HEALTH AND OUR SHARED RESPONSIBILITY TO DEAL WITH CLIMATE CHANGE: A WHO PERSPECTIVE

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Introduction

This comment addresses the relationship between health and climate change, a nexus that occurs against a backdrop of existing human rights standards. These standards beg for a comprehensive right to health approach to climate change, grounded in strong accountability mechanisms, universal application and a clear awareness of the impact of climate change on the realisation of the right to health. First, the contours of this relationship are briefly explained. Second, some forums for action are described. And third, and perhaps most importantly, an agenda for action is suggested.

The comment is written from the perspective of the World Health Organization (WHO). Working on health across the life course at WHO, we have seen how climate change illustrates more dramatically than any other global development issue, the crushing effect of inequalities in health. The adverse effects of climate change are felt most acutely by vulnerable segments of the population whose geography, poverty, gender, age, indigenous or minority status put them at special risk. Conversely, States facing higher exposure to extreme weather events, in both rural and urban areas are those most likely to be lacking the resources for implementing plans and programmes of action to meet this challenge. This comment suggests that the only way to change this reality is to acknowledge the critical role of human rights in examining and developing policy to address this modern phenomenon.

HEALTH AND CLIMATE CHANGE

The fact that climate change affects human health has been well documented¹ and space is too short to recount the voluminous data that exist in this comment. Some comments about what we – as a global community - know, however, are important. We know, for instance, that the World Health Organization (WHO) has warned for some time that "[b]etween 2030 and 2050, climate change is expected to cause approximately 250,000 additional deaths per year, from malnutrition, malaria, diarrhoea and heat stress." More recent studies further warn us that these consequences might be even more diverse, severe, and imminent, than earlier expected. We also know that the adverse effects of climate change are universal – and will have a profound impact on the health of almost all people on the planet. And we know that some regions of the world will suffer greater health

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^{1.} See for example, World Health Organization, 'Protecting Health From Climate Change: Connecting Science, Policy and People', Geneva: World Health Organization, 2009; WHO, 'Factsheet on Climate Change and Health' accessible at http://www.who.int/mediacentre/factsheets/fs266/en/ (accessed on 1 September 2015).

^{2.} WHO. Quantitative risk assessment of the effects of climate change on selected causes of death, 2030s and 2050s. (2014), World Health Organization, Geneva, Switzerland.

^{3.} Hansen, J., Sato, M., Hearty, P., Ruedy, R., Kelley, M., Masson-Delmotte, V., Russell, G., Tselioudis, G., Cao, J., Rignot, E., Velicogna, I., Kandiano, E., Schuckmann, K. von, Kharecha P., Legrande, A.N., Bauer, M., and Lo, K.W., "Ice melt, sea level rise and superstorms: evidence from paleoclimate data, climate modeling, and modern observations that 2 °C global warming is highly dangerous," 15 *Atmos. Chem. Phys. Discuss.* 20059–20179 (2015).

^{4.} See generally, Smith, K.R., A.Woodward, D. Campbell-Lendrum, D.D. Chadee, Y. Honda, Q. Liu, J.M. Olwoch, B. Revich, and R. Sauerborn, "Chapter 11: Human health: impacts, adaptation, and co-benefits in Field," contribution of Working Group II to C.B., Barros, V.R., Dokken, D.J., Mach, K.J., Mastrandrea, M.D., Bilir, T.E., Chatterjee, M., Ebi, K.L., Estrada, Y.O., Genova, R.C., Girma, B., Kissel, E.S., Levy, A.N., MacCracken, S., Mastrandrea, P.R., and White,

consequences than others.⁵

Climate change: worsening health inequities

Extreme weather events, such as the European heatwave of 2003 and Hurricanes Katrina and Sandy in the USA, show that, even in the most developed countries, health is vulnerable to climate risks. The risks are even greater, however, for the poorest populations, who already suffer from high burdens of climate-sensitive disease. For example, the mortality rate from vector-borne diseases is almost 300 times greater in developing nations than in developed regions. Climate-related health risks are also often greater for poor individuals within any population, who often lack adequate shelter or access to health and other critical services, and for population groups with specific vulnerabilities. In the 1991 cyclone disasters that killed 140,000 people in Bangladesh, death rates among women were almost four times greater than those among men: rates among children under 10 years of age were more than six times greater than those of older children. WHO's estimates of the per capita impacts of climate change are many times greater in regions that already had the greatest disease burden, and amongst children compared to adults. The ongoing process of climate change is likely to widen the existing health disparities between the richest and the poorest populations.

The example provided above illustrates clearly how climate change acts as a significant obstacle in ensuring the progressive realisation of the right to health as defined in both WHO's Constitution, as well as the International Convention on Economic, Social and Cultural Rights (ICESCR)⁶ and a range of other international and regional human rights treaties. A key characteristic of the right to health lies in its emphasis not just on the provision of health care but also on the underlying determinants of health, such as access to safe and potable water and adequate sanitation, an adequate supply of safe food, nutrition and housing, as well as healthy occupational and environmental conditions⁷ – factors that are uniquely susceptible to the effects of climate change.

The effect of climate change not only undermines States' abilities to ensure these services, but its consequences also divert precious and often limited resources, hampering States' abilities to strengthen broader and longer-term investment in health. Nevertheless due to the efforts of countless health experts around the world we also have a good idea about what action has to be taken, first and foremost by States themselves as the primary duty-bearers, to make them resilient to climate change. The first are actions to strengthen health systems and to adapt to climate change. They include, for example, investments in surveillance and response for climate-sensitive infectious diseases, strengthening of health system preparedness for extreme weather events, and ensuring climate resilience of critical services, such as water supply and sanitation. The second are actions to simultaneously promote health at the same time as cutting emissions of the greenhouse gases that are driving climate change. The most direct connection is with air pollution, which causes over seven million deaths every year. Promoting cleaner sources of energy for household use and

L.L., (eds.), *Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects*, (the Fifth Assessment Report of the Intergovernmental Panel on Climate Change), Cambridge University Press: Cambridge, United Kingdom, and New York, NY, USA (2015).

^{5.} Patz, J.A., Campbell-Lendrum, D., Holloway, T., and Foley, J.A., "Impact of regional climate change on human health," 438 *Nature* 310 (17 November 2005).

^{6.} International Covenant on Economic, Social and Cultural Rights (ICESCR), G.A. Res. 2200A (XXI), Art. xx. (1966). Available at http://www2.ohchr.org/english/law/cescr.htm.

^{7.} Committee on Economic, Social and Cultural Rights, General Comment No. 14, The Right to the Highest Attainable Standard of Health, UN Doc. No. E/C.12/2000/4 (2000). Available at http://www.unhchr.ch/tbs/doc.nsf/0/40d009901358b0e2c1256915005090be?Opendocument.

^{8.} World Health Organization, "WHO Climate and Health Country Profiles – Global Overview" (forthcoming in November 2015).

^{9.} World Health Organization, "Operational Framework for Building Climate-Resilient Health Systems". (2015) . WHO, Geneva, Switzerland. Available at http://apps.who.int/iris/bitstream/10665/189951/1/9789241565073_eng.pdf .

electricity generation, and more sustainable urban transport solutions, for example, are both human development priorities, but also contribute to slowing climate change, and reducing air pollution deaths¹⁰. These actions will need to be taken by States, but international organisations like the WHO can play an important role in providing a wide range of assistance.

WHO AS A FORUM FOR ACTION ON HEALTH AND CLIMATE CHANGE

It is agreed within the United Nations family that the United Nations Framework Convention on Climate Change (UNFCCC) is the principal forum for the global action that is needed to address climate change. While acknowledging this important consensus within the UN system this agreement does not preclude other United Nations bodies from playing a role in relation to climate change. In the past the UNFCCC Secretariat has welcomed the expert contribution of WHO, including throughout the treaty processes.

Just as WHO acknowledges the priority of the UNFCCC for negotiating global climate action, we also recognise our responsibility as the pre-eminent forum for the discussion of questions of global public health challenges. For this reason, for the better part of the past decade, the item of climate change and health has appeared on the agenda of WHO's governing bodies. And even when it was not, such as at this last World Health Assembly in May 2015, both States and civil society have drawn attention to it.

Not only does climate change pose one of the most significant challenges to global health that we face today, but WHO's expertise is also vital to the efforts to address climate change through global action. This is evident from the contributions that WHO has made to the interim and annual meetings of the Conference of the Parties to the UNFCCC and by the number of requests from States for cooperation and technical advice on the relationship between climate change and health that the organisations has received. For example, WHO's contribution to the UNFCCC climate talks in Bonn, Germany, in June 2015, emphasized that "[a]n effective new universal climate change agreement must also be very much an effective public health agreement, and health ministers and practitioners need to speak up to make that clear as countries shape the final outcome, which will be concluded in Paris, in December." ¹¹

While WHO is supporting efforts to achieve an effective global strategy to deal with climate change, it is also working on the ground in and with affected countries. An example is its ongoing project to address the risks of climate change on water-borne diseases in Bangladesh, Nepal, Ethiopia and Tanzania that aims to heighten awareness of important stakeholders along with coherence between climate, health, and water, sanitation and hygiene (WASH) policies; to strengthen the climate resilience of WASH services, and to assess the effectiveness of community and household interventions in strengthening health resilience to climate change. This will be used as a basis for guiding and "climate-proofing" the large-scale investments that are now being made in WASH, to ensure that they also protect population health from climate risks.¹²

Raising awareness of climate and health connections:

WHO's Member States have requested to work with partners to raise awareness of the links between climate change and health. In August 2014, hosted the first WHO global conference on Health and Climate, drawing approximately 400 participants from 96 countries. This included 25

^{10.} See, for example, WHO, Reducing Global Health Risks Through Mitigation of Short-Lived Pollutants. Scoping Report for Policy-makers, (2015) WHO: Geneva, Switzerland

^{11.} Note of the meeting (see http://www.who.int/globalchange/mediacentre/news/climate-change/en/).

^{12.} This project is funded by the International Climate Facility of the United Kingdom. http://www.who.int/globalchange/projects/wash/en/ (accessed 18 September 2015).

government ministers, heads and senior staff from UN agencies and other intergovernmental organisations, as well as experts, practitioners and civil society representatives from the fields of health, climate change and sustainable development. In response to the very strong scientific evidence of the health risks presented by climate change, the participants gave a clear warning; that without adequate mitigation and adaptation, climate change poses unacceptable risks to global public health. The conference supported stronger engagement by the global health community, to ensure that public health concerns are reflected in upcoming international climate and development discussions, and national adaptation and mitigation policies. Participants affirmed the critical importance of strategies to reduce health impacts from climate change already occurring – as well as realising potential health benefits from measures to mitigate climate change, particularly through reductions in death and disease caused by air pollution. As a follow up to the conference, WHO is mobilising the voices of the global public health community behind a strong and effective climate change agreement at the UN climate conference in Paris in December 2015.

At the global level WHO is currently engaged, in partnership with the UNFCCC Secretariat in providing quantitative and narrative data profiling the impact of climate change on the health of each of our 194 Member States. These profiles will highlight the climate hazards each State faces, the current and expected impacts of the adverse effects of climate change and air-pollution as well as opportunities for health gains from adequate mitigation and adaptation activities. They will also describe the status of responses by each State.

The activities that States and their partners are taking to address the effects of climate change on their populations, of which the health consequences are perhaps the most serious and most costly, require resources. In this respect the pledges by developed countries of US\$100 billion per year by 2020 are a welcome start. But these pledges are likely already too little, and may be too late, for many. Resources to allow all States to take the needed adaptation and mitigation action to protect their people, all people everywhere, from the adverse effects of climate change need to be mobilized today. We have seen this happen in relation to child health where States have mobilised the resources to halve child mortality in a decade and a half. We need an urgent mobilisation of funds to address climate change impacts, many of which will significantly impact health for all.

Elements of An Agenda for Action on Health and Climate Change

In light of the brief description of the problem and some of the forums making an effort to address it, it is possible to suggest a few elements for agenda for action on health in the context of climate change. These actions would support a rights-based response that is rooted in greater accountability mechanisms, enshrined in the UNFCCC, and leveraged through more inclusive participation – as reflected in the global conference on climate change and health convened by WHO.

First, there is a need to ensure that health is made a priority within the context of reacting to climate change. This requires not only support for efforts for research, but also the commitment to address the health consequences of climate change in political and legal documents such as the Paris Agreement and the decisions of the Conference of the Parties to the UNFCCC that will implement the Agreement. It would be particularly important for the Paris Agreement to include a reference to the need to address health consequences in provisions on adaptation. Making health a priority requires mobilising of adequate resources to address the consequences to the health of all, but especially in line with a rights-based approach – for the most vulnerable, that are due to climate change. In this respect more attention is needed to ensure that the Green Climate Fund and other similar funds are in a position to provide adequate resources for the significant efforts that governments will have to make to ensure the health of their people despite the challenges posed by climate change. The Lancet Commission on health and climate change mentioned "[s]cale-up

financing for climate resilient health systems world-wide"¹³ as one of its priority recommendations to governments over the next five years. While pledges have been made the resources have yet to materialise when they are already needed.

Second, we need to set and begin to implement action agendas. Respecting the precautionary principle that is enshrined in article 3 of the UNFCCC, we need to start now, and not wait. The precautionary principle requires that we act based on perceived threats to health that climate change poses even if we are not yet sure that they will materialise. The WHO has been acting by providing information on the effects of climate change on health and by providing technical assistance to our Member States. At its 136th Executive Board Session in January 2015, Member States approved the elements of the workplan presented by the WHO Secretariat up to 2019. This outlines how WHO will work to support government efforts to address the adverse effects of climate change on health; from raising awareness, to developing partnerships that address the diverse range of connections between climate change and health, to guiding research, and supporting implementation. While our Member States bear the main responsibilities for protecting the health of their populations from the adverse effects of climate change, WHO will ensure that it is fit to support government efforts and to provide the information governments need to take the best action possible.

Third, and related to the two above suggestions, there is a clear need to see the synergies between different sectoral approaches. For example, overall poverty reduction, as well as investments in key sectors such as nutrition and WASH, contribute to resilience, including the ability for people to withstand the shocks and disease exposure to which the adverse effects of climate change contribute. Assessing the health implications of decisions in sectors such as household energy, electricity production, and transport, can help to identify opportunities to simultaneously reduce carbon emissions, improve health, and increase economic efficiency. Health Ministries, health professionals, and the WHO need to be prepared to respond to the connections between climate change and health as multifaceted issues that require coordination, cooperation, and above all a concerted will by all concerned to address these challenges.

These are just three basic elements of agenda for global action to address the health consequences of climate change. Many more specific elements will emerge as we face this global challenge, but if these three commitments are in place we will all be well-placed to ensure the goal of the WHO Constitution and the right to health, which is to ensure the highest level of mental and physical health for all.

Climate change will have a profound impact on the health of the most vulnerable for a long time to come. At the same time that it presents the international community with a tremendous challenge, it also offers a unique opportunity for governments to cooperate together. Today the international community has an opportunity to take steps that will ensure healthy populations for generations to come. We know many of the interventions that are needed, but also need to make them priorities if we are to make them realities.

^{13.} Watts, N., Adger, W.N., Agnolucci, P., Blackstock, J., Byass, P., Cai, W., Chaytor, S., Colbourn, T., Collins, M., Cooper, A., Cox, P.M. Depledge, J., Drummond, P., Ekins, P., Galaz, V., Grace, D., Graham, H., Grubb, M., Haines, A., Hamilton, I., Hunter, A., Jiang, X., Li, M., Kelman, I., Liang, L., Lott, M., Lowe, R., Luo, Y., Mace, G., Maslin, M., Nilsson, M., Oreszczyn, T., Pye, S., Quinn, T., Svensdotter, M., Venevsky, S., Warner, K., Xu, B., Yang, J., Yin, Y., Yu, C., Zhang, Q., Gong, P., Montgomery, H., and Costello, A., "Health and climate change: policy responses to protect public health," *The Lancet*, published online 23 June 2015 at http://dx.doi.org/10.1016/S0140-6736(15)60854-6 (accessed 12 September 2015).