecting and using technology enables for more open conversation and reducing stigma. Online comparisons through social media are also harmful as you compare yourself to total strangers. On top of that, you're comparing yourself to kind of edited versions of others which is in essence an illusion of reality. Therefore, there are physical impacts in terms of international overload that have negative impacts on your brain and the body is stimulating negative stress. Technologies have also been designed to grab our attention, something noted by The Social Dilemma in which individuals get also interrupted by notifications, that can result in a habit of self interruption in which we want to check the news and other social media even if nothing is happening.

Data-driven evidence. When developers create new technologies or apps, they need to encourage data-driven evidence, while technology does have negative impacts on mental health it has also helped with other aspects. For example, a key question that should be asked is whether a user feels better or worse as a result of interacting with the app in question. Technology companies should have a vested interest in this to ensure that their users are healthy. As children are getting their first smartphones at an average age of between eight and 10 years old, we do give them an incredible amount of information, however, at the moment we do not know

the long term effects of this as children now end up comparing themselves based off the values gained on social media, namely the number of likes that one has.

Opportunities. The biggest opportunities are in creating awareness and valid information. Specifically focusing on younger audiences we must cover issues ranging from online harms such as bullying to the overall awareness of mental health. This role is very difficult as it requires user testing, understanding what experience young people have today online and working with psychologists and other professionals who must be involved in this design process as technologists can miss potential risks and pitfalls on this journey. Young people who are affected by crisis and natural events can be aided substantially through chatbots by teaching different calming techniques such as breathing, concentrating on emotions and other step-by-step interventions that can have extremely positive results. Digital therapy can also be effective in the field of cognitive-behavioral psychology, online platforms can be created with a range of modules that can help in making healthcare more person-centric.

Session 10 - Impact measurement for tech4good initiatives

Introduction

Technology initiatives are becoming even more prominent now, in all of the approaches for finding solutions to our world's most pressing problems, from drone technology to telehealth to Bitcoin to green energy. The question is, does technology do good? How do we know if technology is doing good, more good than harm? Monitoring and evaluation is very popular with the public sector and NGOs and it's required to demonstrate positive outcomes when donations from public sectors or NGOs are being funded by philanthropy and government. But the same level of accountability is not showing up for the technology solution providers. There is an estimate of \$1 billion right now for the private sector investment in social and environmental impact, and of that technology constitutes a huge number of those. So the question is, does impact measurement and management offer the same level of accountability in the private sector as what we're getting from evaluation and monitoring in the public sector?



Moderator

Jane Reisman
Founder and Senior
Advisor, ORS Impact



Unmesh Sheth
Founder & President,
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Veronica Olazabal
Managing Director,
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Pedro Cortez
Impact Specialist, UNDP

Key Points

Initial evaluations and understanding impact. Within the humanitarian context, we're analysing two issues, first, tech as a solution and second really talking about two things. The first is we're talking about tech as a solution and the second, technology for measurement purposes. There are numerous opportunities and risks, private sector organisations are already focusing on mission-driven impact work, many opportunities come in the form of bigger, cheaper, faster technologies that can impact the public sector. New technologies in the form of machine learning, artificial intelligence and geospatial analysis can enable the measurement of impact on the social and environmental side, that can be seen as analogous to financial management. However, this can be seen as an oversimplification as to assess the effectiveness of social and economic factors, individuals make different choices that can have vastly different impacts in the future. An example of this from the Rockefeller Foundation can be seen in the Green Revolution which solved the issue of hunger for many people globally in the 1950s, however, this has caused long term environmental impacts.

Data analysis for impact measurement. Data is key to understanding whether technologies are having a positive or negative impact. However, this data is often collected without an understanding of local contexts and are often standardised without the end-user in mind. Past solutions have taken too long, and in many cases are owned by tech giants. Randomised control trials for example have their benefits but are often long term projects that are expensive to run for humanitarian organisations. Another issue is data inequality, as data is not shared with local communities, therefore, local communities

therefore, local communities may use organisations that for instance focus on gender awareness, without the data to guide their response. Due to the lack of data, they can regularly make ineffective decisions that have less impact over time.

Standardising impact measurement. Impact management projects created recently in UNDP can have a wide variety of stakeholders, however, different stakeholders need to be a trainer to speak the same technical language. This can be done by creating five dimensions of impact to understand the different ways in which a project can be impactful, irrespective of whether it's an education company in Nicaragua or an impact investor in Singapore. Another consensus or set of principles that are about to emerge comes from the SDGs focused on equity and debt funds for bonds. This can provide a framework for the private sector to map their contributions. Another way to standardise impact measurement comes from the OECD Development Assistance Committee principles. However, differing standards from private and public sectors need to be combined to create bespoke approaches, therefore, not only would your organisation be aware of impact goals and indicators but also a new set of targets guided by the SDGs.

Another mechanism that's holding corporations accountable is the world benchmarking Alliance. They are essentially ranking the about the 200 largest companies against a set of benchmarks that are being created through what is called the Structured Network. We also have to acknowledge that impact is extremely sophisticated and is not like a financial auditing process in which you can follow a paper trail.

Calls to Action

Call to Action 1 - Data Measurement For Social Purposes

Assessing the impact of technology is a difficulty faced by numerous organisations working in different sectors from blockchain and green technologies to assessing mental health impacts. Therefore, standardised rules need to be supported by the international community while also noting the varied impacts ranging from socio-economic factors to disparities in the level of technology and data available in local contexts.

Call to Action 2 - Recognising mental health impacts

While we are still analysing the long term implications of mental health, especially on new generations of young people. Young people have now been exposed to massive amounts of information online that can act as a benefit and detriment. This has enabled gaining knowledge and communicating on a massive scale, however, it has also resulted in increased social stigma online in the form of bullying.

Call to Action 3 - Reforming education to adopt technology

While technology has been moving quickly, educational systems are yet to fully adopt many of the technological reforms required to better support students. This must include training for educators to take a modern approach to teaching which should also aim to build capacity for educators while teaching key critical skills such as online literacy and digital safeguarding.

Call to Action 4 - Blockchain innovations

Blockchain technologies can provide key innovations throughout the humanitarian sector, from ensuring transparency of digital cash programming to providing catastrophe bonds that can be directly traced to a beneficiary. This can and will enable trust in the humanitarian sector through clear public ledgers that are created using blockchain. This can further enable the tokenization of any form of aid, meaning that each piece of aid can be traced, from distributing meals to vulnerable people or giving local communities different ways to access aid.



Thematic Theatre: International Development

Chair Foreword

Executive Summary

This report presents insights and conclusions of WHF London 2021, an e-summit held on 10-20 May, 2021. The report reflects the unique mission, character and work of the World Humanitarian's International Development Programming Board and the innovative ways in which it aims to facilitate important discussions focusing on the most salient ways to respond to current and emerging challenges.

The title of the e-summit – “Building Back Better” – took place as we continued to navigate and reflect during these extraordinary circumstances. Recent times have been characterized by a steep decline of trust in social institutions, especially national governments and business, reduced support for multilateralism, a resurgence of bilateralism and unilateralism, a retreat from democracy and loss of confidence in the media. The humanitarian and development community continue to retain much of its standing, but it too is under continuous attack.

These trends have resulted in a global human-centered leadership vacuum just at the moment when such enlightened leadership is most needed to address the unprecedented multidimensional challenges posed by the COVID-19 pandemic and the rapidly approaching existential threats of climate change.



**Dr Jon-Hans
Coetzer**

Team Leader Online
Learning and Education,
Division for Peace,
UNITAR (Chair)

Yet, at the same time, recent events reveal unprecedented opportunities for global progress. The very magnitude and seriousness of current problems have created sufficient pressure to overcome or at least weaken the resistance posed by barriers to real change. During the past one year deeply-entrenched beliefs are being challenged and set aside. Massive public investments in social welfare, employment and environment have thrust aside the long-standing neoliberal reliance on private sector investment and tax cuts. Prominent business leaders have renounced the goal of shareholder profit in favor of a more inclusive multi-stakeholder approach that recognizes the social responsibility of business. The world's leading financial institutions are shifting their priorities from unsustainable investments towards financing the Sustainable Development Goals. The automotive industry has announced radical changes that will dramatically accelerate its shift from petroleum-based vehicles to electric vehicles. Educational institutions are finally embracing the power of technology to provide high quality online learning at a fraction of the cost of conventional face-to-face classroom models with the potential to reach the tens of millions who lack access through the existing system.

The International Programming Board also examined the significant shifts in public policy in terms of advancing the global reset dialogue, the role of the youth's role in conceptualizing critical peace, women peace and security, and education for all. All these themes and critical discussions sought ways to accelerate, magnify and support the transition to a new paradigm of hope which shifts to focus to the need to invest and develop human security, and from social passivity to social activism to generate momentum for change within the framework of the global reset. At the heart of this paradigm is the seventeen goals of the Sustainable Development Goals. These and other initiatives form a significant part of the World Humanitarian Forum's evolving agenda of work to facilitate discussions to accelerate the process of global social transformation needed to both promote and deliver human security for all – while leaving no-one behind.

Among the catalytic actions discussed and under review by WHF are a global advocacy campaign for human security and peacebuilding, a global platform to reflect and amplify the voices of civil society in the multilateral system, especially the youth and women, in increasing creating an improved international global system.

The structure of membership and activities of the International Programming Board will have a specific focus and encompass:

- ▶ Conceptualizing critical and positive peace.
- ▶ Women, peace and security: critical discussions of gender dynamics in practice.
- ▶ Technical, Vocational Education and Training (TVET) for inclusive and equitable socio-economic development.
- ▶ Education for all – leaving no one behind.

In conclusion, the London e-summit 2021 edition has been characterized by progressive ideas that acknowledge social development and emerging global trends. From its inception the International Programming Board has been a transnational network of individuals bound together by a shared understanding, vision, and values. WHF's leaders understood that human networks were the greatest power they possessed to effectuate change in the world. WHF has grown in number, activities and reach through operating collaboratively with an extensive network of partner organizations. WHF today is conscious of the collective power of human aspiration and value to ultimately accomplish what no single individual or organization can do. The International Programming Board remains young, ambitious, hopeful – with the modesty and common sense to claim very little and the ambition to still aspire for a more human centered global world for all.

WHF would also like to express thanks to the programming board members, who are an integral part of driving our mission and upholding our core values:



Carlos Sentis
CEO, World Innovation Alliance



Charles Strickland
International Development Consultant/Advisor



Courtney Sunna
Manager, Global Community Investment & Philanthropy, AstraZeneca



Dr Daniel Rajmil Bonet
International Relations Professor, UOC University



Fatiha Serour
Co-founder, Justice Impact Lab



Session 1 - Futures thinking: Advancing the global reset dialogue

Introduction

The last couple of years can best be described as a moment of multi-dimensional crises, the pandemic has caused economic emergencies, unemployment, increased abuse, gender-based violence and further highlighted the reality of systemic racism. While we aim to build back better from COVID, there is a need to ask critical questions of today's international order and how institutions will emerge following the pandemic. Future thinking enables practitioners to think creatively about institutions, future challenges and how new technologies can be used to advance our goals of sustainability.



Moderator

Dr Jon-Hans Coetzer
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Development Programming
Board & Consultant,
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Krizna Gomez
Impact Strategist
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Anastasia Evgrafova
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Rohan Patankar
Senior Associate,
Quicksand

Key Points

Localising resilience. Recognising that these patterns exist, articulating them in ways that we start to register them, we are then able to notice where power resides to better improve institutions. Self-organising and promoting global action, particularly in the global south, providing resources and strengths to local organisations can empower beneficiaries to take charge of their narratives. Empowering beneficiaries can also provide role models to young people and other individuals facing hardships. Stories of resilience are powerful tools for enacting system change.

Democratising futures thinking. The pandemic highlighted the huge gap that we have including thinking about our strategies and how we conduct our day to day thinking. The work that we do in the humanitarian and social change field is often based on a three to five-year strategy. These short strategies are based on what we know of the present and some of what we know in the past. But these strategies will necessarily inhibit future events. Therefore, we need to rethink this and base action on future foresight challenging the lens and short term objectives. If we're going to have a global reset dialogue that's meaningful, we have to bring everyone on board, any foresight process is only as good as the level of inclusivity that it has. We're used to thinking and working in silos, we need to break those by building skills and using foresight in developing humanitarian strategies. This also requires positive thinking to highlight success stories to make foresight accessible.

Information exchange. Fora can enable the exchange of information, challenges and solutions. Futures thinking requires effective information exchange across sectors. This information exchange also requires staff to consider language and cultural differences, reports authored in one language then translated multiple times can cause inconsistencies and information loss. The School of Futures thinking designed a toolkit for staff to engage with different parts of the world, noting how language and tone are critical in gaining insights into future challenges. The final element is listening to the end-users; policies or new technologies are only going to be successful if they recognise people's lived experience.

Session 2 - SDG 1 and 2: Poverty, income inequality and food insecurity - a vicious cycle

Introduction

Ending poverty in SDG 1 and SDG 2 on zero hunger are linked to hunger as well as environmental factors. Food security and poverty have massive impacts on the levels of peace within member states, therefore bringing communities together to provide training for natural resources can be an entry point for social cohesion, bringing communities together can quell tensions caused by increasingly drastic climatic conditions. As we aim to stabilise countries, food security and poverty can act as a catalyst for cooperation through different channels at a local, national and international-level.



Moderator

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Co-founder, Justice
Impact Lab



Rebecca Richards
Chief, Strategy
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Dina Saleh
Regional Director, IFAD



Serge Stroobants
Europe and MENA region,
Institute for Economics
and Peace

Key Points

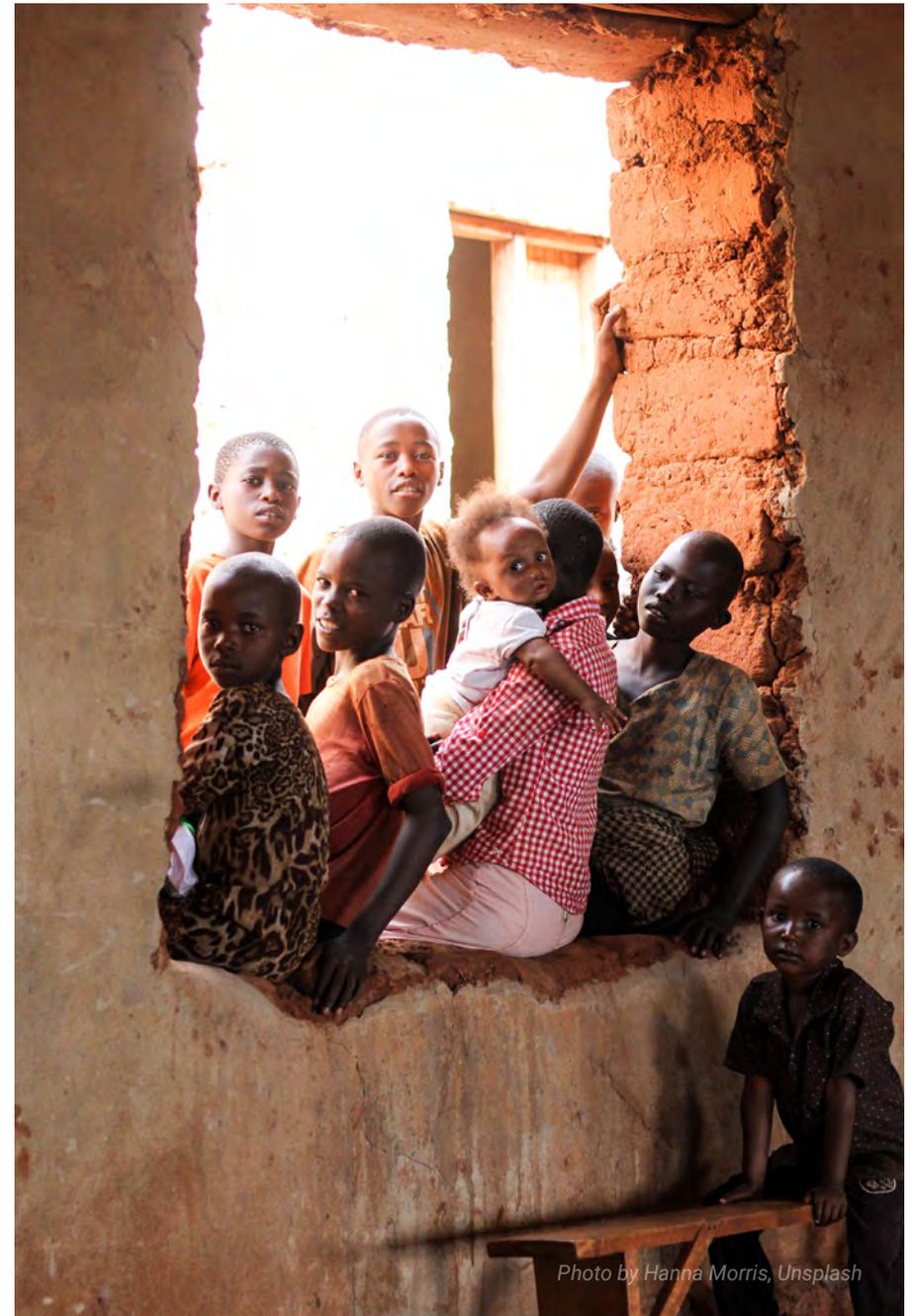
Positive peace, food security and poverty. More than 2 billion people globally face food insecurity, this is defined as the uncertainty in access to a sufficient quantity of food necessary for a healthy life. Food insecurity can be a direct result of violence, conflict or political instability, but it can also be a trigger to a stressor of social tensions. In 2019, most of the 41 active conflicts worldwide were active, with extreme poverty and severe food insecurity generating negative feedback loops, rendering conflict worse. The Institute for Economics and Peace's Ecological Theatre Register demonstrates that climate change poses serious challenges to global development and peacefulness. The adverse impacts will disproportionately affect the world's poorest and most vulnerable, create spillover pressures on neighbouring countries through mass movements, this requires substantial investment today.

Cycles of violence and insecurity. We're seeing that in many countries with ecological hotspots there is a vicious cycle in which there is competition for scarce resources. This creates conflict and in turn, the conflict over limited resources results in further resource depletion. The interplay between ecological effects and socio-economic dynamics may lead the country into a vicious cycle of progressively greater hardship, ecological threats, such as natural events or severe severe food or water insecurity. With a lack of stable institutions, these countries are at high risk of humanitarian crisis, bringing further difficulties in bringing peace in settings with limited resilience, peace and resources.

Empowering rural communities. Providing funds for rural groups can allow them to increase their food security, nutrition and increase their livelihoods. Being both a UN Agency and a specialised financial institution specialised in agricultural development, IFAD has a role to play in helping rural communities build their resilience, expand their businesses and take charge of their development. IFAD acts as an aggregator of resources to invest in the millions of people who are at risk of being left behind. Small scale food production supports the most vulnerable groups from remote areas. Nutrition, resilience and livelihoods are all extremely important, and the environment in which we are living in small scale agriculture and family farming is key to reducing the vulnerability of communities that are highly susceptible to shocks. By building strong local food systems, we are more likely to ensure food security in times of conflict and peace. IFAD saw that in the MENA region, small scale family farming provides more than 80% of some annual and perennial crops and livestock species, and nearly all family farmers hold 75 to 85% of agricultural land-holdings.

Localisation agenda. Sustaining livelihoods and improving food security requires a holistic approach that aligns actions for immediate humanitarian assistance, long term development and sustaining peace. Building on the principle that humanitarian relief development programmes and peacebuilding are not serial processes, but need to work concurrently, this requires an approach that better understands the need to reduce the impact of recurrent shocks and stresses that underpin sustainable development. The local context is therefore critical when assessing solutions, because if they are not adaptable to their local context, then they are not relevant and will likely fail. This is also linked to cooperation between different actors to empower local leaders and offer sustainable transformative responses.

One example provided was in the Butana region of Sudan in which a project was financed which empowered communities to self regulate access to natural resources and to manage them more sustainably. The Butana project contributed to establishing almost 400 Community Development committees, who all agreed on a common natural resource governance framework. This played a pivotal role in reducing local conflict of natural resources, with more than 52,000 people reporting safer access and user rights to land and water after project completion. The enhanced provision of water has consequently improved nutrition, particularly among women and children; this was made possible when a local traditional home garden was further developed for vegetables and fruits. This was then able to cut food insecurity by two-thirds amongst target communities, this empowered women provided nutritious food for the long term.



Session 3 - Transforming humanitarian aid through drone technology

Introduction

Young people face barriers in conflict settings that prevent them from reaching their potential as leaders and subverting their potential to improve their communities in future. In 2019 the Institute for Strategic Dialogue surveyed young people in 83 countries to understand their experiences in peacebuilding and to see how barriers and opportunities may differ depending on the person's context.

As a consequence of this, we should call for a more holistic capacity building that goes beyond training to address the initial barriers to opportunities. We can support more young peacebuilders in their journey, and continue expanding the role that youth can play in shaping secure and open societies we're all citizens of this world can thrive.



Moderator

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Nelson Olanipekum
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**Valeria Gomez
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**Henri Kabore
Sougourounoma**
Founder, Youth
Interfaith Network

Key Points

Promoting the rule of law. So building justice structures, conflict resolution structures are important and play key roles in peacebuilding, therefore, developing these mechanisms can help ensure there is a consistent structure in a democratic society. New technologies can pave the way to enhancing user-friendly justice with new solutions being developed to provide systems that can help mediate conflicts in a user-friendly manner. Another way is by providing legal interventions and enabling acts that can change the legal support for victims of police brutality and other abuses. In these situations, providing legal support and recourse for protestors and aiming to de-escalate situations can help individuals understand the importance of the rule of law and policing as a whole for a community.

Online dispute resolution platforms. One major area where you can use technology to promote peace is online dispute resolution, conflict resolution platforms. So this works in a way where we have online platforms in that we can bring two parties together to mediate conflicts. Many of these parties come to online dispute resolution platforms to resolve their differences, one of the lessons learned is that people are more comfortable joining an online conversation with government bodies, meaning that these platforms can help table the issue of a lack of communication, a fundamental area which is needed to build dialogue. Justice clubs have also been launched in an online manner to help deliver the legal process and deliver conflict resolution faster to help generate peaceful conversations. Justice clubs have been created in Lagos State, Nigeria which has a population of 20 million people.

Changing mindsets. Youth initiatives are oftentimes considered illegitimate or not as strong as traditional actors. This means changing the mindset that youth are others, and their work is separate from traditional actors. Gaining institutional backing can assist young people by bringing the belief that young people can indeed promote a message of peace and translate this to funding peacebuilding efforts. Regularly, youth are simply not involved in decision-making and taking action, however, if we integrate and amplify their voices, we can better inform future generations to provide them with experiences that can then impact their advocacy actions.

Session 4 - Youth leadership: promoting youth in international decision-making

Introduction

We see now an unprecedented rise of a generation of Gen Z changemakers, just as we see the rise of the decentralisation of changemaking right through digital technologies and social media. We need to change the narrative surrounding young people as they are continually being treated differently and with other eyes in international decision-making processes. We need to encourage young people who are already socially engaged to reach across the political aisle, geographic and also in terms of social-economic status. By exploring how we can integrate young people into international decision-making processes, we can enable action at a local, national and international-level as young people account for more than 50% of the global population meaning that they need to be recognised, harnessed and encouraged.



Moderator

Alistair Lobo
COO, Future Leaders
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Neeshad Shafi
Environmentalist
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Reese Wong
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**Virginia
Stuart-Taylor**
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UK Civil Service



Siddarth Satish
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Ariel Foundation
International

Key Points

Activism in difficult circumstances. In differing parts of the world, promoting youth voices can be more difficult as traditional institutions of government may aim to make decisions for youth rather than with. Therefore, adding youth voices to international decision-making through mechanisms such as the UNFCCC can enable a better understanding of demographics to educate and promote activity where there are difficult relationships with governments. In situations where activism is prohibited, creating a dialogue is often the first way to promote discussion with governmental bodies, aiming to provide a platform and to also give governments youth perspectives to allow them to look at young people as untapped potential instead of troublemakers.

Changing existing power structures. Youth Leadership has relied on structures and programmes that quite often require funding to empower and mobilise individuals. Many young people would find themselves in that situation where they care about a cause, but they do not know how to take action on it. Summits and international dialogues with youth components can enable young people to be empowered, enabling them to speak up, create meaningful networks of like-minded individuals to create and fund initiatives. Other initiatives such as the European Voluntary Services and International Citizen Service which allow young people to spend up to a year volunteering and working with people in a country can create important intercultural skills that assist in international decision-making situations. The leaders of each country are not typically representative of people in the country, and certainly not representative of youth, therefore, they can't understand the implications of decisions that they're taking, and the policies, they make the impact they're going to have on young people.

Education and training. It's important to take that first step in making sure that education is something that grounds people in the value of change-making rather than the value of just memorising things and reproducing them in the best way possible. Second, a mechanism through which we can do that is making sure that existing institutions can engage to support youth, while also making sure to respect them. Meaning that giving voice to youth is probably the most engaging thing that you can end up doing. Young people need to be told that they are being treated like adults, young people are primarily looking for an equal platform to express their ideas and solutions. Once you give that equal platform, it inherently gives you a moral high ground to work with. If all the 1 billion youth out there start rallying their voices against the injustices that are happening, leaders won't have any option but to listen to us, because young people outnumber them in most of these scenarios.



Session 5 - Women, peace and security: a discussion of gender dynamics in practice

Introduction

Conflicts, terrorism and extremism have had devastating consequences for women and girls. Women globally are leading peace movements that aim to rebuild their communities. Still, women are often sidelined in peace processes and negotiations. Today we need to improve the discussion focused on gender dynamics in practice, so we're aiming to have a discussion on gender dynamics in practice, to see where we can further improve women's participation in peace and security to look at different factors from gender-based violence, localisation, climate change and support for frontline responders.



Moderator

Salma Zulfiqar
Women's Rights Activist
and Founder, Artconnects



Ngozi Amu
Team Leader and Chief
of Research Analysis,
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Henia Dakkak
Head of Policy
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Key Points

COVID Impacts on women. The pandemic has caused a pushback on gender issues with sexual and reproductive health agenda pushed back. COVID-19 has affected women and their access to services and their access to social support systems. We know gender-based violence has been utilised over many, many years as a weapon of war, the battlefield became the body of a woman to utilise women as a way of terrorising communities. 70% of women who are working in the health sector are nurses and midwives, meaning that they have seen first-hand the impacts of COVID while also taking care of the home, having to help their kids to do schooling and other home tasks.

Training and education. By providing training and education, organisations like ECOWAS have been able to train numerous women to demonstrate that women have a key role to play at a local, national and international-level in peacebuilding. Through training and education, we're able to narrow the disconnect between local actors and governments to enable them to understand the state's responsibility to protect citizens. By improving understanding of regional peace and security protocols, we can create more engaged citizens to create community-led organisations.

Agriculture and security. According to FAO estimates, 60-80% of Africans rely on agriculture and livestock rearing with a further 60 to 80% of these being women who are a clear majority in the agricultural force. Similarly, 80% of women are water collectors with less than 15% of women in the region owning land. These all have impacts on the level of education which they can attain

which they can attain to improve their life circumstances. Therefore, when a pandemic of COVID's scale occurs and you cannot go to the market to sell your products, it seriously impacts the livelihoods, peace and security of women. In a region that has been inflicted by conflict, especially when we think about the Sahel region, Mali and the spillover to Burkina Faso, we need to recognise the 2 million internal displaced people, many of whom are suffering sexual violence. Due to the fact that women have limited decision-making capabilities, we need to make them a part of the solution to addressing these challenges.

Localisation and funding. The gender lens is critical when we speak about humanitarian response. The first responders to any crises are the community themselves and most likely women, therefore, empowering women in civil society is critical. By listening, consulting them and allowing them the opportunity to facilitate change, they will become more empowered. Currently, the humanitarian community is funded by donors, UN agencies, NGOs bilaterally to the country. By the time this funding trickles to the intended beneficiaries, only 0.2% of that is going out to women-led organisations. Following the World Humanitarian Summit in 2016, there was a push by the humanitarian community and donors to work on their grand bargain and one of the elements of the Grand Bargain is that there needs to be a financial threshold of 25% that goes to community-led organisations. The grand bargain focused on localisation, how local actors should be promoted to ensure that they are equal partners in the decision-making and design process of programmes.

Session 6 - Accessibility and inclusion through technology

Introduction

In the past two decades, the label attached to conflict evolved from conflict resolution to management into conflict transformation. What can today's conflict transformation approaches take from traditional conflict analysis, and conflict resolution techniques and approaches? When we look at the conflict transformation literature, it highlights the role of trade in fostering trust and enhancing conflict transformation, but in the context of contested statehood, trade and conflict transformation may be less straightforward than we might expect.



Moderator

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Moderator

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Ola Saleh
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**Professor Joseph
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Erin Kenny
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UNSG's Office



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Senior Lecturer
in International
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Key Points

Trade and other conflict resolution techniques. Other kinds of peacebuilding mechanisms can come into play instead of more traditional conflict analysis and conflict resolution techniques. Transformation requires tackling deep-rooted conflicts, this requires the building of so-called long-term infrastructure for peacebuilding, supported by reconciliation efforts and building the potential of societies. Conflict resolution, on the other hand, is a long term oriented approach, it also addresses root causes, but it is focused more on civil society and INGOs with more of an emphasis on dialogue and peace education. Conflict management tools are considered more short term in comparison, more driven by top-down actors. But in some cases such as Crimea where there is a de facto state contested between Russia and the EU, economic interactions can develop and thrive also in post-conflict conditions of mutual distrust. However, as long as such trade remains informal it will likely not contribute to building trust between conflicting parties.

Systems of oppression. To this end, we will be touching upon six challenges and six examples. The first challenge is the matrix of systems of oppression. From the patriarchy, occupation, colonial hangover, poverty, unpaid care work and deforestation. Then the remaining five challenges are related to aid and peacebuilding architecture. This is an area where we can do something about reviewing our practices and how these practices may unintentionally be empowering the leadership of women and men for that matter in their context. The first of five is women's rights organisations and women peacebuilders receive only 0.2% of aid budgets to fragile states. The second challenge is related to the questions we ask regarding systems of oppression and how we continue the system of oppression instead of transforming them. For example, we ask the women peacebuilders what do you need to be included in process X or Y? This type of question assumes that process X or Y is functional, and assumes that there's sufficient knowledge about those processes made available to women peacebuilders. The third challenge is connected to the second one, and it's about

how do we listen? And to what do we listen? So are we listening to the individual and collective intelligence of peacebuilders? Are international actors facilitators, enablers and mediators? Are we making our listening exercises inclusive in terms of access, language, and reach? And the fourth challenge is related to that relatively siloed work by the various international instruments and the inability to systemically address those intersecting insurmountable challenges faced by women in conflict contexts. The fifth challenge is related to the lack of an intersectional feminist review of the peacebuilding architecture which is highly overdue. It is not acceptable to look today at the offices of UN Special envoys and see the stark disparity.

By now we all know the numbers for women participation are embarrassingly low in peace, mediation and peacemaking despite all the talent pipelines, all the feminist foreign policy advisors. If we promote the feminist agenda in isolation of other issues, then this can undermine the objective of increasing women participation. Representation without equitable access to power entails a high risk of reproducing those existing systems of power.

Restorative justice. The aim of restorative justice intervention is instead of punishing the wrongdoer to restore social relationships. So not restoring the breaking of the law, but restoring confidence, social bonds and repairing victims. Research reveals that in fact, restorative justice is able to satisfy participants and communities and particularly the victim's needs by means of improving their well being and reducing the emotional distress produced by crime. It also facilitates the reintegration of offenders results revealing a lower recidivism rate compared to punishment. But there are some critical issues, for instance, the question that some scholars consider crime just as a legal category based on moral assumptions before they prefer to talk about conflicts. However society needs to manage in legal cases described as criminal is not always the conflict itself, but rather the demand for justice grounded in human needs of those who are affected. This is especially important when considering gender-based violence as this is underreported globally.

Session 7 - Sport diplomacy for development & peace

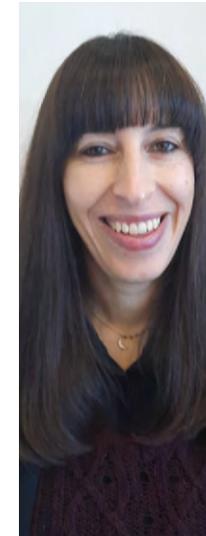
Introduction

How do we use sport to heal the fault lines that have been exacerbated or illuminated during the pandemic? How can sport be used to create hope, healing, peace, equality and inclusion? What does it take to work in this field? What are some of the challenges but also the benefits? Is sport the low-cost high impact tool needed to solve the SDGs? Our mission should aim to use sport to improve bilateral and multilateral relations to advance foreign policy and development priorities.



Moderator

Dr Ashleigh Huffman
Program Specialist,
Sports Diplomacy Division,
US Department of State



Tamara Awatani
Director, Palestine
Sport for Life



Amjad Saleem
Manager, Inclusion,
Protection & Engagement,
IFRC

Key Points

Sports for social development. Local sports for development can enable the use of sports as a means to tackle different social issues from health and gender equality to quality education, social inclusion and youth empowerment. As a local NGO, Palestine Sport for Life targets women and children in vulnerable communities across Palestine, where they design different programmes according to the community needs. They can reach over 3000 youth per year where they implement different models of programmes. For instance, one day events or community programmes that are open throughout the year in cooperation with the Ministry of Education, where they teach kids sports and life skills. Then there is an element of tackling different social issues including leadership and inclusion. By building the capacity of teachers and trainers, we can bring different communities together to try and build leadership

and focus on conflict resolution through sports.

Sports and localisation. The advantage of sports focused organisations is that many of them are part of their local communities, meaning they have trust and access to key decision-makers and volunteers within communities. Through this, they can engage and understand what the community needs and local contexts. This also enables the creation of safe spaces for young people to learn about solidarity, discipline, cooperation, respect and inclusion. We also need to move to how we can employ sport as a way to provide psychosocial support. For example, in refugee camps, often a football is just given out for kids to play with, however, if we attempt to bring in some level of programming, this can help young people during times of crisis.

Gender empowerment in sports. We should also include the gender component by offering an equal level of sports for girls, one example can be seen in Palestine Sports for Life's football programme in which they started with two girls, raising up to 100 workers that can come and provide safe spaces. However, a question that needs to be asked is regarding impact measurement, there is still a lack of clarity with regards to how to measure gender diversity, health, education and other policies with regards to tangible improvements on the ground. Through several international networks and support from commercial entities, sport is able to bring different international communities to Palestine and engage in a cultural dialogue.



Session 8 - TVET: Leaving no-one behind - an inclusive and equitable education

Introduction

How can we deliver practical, valuable education for all knowing that there's still a digital divide, knowing that technological disruption is changing the job market and that we are going to experience a massive transformation? Due to technological advances, there are going to be changes for up to 50% of the jobs in the world. With current estimates showing that over 260 million children do not have access to education, with 200 million people still unemployed and 800 million adults that are illiterate, we have more resources and capacity to look for specific solutions that can help us deliver education to those who need it.



Moderator

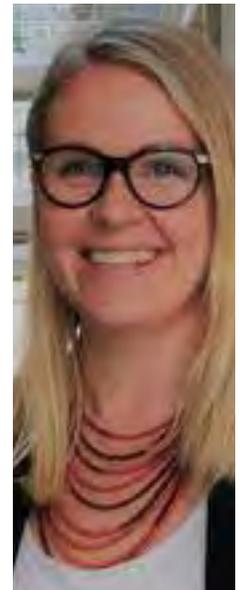
Carlos Sentis
CEO, World Impact Alliance



Mikkel Frich
Co-Founder and Executive
Director of Partnerships,
Teach Millions



Evariste Kambizi
Director, Division
for Peace, UNITAR



Annina Mattsson
Director, ReWired,
Dubai Cares

Key Points

Technology and education. Technologies can enable the basic provision of education everywhere for free, by reaching out to more than 40 countries, Teach Millions was able to bring educational solutions to provide basic learning. This platform also enables any level of education, irrespective of whether you're a young person or decision-maker. A user is able to enter the platform, search to describe the problem you're facing and the solution will come up with multiple answers that can either be complex solutions with tech or a single solution. Regularly, one tech solution is not going to solve all problems and is dependent on local contexts. However, on the whole, it is important that we must make education affordable, equitable and available for all. The end goal is ultimately education good enough for all children, not only to improve literacy skills but to collect data and understand long term impact.

Public-private partnerships for education. When considering how we can advance educational opportunities, public-private partnerships can act as a scaler by leveraging educational technologies and new digital platforms. This is a cross-sectoral issue that requires participation to collaborate and solve problems together. Dubai Cares has enabled these partnerships over the last few years as a grant-giving organisation supporting NGOs, UN Agencies, local organisations and private sector partners in around 69 countries at the time of writing. To address major issues around opportunities for education and learning and skills development, ensuring electricity provision, effective logistics and a direct link to markets requires private sector collaboration. In particular with new technologies, enhancing collaborations to improve transportation and urban planning can enable more effective education in the long run.

Training as an investment. Education of all individuals needs to be increasingly seen as an investment for the future. By empowering individuals in skills, knowledge transfer and opportunities, we can see incredible results. Previous examples of Kosovo demonstrate that further investment is needed in local infrastructure to enable local people to build their lives successfully after any given crisis. For example in East Timor the UN was in charge of administering many basic state functions from public utilities and water services to telecommunications, however, when the transfer of knowledge occurs to these local communities then they can serve themselves. Current estimates suggest in refugee camps that the education rate is less than 50%, meaning that we are currently leaving behind countless lives. Education itself in this context does not necessarily mean a degree, but the knowledge that one can gain to improve one's living conditions.

Session 9 - Education for all: empowering women and girls

Introduction

As we build back better, we must aim to prioritize education for all, but particularly for girls. Equity and Inclusion revolves around creating an opportunity for every child, placing emphasis on marginalised populations that are conflict and crisis-affected, particularly for children with disabilities, ethnolinguistic minorities and of course children coming from the poorest and rural households. Education must also provide support for young mothers as a community around a child that can support their growth is critical for their development.



Moderator

Catherine White
Gender Expert, UNITAR



Wongani Grace Taulo
Senior Education Adviser,
Gender Equity and
Inclusion, UNICEF



Rose Caldwell
CEO, Plan International



Rukmini Banerji
CEO, Pratham Education
Foundation

Key Points

Emergencies and education. The COVID pandemic has demonstrated a disproportionate impact on girls, showing already existing disparities and inequalities within the educational system. Some studies, including those from the Malala Fund, show that an additional 20 million secondary-school-aged girls might be out of school by the time the pandemic passes. UNICEF itself has also looked at these statistics, with tier estimates showing that an additional 10 million girls are at risk of child marriage due to COVID. Even though countries have tried to help girls to continue learning, with the closure of schools, disproportionate levels of girls have not been able to engage with distance learning due to the digital divide.

Building back better in education requires the recognition of gender barriers and interruptions to education. As girls and boys return to school, leaders have the opportunity to shape the environment in which they return, any recovery in education needs to be an inclusive, gender transformative approach. Applying a gender transformative approach is key to achieving gender equality in future as we must also remember we need to help boys with the knowledge and skills to develop their ability to lead and challenge harmful cultural and social norms, such as child marriage, and participate in movements that drive progress for gender equality. Gender transformative education, we mean education systems that are free from gender-based violence, that is inclusive for girls and boys with disability. This must also include comprehensive sexuality education and a curriculum that promotes gender and climate justice.

Continuing education for adolescent girls. There is also a priority to ensure that all adolescent girls complete at least 12 years of education. Unfortunately in most countries, adolescent girls face severe challenges in the transition from primary to secondary education. These face the most severe gaps within service provision, but also gaps within communities as it relates to cultural, social norms that keep girls from continuing their education. Evidence has shown that prolonged school closures result in a high risk of pregnancy amongst adolescent girls and child marriage. We still have many policies that bar girls from returning to school with UNICEF statistics demonstrating that around 15% of young people give birth before the age of 18. As a part of this, cross-sectoral collaborations can be promoted to highlight the importance for communities to support girls to return to school whilst addressing cultural norms.

Calls to Action

Call to Action 1 - Education and training for all

Training and education in development contexts can bring educational services to millions around the world, especially thanks to new developments in Ed-Tech. Technologies have to keep in mind the local context if they are to be successful, with a particular focus on being affordable to improve literacy skills and to understand long term impact, ensuring to leave no one behind.

Call to Action 2 - Women in peace processes

While COVID has impacted gender equality, there is still progress to be made in terms of eliminating sexual violence and critically including women in peace processes. For peace processes to be inclusive in the long term, women must be included to ensure restorative justice and further community inclusion.

Call to Action 3 - Localisation

The localisation agenda is increasingly important when we consider responses to emergencies and other natural events. Empowering local communities can enable greener supply chains that are not reliant on aid from abroad, and also economic empowerment of local communities by supporting and developing local skills in manufacturing and aid provision.

Call to Action 4 - Promoting young leaders

For international and national policies to reflect the desires of young people, they need to be further supported so that they can influence decision-making. Young people need to be provided with the skills, training and knowledge to impact government decision-making.



Thematic Theatre: Supply Chain Management

Chair Foreword

The Supply Chain management programming board at the WHF London 2021 witnessed very meaningful discussions and deliberations on the way forward for several of the most contemporary issues shaping the landscape of the aid & humanitarian sector supply chain management domain. This year's SCM programming board had a well represented mix of practitioners, academics and policy shapers – all of whom are thought leaders working at the forefront of the latest aid supply chain supply chain operations and innovation; resulting in a carefully curated program for the event that showcased the most current and forthcoming topics. These were grouped into 4 over arching themes namely:

The Impacts of Covid-19 on aid supply chains

This pandemic period has been an unprecedented period for the sector. Although the sector has been long used to running supply chains in very challenging contexts; the sheer scale of the disruption to traditional supply chains was a true test of the mettle of humanitarian supply chain expertise – needing to adapt to these disruptions, develop and implement creative solutions at scale; all whilst maintaining the highest standards of duty of care to the supply chain teams and continuing to impactfully serve the communities we work with.

The panel discussions within this theme focused firstly on the vital topic of scaling up and maintaining cold chains for the huge



Neil Rodrigues

Senior Director,
Global Supply Chain Operations,
International Rescue Committee (Co-Chair)

global Covid-19 vaccination program that is underway. Deliberations were significantly focused on the lessons being learnt from the early experience, the capabilities of the current system and actions that need to be taken to strengthen the areas with weaknesses. The task is enormous yet it is apparent that the system is stepping up creatively and innovatively to the vast challenge!

The next panel discussion within this theme focused on last mile logistics within unpredictable post-disaster conditions with a special emphasis on exploring what this has meant for such operations during the ongoing pandemic. Themes discussed included the importance of coordination between actors and preparedness which hearteningly are both improving steadily. With panel representation from both first phase emergency responders and longer term actors; there were interesting contrasts that were apparent between these two aid contexts as regards implications on efficient last mile logistics. However what remains common is the sheer will, collaborative spirit & ingenuity of aid actors to continue lifesaving aid delivery even in the face of the hardest supply chain challenges!

The event witnessed a superlative fireside chat on the first evening that re-emphasized the importance of pooling of resources and highlighted the success of the NGO led airbridge which managed 42 flights for 120 organisations during the pandemic.

The latest developments and thinking about Localization

Localization has been a bit of a buzzword in the sector in recent years; however there has definitely been a lot of thought leadership, piloted new approaches and significant lessons learned about what works and what needs further refinement during this period. The pandemic has in fact had a bit of a silver lining as it has exposed the vulnerability of international supply chains to shocks and disruptions and thus has created a fresh impetus to explore and invest in localized solutions; initially as a pure necessity but increasingly as a measure of building back to a better new normal.

Themes discussed within this block included analyzing the latest developments, trends, challenges and solutions to implementation. The economic and social impacts to local communities, the opportunity to build more sustainable supply chains and the importance of holistic & inclusive sourcing approaches.

Green supply chains & sustainability within the aid context

Day 2 began with invigorating sessions exploring the growing advances in thinking, policy making and practice integration on the closely linked topics of green supply chains, sustainability and innovations. The panel also examined the impacts of the pandemic in driving the realization that more resilient & sustainable aid supply chains are the way forward. Within the innovation panel discussion themes discussed included the impacts of Covid-19 on innovation and new product

development. There was consensus on the importance of localized solutions to enable sustainable supply chains, with some excellent case studies being examined during the discussion.

Transparency in aid supply chains delivering in fragile contexts

The final session of the Supply Chain management program at WHF London 2021 unpacked the multifaceted and thorny topic of transparency in aid supply chains. The United Nations Guiding Principles on Business and Human Rights states that business enterprises should exercise human rights due diligence, including assessing actual and potential human rights impacts within their supply chains. As a moral imperative it is essential that the aid sector leads the way; within the limitations of available resources that need to be focused on direct beneficiary aid impact, yet leading by example in tackling this responsibility with creative and efficient solutions.

Themes discussed within this topic included the ramifications of the requirements and processes governing the implementation of transparency, accountability, human rights, prevention of child labour & modern slavery; verifications and best practices. The panel opined that there are still significant gaps in implementation of policies surrounding transparency; with the resource and available start of the art technology challenges hindering the ability to monitor beyond the first tier of most aid supply chains. There was a critical discussion about regulation and how it is progressing, going into the practitioner perspective, challenges and successes of implementation of policies at the ground level at the last miles of aid supply chain delivery.

The session closed with a call for action to go beyond compliance and legislative frameworks & timelines to all aid actors to ensure that more is done in tackling these critical imperatives.

WHF would also like to express thanks to the programming board members, who are an integral part of driving our mission and upholding our core values:



Susan Hodgson
Head of Humanitarian Supply Chain, Save the Children International (Co-Chair)



Cecile Terraz
MBA, PMP, Global Director of Supply Chain & Procurement, Plan International



Christian Gronnerod
Head Of Supply Chain Management, Danish Refugee Council



Dr. Diego Vega
Deputy Director, HUMLOG Institute at Hanken School of Economics



James McWaters
Senior Supply Chain Advisor: Cold Chain Supply Systems: 19 East Africa, World Food Programme



Marie Houel
Global Head of Procurement and Supply, Solidarités International



Rose Van Steijn
Development Director, Fleet Forum



unicef

WEGHT: KG
CUBE: 0,182 CBM



Uzbekistan

UNICEF



Session 1 - Maintaining cold chain storage for vaccines

Introduction

Strengthening the supply chains around COVID vaccines is critical as we aim to move out of the pandemic. Previous knowledge gained within polio eradication can help with this, including the combination of commercial insights from the vaccine industry. Previous immunization campaigns have assisted with providing learning lessons on the challenges faced in supply chains, especially with the key objectives of bringing down child mortality. When we speak about immunisation this naturally includes cold chain systems that are required to keep vaccines at a certain temperature.



Moderator

Elson Sutanto
Principal Analyst;
Juniper Research



Thomas Sorensen
Senior Contracts Manager,
UNICEF



Hans-Peter Teufers
Director, International
Programmes,
UPS Foundation

Key Points

Cold chain optimization. When introducing new vaccines, to maintain critical health objectives, also means not reducing the amount of investment as substantial funds can be wasted if staff are not correctly trained. Cold chain storage also requires different capabilities with some of the COVID vaccines requiring different levels of temperature that can be more expensive to implement, especially with lacking infrastructure. One example of cold chains can be seen with the UPS Foundation's project with Gavi and the Ministry of Health of Ghana started in 2018. With this project, there was an objective of building the supply chain in the easiest manner by adding standard delivery methods and subsequently adding freezing capabilities. By adding smaller freezing capabilities with specific responsibilities placed on smaller entities that were responsible for the vaccination progress, there were massive improvements in refrigeration, up to a 94% improvement according to impact reports.

Infrastructure development. The effective provision of vaccines also requires effective transportation methodologies and innovations. While every country has differences, many will have a main hub with smaller distribution chains to the endpoint, however, there is a current lack of scenario planning to see where the real pressures on supply chains are. This can not only help users understand how the vaccines initially arrive in the country, but also the IT infrastructure necessary to communicate with warehouse management systems to understand where there are shortages.

The last-mile. The last-mile is often associated with the most vulnerable and hard to reach populations. UNICEF has an overall target to reach these populations as a way to improve health indicators on the whole. Presently, over 100,000 fridges and switches have been delivered to help improve health facilities. Further to this, outreach to these communities is an important part of the strategy as with cold chain systems it is vital that we avoid overcooling or heating vaccines. Ultracold chains that are very close to the last-mile are extremely difficult to manage logistically due to the thermal stability of vaccines, meaning that effective training of cold chains is even more important, with circumstances in which cold chain storage technologies have been unplugged to charge mobile devices.

Session 2 - last-mile logistics: operating in unpredictable post-disaster conditions

Introduction

The question of last-mile logistics, especially in emergencies post natural events is a challenge for humanitarian organisations. Often, rural communities are amongst the poorest and most vulnerable, therefore, the question of how to bring supplies, investment and expertise in the last-mile is critical in our aim to leave no one behind. From lack of supply to emergency coordination, local and regional actors need to be further supported to bring assistance to those most in need.



Moderator

Steve Smith
President and CEO,
Airlink



Paul Taylor
Operations Response
Manager, Re:Act Disaster
Response



Sophie Meyer
Project Manager,
Atlas Logistics,
Handicap International

Key Points

Developing local knowledge. For actions in this realm to be successful, it requires an expert pool of knowledge in the field, this also requires effective coordination and communication with local actors to understand the logistical environment in which they have to operate, from impacts on infrastructure to the vulnerability of people according to local economies and manufacturing. With this in mind, it's vital to understand what local needs and capabilities are as aid delivered should also aim to comply with the principle of doing no harm, in which aid must not cause additional harm to local communities. Oftentimes, it's very difficult to gain a central view of what the needs are and by when items need to be distributed, actors are oftentimes operating in an environment with a lack of preparation and technical systems to support mass disasters.

Analysing operational environments. New disasters can overwrite local knowledge, meaning that operating in new disasters requires capacity building aspects through collaboration with local entities including civil society, local government and the private sector. Private sector collaborations, in particular, are invaluable in terms of their availability and expertise in transportation, logistics, needs, capacities and infrastructure. Another aspect regarding this is the availability of telecommunications, aiming to have stable internet connections are critical when determining how actors outside the country can assist. Measuring the logistical vulnerabilities of people in the region according to market resilience, infrastructure and also disaster exposure can enable more effective action thanks to improved local knowledge.

Working collaboratively. It is incumbent upon the international humanitarian community not to work in silos. By collaborating across sectors, emergency responses in the last-mile are only going to be more effective. A good example can be seen in the response to Hurricane Dorian in which responses were managed from an Emergency Operations Centre with representation from differing response teams. This enabled the creation of plans and liaison amongst different organisations by speaking to people on the ground who are delivering the logistics, to also have representation at emergency headquarters so that teams can be kept up to date on most recent developments, therefore improving situational awareness.

Session 3 - Analysing localisation: trends, challenges and solutions to implementation

Introduction

Following the 2016 World Humanitarian Summit in Istanbul, there has been an increasing call to ensure that localisation remains on the agenda for humanitarian action. From local procurement in emergencies and cities around the world, it is clear that the future of aid is local, from buying items locally to better interact with local populations, to increasing local knowledge to better improve responses. Localisation can act as a powerful multiplier by empowering local actors to take charge.



Moderator

Dr Diego Vega
Deputy Director,
HUMLOG Institute



Claire Travers
Humanitarian Logistics
Association



Pierre Hauselmann
Executive Director, HQAI



Dominic Ford
Logistics Coordinator,
Distribute Aid

Key Points

Shifting supply chains. We've seen in the last 18 months a real shift in the ways that we're thinking about the sourcing of supply chains, as well as the procurement of the supply chain. One trend that can be seen is the reduction of plastics in packaging, even more important as we get to COP 26. By producing locally, not only will you be reducing costs in terms of removing air miles and avoiding the chances of broken equipment, but you also drastically reduce the need to import things internationally which is more environmentally friendly. Funding remains a limiting factor with most of the donations for the Humanitarian Logistics Association coming from abroad or through the support of transportation.

Enabling accountability and social schemes. Localisation can also enable the provision of social schemes such as fair trade and worker rights, it can also enable more accountability in supply chains by focusing on local organisations. Distribute Aid works with 60 different organisations internationally with 35% of them being local organisations. It is important to realise that these processes create trust between organisations and donors, through this due diligence can demonstrate the validity and importance of local actors post-disaster.

Challenges. Learning partnerships created to work with partnerships and to create solutions can aim to address specific problems that vendors are having. These challenges generally fall into three areas, financial assurance, so that local vendors and manufacturers do not have access to the pre-financing that they would need to produce items, this also includes high thresholds for financial health of organisations and safeguarding of workers. The final element is to do with transits with vendors noting that they would have been able to provide at a national-level, but they were being asked to provide goods in tract and have them transported to regional hubs instead. Therefore, national-level response plans should aim to integrate local vendors and work in tandem with them.

Session 4 - Pooled supply chains

Introduction

Pooling resources is sharing existing resources as goods or means of transportation to optimise those resources. There are 3 levels of pooling resources identified in a 2019 publication from the Réseau Logistique Humanitaire (RLH), standardization of processes and tools, cost reduction through economies of scale and strategic alliances with institutional structures. Pooling resources shows that, on the contrary, cooperation is a factor of efficiency and is a win-win for each actor by consolidating purchases to obtain a lower price and by pooling expertise to enable larger access to services.



Moderator

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Global Director
of Supply Chain
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Maxence Giraud
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Patrice Lenormand
Head of C4 Unit, European
Civil Protection &
Humanitarian Aid Operations,
European Commission

Key Points

Pooling multiple resources. Logistical information systems which focus on three areas: product catalogue, purchasing and supply and warehousing developed specifically for humanitarian organisations enabled the sharing of common processes, enabling a common pool of trained human resources.

By sharing product catalogues, actors can have common calls for tenders, resulting in the sharing of costs for new developments and support. These externalised solutions for common transportation, storage platforms and services enable the efficacy of supply chains by reducing costs and ensuring service continuity.

Strategic advantages of pooling resources. Logistics were previously not necessarily considered to be strategic with regards to investment. However, pooled supply chains have demonstrated that for every \$1 invested, \$7 was saved. This can help reduce the humanitarian funding gap by not focusing on the financial aspects but by looking at already existing mechanisms and how to make them more efficient. Pooling resources can also mean sharing offices and taking older existing resources together by sharing knowledge. Competition in this area is a factor of efficiency, allowing a certain level of competition between organisations for funding and human resources, but by finding clear areas of collaboration, organisations are better able to achieve core objectives.

COVID Impacts. At the start of the pandemic, organisations aimed to collaborate with international organisations to respond, however, the scale of the pandemic resulted in everything stopping. With the use of cluster systems previously created a decade ago, a Global Humanitarian Response plan was created, this enabled collaboration to move cargo including masks to protect frontline workers in the field. By aggregating demand with NGOs, they were able to collaborate with the French Red Cross to manage 42 flights, moving 1300 people and 800 tonnes of cargo.

Session 5 - Promoting green supply chain management: adopting sustainable policies

Introduction

As we move to COP 26, we must recognise that with greater frequency and severity of climate hazards, more disruptions can occur in global supply chains, interrupting production, increasing costs and hurting humanitarian supply. Supply chains are therefore key in our aim to achieve sustainable development goals. As climate change makes weather more extreme and frequent, questions on how we should entirely change supply chains are at the forefront of international discussions.



Moderator

Dr Diego Vega
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Mathieu Grenade
Euro-Asia Supply Chain
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Sara Lonegard
Founder and Director,
Distribute Aid



Jens Burchardt
Partner and Associate
Director, Climate Impact,
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Key Points

Decarbonising supply chains. Making supply chains more climate-friendly is a challenge for all sectors, from the production of goods and collection of raw materials to entire logistical chains that result in products being made with components from thousands of different geographical locations. In a report from Boston Consulting Group, they looked at the eight largest supply chains, from food production, construction, automotive goods and note that if taken together, these are responsible for more than half of global emissions. From the end consumer's perspective, many products are produced in a net-zero manner which may cost 1 to 2% higher. Economics is not necessarily what makes this a challenging subject, the difficulty arises in finding companies that have an advantage in market carbon neutral products and to upstream their production.

Innovating and collaboration. Environmental consideration and sustainability are not new issues discussed in humanitarian supply chains, tracking back to 2010 there were several initiatives that got the attention of policymakers. Environmental policy so far has aimed to identify main emitters or contributors to climate change, namely fleet travel, procurement and supply chains. However, humanitarian organizations of course have a responsibility towards climate too to ensure that no harm is done in aid delivery. This first requires collaboration and innovation to search for sustainable solutions. Redesigning products is also necessary, by leveraging relationships with producers, suppliers and governments to align and develop new standards in terms of sustainability.

Switching from fossil fuels. Carbon offsetting today in the field of transportation usually takes place in the following manner, by switching from a diesel truck to a battery pack or railways for long-range transport. This can significantly reduce emissions, however, it is not readily available today. While global trade has brought tremendous benefits, during the pandemic it has demonstrated the weakness of supply chains to global changes in demand and supply, practices that are not healthy from a sustainability perspective. This also requires us to change practices by looking at the entire lifecycle of products.

Session 6 - Challenges to the implementation of new product innovations

Introduction

Innovation in the humanitarian sector can be seen as an interactive process that identifies, adjusts and diffuses ideas for improving humanitarian action, according to a HIF-ALNAP report of 2016. While innovation has always been central to humanitarian action, the implementation of new product innovations faces challenges in terms of adoption and adaptation for differing local contexts. Challenges to new product innovations can slow down the process of innovating, from local manufacturing capabilities for localisation to a lack of skills and experience, innovations can enable a fundamental rethink of how humanitarian aid is delivered.



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Manager, Middle East
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Safia Verjee
Innovations Manager,
Kenyan Red Cross



Andrew Lamb
Innovation Lead,
Field Ready

Key Points

Building expertise locally. As we aim to advance the localisation agenda, producing new products locally is key to enabling local populations to build skills, expertise and resilience. Presently, local manufacturing capabilities are a challenge as many do not have the skills or experience in the field, including manufacturing engineers on their teams. As such, they rely on technical experts from around the world in different sectors to make sure that the products they distribute meet relevant standards. Therefore, many innovations occur in collaboration with the private sector, however, this itself brings its challenges in terms of fairness, transparency in supply chains and ensuring all actors meet all policies and requirements for certification that aid agencies need to have. By creating manufacturing locally, we can encourage faster and cheaper manufacturing that can support more people, more effectively, all while making sure the aid sector is not competing with local markets as in some instances the import of food has affected local agricultural markets.

Advantages of local manufacturing. In emergencies, manufacturing can enable the quick distribution of new products. To address this, the Kenyan Red Cross has a local manufacturing fabrication lab that enables the building of prototypes or different parts that can be created and deployed immediately, the idea being that while creating initial prototypes, then they're able to source the volumes or quality needed through normal supply chain procurement processes. Local producers and suppliers also have tremendous potential by having a short lead time for producing and sourcing products, by adapting to local context and demands to understand the customer and government requirements. By empowering local manufacturers, organisations are also supporting local communities by creating jobs for locals, therefore assisting with the economic recovery of a specific country. This all goes to creating local supply chains that are less vulnerable to global crises.

High tech innovations. Despite the benefits of local manufacturing, some products require a much higher cost and technical expertise to produce. For example, solar pharmacy projects that can be placed in any location without any maintenance for 25 years, this requires specific expensive technical expertise which local markets cannot produce at the moment. On the other hand, some other projects can decrease in cost in future to try and produce locally. Similarly, the raw materials required to produce these items can also be difficult to source at a local level due to difficulties in transportation caused by the pandemic, this is especially the case with electronic components that have seen a massive increase in cost over the course of the pandemic.



Session 7 - Transparent supply chains: ensuring accountability and human rights

Introduction

Protecting human rights in supply chains is critical in our objective to eradicate modern slavery in supply chains. Creating and facilitating multi-stakeholder initiatives can enable the provision of better data and supply chain transparency, yet despite this, the visibility of supply chains is an issue across all supply chains, commercial and humanitarian. Therefore as a practitioner, it can be difficult to know who your suppliers are, let alone their ethics and business practices.



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Key Points

UN guiding principles on business and human rights.

These are a set of principles for member states, governments and companies to prevent, address and remedy human rights abuses that can be committed by business operations as a result of business operations; these were unanimously adopted by the UN Human Rights Council 10 years ago. These principles introduced the important idea of independent responsibility for business to respect human rights, including through their supply chains. This is vitally important as according to UN estimates, 90% of the 169 targets that are a part of the SDGs are related to international human rights and labour standards. Therefore, human rights due diligence helps create an understanding of suppliers' identities and where they can identify the risks of adverse human rights impacts. This is especially important for companies to be able to gain full visibility on their supply chains to understand if human rights abuses are occurring in material extraction in conflict regions for instance, that are used to manufacture key electronic components.

Due diligence. In some commercial sectors, there are membership groups that share audit findings and have the same standards for due diligence, this is currently missing in the humanitarian sector. Presently most humanitarian organisations are doing their due diligence, rendering full transparency in supply chains difficult. Currently, the challenge to this is the capacity required to do large scale due diligence, due to the large variety of issues that need addressing from child safeguarding, preventing modern slavery, human trafficking, anti-bribery and sanctions, it is very difficult for organisations to approach every procurement with this lense. Staff training is one area that can assist with this, Save the Children for example has more than 80,000 suppliers who

need to comply with human rights requirements, meaning that staff need to be trained to spot red flags and take advantage of whistle-blowing procedures to outline abuses.

Modern slavery. Presently, commercial organisations are a step ahead in terms of responding to modern slavery because they have been more in the public spotlight from governmental organisations through legislation, for example, the Modern Slavery Act in the UK. Responding to these abuses requires differing collaborations and new technologies, for example, remote sensing is helping organisations to locate where illegal strawberry production is occurring, where informal settlements are located. Artificial intelligence is being used to understand where new informal settlements are emerging, an example of this can be seen with Cobalt mining in Congo, this enables actors to directly focus on specific areas where the risk of modern slavery is high. Blockchain technologies can also assist with this transparency, however, we need to be sure that the information inputted is not false as this can feed false information to all stakeholders, therefore, requires collaboration with local actors to verify information.

Calls to Action

Call to Action 1 - Promoting green supply chains

Supply chains are one of the largest sectors which produce CO2. Therefore, finding new ways to make supply chains more sustainable is critical as we aim to achieve the SDGs. This requires greening of supply chains not only in the private sector but of course in humanitarian supply chains also.

Call to Action 2 - Transparency in supply chains

Humanitarian aid in principle must aim to do no harm. Therefore, as we supply aid to respond to natural events, conflict and other disasters, we must be conscious of the methods in which these have been produced to avoid supporting corruption, human slavery and other human rights abuses.

Call to Action 3 - Localisation and product innovations

Producing new products and services is key to enabling communities to build skills and expertise in manufacturing. By creating products locally, we can better encourage local markets to support humanitarian efforts, bringing jobs to communities affected by crises.

Call to Action 4 - Leaving no one behind in the last-mile

last-mile logistics constantly poses challenges, as populations living in the last-mile are often the most vulnerable. For these operations to be successful, developing local knowledge is critical along with promoting collaborations with the private sector, civil society and local governments.

Thematic Theatre: Medical & Health

Chair Foreword

Executive Summary

The task facing the World Humanitarian Forum (WHF) Medical and Health (M&H) Programming Board was as singular as it was daunting. The range of challenges to promoting global health security is vast, complex, and dynamic. The goal of the Medical and Health Programming Board was to encapsulate this intricacy and align myriad resources to share, inform, and suggest over two days of interactive conversations.

The significant traits of the Board members were expertise, diversity, and passion. Drawn from academia, industry, government, intergovernmental, and non-governmental organizations, the members of the Programming Board represented acumen in mental health, pharmaceuticals, healthcare delivery, gender inequities, policy, disaster preparedness and response, and myriad other domains that contribute to humanitarian health. Each brought to the group an intense focus on specific topic areas – the passion that animates dedication to improving lives on a global scale starting with the most disadvantaged among us.

The process began with addressing administrative matters. What would be the overall theme, how much time would be allocated and in what increments, and under what format would the exchanges occur?



Prof. Donald Donahue
Professor of Healthcare
Administration and Global Health,
University of Maryland Baltimore (Chair)

The guiding theme was provided by WHF, derived from the World Economic Forum's "Building Back Better", a concept first officially described in the United Nations Sendai Framework for Disaster Risk Reduction at the Third UN World Conference on Disaster Risk Reduction, 14 - 18 March 2015 in Sendai, Japan. The concept of building back better was seen as particularly timely and relevant, given the significant global disruptions caused by the SARS-CoV-2 pandemic. Restrictions related to COVID-19 impacted the processes of the Medical and Health Programming Board (precluding in person meetings), influenced the developing programme agenda, and impacted activities of organizations involved in humanitarian health. There was ready agreement that ongoing activities would necessarily have to be more efficient, produce greater effectiveness, and invoke innovative approaches. Within these parameters and governed by the planned timing of the event, the board reached consensus that the M&H thematic theatre would consist of eight sets of panel presentations, one roundtable discussion, and two fireside chats' distribute across the two days of the Forum convening.

Board participants offered suggestions as to probable topics based on subject area knowledge, individual and organizational focus, and evaluation of need across the humanitarian space. Care was given to address significant contemporary considerations, most explicitly the ongoing COVID-19 pandemic, as well as the multiplicity of health issues facing the residents of low- and middle-income countries (LMICs). There was, therefore, no paucity of suggestions.

As the discussions progressed, several guiding principles emerged organically. One addressed topic inclusiveness and diversity; the eventual programme should examine multiple issues in different locales and not be dominated by any particular topic. Here again, I refer to the passion brought to the process by Board members. Every person is a strong advocate for his or her life's work, organizational mission, and humanitarian initiatives. The charge to the Programming Board was to develop a programme representative of the myriad and complex issues in humanitarian health.

Given the expertise and experience of the Board members, identification of eminent subject matter experts (SMEs) came relatively easily. The Board felt, however, that the agenda should not be dominated by SMEs. There is tremendous value in the perspectives of practitioners working in the field and, perhaps even more importantly, that of the recipients and beneficiaries of humanitarian medical and health services. The Board also strived to ensure equitable regional representation, highlighting voices from the "global south", the Asian subcontinent, Sub-Saharan Africa, the Middle East and North Africa (MENA), as well as those from G-20 nations and United Nation entities.

The evolution of the final agenda was driven by the aforementioned considerations, but also by the substantial issue of identifying qualified participants conversant in the selected topics and with access to the technological infrastructure necessary to support participation in a virtual event. To facilitate this process, we created a table to serve as a "storyboard" for projecting topics and speaker progression. Because the convening would be on 19 and 20 May, the panel time slots were designated by date and sequentially, i.e. 19.1, 19.2, 20.1, 20.2, and so on.

Once this framework was created, it became possible to project the topics in logical sequence, whereby each session contributed to and led into successive panels. We desired this progress to begin with the most immediate and seemingly omnipresent matter – the COVID-19 pandemic – but to quickly give way to examining the remarkable global efforts countering this WHO-declared public health emergency of international concern, to other concerns perhaps overshadowed by COVID-19, and to the core focus of the Forum: Building Back Better.

WHF would also like to express thanks to the programming board members, who are an integral part of driving our mission and upholding our core values:



Dr. Attila Hertelendy
Professor in the
International Executive
Master's in Emergency
and Disaster Management,
Georgetown University



Catherine Kirk
Executive Director,
Sexual & Reproductive
Health & Rights,
Pathfinder International



Dr Elena Cherepanov
Psychologist, School
of Psychology and
Counseling, Cambridge
College



Helen Seibel
Global Head of Community
Investment and Philanthropy,
AstraZeneca

Session 1 - The Pandemic's Impact

Introduction

With over 3 million deaths and more than 10 million people who have been infected during the pandemic, we have seen massive impacts on the world's economy, equal rights and general preparedness. Now over a year into the pandemic, we are still dealing with new variants which exacerbate the adverse effects that we are already facing internationally.



Moderator

Professor Paul Barach
Clinical Professor,
Muhimbili University
of Health and Applied
Sciences



Cristina Parsons Perez
Capacity Development
Director, NCD Alliance



Vanessa Peberdy
Associate Director, Global
Health Policy, IFPMA

Key Points

Impacts on non-communicable diseases. Non-communicable diseases are clustering according to patterns that have deeply embedded social and economic inequalities. The systemic nature of an acute pandemic with a more chronic pandemic of non-communicable diseases means that we need a nuanced approach to protect the health of our communities. To illustrate this point we have seen a collision of pandemics around chronic illnesses with issues such as heart disease, hypertension, high blood pressure, diabetes, cancer, dementia, and others. People living with non-communicable diseases have been at the epicentre of the pandemic, with the majority of the deaths from COVID occurring in people with underlying health conditions. The pandemic has shown us a wake-up call for governments to realise that investing in the health of their populations can reduce severe disruptions to essential health services. Out of crises come opportunities to recognise that the level of investment in these diseases is not enough considering that they represent over 70% of global mortality, and yet, they get less than 2% of overall global health funding.

Preparedness investment. The first point for response would be about seeing health investments as a positive economic benefit, not a cost. Investments in health are primarily an investment in the quality of life of citizens that can add to an economy. Investments in prevention and access are also similar in this regard. For every dollar that is invested in non-communicable diseases in low and middle-income countries, there is going to be a return of at least \$7 in increased employment, productivity and longer life according to the NCD alliance.

We need to be moving past operational silos in the way that our health systems are structured. By looking at universal health coverage and primary health care, we can see improvements in communities by integrating services to counter HIV, tuberculosis and other diseases to make sure our health systems are resilient going forward.

Session 2 - Vaccines

Introduction

A lot of these questions arise in the area of vaccines for COVID. Should we be happy when there is, say, higher access in one state than in another, but there are greater disparities between member states. Challenges we face concern issues of diversity and equity as well as distribution. Vaccines have enabled massive improvements in public health as seen with the eradication of smallpox. As we move out of the pandemic, we have to ensure that vaccinations remain an important part of public health, bringing development and economic growth to populations globally.



Moderator

Tonya Villafana
Vice President,
AstraZeneca



Nir Eyal
Professor of Bioethics
and Director of the Center
for Population-Level
Bioethics, Rutgers
University



Thomas Tinghe
Global Franchise Head,
Direct Relief

Key Points

Leveraging new technologies for vaccines. In the last year, we have seen increasingly new methods to develop vaccines, from therapeutic vaccines and the use of reverse vaccinology to the development of mRNA vaccines which resulted in the successful development of the COVID-19 vaccine. As developing vaccines is a complex process full of challenges, we also need to consider low and middle-income settings, when moving into vaccine development, AstraZeneca developed 130 vaccine candidates with 15 across the world that have achieved licensure, and even fewer of those are being used in low-income settings. Thanks to new technologies, the timeframe of vaccine development has been compressed substantially while ensuring safety and efficacy for patients.

Safe vaccine delivery. Delivery of vaccines is critical as if we cannot deliver vaccines to the people that need them, then we aren't going to have a successful programme, this includes maintaining stability, ease of use and increasing the quantity of vaccines into existing cold chain delivery systems. To achieve equity, we need to scale production and manufacturing capacity so that it is supplied across diverse regions and continents, ensuring that there is diversity for clinical development and vaccine testing programmes. This helps users understand the benefits of vaccines and increases confidence as we move towards the execution and delivery of programmes. Gaining community engagement at a grassroots level is key to gaining support for people participating in vaccine studies.

Technology transfer. There is a need to create other channels for technology transfer, not just intellectual property rights issues, but also so that we have vaccines for everyone globally. This is important as new variants of the virus such as the South African and Delta variants can evade our vaccines. From a moral standpoint, we must enable these technologies to be transferred as we want to avoid catastrophes that are occurring in India and Brazil for example. We also need to think about how to test future vaccine candidates, how to test the boosters that will be developed to strengthen the vaccines that we already have for fighting variants that are already starting to invade the vaccines, for example, difficult ethical questions remain in terms of how to test human populations in a country severely affected by the pandemic such as South Africa.

Session 3 - Mental Health and Psychosocial Support: Global Challenges and Ways Forward

Introduction

The COVID-19 pandemic has taught us substantially about mental health and psychosocial support. First, the cross-cutting nature of mental health and psychosocial support is relevant to all sectors, all across clusters in humanitarian systems as well as the need for multi-sectoral collaboration. This was emphasised by all heads of many United Nations agencies in the Joint Interagency call for action, that was released in December last year and reflected the vision among all EU and UN agencies. When we talk about public health, emergency mental health and psychosocial support are relevant to all public health emergency pillars, from partners coordination to risk communication and community engagement, to case management to a continuation of essential health and social care services.



Moderator

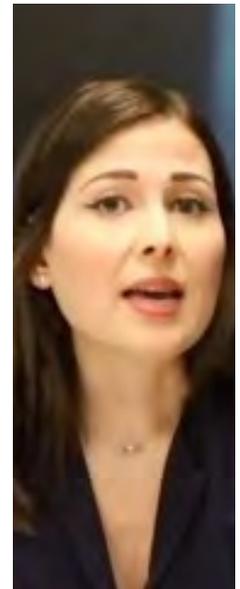
Professor Mike Wessells
Professor of Clinical
Population and Family
Health, Columbia
University



Dr Fahmy Hanna
Technical Officer, WHO;



Dr Ananda Galappatti
Co-Founder, Mental Health
& Psychosocial Support
Network



Dr Zeinab Hijazi
Mental Health and
Psychosocial Support
Specialist, UNICEF

Key Points

Interagency coordination. Another thing that was emphasised during the pandemic is the critical role that the interagency coordination represented by the mental health and psychosocial support reference group can play and should play in the global humanitarian system. The group acted early in response as a great global reference point for mental health and psychosocial support, building on learned lessons from emergencies that occurred such as H1N1 and Ebola. Therefore, innovation for this was vitally important by reaching out to local communities and challenging to reach areas that can enable high-quality and cost-effective tools which were not always available. According to WHO, 90% of member states said they have integrated mental health activities in their plans for COVID response, 64% of countries said they have active multi-sectoral image-based coordination platforms, 82% are implementing mental health and psychosocial activities. 49% of countries have been reporting that they are allocating funds for mental health and psychosocial support activities. But the bad news is that only 20% of countries have reported that they have allocated full financial resources required to implement their mental health and psychosocial support plans as part of COVID-19.

Translating mental health guidance. Another learned lesson is the need to make materials available for global dissemination. For example, the need to translate materials into multiple languages. The basic psychosocial skills for COVID-19 was translated into 30 languages but also was the need to develop inclusive formats of mental and psychosocial support materials. UNICEF is currently working on a project to produce products in braille and in sign language to support the mental health of people with sensory disabilities. Additionally, the need to develop resources in adaptable and creative mechanisms to support adaptation for indigenous populations.

We also learn that operational adaptations are essential to implement multi-sectoral mental health and psychosocial support. In June 2020, WHO published a report focusing specifically on operational consideration across sectors, they learned that there are gaps in technical resources for specific age groups, primarily older adults.

Mental health in crises. The Mental Health and Psychosocial (MHPSS) field has over a decade of experience and integration within the humanitarian response system with a growing base of evidence, standards and best practices to safeguard mental health and psychosocial wellbeing for all children, adolescents, parents and caregivers, especially the most vulnerable populations. But we're still far behind from where we need to be, while mental health is gaining a lot of attention globally, MHPSS is still severely underfunded and misunderstood. To understand the scope of the problem, we know that 10 to 20% of children and adolescents experienced mental disorders, while one out of four children lives with a parent with a mental health condition. One of the most extreme manifestations of poor mental health is suicide, for close to 800,000 people every year, with many more attempting to take their own lives and half of all mental health issues start at age 14 and three-quarters by their mid-20s. We know that the risk for mental health conditions and psychosocial problems among children and adolescents is exacerbated when they are exposed to poverty, violence, disease or humanitarian crisis. Sadly, today we face an unprecedented scale of humanitarian crisis in migration, the number of children who are living in a conflict zone has increased 75% from the early 1990s.

**DON'T
GIVE UP**

**YOU ARE
NOT ALONE**

**YOU
MATTER**

Session 4 - Training and Education

Introduction

Training and education for emergencies is a critical element of emergency response that requires more investment. While emergency medicine varies by region, more than half of deaths at around 40\$ of the total burden of disease in low and middle income countries can be attributed to emergency conditions that are treatable. The size of the pandemic has made the international community think about how we can improve training and education in crises to improve global emergency management to improve identification, containment and verification of diseases.



Moderator

Professor Attila Hertelendy
Adjunct Professor,
Georgetown University



Dr Jamie Ranse
Founding Director, Mass
Gathering Collaboration,
Griffith University



Dr Gregory Ciottone
Health Policy and
Management, Harvard
University



Professor Sharon Chekijian
Assistant Professor
of Emergency Medicine,
Yale Medical School

Key Points

Disease X. The current pandemic has forced organisations to think about a theoretical “disease X” which is more contagious than COVID. Diseases such as measles or mumps are approximately 10 times more contagious than COVID, while it does not have a fatality rate of COVID, other diseases such as Ebola have a 50 to 70% mortality rate with rabies having approximately 100%. Our healthcare systems and economies have been shown to be not prepared when a virus emerges which has a global reach. COVID has also shown that we cannot rely on the way we prepared and responded to large scale natural events, in particular, we are increasingly seeing less funding and desire to respond to crises. Therefore, developing local capacity and preparedness infrastructure can make up for this gap in future.

Encouraging cross-sector responses. Disaster medicine is currently considered a subspeciality of emergency medicine, traditionally emergency trained physicians have been the focus of training. However, natural events such as hurricanes Irma and Maria that went through the Caribbean demonstrated that dramatically more people died in the months following the hurricane than from the actual hurricane. This shows the need for cross-sectoral cooperation, including non-emergency physicians. We have primarily paid attention to acute response times, but now we need to develop capacity at a local level to deal with these crises. beneficiary, and since then, an entitlement to receive those medications through the blockchain.

Developing awareness. We need to develop awareness for all medical practitioners to have an understanding of the psychosocial aspects of a disaster, in addition to the psychosocial aspects of working in teams while developing critical thinking and actual knowledge about disasters. A study from Griffith University following the Australian bushfires of 2009 showed that nurses in pre-hospital environments during the disaster had limited experience of disaster preparedness with many of the injuries being severe burns or from a lack of medicine for other conditions. Patients that present themselves after a disaster might complain about a minor ailment, but they are unable to speak about the impact the disaster has had on them, their mental health and their families.

Session 5 - Fireside Chat, Oxford University Vaccine Development

Introduction

Initially working on the development of vaccines, the University of Oxford particularly looked at ways to produce antibody responses, going on to concentrate on viral vectored vaccines and developing new technologies. Using technology to be able to make a lot of different vaccines, focusing on outbreak pathogens. Presently we don't have vaccines for things like Middle East Respiratory Syndrome, Lassa fever, and Zika virus; Oxford University has been working on these diseases and taking vaccines into early clinical development. One main subject area which they are considering is the problem of "disease X" which is the unknown virus that's going to come and start causing infections in people. In these circumstances, we need to respond as quickly as possible to make a vaccine and plan how we would aim to respond to such an event. Roughly 300 million doses have been administered worldwide for the COVID-19 vaccine developed by Oxford University.



Moderator

George Mullens
Programme Manager,
World Humanitarian Forum



Dr Sarah Gilbert
Professor of Vaccinology,
Oxford University Vaccine

Key Points

Efficient vaccine development. The first thought regarding COVID was looking at some of the symptoms including pneumonia, and it became clear early on that it was a viral infection from a virus which we did not know about. At the time, thinking around the vaccine was about whether the virus would cause a local outbreak, it was not expected to have spread around the globe as quickly as it did. The project for the development of the COVID vaccine started as soon as possible with an aim to reach large clinical trials to test vaccine efficiency. The biggest challenge early on was to have a plan for all parts of the development process while generating and reviewing data, under normal circumstances the development would take at least two years before clinical trials.

International collaborations. In general international collaboration was critical in vaccine development as they did not want to produce a vaccine that could only be licenced by one regulator in one country. Oxford University initially worked with the UK regulator, followed by discussions with the European Medicines Agency and WHO as well, making sure that this vaccine would be available to the world. This meant going through the WHO prequalification process, the technology used had a relatively low cost to manufacture on large scales and does not require frozen storage. Most of the vaccines that are used around the world are kept in a refrigerator rather than a freezer, this type of vaccine can feed into that delivery system that already exists for the world's vaccines.

Manufacturing challenges. The big challenge that we have at the moment is providing enough supply of the vaccine as there are supply issues simply due to a lack of ability to get the vaccine made. New manufacturing facilities have been set up to try to cope with this, but if we're going to have vaccine equity, we need more vaccines, requiring more places to manufacture the vaccine. At the moment there is a lack of manufacturers in Africa making COVID vaccines. Unfortunately, this is not a quick fix as setting up new manufacturing facilities takes time, it is also important that there are partnerships between those who are manufacturing and those setting up new facilities with some pharma companies transferring technology to different manufacturers to provide support.

Session 6 - The Underserved

Introduction

Many groups have been left behind in the global pandemic, therefore we must advance ways to better support individuals living in fragile contexts around the world. From focusing on COVID impacts on children and women to understanding the side effects of COVID, from economic and social factors. From education and impacts on physical and mental health, we have to use a mixed method of design to support these populations.



Moderator

Helen Seibel
Global Head
of Community Investment
and Philanthropy,
AstraZeneca



Dr Tabinda Sarosh
Country Director
for Pakistan, Pathfinder
International



Dr Robert Blum
William H. Gates Sr. Chair,
Department of Population,
Family & Reproductive
Health, John Hopkins
University



Esther Lehmann
Partnership Leader,
World Vision

Key Points

Developing information about the virus. First, it is worth outlining attitudes, knowledge and practices against COVID. We have seen significant levels of concern from young people, particularly whether the virus makes them feel threatened, concerned, scared or anxious. The locations with the lowest amount of concerns were in Shanghai and Belgium. Preventative health practices and knowledge of the virus is also vitally important for young people, while in Belgium and China young people have nearly total knowledge and awareness of the virus, this is not the case globally with locations in Indonesia amongst the lowest in terms of knowledge and practice according to surveys conducted by John Hopkins University.

Impacts on young people. Anywhere from a quarter to two-thirds of young people report impacts of job loss or income loss on their families because of COVID, with the greatest impacts in Sub Saharan Africa, both in Kinshasa and Malawi. In Malawi, two-thirds of girls report a substantial impact of economic loss on their families, translating to food insecurity which is equally high in these countries. Equally concerning is the loss of education with more than 50% of young people reporting significant concerns about completing their lessons for the year as noted by Dr Robert Blum.

Women and girls. Amongst the most marginalised groups during the pandemic have been women and girls, especially in heavily patriarchal societies, they face issues of mobility with healthcare providers reporting significant declines in institutional deliveries during the lockdown, highlighting the urgent need for trained community midwives and providers. The lockdown restrictions also made it very difficult for women to access protective services in terms of gender-based violence. We already knew during the ebola pandemic that domestic and gender-based violence increases during pandemics and lockdowns. Restrictions made it more difficult for women to access protective services like shelter homes. Therefore, new technologies can provide a digital safe space for women and girls by providing information online.

Session 7 - Taking Care of Those Who Care

Introduction

Providing support for humanitarian workers is critical as we aim to promote their protection. First, we have to investigate the culture of humanitarian organisations themselves. There is an idea that if you cannot deal with a difficult situation then you need to have a “stiff upper lip”, meaning that you should not react to potentially traumatic situations. Research shows that humanitarian work is extremely stressful for workers with a survey conducted by MSF among 600 workers, three-quarters of them are confronted with experiences such as combat war zones, physical assault and natural disasters.



Moderator

Dr Kaz de Jong
Mental Health Specialist,
MSF



Carla Uriarte Chavarri
Clinical and Social
Psychology, ICRC



Melly Preira
International Human
Resources Director,
Jesuit Refugee Service



Dr Tim Frasier
Faculty Director, Emergency
and Disaster Management,
Georgetown University

Key Points

Mental health impacts on humanitarian workers. Research demonstrates that mental health is impacted by high-levels of depression and anxiety prevalent among international workers. In a study conducted by MSF, they found that one in 10 people who return from a humanitarian mission were looking for physical health services for mission-related issues, an additional one in 10 also had psychological problems. While the majority of workers stay healthy, there is also a substantial amount of people that develop problems after work. To mitigate this, providing support at a local level with mental health professionals and social workers can assist in supporting humanitarian workers and local communities.

Integrating mental health support. For proper support of workers to be provided, every donor needs to approve budgets and proposals that include an appropriate budget for staff support, this enables NGOs to build a system of appropriate care through the whole process of their projects. ICRC, similarly to MSF works in an environment in which integrating mental health and psychosocial support is a primary objective. In the field, ICRC now caters to and serves a workforce of over 20,000 people in 90 countries. To support them, this requires funding, recognition of the problem and prevention strategies that focus on internal communication with human resources. Through this we can better train people so that they understand the neurophysiology of stress, for example, followed by mental health toolboxes that can provide resources to staff.

Organisational culture. The culture of an organisation is also critical to understand as we see responses to mental health, this also requires development for managers to include diversity and inclusion. From an employee wellbeing perspective, organisational culture research from Jesuit Refugee Service has shown that poor mental health in aid workers is more likely associated with organisational stressors, we know that these have a direct root in organisational culture. This naturally requires buy-in from leadership, if leadership is able to provide tools to help workers, then it'll create a culture that ultimately embraces the values of the organisation in question. Diversity and inclusion in this regard are also important with a survey from Thomson Reuters Foundation showing that half of the workers that have experienced racism at work in the past year saying that agencies are failing to combat discrimination in their ranks.



Session 8 - Driving Effectiveness and Efficiency in Healthcare

Introduction

The implementation of digital health tools in resource-poor settings, wars and humanitarian crises is a challenge that needs to be further addressed as we aim to leave no one behind. Effectiveness in this context not only relates to the provision of resources such as oxygen tanks in response to COVID, but also creating collaboration across clusters and with humanitarian aid organisations. Efficiency also surrounds accurate international standards that have to be achieved in health settings to provide the most amount of support and advocacy possible.



Moderator

Dr Satchit Balsar
Centre for Health
and Human Rights,
Harvard FXB



Dr Radhya Almutawakel
Co-Founder and Chair,
Mwatana for Human Rights



Gareth Presch
Founder and CEO,
World Health Innovation
Summit



Victor Akinwande
Research Engineer,
A.I Science IBM Kenya



Mohini Bhavsar
Global Head of Digital
Health Partnerships,
Living Goods

Key Points

Documenting violations. Even as a disaster strikes, whether it's a conflict or natural event, hospitals and local health centres are attacked, therefore in this context, information is power. Highlighting human rights violations faced by health workers can assist with advocacy which further improves effectiveness by creating accountability. If we continue to document violations against health systems then it lets the whole world know about what is occurring in a conflict zone by parties to the conflict. This documentation can protect health systems from being attacked by all parties to the conflict.

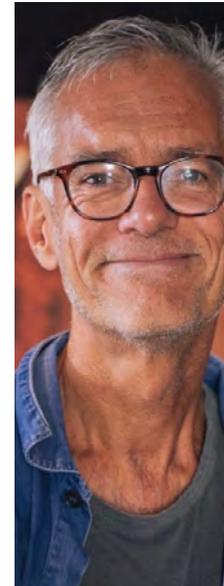
Understanding the patient's history. Applying technological advancements in healthcare and communication can also drastically improve efficiency and effectiveness. From a care provider's perspective, they may want to better understand a patient's care history, this is a massive problem in many countries, trying to coordinate the handover of patient records. In Kenya for example, the healthcare system creates accurate summaries of patient care, which then helps to orchestrate care workflows. Efficiency and effectiveness in this context can also mean developing conversational chatbots that can be used in mobiles to help patients self manage their health conditions.

Data and health. Digital solutions can enable efficiency gains through digitally capturing information, specifically healthcare data, these can help for decision-making. As technology is an enabler, data needs to be routinely used effectively for decision-making. Technology is always seen as an enabler to better efficiency, but it will not replace human delivery of healthcare. From this perspective, new technologies from companies such as DeepMind can assist with the early detection of illness and by scanning millions of electronic health records, enabling the detection and diagnosis of illnesses earlier.

Session 9 - Bridging the Gaps

Introduction

Bridging the gap requires us to consider issues ranging from leaving no one behind in humanitarian assistance to providing culturally sensitive assistance in response to natural events. For example, the Haiti earthquake showed the importance of training to deploy individuals who are qualified and experienced in dealing with difficult circumstances. We cannot deploy to humanitarian emergencies without having ensured quality, accountability and understanding of local contexts.



Moderator

Professor Johan von Schreeb
Global Disaster Medicine
at the Department
of Global Public Health,
Karolinska Institutet



Dr Nimrod Eisenberg
Creative Consultant,
Dream Doctors Project,
Israel



Dr Tracey McNamara
Professor of Pathology,
Western University
of Health Sciences

Key Points

Developing local knowledge. To respond effectively, local knowledge needs to be developed to understand the capacity of field hospitals and emergency medical teams. Remote assessments of situations require an understanding of vulnerabilities of the affected country, understanding of the event that occurred and assessing vulnerabilities. These are critical first steps to understand for effective international assistance. For example, in Lebanon, there are significant health care capacities from laparoscopic surgery and robotic surgery to other advanced care along with significant trauma care capacities. However, on the other hand, Lebanon was hit by an economic crisis in 2019 which has caused vulnerabilities prior to last year's explosion in Beirut. Of the thousands of people injured in the crisis, 85% were treated on spot by 42 hospitals all over the country followed by international field hospitals.

Emotional support. Cultural gaps between countries can also render interventions less effective. In providing emotional support to patients, there is a cultural gap between cultures concerning how we deal with emotions. Psychiatry in some instances is a verbal-linguistic therapy method. Therefore, one of the biggest challenges is to find innovative ways to reach different cultures and overcome the gaps, whether they're linguistic, cultural or professional. For example, medical clowns can provide some emotional support to patients without a common cultural background, primarily because the humour they provide is non-verbal.

Veterinary services. Bridging the gaps also requires an understanding of how the SDGs are interlinked. The UN recognises that food and agriculture offer key development solutions, especially in hunger and poverty eradication. However, when responding to these crises, we often take a human-centric approach to these issues that we face, not often recognising the impact of climate change for example. While we may provide funding to provide research into an emerging infectious disease, there is less funding for veterinary services, with a 2018 report from FAO showing that Animal Health investigations are not being performed, these can help with disease prevention, showing a significant gap in our health systems.

Session 10 - Building Back Better: Global Action Plan on Health and Well-being

Introduction

Accelerating and engaging with countries and leadership is critical to improving primary health care coverage for all as we aim to build back better. This also requires collaboration amongst humanitarian agencies, minimising duplication and joining with civil society to engage and enhance innovation and research. Contributing to the poorest health indices globally is critical in our aim to achieve the SDGs, from supporting sexual and reproductive health services to promoting healthy pregnancies.



Crystal Lander
Executive Director,
Global Affairs, Pathfinder
International



Dr Henia Dakkak
Head of Policy
and Liaison Unit, UNFPA



Katie Dain
CEO, NDC Alliance



Dr Amina Dorayi
Country Director, Nigeria,
Pathfinder International



Elizabeth Njoroge
International ICT,
Christian Aid

Key Points

Community developments. The Global Action Plan for Healthy Lives and Well Being builds on past initiatives of the global community to secure the health and wellbeing of underserved populations. The target audience for this is at a leadership, regional and country level. Recent health events have shown that what happens in a small community can have a huge impact on the entire population of the world. Therefore, this plan focuses on engaging with communities and developing local strategies to understand that communities are the first responders to any given crisis. As communities better understand their specific needs, they are often the best means to improve effectiveness with the use of limited resources.

Civil society. The recognition that civil society is one of the key elements of a society's approach for help, can create meaningful engagements from communities, acting as a catalyst to achieve health objectives. Health services need to meet the demands of populations. While governments are good at making commitments at an international-level with the UN, oftentimes the situation on the ground is very different in terms of action, buy-in and implementation, civil society can therefore hold governments to account by building trust and awareness. Strong civil society engagements to achieve the SDGs need to be supported by a strong legal, social and policy environment with some data suggesting that more than 3.2 billion people live in countries where civic spaces are repressed or closed.

Telehealth. From a tech perspective, there are numerous ways in which we can bring in new technologies to assist with building back better. Digital health for example results in increased access to health. From mobile applications that can help young mothers monitor their pregnancies, also even after childbirth there can be increased monitoring and knowledge provision. Digital health is, therefore, able to bring health closer even to those individuals who have few funds. Digital health can also be cost-saving as a doctor can sit at their home and administer health services, meaning it does not necessarily require investment in a facility. Similarly, telemedicine is able to increase capacity to support patients while standardising data regarding hospital capacity and demographics to provide further explanation on how a disease like COVID-19 is spreading through a country.



Calls to Action

Call to Action 1 - Vaccine equity and development

The development of the COVID-19 vaccine demonstrated the vast technological improvements that we have seen across the globe, a process that would usually take several years that has been condensed drastically. However, while we have seen a widespread rollout of the vaccine, we must ensure that it is being distributed fairly.

Call to Action 2 - Mental health and psychosocial support

Supporting mental health for frontline workers is critical as one in 10 humanitarian workers suffer from mental health related issues. Therefore, providing appropriate budgets, training and education are vital in building a system of appropriate care throughout all humanitarian missions.

Call to Action 3 - Building back better in public health

Building back better requires widespread collaborations from government and civil society to tech companies that can provide new services through digital health. In particular mobile applications can help young mothers monitor their pregnancies in situations where there is limited knowledge and capacity to support patients.

Call to Action 4 - Protecting the underserved

Developing information on affected populations to impact young people, women and girls highlight the urgent need for economic assistance through the provision of jobs, to providing preventative health practices and knowledge of the virus. Especially amongst the most marginalised groups, women and girls have faced issues of mobility and gender-based violence which has increased during the lockdown.

Thematic Theatre: Finance & Funding

WHF would like to express thanks to the programming board members, who are an integral part of driving our mission and upholding our core values:



Barry Kolodkin
Director, Deputy Chief
Evaluator, EBRD (Chair)



Bilal Khazada
Head of Cash Transfer
Programme Operations,
Save the Children
International



Mark Astarita OBE
Director,
Astarita Aldrich & Ward



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National Bank of Ethiopia
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3. Salt	
4. Famix	
5. Pulse	
6. Rice	
7. Soap	
8. Wheat	

Session 1 - How development funding and financing can support the humanitarian sector

Introduction

Economic development and opportunities is a critical element of the SDGs as if we give individuals a stake in society from disaster response and improving economic stability, we can help provide tools for reconciliation and peace. This requires support from the private sector as noted by the EBRD in which 75% of their actions in countries are to assist entrepreneurs, companies and local municipalities to help create jobs and foster a commitment to investing in companies that work towards the SDGs, this also includes mitigating against climate change to help promote environmentally friendly solutions. On the other hand, finance clearly has a massive role to play with alleviating poverty, improving health, education, governance and more with ISDB providing more than \$180 billion since its inception.



Moderator

Maria Goravanchi
Regional Managing
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Dr Nabil Ghaleb
Director, Economic
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James Holmes
Founder and Secretary-
General, International
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Camilla Otto
Director for Donor
Co-Financing, EBRD

Key Points

Eradicating extreme poverty. More than two-thirds of all refugees worldwide come from member countries of ISDB, with a further around 300 million persons living in extreme poverty. Financial intervention included the deployment of special programmes backed by impact investment packages, lines of financing, grants, technical assistance, capacity building programmes, and ISDB's active portfolio in the emergency response. The preparedness segment alone consists of over 150 projects and the outstanding allocation does exceed \$3 billion. The bank on average allocates on an annual basis over 10% of its total financial commitment to projects and programmes aiming mainly to support and empower vulnerable categories, mainly women and youth.

Multi-year funding. This is a highly effective method for financial planning, if properly calibrated, especially in cases where goals and objectives have a long term horizon and are scalable, the reason being that often policies and strategic directives that are medium to long term cannot be executed without long term. Therefore, the process towards the allocation of limited resources must be viewed from a long term perspective to avoid having a mismatch of priorities and availability of resources. This multi-year funding can also provide predictability for humanitarian players, mitigating uncertainty. This can all have impacts on the viability of interventions and programmes, saving time, costs and boosting efficiency. For ISDB, many of its projects are largely composed of infrastructure operations and programmes that often take years to resolve.

Other examples in their portfolio also include emergency response and preparedness for food security, aiming to assist smallholder agriculture productivity enhancement in Africa.

Alternative funding solutions. It is a distinct possibility we will not achieve the SDGs on time. Currently, according to UN estimates, there is a funding gap of \$2.5 trillion per year for the SDGs. Therefore, this gap needs to be addressed through grants and other alternative funding sources to generate growth in countries while also creating tax revenues and trade. The humanitarian agenda is broad, ranging from disaster response to pure development but also other issues in the middle such as refugee camps in which refugees are on average likely to spend 15 years in a camp. These are situations where there's a need for recurring resources. Working with blended financial instruments and more collaboration amongst financial institutions, by promoting partnerships on regular productive assets such as infrastructure, WASH and other services, institutions will be able to leverage their expertise and funding. This must also include support from the private sector who can provide new innovative ways to tackle the SDGs.

Session 2 - Digital solutions for supporting beneficiaries: digital currencies and IDs

Introduction

From blockchain to other frontier technologies such as digital wallets, humanitarian settings can often provide some of the best examples of how new technologies can radically impact the lives of the most vulnerable with some of the earliest adopters and best use cases found in humanitarian settings. In technology terms, the level of connectivity of a person to the digital world can enable them to access their rights, with digital identities powered by blockchain able to confirm the identity and retrieval of food, money, crisis funding, cash transfers and more.



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Founder, Supernova Data



Simon Reed
Deputy Director, Irisguard;
Mr Erik Zvaigzne, VP,
Product Innovation,
Convergence Tech

Key Points

Digital wallets. While mobile wallets have been developed for the last 20 years, they are gaining more interest in part due to biometric scanning. One of the first cases of this was in UAE where Irisguard developed visual scanning technology for border control systems, however, this resulted in the recognition that it could be used for other metrics to provide real-life proof for services. ATMs have been developed with these facial recognition systems so that beneficiaries do not have to use cards or remember pins and passwords. This resulted in innovations with UNHCR in which irisguard was able to develop a system for around 12 million refugees. Digital identity can be seen as largely meaningless if it isn't connected to real-life services that are important and variable in different countries. In their work with UNHCR, refugees of 79 nationalities are going to 32 countries where they're resettled, and they use that identity in a way that then links into an additional set of services.

Blockchain for traceability and digital identity. Organisations like Convergence Tech have been looking at blockchain in different use cases by working with UNDP in varied situations from India and Mongolia to Afghanistan, Morocco, Canada and Singapore. Blockchain can enable better privacy and security than other traditional solutions, demonstrating that the deployment of tech is a leap forward in creating better data governance and accessibility as most of these solutions work off of cell phones. On digital identity, further work is needed regarding standards and interoperability to make sure that there are solutions that work for a whole variety of citizens in different situations. Blockchain can assist with traceability, through

transparent sustainable supply chains, for instance, therefore tying back to environmental initiatives, tying back incentivization programmes and therefore creating system change on a small and large scale.

Challenges to implementation. Many of the challenges in implementing these new technologies come from a need for system change, designing processes that enable existing humanitarians to gain an understanding of how the tools work, how they can be used and how to can be used to solve numerous problems. To some extent, being able to explain these issues is necessary if we are to gain trust in technology to enable users to switch some of their services to digital wallets for example. There needs to be a connection to understand that a digital wallet is equal to a passport, so this is about socialisation, change management and deployment into rural areas where technological infrastructure is limited.

Session 3 - Localising finance and leveraging local resources: voucher and cash-based assistance

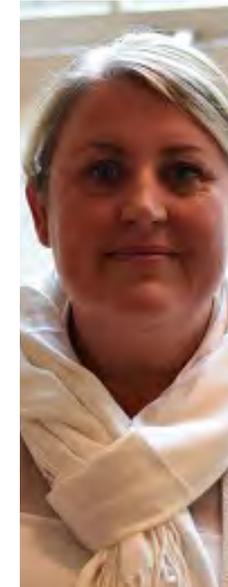
Introduction

Financial service providers can assist and support in times of crisis. The quality of the collaboration between humanitarian agencies and financial service providers (FSPs) is critical to delivering assistance. With good quality services, there are many aspects which FSPs can assist with, including a broad range of cash services in key geographical areas, ensuring agents coverage of locations and providing local agents sufficient liquidity. Key challenges remain with around 75% of adults who are living in countries coping with humanitarian crises today remaining outside the formal financial system. Localising finance therefore can play a key role in enabling entrepreneurs and economic development.



Moderator

Bilal Khanzada
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Key Points

Digital services. More aid agencies are providing cash through electronic means and digital payments, this has particularly increased in the current COVID pandemic, as we look at ways to reduce the risks of transmission. This presents new opportunities to link humanitarian assistance as a catalyst for more financial services by working with FSPs. In work which the British Red Cross did with ICRC back in 2018 in Kenya and Nigeria, they came to an understanding that financial inclusion whilst not being the primary objective, that it is a humanitarian imperative and the need, which must be met first. If we want to try to use cash assistance as a stimulus with financial service providers to meet and increase the ability of people to access financial services, then we need to focus on more training, helping people improve their financial literacy, and working with those FSPs to make sure that they're able to provide those services to new and diverse areas of clients.

Understanding local contexts. Local providers will understand the local context and can provide appropriate solutions. People who are involved in receiving aid often prefer a local provider, it's most likely to be a service they are already using, so this is about ensuring that individuals have a choice of how they receive assistance. On the other hand, individuals are very much aware of a disaster or crisis in-country, meaning that there need to be contingency plans in place. For example, after the Nepal earthquake, one of the remittance companies had managed to get their Kathmandu branch up and running again in less than half a day, demonstrating that local providers are a critical part of any solution when disaster or crisis strikes. There are also lessons learned that local providers do not necessarily have the same level of knowledge from country to country or even within the country.

Therefore, it's important to understand their capacity, working with them in partnerships to develop their knowledge. A paper released by the Overseas Development Institutes demonstrates how local cash transfers in Sub Saharan Africa can act as a multiplier, meaning that if a million dollars is injected through humanitarian assistance, it will generate an additional income at half a million dollars.

Market-based interventions. Understanding relevant market systems and value chains of the key commodities and services that crisis-affected people need or have lost access to is critical in response, this is also to ensure that we are in line with the principle of doing no harm. That's not doing harm to the local economies and market systems that people live in every day. Investing in rehabilitating critical sections of that market system, which could be the infrastructure, it could be storage facilities, it could be advocating for exceptions, due to humanitarian circumstances for certain regulations can be a really effective way of meeting humanitarian needs within your resources. This is called Market-Based Programming or Market-Based Interventions. It's really important that we look at how we provide assistance, we try to look at cash and markets where it's available to make sure that we're taking advantage of those multiplier effects. The markets in which people are living can sometimes result in people selling those goods to get cash to pay for the items that they need. One example in Bangladesh is of delivery of items across host communities with a ground truth solutions report noting that host communities preferred a combination of cash and goods. This is a common occurrence in which households can purchase medicine, clothing, food and other items with goods and are included to sell others.

Climate Change Side Event - Climate Vulnerability and Risk: The Need for Community Driven Approaches

Introduction

While we all know about climate change, we also need to be aware of its varied consequences. From health and financial to security impacts. Different international organisations, companies and INGOs are going to respond in different manners, therefore, having a cross-sector discussion on what are the important aspects to address is critical in developing our understanding of the future objectives past COP 26 later this year.



Moderator

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Programme
Management Officer,
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Technology Bank



Dr Lucia Morales
Lecturer,
Technological
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Key Points

Sustainable energy solutions. The Global Platform for Action for Sustainable Energy in Displacement Settings was founded three years ago with the aim to achieve SDG 7 in displacement settings. Energy production, especially for displaced populations is extremely difficult, especially for individuals who do not have a permanent presence in the country. Working on energy for displaced populations usually falls on two topics. First of which is cooking in which usually open fires are used with firewood or charcoal, freestone fires as they're otherwise known are extremely inefficient, use a lot of firewood, that leads to degradation of the landscape which results in landslides which in turn can cause conflict, the use of firewood can also result in many negative health consequences. There's a clear connection between the energy topic and the environment in these places. The aspect is to do with reducing the amount of fossil fuels used, particularly with diesel generators for which there are an estimated 10,000 running globally every day to produce electricity, pump water or run health clinics. In refugee camps for example which host over 5000 households, approximately anywhere from 20,000 to 800,000 people, we need to think about energy solutions more in line with a city rather than temporary notions. Naturally, with solar and other renewable energy solutions we can produce energy cheaper and more efficiently.

The interaction between climate and food security. Climate change innovation in the framework of EU European Union policies recognises that issues ranging from security and economic policy are all interconnected, from agricultural and food production, environmental degradation, water shortages and supply differentiation all have impacts on sustainable development. Particularly at an agricultural, food production and environmental agricultural policy is still too reliant on fossil fuels, as we push for a zero-carbon economy, it requires a radical rethink of how new technologies can transform our food production systems.

Economics and climate change. Critical insight in terms of how climate change will affect social inequality is analysed further.

Countries around the world have developed at different speeds with different resources available. We have benefited economically by exploiting resources like coal and other fossil fuels associated with greenhouse emissions. We started with this process back in the industrial revolution, with different countries at differing levels, we need to encourage alternatives. Wealthy countries also have major problems, particularly in the area of social inequality, but even then, individuals within these member states do not use resources in the same way. Even in the richest countries, some of us are polluting more than somebody that might be using coal to be able to cook and feed themselves. While there has been a move towards the financial dimension, there is still an abundance of investments in the fossil fuel industries which will not be sustainable in the long term.

Medical and health impacts. Medical matters cross all different topic areas and focus, even with regards to climate. In the United States and Europe, there is a tendency to think of warmer temperatures and melting ice. But in reality, climate change is having far more severe and cascading impacts. More severe weather, increased storm activity, intense wildfires and agricultural crisis, increased participation and more significant storms caused excess runoff. This damages agricultural lands and adds excess nutrients and antibiotics running off from farms into the bodies of water. This results in the growth of toxic flora, things like red tide and other toxic blooms. Social inequity also causes adverse health effects as shown in New Orleans, Louisiana, that poverty and income levels caused by flooding from Hurricane Katrina. This clearly has more impacts on the most vulnerable, driving impacts on food chains that cause famine and conflict.

This exposes humans to zoonotic diseases such as Ebola and potentially the source of COVID-19. Disease carrying insects have expanded their range drastically. This causes diseases that were once local to spread as can see with ebola, zika, dengue, chikungunya and West Nile diseases. These have all expanded and now global threats, WHO estimates that there's more than one novel disease emerging every year with warm waters supporting insect swarms globally.

Calls to Action

Call to Action 1 - The funding gap

According to UN estimates, there is a funding gap of at least \$2.5 trillion per year for the SDGs. This gap in finances requires further support from the private sector specifically to provide their technological expertise and financial support as business cannot thrive in a failing world. Particularly, promoting public-private partnerships and impact investment can bring much-needed capital while also bringing financial benefits based on achieving development goals.

Call to Action 2 - Localising finance

The localisation agenda requires wide-scale interventions, not only in terms of product design but in finance as well. Therefore, understanding relevant market systems and local economies are vital in terms of how we try to achieve multiplying effects for cash-based assistance. Alongside the principle of do no harm, financial interventions in post-disaster scenarios need to support local enterprise to create long-term sustainable economic growth.

Call to Action 3 - Intersectoral impacts of climate change

Climate change effects are widespread, we are currently seeing impacts from social inequality advanced by weak social conditions caused by increased natural events, to the spread of more diseases as warm waters encourage insects which carry these. Climate change also requires a totally different approach to energy and security concerns with agricultural systems heavily reliant on fossil fuels and subsistence agriculture in many cases relying on firewood and coal for cooking purposes.

Call to Action 4 - New digital solutions

New technologies can vastly change the way humanitarian operations work, especially in the delivery of aid, in which blockchain can create a system of transparency and increased trust between a beneficiary and aid organisation. Similarly, digital identities in the form of digital wallets can increase the access of refugees and vulnerable groups to aid without the requirement of formal identification like passports. However, each of these solutions requires a serious discussion regarding the ethics of data collection and how best to assist in disaster scenarios.



Session 1 - Setting the Scene

Introduction

Humanitarian efforts require an overall rethink concerning disaster risk mitigation. While we are still in the COVID-19 pandemic, we are seeing more humanitarian crises overlap in larger areas and in more locations across time. This co-location of multiple crises is only becoming more frequent with time with cascading weather effects, the humanitarian works need to consider more and more the situation on the ground to take into account climate change adaptation action.



Moderator

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Dr Krishna Vatsa
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Mihir Bhatt
Director, AIDMI India

Key Points

Responding to more natural events. Climate change adaptation is increasingly important as the humanitarian world needs to respond to new crises such as heat waves which we are currently seeing in Canada and the United States. Second, extreme weather events are causing additional risks with cyclones for example, that are occurring more frequently and have a larger impact in terms of geographic spread, loss and damage. Therefore taking into account climate change adaptation is critical as we address new crises.

Changing our economic systems. Investing in humanitarian responses requires research into new technologies to provide action in terms of relief, rehabilitation and economic loss. This requires investment into natural resources and social innovations that are clean, especially in terms of energy consumption. Our economic system is currently based on economic growth and investment in terms of capital instead of restructuring growth through humanitarian action or social enterprise and impact investments. Fortunately, we are now developing more tools on green finance, structures and institutions.

Data as the new gold. The increased use of data has enabled the use of new tools and technology, not only by large corporations, authorities and government bodies but also by individual disaster responses by humanitarian crisis workers. Therefore, we need to be able to democratise this data so that it is widely available to the public openly and safely. This also means that data should be in the public domain without compromising the privacy of the individuals whose data is being pulled out of the population. In these circumstances, we need to further develop partnerships between varying sectors to promote local action within the localisation framework.

Session 2 - Frontline search and rescue in natural events - collapsed structures

Introduction

In responding to natural events, building capacity for emergency disaster management in disaster scenarios is increasingly complex. Collaborations between local groups and international responses demonstrate this complexity amongst teams in terms of levels of coordination with teams from different countries with different languages. Natural disasters can also notably turn into humanitarian disasters as we've seen with the Fukushima tsunami, meaning that search and rescue activities will depend on the type of disaster.



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Tsukasa Katsu
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Key Points

Varying risks from conflict to natural events. From the user's perspective, capabilities have to be different when addressing different crises. There needs to be prepared to stay from anywhere from a week to several months dealing with different crises of varying scales. Therefore, this requires bigger logistics and also techniques and training, not only to deal with search and rescue but chemical risks from explosions as seen in the Beirut explosion. Local populations will typically be welcome towards disaster professionals, however, this is not always the case with other foreign workers who face attacks or even kidnapping in the field. This is of course dependent on the scenario in question, whether it's natural, conflict or terrorism-related.

Dimensions of victim support. There are three dimensions of support for victims. The first is psychological support for the victim as a humanitarian service and the second is acute stress disorder, which the rescuers as well face. Presently, there is limited capacity to provide psychological support to victims and others who are affected with rescue teams not regularly trained to deal with these situations. The third dimension is supporters. As can be seen in the example of the Mexico City earthquake of 2017, the Japan International Cooperation Agency deployed a team that hired interpreters, drivers and logistical assistance. Support to local workers is also critical as they are part of the affected populations, therefore the provision of care to local supporters, while different to the direct victims, is still necessary for building local community resilience.

Research, search and rescue. Bridging the gap between research and search operators will help improve efficiency. While many search operators are engineers in their own right, universities can provide new technologies that can assist with these operations from drones and augmented reality that enables more realistic training to understand the impact of funding on preparedness. Research also demonstrates how civilians behave during an emergency, while civilians are always the first responders on scene, many will act without training or full knowledge of the situation, therefore providing active information is critical in these circumstances.

Session 3 - Strengthening the capacity of local response

Introduction

The localisation agenda is there to enhance the capabilities of local people to deal with critical crises. When any given crisis occurs, local communities are the first to act in concern with national and international organisations to improve their capacity to respond.

To advance this goal, we require widespread collaboration from civil society organisations, government and the private sector to assist with communities on the ground.



Moderator

Anna Averkiou
International Media
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Paul Knox Clarke
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and Humanitarian
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Loreine De La Cruz
Executive Director,
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Rupert Douglas-Bate
Director, Global MapAid

Key Points

Climate change and localisation. The climate crisis and its increasing impacts means that local response will become central to humanitarian aid and work. Initiatives such as the CFC initiative from UNICEF are critical in bringing together civil society organisations globally, but particularly in the G7. With this in mind, it's also important we engage with youth and women's focused organisations because they are critical to local responses. Whereas localisation has largely been a discussion focused on funding and where it goes, climate change is going to advance it. Climate change is going to result in more resilience programming which in turn requires support from local economic environments that can help local communities recover by creating jobs.

Training and education for local organisations. Despite reforms, it is important to note that the international humanitarian system retains the concentrated power and resources of a small group of humanitarian actors in western countries. This is ineffective, costly and marginalizes the skills, knowledge and capacities of thousands of local NGOs in frontline emergencies. Unlike larger, more specialised and well resourced actors who have easier access to partnerships and with funding sources, local and national actors face substantial barriers to creating partnerships because in many cases they may lack the language skills required to coordinate and fund different projects.

Building support for local partners. Local activities, leadership and partnerships that are being built with aligned goals and aims can bring around an effective rapid response in crisis situations. Global Map Aid is seeking to support this work with local partners on the ground in countries ranging from Malawi, Ethiopia and Nepal to the United States and UK, to enable these partners to make maps about subjects that are critical for building resilience at a local level. Through vocational education and microfinance for small business startups, maps can also show where business mentoring and coaching is occurring so that we can further nurture these. These maps are then able to show where populations are involved in agriculture, food production and other types of economic activity, from water collection to small business incubators in rural communities.



Session 4 - Water crises and resilience

Introduction

Presently over 785 million people around the globe do not have access to basic water services, meaning that these are individuals who do not have water near their homes or have to go and use a surface source to collect water from a river for example. Poor water services have massive impacts not only with climate change but with disease and collection, particularly for women and children who are mostly tasked with water collection. With continued risks of floods and droughts caused by climate change, we must aim to build resilience in these communities to deal with changing conflicts and environmental crises.



Moderator

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Kitka Goyol
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Key Points

Improving WASH systems. Strengthening national and local water, sanitation and hygiene systems (WASH) can enable further development through the different SDGs, from gender equality to education. Strengthening WASH also requires funding to support the challenges with community management and maintenance of water schemes, particularly pumps to ensure they're financially viable across multiple locations. Therefore, providing the basic infrastructure in these circumstances, is critical in building system resilience.

More extreme natural events and their impact on WASH.

More and more individuals are experiencing flooding, droughts or a lack of water in part due to climate change, with water sources such as Lake Chad drying up at an alarming rate. This of course has a direct impact on their livelihoods and their ability to live life as normal. In a recent report by UNICEF, it was shown that 74% of all disasters that happened between 2001 and 2018 were water-related. It is therefore really clear that climate is having an impact on the vulnerability of water systems. Examples of this can be seen in Ethiopia, in some regions there is a lack of rainfall, resulting in drought with livestock that dies because of this. However, then rain falls on the highlands of Ethiopia, it runs down and causes severe floods, displacing communities and also contaminating traditional water sources.

Climate change and economic losses. Socio-economic and migration challenges are emerging as a result of climate change. When we talk about loss and damage in humanitarian crises, the humanitarian community is yet to adopt and unpack the full impacts of loss and damage globally. Movements from young people, in particular, have been excellent at forcing governments to declare a climate emergency for which we've seen progress at the G7 and further later this year at COP 26. Climate is also going to have further impacts on access to resources, especially for those who are most vulnerable. The lack of skills and economic opportunities are only going to increase in future if we do not change the unequal power relationships between government and citizens.

Session 5 - NGO Access to Disaster Zones: Enhancing cooperation between agencies and governments in the field

Introduction

The term “field” is subjective and open for interpretation, in today’s context we’ll be considering disaster risk reduction, humanitarian assistance and building the capacity of disaster responders in public health. Good cooperation between NGOs and governments in the field is critical in delivering humanitarian principles of impartiality, neutrality and independence. While NGO workers are at times viewed as volunteers rather than professionally, it is important to include them in missions with the UN, EU and others to support disaster relief.



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Alois Hirschmugl
Technical Director,
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Key Points

Avoiding duplication. Cooperating and collaborating with NGOs requires an understanding of the technical, professional and common competencies to avoid duplication of efforts. Similarly, some NGOs may not be accepted into a country for political reasons, or even it can be too dangerous to be involved in the actual disaster situation. In some circumstances there are too many NGOs, as can be seen in Haiti after the 2010 earthquake in which besides the well known larger organisations like Oxfam International, Save the Children and others, the abundance of NGOs can result in short term relief measures with limited coordination, without feedback or support of overall disaster management.

Long term disaster management. Providing preparation and integrated long term disaster management should remain a priority for local, national NGOs and governments, especially making sure that they are aware of the culture and local contexts that they are operating in. In this context, localisation is key to better integrating and training NGOs. By understanding each other's mandate and working procedures, NGOs and governments can develop good cooperation and relationships with government, military and other disaster relief organisations. Through joint training with NGOs, it'll be easier to cooperate in disaster zones.

Areas for collaboration. Collaborations with governments ultimately rely on political will to support beneficiaries and vulnerable groups. Unfortunately, for many governments, this is not the case. While cooperation is easy to speak about, there are many difficulties to achieving it, not only because of priorities but to avoid duplication of efforts, particularly around disaster management where there might be joint operability. Yet despite this, we have seen successful examples of these operations, particularly in the Indian state of Orissa in which there was a tropical cyclone that killed more than 10,000 people in 1999. Yet, 10 years later, another tropical cyclone killed 86 people. The government of Orissa succeeded in reducing the number of disaster deaths through an NGO and government coordination platform now known as the INteragency Group. This group played a crucial role in disseminating early warning information, enabling the evacuation of 1.2 million people from 18 coastal districts.

Session 6 - Communities First: The Natural First Responders

Introduction

Building community resilience and working with communities is critical in conflict and fragile community spaces, irrespective of whether it's in traditional forms of disaster risk reduction or conflict scenarios in that we must protect the most vulnerable and empower them. First, we must realise that communities should be allowed to take responsibility and work on their behalf. In many circumstances, affected communities are referred to as beneficiaries, with outside organisations coming in with good intentions and centralised planning systems and assessments that are not appropriate when aiming to build community resilience.



Moderator

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Dr P G Dhar Chakrabarti
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and Technical Committee
WCDM-2020



Emma Le Mesurier
Director, Mayday Rescue

Key Points

Empowering responses and preparedness. The largest community-based disaster risk management programme implemented currently has a coverage of around 300 million with support from 300,000 villages in India. In this context, community-based disaster risk management initiatives were shown to be successful and upscalable. These programmes did not look only at response and preparedness, but also disaster mitigation or risk reduction. By arranging a village level committee, we are placing trust in them to assist with building resilience planning and also as central contacts for early warning information in the case of a natural event. While communities are always the first responders, we can aim to professionalise the response system so that there is a limited time gap between the disaster and the actual response. This time lag can be anywhere from a few hours to sometimes weeks, depending on the location and scale of the crisis, meaning that the first few hours of responses are crucial in saving lives.

Changing the humanitarian system. We should also recognise that our current response systems are overwhelmed and will continue to be overwhelmed with impacts of climate change. Even in the United States, response organisations are regularly understaffed and lacking in resources. Natural disasters are in many cases the primary example of how a natural event can have further impacts on local economies and public health. With the outbreak of Dengue fever in Sri Lanka, there was protracted flooding which resulted in a bigger population of mosquitoes, which in turn resulted in higher infection rates. This means that by the time a formal call for rescue services or humanitarian interventions take place, we're subsequently dealing with multiple, complex issues.

Integrating local communities. Integrating these groups is critical as we need to stop treating them as beneficiaries, instead of aiming to integrate them into problem-solving and taking advantage of their local knowledge. These can help incentivise creative problem-solving. Communities know whether a road is dangerous for example, with long term security experts frequently unable to access certain areas due to protocols that may prevent you from going out unless you're in a convoy. The White Helmets, for example, were able to provide rescue training for community members, by giving them the right levels of training, not only do they provide input, but also delivery on the ground.

Session 7 - Natural Events - assessing the crises of today and tomorrow

Introduction

From landslides and tsunamis to flooding and wildfires, natural events are only going to increase as we view more effects of climate change. We should also consider how we look at threats and risks caused by natural events and how different countries respond to the impacts they face economically and socially. By looking at new economic models such as the green economy, we can develop new ideas from social impact funds to do recovery, rehabilitation and preparedness.



Moderator

Mihir Bhatt
Director, AIDMI India



**Mr Anoka
Primrose Abeyratne**
Lead, Environment
Working Group,
Royal Commonwealth
Society



Paolo Garonna
Secretary-General, FeBAF

Key Points

Financing long term projects. Financing is required to look at long term and large scale projects to respond to natural events. Within the UN SDGs, collaboration plays a key role in making sure that we have long term projects and sustainability, as well as the long term ability to assess risks across countries. There are a variety of factors that can only be tackled by long term thinking, from preventing deforestation, which has a key role to play in avoiding floods, to migration caused by rising sea levels.

Urban resilience. Making cities more resilient to excess, water for example, can provide new innovative ways to think about how we're able to respond to monsoon floods that we see in Asia for example. Some cities have been creating wetlands and manmade lakes, areas that can take excessive watering, enabling further water conservation for the months in which it is more needed. Other initiatives such as reforestation initiatives in Commonwealth countries can enable resilience and knowledge building.

Cross-border impacts. The transboundary effects of many natural events require further collaboration across borders, not just in the interest of environmental concerns but also public health. We have seen impacts of heat waves on varying environments with serious long term health-related issues in urban populations. With floods in India and Bangladesh occurring simultaneously, we need to gain further data to investigate more effective methodologies for collaboration, especially with local communities.





Session 8 - Disaster Risk Reduction in Action

Introduction

We are all dependent on infrastructure resilience yet from the use of new technologies to data that assesses the vulnerabilities of our preparedness planning. Disaster risk reduction needs to recognise the increasing complexity of crises and how to strengthen communities, local states and regional organisations to strengthen their DDR in differing fields, from mountain preparedness to maritime exercises and capacity building.



Moderator

Dr Albrecht Beck
Director, PPI and Head,
Knowledge Hub
for Urban Disaster
Risk Reduction



Gianluca Pescaroli
Lecturer in Business
Continuity
and Organisational
Resilience, UCL



Dr Mika Peace
Fire Meteorology Senior
Research Scientist,
Australian Bureau
of Meteorology

Key Points

Wildfire management. Wildfire responses in particular are of increasing concern as was seen with wildfires in Australia and other regions. While large bushfires generate huge amounts of energy which changes the surrounding atmosphere, particularly with wind fields, we see local effects in terms of fire behaviours, followed by foreign atmosphere interactions. New technologies have enabled the running of fire atmosphere models and simulations to support sophisticated numerical weather prediction systems. Through these models, we can run case studies to view the impact of bushfires and the process that drives their behaviour. Through meteorological institutes, we're able to create collaborations between local governments, land management and fire management agencies.

Communications and critical infrastructure. In the last few years, we have developed new understandings of critical infrastructure, this is no longer just roads and bridges, but everything from power to satellite failures. When we communicate with different agencies, we still have to go beyond the fragmentation of each organisation and go beyond the duplication of efforts. Another effort that is worth pursuing in improving resilience is in simplifying the language used, while much of the language used today is the result of diplomatic efforts, it is not simple to translate into different languages and contexts.

Future resilience. To better improve resilience in future, we need to be able to effectively communicate the science to the individuals that are making political decisions, so that they understand the impacts, how this translates on the ground and the response required to the impacts in terms of preparedness for future natural events. An example of this can be seen in South Australia in 2016 in which there were severe storms, this information was communicated at least a week in advance of the storms which subsequently knocked out the major power lines in the state. In this circumstance, scenario planning took place months in advance with collaborative efforts amongst all emergency management groups, meaning that all were aware of the worst-case scenario in which there would be a potential blackout for 2 million people.

Session 9 - Technology and disaster response

Introduction

From drone technologies to advancements in data analysis, AI and machine learning, technology has a critical role to play in disaster response. Hardware will continue to improve and provide innovative ways to respond to disasters, from hurricanes and wildfires to earthquakes through mapping technologies to see that areas are impacted, but also for regulatory purposes that can enable those with few technical capabilities to locate individuals during disaster scenarios.



Moderator

Andrew Staniforth
Director of Innovation,
Saher Europe



Romeo Durscher
Vice President
of Public Safety, Auerion



Cass Collins
Deputy Director,
Services Disaster
Response, Microsoft



Timothy Chapuis
Senior Project
Manager, Pix4D

Key Points

Drone technologies. Drones have enabled the collection of intelligence to locate affected areas and provide analysis of local infrastructure and whether it has been affected by a crisis. When we consider drones, we should not solely think of aerial capabilities, but also maritime drones that can operate oil pipelines. Similarly, land drones are a primary tool for law enforcement in responding to security situations in which chemical, biological or improvised explosive devices have been used.

Technology and COVID response. Technology has been critical in our responses to COVID, by better enabling the coordination of missions to even chatbots that are created to answer questions from the public. At Microsoft, there is a team of 1000 employees who are looking at technological responses to natural events such as hurricanes, earthquakes, floods and fires. In responding to COVID, Microsoft worked on 114 missions in collaboration with the focus being on digital tests and registration systems so that individuals can register through drive-through facilities. Soon after the risk identification system was created, this helped identify areas that have been exposed to the virus. Technology also had a role in the distribution of vaccines by gaining health data and moving it to the cloud to have effective vaccination rates across different regions.

Data and crisis intelligence. Data for before, during and after a crisis can assist with prevention in the case of floods, wildfires, earthquakes and other natural events. This can enable the creation of measures and policies that a natural event will be less impactful. As crises are multiplying globally, providing coordination and information can equip teams to understand the operational environment they're working in while also supporting local communities to be the first responders.

Session 10 - What next? Extrapolating trends for the future

Introduction

The speed at which norms of society unravelled with deserted city centres, businesses shutting down and enforcing social distancing makes us rethink how we should respond to crises in the future. We must also recognise that the last year is not a one-off and that we must remain vigilant and prepared. Our central purpose of promoting preparedness for a major crisis incident has become a condition in which all areas of society, from government, academic, business and civil society must promote.



Moderator

Lord Toby Harris
Chair, National
Preparedness Commission



Andy Towler
Founder, The Resilience
Group Ltd

Key Points

Increased instability caused by new risks. Countries are facing increased risks with more volatility and instability caused by COVID and climate change. In a new edition of the UK national risk register, it was noted that there are 38 major risks facing the UK, including environmental hazards, major accidents, cyber-attacks and terrorist risks arising overseas. Climate change is considered the foremost risk with more extreme weather events both home and abroad, from floods, droughts, storms to heavy rainfall, these will become more intense and more frequent. This will render some parts of the world increasingly uninhabitable, driving huge amounts of refugees and causing further shortages of food and water, with impacts on global supply chains, causing further political instability that will spill across national borders.

Delivering effective responses. Through the sense of the pandemic, we have seen the vast majority of countries failing to prepare adequately and deliver an effective response that has kept their citizens safe. In these circumstances, promoting global security frameworks can stack up against the globalisation that has led to benefits for millions across the globe, yet at the same time has led to accelerating risks as can be seen with COVID in which it was able to spread rapidly worldwide.

Social and economic trends. Poverty and inequality will also have further impacts in the future, it has to make us rethink disaster management and how we build the resilience of public and private sector networks as well as civil society. A lack of education and opportunity can be seen as much to blame for many of the impacts we see in terms of national disasters and their responses to them. For this to be effective, it requires an appreciation for risk, which many organisations struggle with, especially considering the increased natural events that we will see as a consequence of climate change.



Calls to Action

Call to Action 1 - New technologies for disaster response

New technologies in the form of drones, data analytics and chatbots have demonstrated the effectiveness of new technologies to radically alter our responses to humanitarian crises. From drone technologies that can map and provide data as a primary tool for law enforcement and emergency responders, to providing knowledge of natural events in data.

Call to Action 2 - Communications in disaster risk reduction

Building resilience in responding to disasters requires funding of new capabilities to create collaborations between government, business, communities and emergency managers. Improving resilience also requires the capability to effectively communicate scientific analysis to decision makers and communities so that they understand the potential impacts, further encouraging preparedness.

Call to Action 3 - WASH systems strengthening

Water, sanitation and hygiene have been radically affected by climate change and the COVID-19 pandemic, highlighting the importance of water as a resource for all life on earth. Climate change has particularly demonstrated the importance of protecting water systems with increased insecurity around varying regions of the world caused by a massive decrease in water availability.

Call to Action 4 - Improving localisation and local response

As we aim to improve responses to natural events, building capacity, training and education in communities is critical if we are to stop treating them as beneficiaries, instead of integrating them into solutions and taking advantage of local knowledge. We must also recognise that our current responses are understaffed and lacking in resources, particularly if we are facing multiple crises at the same time.

EMERGENCY SHOW

Session 1 - Setting the scene

Introduction

As we continue to build systems that respond to crises, we need to point out the increasing frequency of natural events, multiple deployments, system failures that are no longer just geographically based. Therefore, we need to reconsider disaster systems and models. Donor countries are now getting



Moderator

Eric McNulty
Associate Director,
T.H. Chan School
of Public Health,
Harvard University



Craig Fugate
Former Administrator,
Federal Emergency
Management Agency



Paolo Garonna
Secretary-General,
FeBAF



Rupert Douglas-Bate
Chairman & Founder,
Global MapAid

Key Points

Changing humanitarian aid. As we saw at the start of the pandemic, everyone was competing for the same PPE, meaning that there was not enough supply to meet demand. In these circumstances, we must advance financial instruments to drive efficiencies and resilience so that there is more capacity and distributed risks. On the other hand, we need to also drastically reduce the amount of aid sent abroad for each disaster. We need to further promote the localisation agenda to employ local staff and buy resources from local economies. This can be seen in the response to the Haiti earthquake where a tremendous amount of resources were sent in from aid groups, yet, Haitians were the ones doing search and rescue while also trying to build their economies back.

Financing resilience capabilities. Financing in the disaster context is critical with more funding mechanisms looking at climate as an existential threat for future investments, because if a company cannot service debt, how long can donor countries be expected to continually invest? Climate change has also resulted in a change from insurance models to government subsidies, particularly for flood damage, this means we have to prepare to find different efficiencies in the system by building capacity and using finance as a tool for change.

Building partnerships. Global value chains are not the single element that results in positive competition in manufacturing, it is also reflective of the 150+ countries that work to supply components for our modern life. Therefore, when these value chains are broken by a crisis, it has an impact on all. Therefore, we need to build connections and partnerships, especially in civil and social protection. It is not a question of a single organisation, but gaining widespread expertise from supply chain planners and design to logistical experts. We need to build an emergency in which there is an equal ecosystem of crisis responders, from early warning and preparedness building to emergency relief, recovery and deconstruction.

Session 2 - The global landscape - communication, toxification and polarisation

Introduction

In responding to crises, we have to carefully construct and package our message to ensure that citizens can understand and then act on the accurate information provided. However, we are currently facing issues of individuals not trusting traditional media with social media platforms continually wondering how to deal with mis and disinformation.



Moderator

Emily Hough
Editor in Chief,
Crisis Response Journal



Dr Jennifer Hesterman
Vice President, Education
Services, Watermark
Risk Management



Nigel Singer
Mediation and Conflict
Resolution Expert



Natasha Mudhar
Founder, The World
We Want

Key Points

Social media impacts. Communication whether it's through traditional media or digital media can influence behaviours positively bringing awareness for issues within the whole spectrum of the SDGs. It can also convert awareness into action with grassroots momentum towards addressing particular issues and marrying that up with top-down action from governments. While new digital media has been a force for good, it can also act as a force for bad by inciting hate, polarisation and mental health impacts.

How information is accessed. When looking at communications we also have to consider how individuals access information online and how attention spans have decreased over the most recent years, this is also a substantial challenge for traditional media outlets who are trying to promote accurate information to the general public. In tandem, we have also seen a decline in critical thinking skills in which people are not thinking about the potential bias of information and motives. This problem will only be exacerbated with further technological developments in the realm of deep fakes in which AI can be used to make a false video of a person which is very close to reality, this could have vast security implications in present and future. We have also seen the impacts of incorrect communication during the pandemic in which masks and vaccinations became political issues instead of public health measures.

Government communications in crises. Governments face serious challenges in trying to ensure that accurate information is given to the public in the case of a crisis. To leverage these platforms, especially in the social media space, we have to know what your target audience and preferred communication platform is. When there is misinformation about vaccines, for example, we need to promote compelling messages that drill down to the audience in question about the benefits. This means being empathetic, understanding the audience's concern and using effective imagery to influence public opinion.

Session 3 - What's next on the emergency agenda? From a pandemic to climate change?

Introduction

The pandemic has resulted in a fundamental shift in emergency management. On the other hand, climate change is going to continue to challenge emergency managers across the globe. Creating climate adaptation plans that were previously viewed as politically toxic are critical in creating adaptation plans for governments. In terms of what is next for the emergency agenda, climate change has radically impacted all sectors of society with multiple natural events occurring across the globe simultaneously, these place enormous pressures on the ability of teams to respond, have adequate supplies and manage resources.



Moderator

Alice Hill
Senior Fellow for Energy
and Environment,
Council on Foreign
Relations



Professor Steven Pyne
Emeritus Professor,
Arizona State University



Dr Johann Goldammer
Director, Global Fire
Monitoring Centre

Key Points

Rethinking emergency planning. Escalating climate events will continue in frequency and severity. As was seen in Texas earlier this year, the entire electrical grid failed in part due to a reliance on fossil fuels, the polar vortex which came from the south was not expected, resulting in an electrical grid that simply wasn't prepared for this level of cold. This then resulted in cascading damages in wastewater treatment to people being left in the dark of their homes. Emergency managers will be on the frontlines and they need to rethink how they conduct business so that they have the necessary power and resources to do what they must to save lives.

Increasing wildfires. On the other hand, wildfires have evidenced how we combust too much, resulting in bad fires that burn towns and destroy ecosystems. Many wildfires can actually be good for an ecosystem and can encourage habitability, improve the ecological health of local ecosystems. In our quest for economic development over the last few hundred years, we have found more resources to burn to produce energy. Yet, this burning has resulted in the fire equivalent of the ice age with continental impacts, bio-geographical shifts, changing sea levels and mass extinctions.

Bridging the knowledge gap. The positive role of fire in nature is for many a difficult concept to grasp, similarly, when advancing scientific analysis on emergency services or other issues, we saw that scientific knowledge did not enter political decision-making. Therefore, we must encourage a simple understanding of these key issues to ensure there is an interface between the science community, policymakers and of course the community of practitioners to support countries, regional, multilateral and intergovernmental organisations.



Session 4 - Intelligence versus information in emergencies

Introduction

The provision and communication of accurate information are critical when responding to crises. By training audiences internationally on a whole array of training and exercises, we can reinforce governmental responses with wider use of data to build situational awareness and preparedness for natural events. Providing inaccurate and untimely information can hamper responses with misinformation causing obstacles.



Moderator

Andrew Staniforth
Director of Innovation,
Saher Europe



**Brigadier (Ret'd)
David Russell-Parsons**
Assistant Director,
Cabinet Office -
Civil Contingencies
Secretariat



**Commissioner
Georgeina Whelan**
Emergency Services
Agency, Australia

Key Points

Increasing quantities of data. When considering the important role that data has, whether its mobility data or other forms, there is a massive quantity of data that needs to be analysed and investigated, requiring curated ways of aggregating, sorting and visualising to enable teams to understand. On the other hand, inaccurate information has hampered responses by painting a different picture of the crises that are being faced. Similarly, we have to recognise that technological developments have radically changed the approach to intelligence development. Whereas in the past human intelligence provided great opportunities for security forces, whether it's military, law enforcement or crisis managers, but now there is a delicate balance between information overload and the amount of data used in a system.

Enhancing preparedness. Numerous international examples of preparedness demonstrate that mitigating varying risks with increased preparedness can result in governments and emergency planners being better prepared by overlaying the risks of flooding for example. Numerous tools have been developed recently, for example, geospatial technologies which enable the aggregation of data combined with mapping can enable responders to better understand the data they are being shown. The final element of preparedness is to do with exercising and stress testing to enable teams to gain some practical experience dealing with power outages of potential terrorist attacks. AI in particular has shown to be helpful in providing automatic warnings through social media of potential disasters, with examples seen in Germany with an attack on a Christmas market and in the Caribbean with some hurricane warnings.

Crisis response in a new age. While new technologies have caused a rethink in terms of how we collect data and use it to respond to natural events, however, the principles of emergency response hold, staying calm, assessing a situation, finding subject matter experts and making sure you have the best sources for your decision are still critical. Now emergency responders need to develop skills in data acquisition, AI and gaining an understanding of the technical limitations, legislative requirements and information regarding hard data, data ethics, governance and sources used.

Session 5 - Procurement and supply chain management in emergencies

Introduction

Supply chains are affected in emergencies, ensuring that supply chains and their systems work are vital in the immediate declaration of an emergency. So whether it's setting up vaccination systems, providing vaccines in the late miles, or coordinating responses amongst local organisations, it is all reliant on the supply of critical resources, requiring collaborations and different perspectives from government and local communities to the private sector which plays a key role in supplying goods.



Moderator

Mike O'Neill
Group Managing Director,
Optimal Risk



John McFall
Lead, Global Supply
Chain and Operational
Excellence Practice,
Amazon Web Services



Alan J Brown
Groups Security
& Resilience Director,
Tesco

Key Points

Private sector support. COVID has caused businesses to look at their roles in supply chains with widespread disruptions globally. Tesco for example, as one of the UK's largest private sector employers, played a massive role in the response to the virus given that they are 30% of the UK's food market and the largest fuel supplier. COVID has exposed the need for cooperation across supply chains with challenges seen in the price of goods and availability. There are holistic business challenges that need to meet the demands placed on suppliers, due to the competitive nature of the market, avoiding stockpiling and ensuring there is a spread of products across a region is important when implementing contingency plans in the case of a crisis.

Technology and logistics. Technical capabilities and effective communications are central to supply chains. Through logistical and supply chain networks we can move large quantities of items in response to natural events such as hurricanes as noted by Amazon Web Services. Likewise, they work with organisations such as the Red Cross to go beyond donations and provide local businesses with logistical subject matter expertise and other technologies that can help mitigate and identify risks.

Dynamic supply chains. Humanitarian supply chains are dynamic and require a different set of expertise. COVID has naturally increased the complexities of humanitarian mission capabilities. The idea of additional complexities can be seen in data and additional legal requirements in different countries globally which means that humanitarian organisations are faced with different data streams and legal requirements. Therefore, we have to question how to rapidly construct new supply chains with increased complexity, especially in the face of new natural events caused by climate change.

Session 6 - Design perspectives for Emergency Response

Introduction

Understanding responses to crises from a human level is important when understanding the experience of a crisis, so often we find a disconnect between what organisations assume happens and the lived reality. Therefore, designing new mechanisms which place communities at the centre is important as we aim to advance the localisation agenda. Many organisations are now increasingly advocating the use of design tools to tackle the new threats ahead of us.



Moderator

David Wales
Founder, SharedAim Ltd



Jonathan Collie
Co-Founder, The Age
of No Retirement



Dr Anjali Mazumder
Theme Lead on AI
and Justice & Human
Rights, Turing Institute



Professor Lisa Thomas
Lecturer in Design,
Lancaster University

Key Points

Improving collaborations. Research in collaboration with industry, public, private sectors, national and international governments can enable a diverse and strong focus on sustainability, health and wellbeing. Poor design is often thought of in terms of specific disciplines such as graphic or product design. Yet, adopting a multidisciplinary approach to design can enable a transformation as many complex challenges cannot be attentively addressed by a single discipline. The requirement for sustainable design which takes into account environmental degradation, loss of biodiversity as growing inequalities and climate insecurities are needed to provide long term prevention strategies.

Data in operational environments. New technologies in data science and AI have resulted in the development of research activities that aim to embed inclusive practices in design development, deployment and governance of data and AI. While there are concerns with AI about privacy, discrimination and surveillance, AI can be used to better protect human rights, improving services by enabling the collection of newer forms of data that can provide a clearer picture of the operational environments in which emergency responders are working in. Having a wide multidisciplinary team of lawyers, privacy counsellors and others can enable new design solutions to support vulnerable populations.

Shifting to communities. New design practices can enable organisations to push aside assumptions and search for innovative solutions. To do this, we need to speak to the end-user, gather insights and learn how to improve. In a recent review of 70 design research projects, it was found that there is a shift towards working with communities. For example, Lancaster University has worked with local communities in Ghana to develop house cleaning protocols to reduce anti-microbial infections. Engagements with communities that are most affected by the deployment of technologies is vital in recognising the importance of multidisciplinary groups as ultimately new technologies will only be successful if they have the end-user in mind, especially in the humanitarian context.

Session 7 - Urbanisation, cities and future planning through design

Introduction

Design is at the root of our aims to make people's lives safer, better and more resilient. Design, whether its system design or design that can help make businesses and organisations including emergency and frontline responders work better. Bad design, on the other hand, can be potentially disastrous, especially in the field of crisis and emergency management. Currently, more than half of the world's population lives in urban areas, this is expected to rise to about 70% by 2052 according to UN statistics. We need to look at how design can ensure the safety, security and empowerment of urban inhabitants.



Moderator

Emily Hough

Editor in Chief, Crisis Response Journal



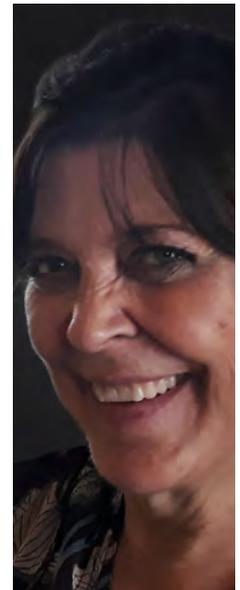
Idrees Rasouli

Associate Professor and Deputy Head of Cambridge School of Art, and Founder & CEO of X-Crop



Dr Albrecht Beck

Director, PPI and Head, Knowledge Hub, Urban Disaster Risk Reduction



Dr Elizabeth Dean Hermann

Professor of Urbanism and Landscape, Rhode Island School of Design

Key Points

Human-centred design. Routes into design can be varied, from wanting to design new ways to respond to tropical diseases, to wanting to construct environmentally sustainable solutions. Human-centered design aims to design proposals that have in mind the immediate surroundings, available tools and resources. This is also important with regards to prevention, research that looks at large scale urbanisation and how it affects society has noted interrelated challenges, from global warming and cultural erasing. Equally, we have to look at community, economic and environmental issues when we design new urban systems. A recent project funded by the Anglo-Japanese Foundation noted that the Japanese government spent over \$2 billion in prevention in terms of physical infrastructure, however, at the same time, social infrastructure is being lost with a lack of inclusion for older and younger people.

Bringing design to citizens. When we consider design in the context of emergency disaster management, we need to call upon our collective ingenuity, creativity and commitment to solving the most difficult problems. When we speak about building back better, we have to question the role of design. In this context does this require new sustainable designs or focusing on inclusivity? Design is able to bring together the firsthand experience of citizens and respond to immediate and long term threats, with this in mind we have to change human patterns of consumption and sourcing of supply chains to integrate with urban and rural communities.

Dynamic environments and design. The interconnected nature of multiple systems must also guide our thinking on design. Therefore, conceptualising situations, conditions and opportunities within a framework of systems understanding, and understanding that these systems are not fixed, but dynamic. Effective design must have the end-user in mind, this can be done through research, dialogue, feet on the ground and translating this into a visitation that can impact people, environments and make them more agile and resilient.



Session 8 - Future of emergency management and planning

Introduction

Bringing in new kinds of technologies such as green technologies for frontline work is critical as we consider the future of emergency management and planning. One of the biggest challenges remains the engagement of the wider community by harnessing existing technologies, understanding society, how it's evolving and what are the key pressure points from climate change to other social influences found in social media.



Moderator

Sebastian Bassett-James
Director, Strategic Partnerships, Emergency Planning Society



Lyndon Bird
Chief Knowledge Officer,
DRI International



Daniel Seet
Senior Director,
Operations Department,
SCDF



Zal Rustom
Chairman,
Argo UK Resilience

Key Points

Training and education. Future planning requires sector-wide research and reporting on trends, predictions and improvements in terms of training, education and certification. Business continuity management is moving rapidly into organisation resilience or resiliency management as business cannot succeed in a failing world. This requires bringing together all of the expertise under emergency management, business continuity, security and crisis management.

Changing plans and capabilities. In emergencies, many times our plan to respond hinges on the next best course of action considering existing plans and capabilities. The Harvard Centre for Crisis Leadership spoke about the idea of getting out of the basement, namely to avoid falling into the first type of crisis that hits. Therefore understanding risks is the first priority by communicating with local communities by assessing situations and building the physical infrastructure required to provide confidence and reassurance to the public as can be seen in Singapore. Singapore in particular has been extremely effective in bringing a more social platform angle in terms of building community and population support, preparedness, training and awareness.

Understanding the unknown. Black swans in the crisis scenario situation mean trying to understand issues that we are neither aware of or understand. Arguably, many issues fall within this, particularly, cyber risk issues for that we are still researching and trying to understand the risks. Part of the challenge of this is encouraging management of government, business and INGOs to spend resources and money for training and education, but development for testing which you are not aware of can have potentially massive consequences.

Session 9 - Future of emergency services: challenges and opportunities

Introduction

There is often a difference between the experiences that nations imagine in terms of crisis response and the lived reality of local communities. The closer we try to get to affected communities, the better. The pandemic has resulted in serious questions regarding our preparedness for large scale emergencies and threats like climate change. There is a recognition across all sectors that building back better is a necessary precondition for achieving the SDGs, however, we need to consider new opportunities and understand better the needs of communities to find innovative ways to tackle the problems we face.



Moderator

David Wales
Founder, SharedAim Ltd



Nicola Millard
Principal Innovation
Partner, BT



Teong How Hwa
Deputy Commissioner,
Future Technology
& Public Safety, SCDF



Robert MacFarlane
Deputy Director, Cabinet
Office - Civil Contingencies
Secretariat

Key Points

Innovating for end-users. When finding new innovative approaches, we need to raise the awareness of local communities, while also innovating with and for customers. Many large organisations have an incredible ecosystem of innovation partners ranging from startups to universities who can provide different perspectives on appropriate innovations. We have to further aim to answer the question, how do we design services from a customer and human experience, rather than current methodologies that are very much in silos?

Building partnerships. Emergency response management cannot rely on solely government agencies, therefore building up capacity in local communities is key to creating lasting, fruitful partnerships. Partnerships internationally can also enable the building of emergency management ecosystems by sharing best practices and working together. Partnerships in this realm should not be solely focused on law enforcement or military counterparts, but also startups and tech companies as they possess knowledge in frontier technologies for which many government departments do not have expertise.

Developing life-saving skills. Emergency life-saving skills are relevant for all sectors of society, not just emergency managers. Therefore, teaching basic knowledge of firefighting, first aid and CPR can act as a multiplier in responding to crises. In Singapore, over 1 million people have been a part of this training from corporate workers to migrants, oil processing companies and even schools. By building these skills from school, up to and past university we can communicate with communities about the importance of disaster response and basic life-saving skills required to help others.

Session 10 - Future global health

Introduction

The COVID-19 pandemic has highlighted the weaknesses that exist in our public health systems, especially psychological impacts on communities and healthcare professionals who have responded to the virus. Over the last year, we have seen increased burnout for public health workers, taking a terrible toll. These have had further detrimental effects on employment and people's mental well being and of course poverty in terms of job loss, loss of self-esteem, daily routine and community.



Dr Peter Patel
Founder and International
Director of the Faculty
of Disaster Medicine,
Sri Ramachandra
University



Dr Mike Drayton
Fellow, UK Cabinet Office,
Emergency Planning
College



Dr Satchit Balsari
Centre for Health
and Human Rights,
Harvard FXB

Key Points

Technology and the future of public health. Data and technology will continue to play massive innovative roles in our healthcare systems. Mass gatherings found in India for example have enabled the development of cloud-based disease surveillance systems. When we speak about the future of health, we should also keep in mind AI and machine learning while using data responsibly. In one mass gathering at a religious festival in India, over 10 million people come from across the country. This is potentially an epidemiological nightmare, however, these new technologies can for the first time enable policymakers to assess deviations and then take steps to reduce potential infections.

Globalisation and disease spread. When looking at global health security, many countries did not consider the emergence and spread of new infectious diseases, spreading even further due to globalisation of travel, this has enabled diseases to rise, resulting in the further rise of drug-resistant diseases that are causing new pathogens. An analysis of the Global Health Security Index published in 2019 showed that out of the 72 centres created globally, only 66[^] of them work, with fewer than 5% able to prove that they tested their emergency operations centre at least once a year. It was found that even among top countries, there were six indicators and main categories, even top countries scored around 50% in terms of preparedness.

Addressing weak healthcare systems. There are serious concerns on how rapidly COVID spread throughout society. Weak health systems followed by a lack of funding and commitment from the central government highlights the many weaknesses that must be addressed. Similarly, the peddling of new medicines without clinical trials is another serious issue with self-organised attempts at providing oxygenation and ventilators devoid of clinical knowledge and the human resources required to operate this equipment. These issues in multiple countries have contributed to a pandemic of complications, resulting in rampant steroid use and false cures for the virus. In large populations, communicating effectively is critical to responding to basic health needs. If we cannot fix the basic requirements, then this will cause additional psychological impacts.

Session 10 - Future global health

Introduction

Today's challenges and trends require widespread collaboration including corporate, government, NGOs, emergency response organisations and local communities. We have to therefore build preparedness and question why we are stuck in bureaucracy when we want to implement new disaster management capabilities. This could be because of cognitive biases and habits which do not encourage long term policy thinking. While we might be focused on the biggest threats, we do not spend enough time thinking about our reactions, awareness and mindfulness.



Moderator

Emily Hough
Editor in Chief, Crisis
Response Journal



**Dr Margaret
Heffernan**
Author, *Willful Blindness:
Why We Ignore
the Obvious at our Peril*



Eric McNulty
Associate Director,
T.H. Chan School
of Public Health,
Harvard University

Key Points

Changing mindsets. Many organisations are stuck in a 20th-century mindset. We are currently facing an issue in which these forecasts that are based on this mindset are broken, in part due to technological advancements, globalisation and increasing inequality globally. Management systems are based on the idea that we forecast, do a plan then execute, when we build these plans they are built on bureaucracies and hierarchies. Building capacity for preparedness is critical, even in low likelihood events to ensure we are prepared. However, policymakers do not necessarily want to spend money, time, effort and resources on an emergency that may not occur. However, this lack of preparedness has been highlighted during the pandemic with critical care beds at around 89% capacity in the UK at the time of writing meaning that there was very little capacity to deal with the pandemic.

Dealing with complex challenges. We have to recognise that fundamentally, bureaucracies are not appropriate bodies for dealing with complex challenges for which there is unpredictability, complexity and a lack of capacity. Institutions have a difficult time adjusting to situations in a crisis, we have seen during the pandemic that bad public health disasters with little funding for public health has resulted in further impacts which could have been avoided if preparedness was invested in. At the root of all of these issues we need to consider psychology, behavioural analysis and design as these all affect our behaviour and ultimately how we interact in the real world.

Understanding risk and uncertainty in crises. Risk and uncertainty are two factors that radically impact our responses. Risk can be quantified in uncertainty, but because it is difficult to quantify, it can get lost for policymakers. This results in policymakers and end beneficiaries feeling anxious, overwhelmed and uncertain in crisis situations because they are uncertain about future events. Therefore, keeping flexibility is key as there are multiple possible answers to a crisis. Similarly, we need to recognise that there are multiple interactions that can take place in a crisis, meaning that cross-sector discussions are vital, new technologies from robotic systems to AI can enable new types of interactions that keep staff safe in uncertain times.



Calls to Action

Call to Action 1 - Future trends

Changing mindsets for preparedness is critical, the lack of preparedness across global health systems has been highlighted. Therefore, changing mindsets to make policy-makers understand the value and potential savings provided by funding preparedness capabilities in advance of a potential crisis.

Call to Action 2 - Designing new responses

Design is at the heart of responses to emergencies, yet our designs have been focused on top-down providing emergency response. Instead, focusing on the natural first responders, namely, communities and providing them with training, education and knowledge should be the aim as we start to build back better.

Call to Action 3 - Communications in crisis response

Communicating to civil society through social media shows several challenges as we've seen increased polarisation. Therefore, providing accurate and succinct information can assist in saving lives. Governments need to ensure accurate information is given to the public. This also requires further understanding of target audiences and preferred methods of communication.

Call to Action 4 - Developing intelligence and information

Intelligence and information have an important role in enabling investigations and visualising current events in the case of a crisis. However, the massive quantities of data can make it difficult for policymakers to assess a situation accurately. Therefore, through AI and data analytics we can provide more accurate pictures for military, law enforcement and crisis managers to respond to crises.

Exhibitors

We were delighted to welcome exhibitors including:



World Humanitarian Forum (WHF) is the largest and most inclusive nonpartisan forum in humanitarian aid and international development.

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