



2019 CLIMATE CHANGE AND HUMANITARIAN HEALTH SYMPOSIUM

SUMMARY REPORT | NOVEMBER 2019

We acknowledge the Wurundjeri people of the Kulin nations, the Traditional Owners of the land on which we gathered for this symposium. We pay our respects to the local people for allowing us to have our gathering on their land and to their Elders: past, present and emerging

CLIMATE CHANGE AND HUMANITARIAN HEALTH RESEARCH PROJECT

Humanitarian Health Actors and Climate Change: building the evidence base for action and advocacy for resilience and adaption by NGOs.

This outcomes of this symposium contribute to the ongoing Centre for Humanitarian Leadership research programme on the effects of climate change on humanitarian health practice. The research programme has Deakin Unversity Ethics Approval HEA-19-144.

CENTRE FOR HUMANITARIAN LEADERSHIP

The Centre's vision is that disaster and conflict-affected communities aiming to achieve social and economic resilience and recovery will be supported by a humanitarian system that is characterised by leadership excellence. The Centre's mission is to develop and improve leadership in the humanitarian system through collaborative research and education, which enables transformative practice. The Centre is a partnership between Save the Children and Deakin University.

This report was edited by the symposium conveners Elizabeth Irvine and Sonia Brockington.

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BACKGROUND

The Climate Change and Humanitarian Health Symposium was held on Tuesday 12 November 2019 at Save the Children Australia in Carlton (Melbourne, Australia).

Over 45 people attend with representation from NGOs, government, academia and the private sector. We were especially pleased to welcome delegates from humanitarian agencies across the Asia-Pacific region including **MERCY Malaysia, NU Care (Indonesia), Save the Children Vanuatu, Save the Children India, CARE Philippines, Lutheran World Relief, Medicines du Monde Japan** and independent practitioners from **Nepal**.

Paul Ronalds (CEO Save the Children Australia) gave the opening address, followed by guest presentations on topical issues in humanitarianism, climate and health from **Dr. Kathryn Bowen** (Australian National University), **Dr. Nasir Hassan**, (WHO Western Pacific Region Office), **Julie Arrighi** (Red Cross Red Crescent Climate Centre) and **Dr. Celia McMichael** (The Lancet Countdown on Climate and Health) and **Misha Coleman** (Global Health Alliance Australia).

Roundtable discussions held during the afternoon sessions captured experiences and insights from delegates. The first, facilitated by **Stephen McDonald** (Centre for Humanitarian Leadership), examined enablers and barriers in climate-informed practice as experienced by humanitarian health practitioners.

The second, led by **Patricia Schwerdtle** (Médecins Sans Frontières) highlighted some of the progress by humanitarian health organisations in increasing climate resilience and ideas for next steps, challenges and opportunities for the sector.

The conveners extend their sincere thanks to members of the CHL team, particularly **Liz Thompson** and **Tara Cartland** for their support prior to and on the day of the event. We also thank our guest speakers who generously offered their expertise and time to join us, and to all the delegates for their contributions.

This symposium was held as part of ongoing research in humanitarian health practice and climate change and is subject to the conditions of Deakin University ethics approvals. As such, comments made during the day's discussion are not attributed any individuals or organisations. Summaries of guest speaker and delegate presentations attributed as such and have been included with their permission.

Climate change is not a future prospect – it is happening now, and those most vulnerable to its effects are set to suffer the greatest health impacts. The question is, are humanitarian organisations ready?

Sonia Brockington & Elizabeth Irvine
Symposium Co-Convenors

KEY MESSAGES

THE HEALTH EFFECTS OF CLIMATE CHANGE

The links between climate change and the health of populations are well established, with the main impact of climate change on human health being an exacerbation, in both number and severity, of health problems that already exist. As climate change acts as a threat multiplier, what humanitarian organisations are seeing now will get worse.

Climate change effects will be felt most keenly in low-income settings and by those who are more vulnerable such as children, the elderly and the ill. The effects of extreme heat, malaria, diarrhoeal disease and dengue will require increased attention, especially in urban and informal settlements. In higher-income settings, heat-related illnesses will continue to affect vulnerable populations, and the prevalence of non-communicable diseases such as diabetes and cardiovascular disease is also expected to increase due to climate effects. Those at the front lines of climate change are already observing that as the time between disasters decreases, the severity increases and recovery time decreases, mental health and psychosocial effects are becoming increasingly prevalent.

IMPACT ON HUMANITARIAN RESPONSE

As a threat multiplier, climate change will worsen drivers of humanitarian crises such as food insecurity and scarcity of other essential resources such as water. Climate change is also identified as contributing to the ‘typology shift’ of crises to longer and more protracted periods, increased humanitarian need and the cost of response.

Humanitarian organisations need to be aware that migration is an identified climate adaptation response, as communities move to reduce their exposure to events, or increase opportunities for nutrition, water and access to health care.

The long-term nature of climate change means longer-term thinking by humanitarian organisations is now required and “getting in and getting out” is no longer a relevant way of operating. There are however tensions in the humanitarian-development nexus that need to be navigated in moving forward with this.

Albeit with recognition that being climate-informed has its own set of requirements, there are identifiable synergies with health programming disaster risk reduction, development and capacity building programmes that already exist within many organisations. Recognition of these synergies will help to progress climate

informed practice through the identification of co-benefits of action and additional resourcing. In this way, as well as a threat multiplier, climate change can be a “solutions multiplier”.

COORDINATION

For effective action, climate change cannot be considered another ‘silo’ and must be integrated across organisational programming, particularly WASH, livelihoods and nutrition as this is where many co-benefits of climate action can be realised. There remain opportunities for increased inter-agency cooperation and coordination at the sector level for humanitarian and development actors.

In progressing climate change action on health more broadly, working with national authorities such as National Disaster Management Agencies, Ministries of Health and climate focal points both internally and externally are critical success factors.

ADVOCACY & COMMUNICATION

There is a strong consensus that humanitarian organisations need to advocate for climate action with opportunities for political advocacy identifiable at local, state and federal government levels. In undertaking advocacy humanitarian organisations need to give due consideration to humanitarian principles, carefully chose context and avoid being party political.

Coordination is particularly important in advocating and communicating on climate, and there is a proven power of alliances in advocating for action on health. Coordination means focus messages can be aligned and mixed messaging minimised. Advocates also need to be able to communicate effectively to policy makers about how programmes will improve health outcomes and promote social cohesion.

Internally, bottom up advocacy can be critical to operationalising climate action, an engaged and accountable leadership is required. In achieving long-lasting action, identification of the co-benefits of climate action for health and engaging champions outside of the organisation or the sector can be effective.

Humanitarian organisations are, and will continue to be, questioned on their own climate impact so need to be prepared to “have their house in order” with respect to climate, whilst still being prepared to advocate and programme for resilience.

STRATEGIC PLANNING

In planning for the impacts of climate change on health humanitarian organisation need to consider two time scales: now until 2030 under a +1.5°C scenario; and 2030-2050 under a +2°C scenario. Looking beyond 2050, organisations need to be integrating +1-4°C scenarios into organisational strategies to build climate resilience in the long term.

CLIMATE ATTRIBUTION

Direct attribution of climate change to humanitarian crises remains challenging and climate should only be attributed as a cause where appropriate.

There are significant volumes of work on the attribution of quick-moving stressors such as health and vector-borne disease, but context-specific (low-income setting) data gaps remain, with the majority of data from well resourced, high-income settings. High-risk areas across Africa and Asia, informal settlements and internally displaced populations remain key areas requiring investigation.

The lack of data from humanitarian contexts is recognised as a challenge by humanitarian organisations in their planning, and similarly for researchers looking to progress knowledge in the climate and health space.

PROGRAMMING

Humanitarians can respond to climate change through both adaptation and mitigation activities. One of the most effective measures to reduce vulnerability to climate change are programmes that improve basic health measures, including public awareness and information campaigns.

Major donors such as the Asian Development Bank, World Bank and Green Climate Fund recognise the importance of investing in health mitigation and adaptation activities and are taking a keen interest in these types of activities.

With the need for urgent and transformative action, it is important that NGO activities on health and climate are coordinated with broader international and national initiatives. Taking a 'systems view' of health interventions is imperative as this will help to align on-ground action with broader national and international initiatives, such as the WHO Operational Framework for building climate resilient health systems [1]. Coordination of programming with National Adaptation Planning underway in many countries will help to maximise impact. Programming in Small Islands Developing States (SIDS) and the Pacific should also align with the SIDS Action Plan strategic focus points of empowerment, evidence building, resources and implementation [2].



SESSION 1

INTRODUCTION AND GLOBAL OVERVIEW



PAUL RONALDS - CEO SAVE THE CHILDREN AUSTRALIA

Climate science has been established for over a century. It was first recognised by the science community in 1912 with contemporary news linking increased atmospheric carbon-dioxide from the burning of coal to a “blanket on the earth”. Even then it was recognised that the effects would be considerable and long lasting.

With the evolution of science we now know the world’s disadvantaged will be the most affected by climate change. As humanitarians we need to understand the effects across our region and how it will affect different groups of people. We know that children are particularly vulnerable.

In acting on the science, we also need to be aware of the politics, as of course climate change is a very political topic. Good humanitarian action asks deeply political questions and we must speak out for those most vulnerable and least able to cope. But we need to be wise in this, carefully choosing our context and trying to avoid being party political.

For those of us at the forefront of climate responses it can be hard to maintain our efforts, especially in the face of seemingly intractable political inaction. But we cannot lose hope. There are incredible people around the world doing incredible things. And in quoting Swedish environmental activist Greta Thurnberg “The one thing we need more than hope is action. Once we start to act, hope is everywhere”.

DR KATHRYN BOWEN - AUSTRALIAN NATIONAL UNIVERSITY

UNDERSTANDING CLIMATE CHANGE AND HEALTH: GLOBAL OVERVIEW

It is established that the health of human populations is sensitive to shifts in weather and climate change, and that climate change will act on health mainly by exacerbating problems that already exist. Globally, the impacts of climate change are inequitable: the countries that are emitting the greatest levels of greenhouse gases are least affected, but the countries that are emitting the least are among those most impacted. Adverse health impacts will be greatest in low-income countries and those at greater risk include, in all countries, the poor. Data from the World Health Organisation shows that by 2030 an estimated 250,000 additional deaths per year due to climate change will occur, with malaria, diarrheal disease and dengue being the most important in low income settings [3].

In complex settings where humanitarian organisations commonly work, climate change acts as a threat multiplier. What we’re seeing now will get worse. If we’re seeing food insecurity now, we’ll see more of it. Additionally, climate change is among the contributing factors to the typology shift of crises to longer and more protracted periods. Direct attribution however remains challenging as there is a lot of research on the quick moving stressors but less on the slow-moving stressors. The science is clear on heat and vector borne disease, but food and water security haven’t had the same attention.

As for predictions to 2030 in our region, floods and cyclone activity is going to dramatically increase, and in terms of number of people exposed, Asia will be particularly affected. With these eventualities, humanitarians, development actors and emergency responders will need to consider the capacity of the communities in which we work to respond. For example, when in the United States 2 million people need to be evacuated, this is a possibility. But what about states or regions that do not have the capacity to facilitate this?

With the lines between science and advocacy blurring, one of the most effective measures to reduce vulnerability to climate change are programmes that improve basic public health measures. Issues of climate and health are becoming of increasing importance on the international climate agenda and governments are taking a lead role in responding. Donors such as the Asian Development Bank and World Bank are taking a key interest.

The health sector can respond to climate change through both adaptation and mitigation activities. There are many guiding documents and plans (such as National Action Plans) available at the international and national levels.

Many of these activities have relevance to the humanitarian sector and shifting to a systems view is important. Climate change is not another silo and action on climate change for health needs to be considered across the six “building blocks” of health systems. An example of how to approach this might be to ask “How do we make sure our hospitals are climate resilient?” It is also important to acknowledge the impacts of climate change on health staff. WHO Training Modules [4], and the Climate and Health Country Profiles [5] provide opportunities to develop capacity around the region.

The Sustainable Development Goals, the Paris Agreement, the Sendai Framework and the New Urban Agenda also provide relevant guidance for health actors and there are many commonalities between these, which can be drawn out and synthesised. But how the health sector builds, and communicates on these, is also of increasing importance. It is our job to communicate effectively to policy makers about how our policies will improve health and promote social cohesion. Recognising and promoting co-benefits of mitigation measures can be an effective tool in this. It is also important to note that how we communicate climate is therefore closely aligned to, and can support, strengthening of health systems.



DR NASIR HASSAN - WORLD HEALTH ORGANISATION **PACIFIC PERSPECTIVES ON CLIMATE RESILIENCE**

The Western-Pacific Regional Office covers a geographically large and diverse area, comprising 37 countries and territories and 1.8 billion people from Mongolia to the Pitcairn Islands. Across the Pacific there are no downward trends in climate indicators such as sea level rise and the smaller islands are particularly vulnerable due to their size, geography and capacity. Many Small Island Developing States (SIDS) fall into the top 15 countries most susceptible to sea level rise globally.

Across the region, the susceptibility to climate change is developing to be much worse than expected: with up to three times more people affected than initial projections. For some Pacific Island Countries (PICs), decreasing time between emergencies, increasing vulnerability and decreasing resilience is pushing communities into a spiral of social and economic disadvantage. Here is just one story about the erosion of resilience and impact of climate change at the personal level:

“I’m terrified. I build my kitchen then it fell into the sea. I tried to build it better, but it fell into the sea again. By the fourth time, I give up” – Pacific Island resident

In the special report released by the IPCC [6], global warming is projected to increase by 3C by the end of the century. In planning for this eventuality we need to worry about two time scales: now through to 2030 (+1.5C) and 2030-2050 (+2C). The difference between 1.5-2C will negatively affect natural, managed and human systems globally.

With respect to health and climate change in the Pacific, the challenges are real. For example, how many extra diarrheal cases are being caused by climate change impacts? Indications are that the 250,000 additional deaths attributable climate change [by the WHO] is probably an underestimate.

The Pacific Islands Action Plan on Climate Change and Health sets an ambitious goal for Climate Change and Health in that by 2030, all health systems in SIDS will be resilient to climate variability and change [7]. Pacific Islands however require investment to achieve this. Ideally, activities needs to align with the Action Plan strategic focii of empowerment, evidence building, resources and implementation. There is also an identified urgent need for:

1. Improved data gathering
2. Robust health information systems
3. Multi-sectoral cooperation
4. Evidence based initiatives adapted to the Pacific context
5. Better understanding of the complex science underlying the links between health and climate change

To inform and influence policy, data and evidence must be localised and there may be no need for complex analysis for data to be useful. Even raw data simply plotted can be useful or simple comparison or correlation plots of environmental drivers and health impacts has been shown to be useful for understanding the relationship between diarrhoeal disease and precipitation in Suva Fiji, mental illness versus temperature (unpublished data) or mean birth weight following established weather phenomena such as El Niño [8,9].

Across the Pacific WASH is, and will continue to be, a big issue for health and early warning will be the key to increasing health systems resilience. For hospitals and schools this can be achieved through following the principles of health care without harm and the development of “SMART Hospitals” (safe + green). In the context of the Pacific where severe storms are impacting communities and infrastructure safety is arguably more important than being green.

More generally, health advocates need to participate in climate change forums. Presently, only 1-2% of global climate funding goes to health programming, and advocating on health-co-benefits has been effective in increasing this. At the recent Asia-Pacific Parliamentarian Forum on Global Health presenting and advocating on the basis of co-benefits also proved effective.

SESSION 2: CLIMATE AND HEALTH IN HUMANITARIAN PRACTICE



JULIE ARRIGHI - RED CROSS RED CRESCENT CLIMATE CENTRE

EXTREME HEAT IN URBAN ENVIRONMENTS

Heatwaves are deadly and their impacts are on the rise globally due to climate change. In recent years, heatwaves have broken temperature records and led to the deaths of thousands of people. The 2003 European heatwave killed more than 70,000 people, and the 2015 heatwave in India reportedly killed over 2,500 people. In 2005, an 8-day event in Bangladesh 2005 resulted in 3,797 additional deaths.

Exposure to extreme heat can lead to dehydration, heat exhaustion, heat stroke, loss of consciousness and other medical emergencies. Heatwaves can also exacerbate pre-existing conditions such as cardiovascular disease and respiratory illnesses and have deadly consequences. Heat is often considered to be a 'silent killer' as the documented cause of morbidity and/or death may be attributed to condition occurring secondary to the heat stress or exposure. Additionally, the effects of heat stress typically occur around two days after the onset of the event. People living in urban areas are amongst the hardest hit when a heatwave occurs because urban areas are hotter than the surrounding countryside. The urban poor frequently bear the brunt of this silent emergency.

Research on the attribution of heatwaves to climate change is currently centered in Europe and there are significant geographic data gaps where extreme heat conditions are expected to worsen under climate change. There are more specific gaps in vulnerability and exposure across informal settlements which can warm more than the national weather station data may indicate due to micro-heat island effects and other spatial effects, and there is a need for in-depth analysis of spatial vulnerability and exposure patterns, particularly as they apply to humanitarian contexts. Research on local thresholds for heat risk (especially in Asia and Africa) is required, as is information on the effectiveness of heat early warning systems at the local level. Mortality baseline data, which can be used to monitor progress in heat-adaptation programmes could also be strengthened.

Building from research, further priorities for climate action on heat include urgent improvements in public awareness of the risks associated with extreme heat and a strengthening of public information campaigns, development of innovative approaches to risk and scaled up investment in heat early warning system and heat action planning. Heat reduction strategies need to be integrated into urban planning and growth and partnerships and sustained collaboration across sectors will be required to meet increased risk.

As the humanitarian sector, we need to ensure we see heatwave risk and reduction and response as our priority.

There are many global examples of adaptation for heatwaves including water distribution to vulnerable persons (French Red Cross), tree surveys and preparations to increase green coverage (Uganda), introduction of social protection measures such as low-income subsidies for cooling (New York City), water park installations (Cape Town), social support for vulnerable or isolated persons (Australian Red Cross), forecast-based financing and mobile cooling centres such as airconditioned buses (Vietnam Red Cross), awareness raising and water distribution (India Red Cross) and social-media based awareness campaigns timed with the onset of the heat season (Bangladesh).

As for the Red Cross Red Crescent Climate Centre, upcoming and planned activities include the development of heatwave campaign materials for cities and RCRC branches, tactical campaigns for informal settlements in Lusaka, Zambia (drink more water, stay cool) and companion guides to the Heatwave Guide for Cities which can be a useful resource for humanitarian practitioners [10].

The Heatwave Guide helps planners to understand, reduce the risk, and respond to heatwaves in cities. It provides information for technical staff within city government on working with partners to understand city-specific heatwave risks; operational approaches to prepare for an imminent heatwave; response strategies to reduce human harm during a heatwave; and ways to learn from a heatwave that has just ended.

DR CELIA MCMICHAEL

CONNECTIONS BETWEEN CLIMATE CHANGE, MIGRATION AND HEALTH

Climate change is often positioned as an environmental problem, yet it has significant impacts for human populations including for human health and migration. This presentation focuses on the connections between climate change, human migration and health. It considers how climate change will shape human migration, and the health risks and opportunities for people who move in the context of a changing climate.

Migration is not necessarily an indicator or cause of vulnerability; it can be an adaptive response to cope with climate change impacts. Migration and retreat might reduce exposure to hazards from extreme weather events and damaged physical environment, reduce undernutrition or freshwater shortages, and enhance access to health care. Conversely, forced and/or unplanned migration could increase the risk of adverse health outcomes, particularly among vulnerable groups.

Emerging case studies point to adverse outcomes associated with managed retreat in small island or coastal communities affected primarily by sea-level rise (SLR): including for example decreasing mental health, food security, water supply, sanitation, infectious diseases, injury, and health care access. People may also move into sites of climate-related health risks, including urban poor areas. Human health is an important measure of the whether migration is a 'crisis' or a form of 'adaptation' in the context of a warming world.



SESSION 3: CLIMATE COMMUNICATION AND POLITICAL ADVOCACY



ROUND TABLE 1: EXPERIENCES IN CLIMATE INFORMED PRACTICE: ENABLERS, BARRIERS AND COMMUNICATING NEED

In these round-table discussions, participants were encouraged to discuss their work in climate informed health practice, and enabling factors and barriers experienced. International guests were invited to make a short presentation of their organisation's work in climate informed health practice, summaries of which follow.

UMA NEPAL NEPAL

Climate induced disasters are impacting lives of millions with increased intensity and frequency. Major challenges are for those who are poor and living with limited resources. Loss to lives and livelihood due to climate changes are increasing their vulnerability many folds. Lack of knowledge, lack of appropriate strategies to integrate primitive knowledge base, poor access to localized themes to mitigate the effects, poor enactment of national and global policies and absence of simplified measures contribute to the overall challenges. In order to address the challenges, a multi pronged approach would be a promising answer. Some of the areas that I have experience in regarding climate change are:

- Developing evidence based strategies for prevention, preparedness, response, recovery and reintegration.
- Innovative educational sessions for individuals, organizations and government stakeholders on latest theories and best practices
- Environment creation as part of community based transformation approach for wider application of practical skills and expertise
- Research on primitive practices and integration of these with scientific interventions.

Thematic areas are communicable and non communicable diseases, reproductive health, sexual and reproductive rights, comprehensive sexuality education, WASH and psychosocial interventions, food insecurity and under nutrition, undertaking a systems-based approach, conflict and complex emergencies, natural disasters and technological disasters.

In the context of a small country like Nepal, climate change has still not taken the place as a national agenda in practical way and at individual/grass root level it is not perceived as a big challenge because mostly either people are not aware of climate change or some believe that countries like Nepal are not the main contributors to climate change. This requires research in Nepal. The discussion at symposium also brought about a thought that, may be the wording can be changed and not calling it the climate change and may be calling it climate variation. However, this needs a research to find the actual workable solution. Continual learning and research activities are required in Nepal.

NORMALIZA (MEL) NASIR
MERCY MALAYSIA

Below are some of our works in Climate Change:

1. WASH projects in the state of Kelantan, Sabah and Sarawak which focus on the various systems we used i.e rain water harvesting, water filtration system, deep well and nature-based dam, plus the capacity exchange programs for the villagers in infrastructure management and also climate change and risk reduction
2. School Preparedness Program with the focus on climate change impact to school children.
3. Disaster Risk Reduction in Malaysia focusing on villages and communities, but we are also extending our program with Local Government Units such as Penang & Selangor state as well as with private sector such as hospitals in Johor and the Kuala Lumpur International Airport.
4. Our leadership program with Yayasan Bank Rakyat (YBR) that touches on climate adaptation issues and sustainable development.
5. Our reconstruction and build back better projects for schools, hospitals and other infrastructure projects that include climate mitigation and improved safety measures. For example:
 - Earthquake resistant building – following the Tsunami in Aceh, MERCY Malaysia worked with Kyoto University & Nepal's Society for Earthquake Technology to make seismic resistant home;
 - Health clinic in Myanmar designed earthquake and typhoon resistant and;
 - Health clinic in Jamtoli Camp 15, Cox's Bazar, Bangladesh that is built according to government guideline.
6. Work closely with National Disaster Management Agency (NADMA), under the Office of Prime Minister.



7. Advocacy through contributions and attendance at Climate Change Impact to Human Health - 2018 Tzu Chi International Medical Association Conference; Science, Technology and Innovation for DRR Symposium 2019; From Policy to Practice - Think City's Climate Action Week 2019 and Urban Innovation and Climate Action - Asia Pacific Urban Forum

RAYAPPA (RAY) KANCHARLA
SAVE THE CHILDREN - INDIA

Since 2008, I have mounted and managed approximately 38 Humanitarian Responses across rapid onset, chronic and conflict based crises, with a niche approach called Child Centred Humanitarian System (CCHS).

In the very first phase of 1 to 30 days, based on rapid assessments, a Re-Active / Rapid Care approach has been the primary approach to humanitarian health response such as launching medical and health camps. In conflict settings, immediate cash support to undergo multiple surgeries and medication is an efficient strategy to save lives and losses of vital limbs.

Establishment of Child Friendly Spaces (CFS) for providing protection for children under 18 as well as pregnant and lactating mothers had been an innovation in order to strengthen local government response and prioritize those severely vulnerable to any humanitarian crises, namely, children, women, disabled, elderly and ill. CFS, for example, in recent Patna (Bihar, India) urban humanitarian crisis, played a key role in identifying the children that needed emergency health care have been referred to the nearest clinics, speciality hospitals as well as enabling much needed psycho-social care to the affected children, women and other vulnerable groups to mitigate stress, distress; and in some cases trauma care, as per the rapid diagnosis of health teams.

Following this, progressive in-depth assessments enabled prioritization of health and nutrition needs with prioritization of severely acutely malnourished to those who are impacted by secondary crises such as water borne diseases, lack of sanitation. Progressive recovery has enabled longer-term recovery of health and nutrition through provision of kitchen gardens and accompanied handholding support to LCBD* (Low Cost Balanced Diet), among young mothers and adolescent girls.

In these very places, with climate change inducing newer and unforeseen humanitarian crises, preparedness and resilience building at individual and household level; and in schools where children spend best hours and years of their childhood, are the vital needs of the hour. Resilience as a necessary condition to ensure rights of children in humanitarian -development - climate change triple nexus.

LEIWAKU (LEAH) NOAH
SAVE THE CHILDREN - VANUATU

My name is Leah Noah and I worked as a health technical Advisor for Save the Children in Vanuatu office since 2014.

Vanuatu is vulnerable to frequent tropical storms, as well as earthquakes, volcanoes, and tsunamis. Many areas of the country are low-lying and prone to coastal flooding. Because Vanuatu is small, when a tropical storm or other disaster hits, it will very likely affect the whole country.

In March 2015- June 201 we experienced a Category 5 Tropical Cyclone Pam and followed by El Niño drought which caused hardships for families and communities that lost rainwater, harvesting structures and crops during the cyclone. In all the provinces, but especially in Shefa and Tafea, this caused health problems to children like respiratory infections, vector borne and water borne disease and most of all malnutrition amongst children under the age of 5 years. In the health sector we work closely with the Ministry of Health through the Village Health Workers (VHWs) network and communities to respond to the urgent needs in the most affected communities by providing mobile health clinics. Its main objectives are to provide education on health and nutrition to parents, community members and children within the target communities, treating skin and respiratory infections and identifying malnutrition in children using Mid-Upper Arm Circumference (MUAC) measurements and refer cases of moderate and severe acute malnutrition to health facilities for further management.

We also distribute high energy biscuits to children as foods are of scarcity and also provide health and nutrition technical support to all the Village Health Workers throughout the country for the continuity of monitoring nutrition and health issues, identifying malnutrition in children so they could be treated accordingly.

In 2017 the active volcano on Vanuatu's Ambae Island has once again begun spewing out ash and harmful smoke which impacted health and nutrition for adults, children, elderly and people living with disability totaling up 13,000 residents on the entire island. The government of Vanuatu has declared a state of emergency over a period of 1 year and people from that island are forced to migrate to other islands for safety. The Save the Children health sector works closely with the ministry of health, ministry of Agriculture and other humanitarian NGO's in country to ensure there is safe water for drinking by installing rain harvesting first flush water tanks and build a proper cover for the underground wells. The WASH team constructed improved toilets including tippy tap and soap for hand washing for children in schools and for displaced families. The team has provide WASH education in schools, encouraging children to use toilets and wash their



hand on two most critical times; after using the toilet and before eating.

The displaced population does not access to good nutrition so we provided them with vegetable seedlings, root crops that are climate resilient. Save the Children is also part of the nutrition working group that strongly advocate for a nutrition basket; a family basket of foods consist of proteins, carbohydrates, vitamins and minerals from nearby islands to be distributed to the displaced families from Ambae Island.

SUBHASHIS ROY -
LUTHERAN WORLD RELIEF - USA

Climate change and inter-annual weather variability is contributing significantly in accelerating risks and vulnerabilities related to natural hazards, insidiously impacting lives of millions each year. Climate change is not only an issue for future, but it has already started straining the present disaster relief system, evident by the increased case load and higher response cost.

Expectations of affected populations to assimilate ways to return in their normal routine has propelled humanitarian actors to debate on the dimensions of humanitarian responses and work out alternative approaches that integrate risks, vulnerabilities and adaptations. In our efforts to make community “disaster ready”, we need to have strong, proven, evidence-based system to promote radical shift from traditional response to a prudent integrated approach. As such it necessitates us to design our preparedness plans that establishes links btween the relief, recovery and preparedness.

The challenges can be categorized in three major areas.

- **System Level** - poor access to financial services, lack of research, community service, no system for quick recovery communication system.
- **Agent Level** - lack of capacity and opportunities for increasing ability to learn, lack of resources, resourcefulness is missing.
- **Institution Level** - poor enactment of rights and entitlements, lack of decision-making structures.

To counter the challenges in a systematic way, organizational preparedness is essential. Some of the areas where I am working currently are:

- Community based analysis on the threats and gaps in capacity
- Multi-year organizational preparedness plans
- Integrated program cycle approach in responding to basic needs that affected due to communicable and non-communicable diseases, livelihood interventions (farm and non-farm) getting impacted by weather variabilities, poor access to nutritious food, access to WASH intervention, shelter as means to protect and psycho-social issues
- Developing systems at different levels on preparedness, prevention, mitigation and response.
- Developing system for data analysis at community level
- Integration of traditional age-old warning systems with latest technologies
- Customized approaches for conflict affected population and natural disasters

NURHAYATI (NURI) MARAMAN

PBNU CARE - INDONESIA

PBNU has the Institute for Disaster Management (LPBI NU) and Health Institution (LKN NU) also Student Association (IPNU). Some of the actions that have been taken for Climate Change are:

- Incorporating the theme “Plastic Waste Management” at the National Conference (Musyawarah Nasional) attended by the President, Vice President, Ministers and all NU branch representatives throughout Indonesia. An exhibition was also held about the benefits of recyclable waste.
- Learning about plastic waste (Ngaji Plastik), attended by the community and students at least more than 500 people sitting together listening to the impact of plastic for climate change.
- Invite santri (students) to participate in caring about climate change, and teach students to take part, one of which is garbage savings, where students collect garbage and money saved for future use.
- NU leaders approached entrepreneurs to be able to reduce activities that had a large impact on the environment.
- Conduct training for students to hold small activities around the pesantren (santri school) that have an impact on climate change.

LPBI NU activities on climate change occur in the community through social media, mainstream media and direct campaigns to increase the capacity of the management and the community in controlling climate change.

The strategy of waste management by the Nusantara Bin bank (archipelago Garbage Bank) includes public awareness raising and education about waste management targeting Boarding School (Pesantren), schools (madrasah) and communities through 3R [reduce, reuse, recycle] techniques.

- The ‘Plastic Study’ provides counseling about the dangers of plastic and spreads knowledge about plastic waste reduction technique.
- Socialization of waste management in the Ciliwung River community provides community awareness about river waste management.
- Declaration of “Beat Plastic Pollution” ensures community commitment related to the reduction of plastic waste.

A socialization of waste management in the Bogor waste-bank community - Waste Management by Bank Sampah Nusantara which based on banking. Nusantara waste savings teach the procedures of recycling waste, hold Roadshow and Workshop of waste management and socialization of waste-bank management systems based on banking and improving the Management Capacity of the Indonesian Garbage Bank - Training of Training (TOT) on environmental based of waste bank management for management of the Indonesian garbage bank throughout Indonesia

Research activities include:

- Preparation of the review book of Health Crisis Management in the year of 2017
- Composing the best practices of each institution to be socialized to the government and NGOs



- Providing of guide books and efforts to overcome health crisis for schoolchildren throughout Indonesia

Other activities include:

- Policy advocacy related to Climate Change and Humanitarian Health- Facilitating the government and stakeholders at the district and village / kelurahan levels to create map and giving assessment to any potential thing of each district.
- Making compilation of Standard Operating Procedure (SOP) documents for climate change and humanitarian health.
- Knowledge Management related to climate change- Making documentation of climate change control programs and activities, which involve broad communities, NGOs, the Government of Indonesia, the international community, the United Nations and press media.

FARHRI FAJRI ALFAREZ - INDONESIA
IKATAN PELAJAR NADHLATUL ULAMA
(NAHDLATUL ULAMA STUDENT ASSOCIATION)

Our activities related to Climate Change and Humanitarian for this year are:

- Ngaji Plastik - Ngaji means to learn with a specific subject. For this time santri (students) of NU learning about Plastik or Plastic. We learn the effect of plastic waste to the environment and also climate change. We do ngaji plastik every month. We go to different Pesantren (Islamic Boarding School) to discuss “plastic”.
- Bank Sampah Nusantara (Nusantara Waste Bank) - Santri should collect sampah (waste) and give it to the waste bank. Then Waste Bank will pay for what they did.
- Exhibitions, including in Munas (Musyarawah Nasional NU or NU National Conference), February 2019. The event was attended by more than one hundred fifty thousand people. At least from this exhibition our Muslim society has more awareness about climate change.
- Another movement is to make a book like “Santri Siaga Bencana” (Student Prepare for Natural Disaster). We also plan to make another book, “Santri siaga Perubahan Iklim dan kemanusiaan” (Student Prepare for Climate Change and Humanitarian).

JEROME LANIT - CARE - PHILIPPINES

CARE Philippines, is undertaking an Non-Communicable Disease (NCD) in Emergencies Program in the conflict-affected Muslim city of Marawi and Lanao del Sur Province in Mindanao, Philippines. The overall aim of the project is to reduce the risks of NCDs (specific to hypertension, diabetes and obesity) and establish support groups in the evacuation centres that will advocate, provide awareness, information and education to the larger community. On top of this is to support the health sector of government on strengthening its services to the ground level up to enhance its health system.

The missing link is the correlation of climate change and its impact on the health situation of Internally Displaced Persons (IDPs). Based on current Philippine national data, 23% of the population are hypertensive and 15% are diabetics – for aged 25 above. However, with our recent baseline results, during emergency situations we initially observed a spike on the rate of hypertensive patients and diabetics to as much as 50% and 25% respectively (although we only targeted aged 30 above).

This is nothing out of the ordinary but the factors they often attribute to the increase of these diseases are: stress, diet or food source, and hotness/coldness in the camps or transitory sites – which is directly associated with changing climate. As to which among these factors contribute the most to the increase of hypertension and diabetes is something difficult to establish but they are somewhat inseparable.

YUKO YONEDA
MEDICINES DU MONDE - JAPAN

In Japan, MdM runs two projects with mental health and psychosocial support focus. In Tokyo, MdM has been working with the poor in the chronic or repeated state of homelessness, many of whom carry mental health conditions. In Fukushima, MdM provides long-term recovery support to those affected by the 2011 Japan Earthquake with a deep sense of unrecoverable loss and post-traumatic stress disorder (PTSD) conditions. Most of them are aged, living alone, after having had repeated relocations and separated from younger generations who had chosen to move. Both projects work in partnership with local NGO partners to provide holistic care and support, so that they can regain a sense of dignity and security and belonging to a community. They are also vulnerable particularly to extreme weather events and disasters. Messages on protection from the heat strokes and maintenance of health are integrated in

regular health consultation and information sessions, especially at the change of seasons.

Repeated shocks and limited recovery time are having an impact on affected populations and this was especially noted in the Typhoon Hagibis that hit eastern Japan. For many in Fukushima, this brought back experiences of the evacuation post-the 2011 nuclear disaster. One evacuee from the typhoon went to the doorstep of the evacuation center, but just couldn't bring herself to enter into the building. Throughout the response, there was

a noted increase in mental and emotional health needs which also become evident in their physical symptoms, i.e. the 'invisible' impacts. This became challenging as individuals had not fully acknowledged the effect and the impact of repeated shocks with limited recovery time exacerbated this.

MdM has a presence in Cox's Bazar where work is being undertaken on community-based health education sessions, including messaging for disaster risk reduction with the Rohingya population.

MISHA COLEMAN

POLITICAL ACTION ON CLIMATE CHANGE

In responding to the health impacts of climate change, Australian State and local governments can play a key role by investing in adaptation and mitigation responses that have co-benefits for human, animal and environmental health.

Impacts of climate change on health include potential for increased prevalence of many other conditions: heat illness, asthma, heart disease, anaemia, and infectious diseases including diarrhoea. Many of our water sources will become undrinkable. Climate change has even been linked to depression.

The policy paper by the Global Health Alliance Australia "Townsville to Tuvalu: Climate Change Impacts on Health in Australia and the Asia Pacific" highlights evidence and case studies to show how climate and environmental change will affect human health in the Asia Pacific region. It provides proposals for how Australian Governments - Federal, State and Local - might respond to this challenge, arguing that Australia's aid, health and agricultural portfolios have an opportunity to develop policies that build resilience in our region to the

impacts of climate change on human health. Such an approach would elevate Australia's standing in the region. The benefits are also closer to home, in terms of reduced health risks, and improved political, health and economic security for Australians.

The link between environmental and human health has not been at the centre of Australian policymaking. The "Townsville to Tuvalu" paper hopes to redress that gap, and to inspire effective policy solutions to an issue of vast and growing significance to Australia, its region, and the world.

Australia has longstanding commitments to the region, notably through its Official Development Assistance program, but also through a host of government and non-government initiatives. Australia has a major opportunity to build on these efforts by supporting its partner countries to develop their resilience to the health impacts of climate change. Humanitarian health responders are encouraged to advocate for political action climate change through the local, state and federal government levels. The power of alliances in advocating, adapting and mitigating the effects of climate change also bear consideration.



SESSION 4

CLIMATE RESILIENT HUMANITARIAN HEALTH SYSTEMS

ROUNDTABLE 2: BUILDING A CLIMATE RESILIENT HUMANITARIAN HEALTH SYSTEMS FRAMEWORK

In determining how humanitarian health practice might become more climate ready, this session raised the following topics for discussion:

1. The need to move from the ‘why’ to the ‘how’
2. How do humanitarians define a ‘climate resilient health system’?

MOVING FROM THE ‘WHY’ TO THE ‘HOW’

In progressing toward climate resilience, there is substantial action that can, and is, being taken by humanitarian organisations. Further opportunities raised by the delegates included:

- The opportunity for advocacy through the telling of stories from the field.
- The need to think longer term. Humanitarians tend to want to get in and then get out, but whether we like it or not, “getting in and getting out” is no longer a relevant way of operating.
- Looking internally as to how to manage climate is critical for organisations and needs to take place before taking it to the field. Bottom up advocacy is critical to internally operationalising climate considerations and if climate isn’t recognised internally, long-term traction won’t be achieved.
- In working towards climate resilience, there is the opportunity to acknowledge the work toward climate resilience that is already being undertaken, in disaster risk reduction, capacity building or climate adaptation programming. Just as it can be a threat multiplier, climate change can be a solutions multiplier
- Recognising co-benefits in climate informed-practice can be an effective way to advocate for change. This can be identified and led at any level in an organisation e.g. operations teams identifying cost reductions through the move from single use consumables to multi-use alternatives.

- To scale up local models to the organisational level you must be a champion, but you have to rely on the ground level evidence and be a catalyst to be the change. Through building a community of practice, humanitarians can be the change.

Challenges humanitarian organisations face when trying to implement climate resilient health practice include:

- Tension between humanitarian and development mandates. In many organisations, climate change sits under disaster risk reduction and neither humanitarian or development workers “own” climate change. Quite often for example, ‘health’ as a standalone does not come up in DRR plans whereas ‘malnutrition’ might.
- Breaking down the doors. Donor funded organisations need to buy into the climate change–health–humanitarian nexus and advocates need to force climate change into discussions. Bringing arguments back to operations (e.g. how to continue to provide health services when extreme weather events destroy them), to take an earth systems perspective – being seas (water), bees (ecosystem) and trees (cleaning the air), or relating to the health of future generations have been effective tools.
- Strategic vision on climate, training for operational staff and funding are consistent challenges for humanitarian organisations. Globally, we need the scale and change of the industrial revolution in half the time. We need transformational leadership.

WHAT IS A CLIMATE-RESILIENT HUMANITARIAN ORGANISATION?

Contributions from delegates determined that a climate-resilient humanitarian organisation is one that:

Is ready to advocate, mitigate and adapt.

A climate resilient organisation needs to be involved in advocacy, mitigation and adaptation – how can we advocate without evidence of internally mitigation activities? Organisations are, and will continue to be, questioned on their own climate footprint so there needs to be discussion about advocacy and internal mitigation action. Humanitarian organisations will have to “have their house

in order”, still need to speak out and have programmes running on the ground.

Has embedded focal points who are looking at climate risk.

It is important to note that focal persons or team might not be in the humanitarian or health team, they may for example be in livelihoods or procurement

The procurement decisions are an important but rarely talked issue about in the humanitarian sector, and these can account for around 70% percent of carbon emissions. Life cycle analysis, modern slavery in the supply chain, and consideration of environmental aspects all play a part. How the private sector is engaged will also be crucial as selecting for procurement methods that consider climate change will help to drive resilience.

Cash distributions (versus goods distributions) can be viewed as a climate-informed choice, with the added benefit of invigorating the local economy.

Recognises that whist attribution can be difficult, disease burden forecasts cannot be undertaken without considering climate risk.

Climate and health science is rapidly evolving, as are the political and social arguments. Establishing interlinkages can therefore be important for individual organisations. So much of the work

we do is siloed and some effort made to providing cohesive guidance together.

When responding to climate-related disasters, humanitarian organisations often come up against the issue of attribution – is this disaster a result of climate change? Attribution remains difficult and not always possible, especially on the short time scales needed to raise money for more rapid onset situations. A possibility might be to form advocacy coalitions so that collective voices and messaging can be heard. This way focus can be aligned and mixed messaging minimised.

Allows space for change which may be driven from the bottom and the top, and listens and engages with champions from outside the sector

Engaged leadership is considered a core requirement of a climate-resilient humanitarian organisation. It is present, but not in large numbers. Leadership teams need a way to be accountable, such as KPIs to drive organisational change in climate resilience.

The ability to foster adaptive communities to face risks and vulnerability

The most effective climate and health interventions involve significant engagement with local communities in planning and execution. This is particularly important in public health campaigns.



ENDNOTES

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