MENTAL HEALTH IN NATIONALLY DETERMINED CONTRIBUTIONS: CURRENT STATE AND OPPORTUNITIES FOR INTEGRATION

UNITED FOR GLOBAL MENTAL HEALTH

The objective of this briefing paper is to provide policy makers with an overview of mental health in Nationally Determined Contributions to date as well as possible entry points for the inclusion of mental health in NDCs.

KEY BACKGROUND

- One in 8 people around the world lives with a diagnosable mental health problem, according to the World Health Organization. The majority of these people do not receive adequate support with the treatment gap being as high as 90% in certain contexts. This has huge cost implications, as mental health problems are estimated to cost the global economy approximately 1 trillion USD every year.

- Climate change is making this worse by increasing the risk of new mental health problems and worsening mental health in people with pre-existing mental health conditions. Including mental health into Nationally Determined Contributions (NDCs) is essential to promote good mental health in the context of climate change as well as preventing and addressing the negative mental health impacts of climate change. Highlighting the mental health co-benefits of mitigation activities can also contribute to showcasing the win-win opportunities for both climate and health coming from climate action.

- However, in the latest WHO review of health in NDCs, **only 3% of 2022 NDCs** included a reference to mental health, which was still an increase from the 1% of the first round of NDCs.

- Most **references to mental health in previous NDCs** tend to focus on highlighting the negative impacts that climate change is having on mental health. For example, based on searches for "mental health" in ExploreNDCs by ClimateWatch:

  - Moldova's revised first NDC highlights "increased number of depression cases, other mental illness and behavior cases due to stress" in the context of climate stressors.
  - Liberia's revised first NDC recognizes mental health as one of the health consequences of climate change together with heat-related illnesses, infectious diseases, and malnutrition.
  - Albania's revised first NDC includes mental health as one of the consequences of floods and climate-related disasters.
  - Sri Lanka's first NDC highlights the importance of addressing "mental diseases which can increase due to extreme heat and drought" within the health sector section of the NDC.
  - Viet Nam's revised first NDC highlights in the context of loss and damage considerations that "post-disaster losses also include disease outbreaks caused by contaminated drinking water and mental health problems caused by trauma, anxiety, and stress".
  - Oman's first update to its second NDC stresses how "it is important to give particular focus to how climate change may affect people's mental health as a result of ongoing stress, and disruptions to their way of life".

Image Credit: Joydeep Mukherjee / Climate Visuals Countdown

- Some past NDCs however also proposed some **more action-oriented considerations**. For example:

  - Lao's revised first NDC included "informing sensitive communities to mental illness" as a component of climate-informed health programmes within its health adaptation strategy.
  - St. Kitts and Nevis' revised first NDC included in its priority adaptation action for public health to "develop program to address mental health issues in the aftermath of disasters" given that "mental health issues related to trauma of extreme events - including tropical cyclones and flooding - may also increase, along with loss of social cohesion in the aftermath of disasters". The NDC also highlights the negative mental health and emotional wellbeing impacts of sea-level rise.
  - Canada's revised first NDC highlights in the section on Indigenous climate action how First Nations' solutions can span a breadth of realities and expertise, including health and mental wellness.

- Currently, of the **NDCs 3.0** which have been submitted as of 10/03/2025, the below have included a reference to mental health:

  - The United Arab Emirates NDC 3.0 highlights how the impacts of climate change "have also been associated with mental health conditions like elevated levels of anxiety, depression, suicide, and post-traumatic stress disorder" and how health consequences (including mental health issues) will place added pressure on communities and healthcare systems.
  - The UAE NDC also highlights how the UAE included mental health within its National Vulnerability and Adaptation Assessment Programme for Health and Climate Change. The NDC also indicated how, during COP28, events took place investigating various topics, including youth engagement around the impacts of climate change on mental health.
  - Uruguay's NDC 3.0 highlights how urban flooding can lead to displacement with consequences on both physical and emotional health.
  - Saint Lucia's NDC 3.0 highlights how "psychosocial support services are critical to addressing the mental health impacts of climate-induced stress and displacement".
  - The Marshall Islands' NDC 3.0 highlights how in the context of climate change "mental health issues are likely to worsen".
  - Canada's NDC 3.0 includes improved mental health outcomes as one of the benefits of climate action and mentions a specific project, the Yukon First Nations Climate Action Fellowship, as a specific project that deepened "our understanding of the climate and mental health crisis as a crisis of disconnection".
  - The Maldives NDC 3.0 highlights how "climate change can also hinder food supply chains, reduce access to potable water, and increase the risk of mental health disorders

across the nation" and includes "strengthen mental health support services, with special emphasis given to psychological distress and trauma caused by extreme events" as one of the strategies to safeguard the health impacts of climate change as well as "strengthen mental health support services for vulnerable groups to address climate induced psychological impacts" as one of the strategies to overcome the challenges faced by vulnerable groups. The NDC also includes "continue enhancing the engagement of children, women, and vulnerable groups in the disaster management cycle, provide opportunities for them to develop disaster preparedness skills and ensure access to sufficient psychosocial support" as part of the management and implementation of effective disaster risk reduction measures. Relocation due to climate change is also described as contributing to "psychosocial impacts and loss of identity". The recurrent nature of climate stressors is described as "affecting not only the afflicted island communities' livelihoods, but also their psychosocial well-being and ability to cope". In the context of loss and damage, the NDC recommends to "enhance the delivery of psychosocial support to affected communities as a result of climate impacts such as extreme events and associated loss and damage of climate impacts". When looking at youth specifically, the NDC highlights how "beyond physical health impacts, climate change also affects young people's mental well-being and can cause psychological distress, such as stress and anxiety, particularly following extreme weather events".

- As shown by these examples, the majority of mentions of mental health are in the context of outlining the various **health impacts** from climate change. We believe that, while this is an important starting point, we also need to ensure that the recognition of impacts is followed by outlining actions, strategies, and ways of monitoring how to effectively address these impacts. Extensive guidance on the provision of mental health and psychosocial support (MHPSS) in settings affected by adversity (including climate-related adversities such as extreme weather events) already exist (see IASC Guidelines on Mental Health and Psychosocial Support in Emergency Settings and the IASC MHPSS Minimum Service Package). This guidance can be referenced when describing actions to protect and support mental health and psychosocial wellbeing in the context of climate change.

KEY ENTRY POINTS FOR MENTAL HEALTH IN NDCS 3.0

Despite most NDCs to date covering mental health in the context of the health impacts of climate change, there are multiple other possible entry points which may be considered. Below is a list of possible additional entry points. Please note that this is not an exhaustive list but includes the entry points likely most relevant to mental health.

ENERGY

Suggested wording for NDCs and/or relevant NDC guidance:

"Transitioning to renewable energies can hold a number of co-benefits for health, including for mental health and psychosocial wellbeing. Indeed, while energy poverty has been shown to be associated with a variety of negative mental health outcomes, interventions aimed at ensuring access to sustainable and secure energy sources have been shown to contribute to improvements in psychological wellbeing as well as reductions in symptoms of mental health problems such as depression and anxiety".

The energy sector is often one of the main contributors to the emission of green-house gases and a key topic of discussion within the NDCs. One key way through which sustainable energy is likely to positively impact mental health is by reducing energy poverty in the population. Indeed, interventions aimed at reducing energy poverty have been shown to have significant health co-benefits, including for mental health. For example, the Warmth and Wellbeing Scheme rolled out by the Irish government provided free, extensive energy upgrades to the homes of people at risk of energy poverty and living with chronic respiratory conditions. Together with leading to improvements in respiratory symptoms, this intervention was also shown to contribute to reductions in symptoms of anxiety and depression as well as improvements in emotional wellbeing.

Possible actions to consider:

- Transition away from fossil fuels and towards renewable energy sources as a key strategy for protecting mental health.
- Address energy poverty in vulnerable populations and consider monitoring the mental health co-benefits of such interventions.

Additionally, air pollution resulting from the combustion of fossil fuels has a number of devastating health consequences, including on brain health and mental health. In the context of brain health, substantial evidence highlights the negative impacts that air pollution can have on our brains, from harming developing brains to increasing the prevalence of strokes. Air pollution is currently recognized as one of 14 modifiable risk factors for the development of dementia. Emerging evidence is also pointing to the negative impacts that air pollution can have on mental health, from increasing the risk of new mental health problems to worsening mental health in people living with pre-existing mental illness. Importantly, reductions in air pollution have been shown to lead to improvements in population mental health. For example, it has been estimated that China's efforts to reduce air pollution have prevented 46,000 suicides in the country over just 5 years.

Image Credit: Amitava Chandra / Climate Visuals Countdown

Suggested wording for NDCs and/or relevant NDC guidance:

"One of the main consequences of the combustion of fossil fuels is air pollution which has a number of devastating consequences for both physical and mental health. Air pollution impacts every organ of the human body, from our lungs to our brains. Increasing evidence is pointing to the impacts that air pollution can have on brain health and mental health, from increasing the risk of dementia and strokes to worsening symptoms of depression. Conversely, clean air policies have been shown to hold a number of co-benefits for mental health, for example contributing to decreased suicide rates in certain settings".

Possible actions to consider:

- Highlight the impacts of air pollution on mental health and brain health when discussing the physical health impacts of air pollution.
- Integrate mental health considerations into clean air policies (e.g., by highlighting the detrimental impacts of air pollution on every organ of the human body from our lungs to our brains, by underlining the important co-benefits coming to mental health from clean actions (e.g., green spaces, less energy poverty, more physical activity resulting from active modes of transport), and by providing specific guidance on how to support groups that may be particularly vulnerable to the health impacts of air pollution, including people with severe mental health problems living with co-morbid non-communicable diseases).
- Consider monitoring the mental health and brain health impacts of air pollution and the mental health and brain health co-benefits coming from clean air policies.

Image Credit: Credit / Cilia Schubert

TRANSPORT

Suggested wording for NDCs and/or relevant NDC guidance:

"*Interventions to make the transport system more sustainable, such as encouraging active modes of transport, are also likely to have multiple health co-benefits, including for mental health. Indeed, robust evidence exists on the link between engaging in physical activities such as walking and cycling and improved mental health outcomes for a variety of mental health conditions, such as depression and anxiety".*

A key sector responsible for emissions is that of transport and many NDCs cover how to make the transport system more sustainable (e.g., via public transport, electric vehicles etc.). Encouraging more active modes of transport such as walking or cycling where possible can have multiple mental health co-benefits given the strong link between physical activity and mental health. Indeed, extensive evidence highlights the therapeutic role of physical exercise in decreasing symptoms of a variety of mental health conditions, particularly for depression and anxiety.

Possible actions to consider:

- Consider optimising mental health gains by prioritising active and electric public transport interventions as these (i) yield greater air quality gains because of reduced air pollution from brake and tyre friction and reduced fossil fuel combustion; (ii) promote increased physical activity; and (iii) reduce road traffic accidents and the consequent exposure to potentially traumatic events; all of which can have important co-benefits for mental health.

Image Credit: Ryan Brown / UN Women

FOOD AND AGRICULTURE

Suggested wording for NDCs and/or relevant NDC guidance:

"*Ensuring a secure supply of healthy and sustainable food is also likely to have positive impacts on health, including on mental health. Indeed, while food insecurity can negatively impact mental health by increasing levels of stress and worry over food and reducing the intake of essential nutrients; healthy diets have been shown to improve symptoms of certain mental health problems such as depression. Additionally, improving food security by supporting the agricultural workforce is likely to protect the mental health of people working in the agricultural sector such as farmers, which have been shown to be particularly vulnerable to the mental health impacts of climate change*".

There are multiple possible links which have been established between food, agriculture, and mental health. Firstly, food insecurity (which is often addressed as part of NDCs) has been linked to multiple negative mental health outcomes (with more evidence for depression) as well negatively impacting children's development with consequences for their mental health and brain health. People living with mental health conditions also tend to be more likely to experience food insecurity. Secondly, healthy diets have been shown to potentially hold various co-benefits for mental health with evidence highlighting dietary interventions as holding potential for reducing symptoms of depression across the population. On the flip side, exposure to ultra processed and unhealthy foods has also been shown to be an important risk for a variety of chronic non-communicable diseases, including common mental disorders. Furthermore, indoor air pollution due to cooking as well as air pollution resulting from agricultural practices (e.g., crop burning) can further negatively impact physical and mental health (see section above on air pollution and mental health). Finally, people working in the agricultural sector such as small-holder farmers have been shown to be particularly vulnerable to the mental health impacts of climate change, with droughts and disruptions to crops having been linked to increased suicide rates in this population.

Possible actions to consider:

- Implement sustainable agricultural practices in order to increase resilience to climate change, reduce the risk of food insecurity, and protect mental health.
- Encourage sustainable and healthy dieting practices across the population, with co-benefits for mental health and psychological wellbeing.
- Ensure appropriate and accessible mental health and psychosocial support is available for farming and agricultural communities which are often at higher risk of experiencing poor mental health in the context of climate change.
- Support the adoption of crop insurance policies to better absorb climate shocks and protect the mental health of agricultural workers.
- Integrate mental health considerations in nutrition programming for mothers and children and vice-versa.

More specifically, agricultural practices such as the use of highly hazardous pesticides can also negatively impact both biodiversity (e.g., by contributing to insect decline) and climate change (e.g., by contributing to green-house gas emissions) as well as negatively impacting the mental health of agricultural communities. Indeed, the use of highly hazardous pesticides has been highlighted as a considerable issue in the context of suicide prevention, given that self-poisoning with pesticides is among the most common means of suicide worldwide. The phase out of highly hazardous pesticides has been identified as an effective and cost-effective suicide prevention strategy, with important potential co-benefits for biodiversity and climate change.

Suggested wording for NDCs and/or relevant NDC guidance:

"*The use of highly hazardous pesticides not only has negative effects on biodiversity (e.g., by contributing to the global decline in insect populations) and on climate change (e.g., by contributing to green-house gas emissions) but can also have devastating impacts on the mental health of agricultural communities given that self-poisoning with pesticides is one of the most common means of suicide worldwide. A full phase-out of highly hazardous pesticides therefore represents not only an important intervention to improve biodiversity but also a life-saving and cost-effective suicide prevention strategy*".

Possible actions to consider:

- Ban or phase-out highly hazardous pesticides to protect biodiversity and prevent suicides, while providing advice and training about low-risk alternatives.

URBAN SPACES AND CITIES

Suggested wording for NDCs and/or relevant NDC guidance:

"Making cities more sustainable can have a number of positive impacts on health, including on mental health. While living in cities often exposes people to a number of risk factors for poor mental health such as noise, air pollution, and crime; mitigation interventions from increased green and blue spaces to more active modes of transport represent win-win opportunities to both make cities more sustainable and improve psychological wellbeing".

Cities are responsible for approximately 67 percent of global energy consumption and 70 percent of green-house gas emissions, according to UNDP. Living in cities has been shown to be generally detrimental to mental health, sometimes contributing to the development of conditions such as anxiety, depression, and psychosis, at least in certain settings. This is the result of many factors interacting in complex ways across multiple levels and timescales, from risk factors that are particularly prevalent in urban settings such as air pollution, noise, or crime, to the psychological, social, and neurobiological effects of living in cities. Cities can, however, also represent spaces of opportunity to improve mental health via public health interventions, e.g., by providing access to community, health, education, and economic gain. There are also significant mental health co-benefits coming from mitigation actions at the urban level, from improved access to green and blue spaces, to active modes of transport and increased levels of physical activity.

Possible actions to consider:

• Make cities more sustainable by reducing risk factors for poor mental health (e.g., reducing air pollution and noise) and increasing protective factors for good mental health (e.g., increased access to green and blue spaces and more active modes of transport).

Image Credit: Preston Keres / USDA / FPAC

Image Credit: Sara Hylton / Climate Visuals Countdown

ECOSYSTEMS, FORESTRY, AND BIODIVERSITY

Suggested wording for NDCs and/or relevant NDC guidance:

"*The protection and expansion of ecosystems and natural environments can both contribute to mitigating climate change as well as promoting positive mental health and supporting people living with mental health conditions*".

The protection and expansion of ecosystems and natural environments represents a key priority action when it comes to mitigating climate change as part of NDCs. The recent Convention on Biological Diversity Global Plan of Action on Biodiversity and Health highlights the negative mental health impacts coming from biodiversity loss as well as the positive contributions that nature can have on mental health. Nature prescriptions (i.e., a referral or an organised programme, by a health or social professional, to encourage spending time in nature) have been found to contribute to significant reductions in symptoms of anxiety and depression in general populations. A conservative global estimate using quality-adjusted life years estimated that the economic value of protected natural areas derived from improved visitor mental health corresponds to US$6 trillion per year.

Possible actions to consider:

• Protect and expand ecosystems and natural environments in order to maximise the positive contributions that nature can have for mental health.
• Consider encouraging the use of nature prescribing within national health systems to promote positive psychosocial wellbeing, as an adjunct to other appropriate mental health interventions, for people experiencing poor mental health.

WASTE

Suggested wording for NDCs and/or relevant NDC guidance:

"*Increasing levels of waste and inappropriate waste disposal can have a number of negative impacts on health, including on mental and brain health. From being exposed to neurotoxins due to the burning of plastics to the psychosocial impacts of living close to landfills, waste can be harmful to our mental and brain as much as it is to our surrounding environments. Diminishing absolute levels of waste and reducing human exposure to waste and to the byproducts of waste management represents an important priority for the health of humans as well as of the planet*".

According to the IPCC, waste management is one of the sectors with the greatest potential to contribute to emissions' reduction. Inappropriate waste management can lead to a variety of negative mental health and brain health impacts, from exposure to environmental pollutants themselves to the negative impacts of living near landfills. Recent evidence has highlighted possible biological pathways through which improper waste management may impact brain health given that, for example, brain tissues tend to harbor a higher proportion of microplastics when compared to the composition of plastics in other organs such as the liver or kidney. Improper waste management (e.g., waste burning) can also contribute to exposure to a number of other neurotoxic agents (see more information on air pollution and mental health above).

Possible actions to consider:

- Reduce waste and improve waste management and disposal in order to protect the environment and mental health.
- Reduce human exposure to waste and byproducts of waste management to safeguard mental health and brain health.

Image Credit: Fairphone

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EDUCATION

Suggested wording for NDCs and/or relevant NDC guidance:

"*Climate change can disrupt education by, for example, preventing students from accessing schools due to extreme weather. Given the strong protective role that education can have for mental health and cognitive development throughout the lifecourse, ensuring access to appropriate education, even in climate-affected contexts, is a key strategy to safeguard young people's mental health.*

Additionally, in the context of climate education, learning about climate change can understandably lead some to feel distressed, particularly children and young people. However, knowledge surrounding climate change is fundamental in order for people to act and understand climate policies. Therefore, mental health considerations should be integrated into climate education in order to ensure people are educated about the realities of climate change while safeguarding their mental health and instilling a sense of agency and self-efficacy. Finally, climate change considerations should be more routinely integrated as part of the training curricula of mental health professionals to ensure they are equipped to respond appropriately to the mental health consequences of climate change".

There are multiple relevant entry points for mental health in discussions around education. Firstly, education can represent a protective factor for good mental health (e.g., by supporting child and youth mental health through promotion and prevention activities as well as by timely referral to community-based services where needed). Therefore disruptions to education due to climate

change (e.g., not being able to attend school because of extreme weather) can have profound implications for mental health. Secondly, climate education is fundamental to ensure widespread support of climate policies aimed at keeping the world on track with the aims of the Paris Agreement, especially for young people. Being transparent about the threat that climate change poses to all life on Earth is an important but complex facet of climate education. However, it's important that teachers and young people feel equipped to respond to the psychological distress which may emerge when discussing climate change or when preparing and responding to climate stressors. Integrating mental health considerations into climate education may represent a win-win opportunity as people can feel more empowered to face the evolving impacts of climate change, including through action, and can do so while safeguarding their emotional wellbeing. Guidance exists on the topic, as well as specific resources for teachers. Finally, climate considerations should be more routinely integrated within education curricula for mental health professionals to ensure they feel equipped to respond to the mental health consequences of climate change.

Possible actions to consider:

- Ensure children and young people can still have access to appropriate education in contexts heavily impacted by climate change to safeguard their mental health and cognitive development.
- Educate people on the physical and mental health impacts of climate change and on the co-benefits for physical and mental health coming from climate mitigation and adaptation.
- Ensure that mental health and psychosocial considerations are integrated in education curricula on climate change, particularly when teaching about climate change to young people.
- Ensure climate change considerations are more routinely integrated into the education curricula of mental health professionals (both in terms of mental health impacts as well as in terms of appropriate mental health and psychosocial interventions).

WATER

Suggested wording for NDCs and/or relevant NDC guidance:

"Exposure to hydrological hazards such as flooding can negatively impact mental health by contributing to the development of mental health problems such as anxiety, depression, and post-traumatic stress disorder (PTSD). Conversely, lack of water and droughts can negatively impact mental health by worsening the social determinants of mental health such as poverty. At the same time, considerable mental health benefits can come from water conservation and the safeguarding of blue spaces (e.g., rivers, lakes, oceans etc.) which represent key spaces for positive physical and mental health".

Water is a fundamental component within the NDCs as relevant both for mitigation (e.g., as a renewable energy source) and adaptation (e.g., due to the increasing rate of hydrological hazards such as flooding). Water is also relevant to mental health. Exposure to floods has been shown to have long-lasting mental health impacts, increasing the risk of new mental health problems such as anxiety, depression, and post-traumatic stress disorder (PTSD). Poor water quality resulting from flooding (e.g., through water contamination) is also likely to have negative consequences for mental health. Droughts can also negatively impact mental health by increasing levels of water insecurity and worsening social determinants of mental health such as poverty and gender inequalities. Finally, sea-level rise can have a number of negative impacts on mental health via numerous pathways (e.g., forced relocation, salinity levels impacting physical health etc.). At the same time, water and blue spaces can represent important contributors to positive mental health and psychological wellbeing (e.g., by providing spaces for recreation, socialising, and physical activity).

Possible actions to consider:

• Implement sustainable water management practices as a strategy to reduce water insecurity and protect mental health.
• Ensure appropriate and accessible mental health and psychosocial support is available for people and communities exposed to flooding.
• Ensure appropriate and accessible mental health and psychosocial support is available for people and communities experiencing droughts.
• Protect and expand water ecosystems and blue spaces as a strategy to promote psychosocial wellbeing.

Image Credit: Lars Engelgaar / Climate Visuals

YOUTH

Suggested wording for NDCs and/or relevant NDC guidance:

"Young people will bear the brunt of the physical and mental health consequences of climate change. The mental health of children and adolescents therefore needs to be protected and promoted in the context of climate change. Young people can also provide important contributions to climate action and the NDC development and implementation processes, and should therefore be safely, equitably, and meaningfully involved. Safe and meaningful involvement is also likely to contribute to an improved sense of agency and psychological wellbeing".

Young people will bear the brunt of the mental health impacts of climate change. Children and young people around the world are understandably worried by climate change, experiencing heightened levels of anxiety and psychological distress. Childhood and youth are critical windows of risk and opportunity for mental health problems, given that 75% of psychiatric disorders first arise before the age of 24. According to UNICEF, 13% of children and young people aged 10-19 years old live with diagnosed mental health conditions. This represents 80 million young people aged 10-14. The annual loss in human capital arising from mental health conditions in children aged 0-19 is estimated to be US$387.2 billion. Climate change will likely make this worse, increasing the number of risk factors for poor mental health and eroding protective factors for good mental health among young people. This highlights the need to safeguard young people's mental health in the context of climate change. Importantly, young people also have a number of strengths and resilience factors and, given they will experience the future impacts of climate change, should be meaningfully, safely, and equitably engaged as part of the NDC development processes.

Possible actions to consider:

- Ensure appropriate and accessible mental health and psychosocial support is available for young people exposed to climate hazards.
- Ensure young people (including young people with lived experience of mental health problems) are meaningfully, equitably, and safely involved in climate action and climate decision-making.

Image Credit: Jörg Farys / Fridays for Future

GENDER

Suggested wording for NDCs and/or relevant NDC guidance:

"*Women, girls, and gender-diverse people are disproportionately affected by climate change due to their heightened exposure, vulnerability, and reduced adaptive capacities in most settings. This translates into women, girls, and gender-diverse being particularly vulnerable to the mental health impacts of climate change*".

Women, girls, and gender-diverse people are often disproportionately impacted by the physical and mental health impacts of climate change. This tends to happen due to their heightened exposure, vulnerability, and adaptive capacities (although in some other specific contexts the opposite can be true with boys and men being more vulnerable). In the case of mental health, women tend to be at higher risk of developing mental health problems such as post-traumatic stress disorder in the aftermath of extreme weather events. Additionally, climate change is likely to make risk factors for poor mental health such as gender-based violence more prevalent.

Possible actions to consider:

- Ensure appropriate and accessible mental health and psychosocial support is available for women, girls, and gender-diverse people exposed to climate hazards.
- Address possible risk factors for poor mental health in women, girls, and gender-diverse people which climate change is likely to make more prevalent such as gender-based violence and gender inequality.

Image Credit: Avijit Ghosh / Climate Visuals

INDIGENOUS COMMUNITIES

Suggested wording for NDCs and/or relevant NDC guidance:

"*Despite having historically contributed the least to climate change, Indigenous communities are particularly vulnerable to the negative mental health impacts of climate change, from worsened mental health problems such as substance abuse and suicide to impacts on spiritual wellbeing, cultural identity, and place attachment. Conversely, Indigenous communities often also hold the solution to both caring for their surroundings as well as safeguarding their mental health, highlighting the importance of integrating local and Indigenous knowledge as part of climate action"*.

The wellbeing of Indigenous communities is often closely interconnected with the natural world. Indigenous communities often rely on their surroundings for their subsistence and their cultural identity can often be closely interconnected with nature. Therefore, Indigenous communities can be particularly vulnerable to the impacts of climate change on mental health, despite having historically contributed the least to climate change. These mental health impacts include impacts on clinical mental health issues such as depression and suicide but also include impacts on broader constructs relating to psychological and spiritual wellbeing such as place attachment and cultural identity. Importantly, Indigenous communities often already possess many instruments to cope with the psychosocial impacts of environmental degradation and to take culturally informed actions to care for lands and ecological systems that can mitigate climate change and provide mental health co-benefits.

Possible actions to consider:

- Ensure appropriate and accessible mental health and psychosocial support is available to Indigenous communities exposed to climate hazards.
- Implement culturally-appropriate and local strategies to promote mental health and address mental health problems in the context of climate change, where these are appropriate, designed with the communities involved, and not harmful or stigmatising towards mental health problems.
- Consider appropriate adaptation of mental health and psychosocial support to local understandings of psychological wellbeing.

Image Credit: Karen Toro / Climate Visuals Countdown

RIGHTS

Suggested wording for NDCs and/or relevant NDC guidance:

"The mitigation of climate change is also enshrined in international human rights law recognizing both the right to a clean, healthy, and sustainable environment as well as the right to the enjoyment of the highest attainable standard of physical and mental health".

The right to a clean, healthy, and sustainable environment as a human right is being increasingly recognized in the context of climate legal discussion. Mental health is also increasingly becoming part of this as shown by the examples below:

- In the case of Verein KlimaSeniorinnen Schweiz and Others v. Switzerland brought to the European Court of Human Rights, the court ruled that Switzerland violated the European Convention on Human Rights by failing to adequately address climate change. The evidence brought forward by the applicants included the psychological effects of climate change.

- In the case of Duarte Agostinho and Others v. Portugal and 32 Other States the applicants had brought forward the mental health impacts of climate change (e.g., worsening mental health in the context of wildfires and climate anxiety) as evidence for Portugal and other EU states breaching the European Convention on Human Rights.

- In Resolution 48/13 of 8 October 2021, the Human Rights Council formally recognised the right to a clean, healthy and sustainable environment as a human right and invited the General Assembly to consider the matter (see General Assembly Resolution 76/300) with mental health being explicitly mentioned in the following section:

  "Recognizing that sustainable development, in its three dimensions (social, economic and environmental), and the protection of the environment, including ecosystems, contribute to and promote human well-being and the enjoyment of human rights, including the rights to life, to the enjoyment of the highest attainable standard of physical and mental health, to an adequate standard of living, to adequate food, to housing, to safe drinking water and sanitation and to participation in cultural life, for present and future generations".

- During the 49th session of the Human Rights Council in 2022 a report was presented on the right to live in a non-toxic environment, whereby a non-toxic environment is identified as one of the substantive elements of the right to a safe, clean, healthy, and sustainable environment. This report also called for the elimination of all highly hazardous pesticides

which, together with being a threat to biodiversity, are also a common mean of suicide (especially in low- and middle-income countries).

- The mental health impacts of climate change were a recurring argument used as part of the People's Petition presented to the International Court of Justice during the ICJAO Oral Hearings in December 2024.

- The Convention on the Rights of the Child highlights the risks coming from environmental pollution in the context of recognising the right of the child to the enjoyment of the highest attainable standard of health (Article 24) as well as the development of respect for the natural environment in the context of the right to education (Article 29).

Possible actions to consider:

- Consider including the mental health impacts from climate change and other environmental stressors as one of the arguments in the context of the right to a clean, healthy, and sustainable environment.
- Consider including the right to the enjoyment of the highest attainable standard of physical and mental health as one of the arguments to encourage a transition away from fossil fuels as an intervention to safeguard physical and mental health.
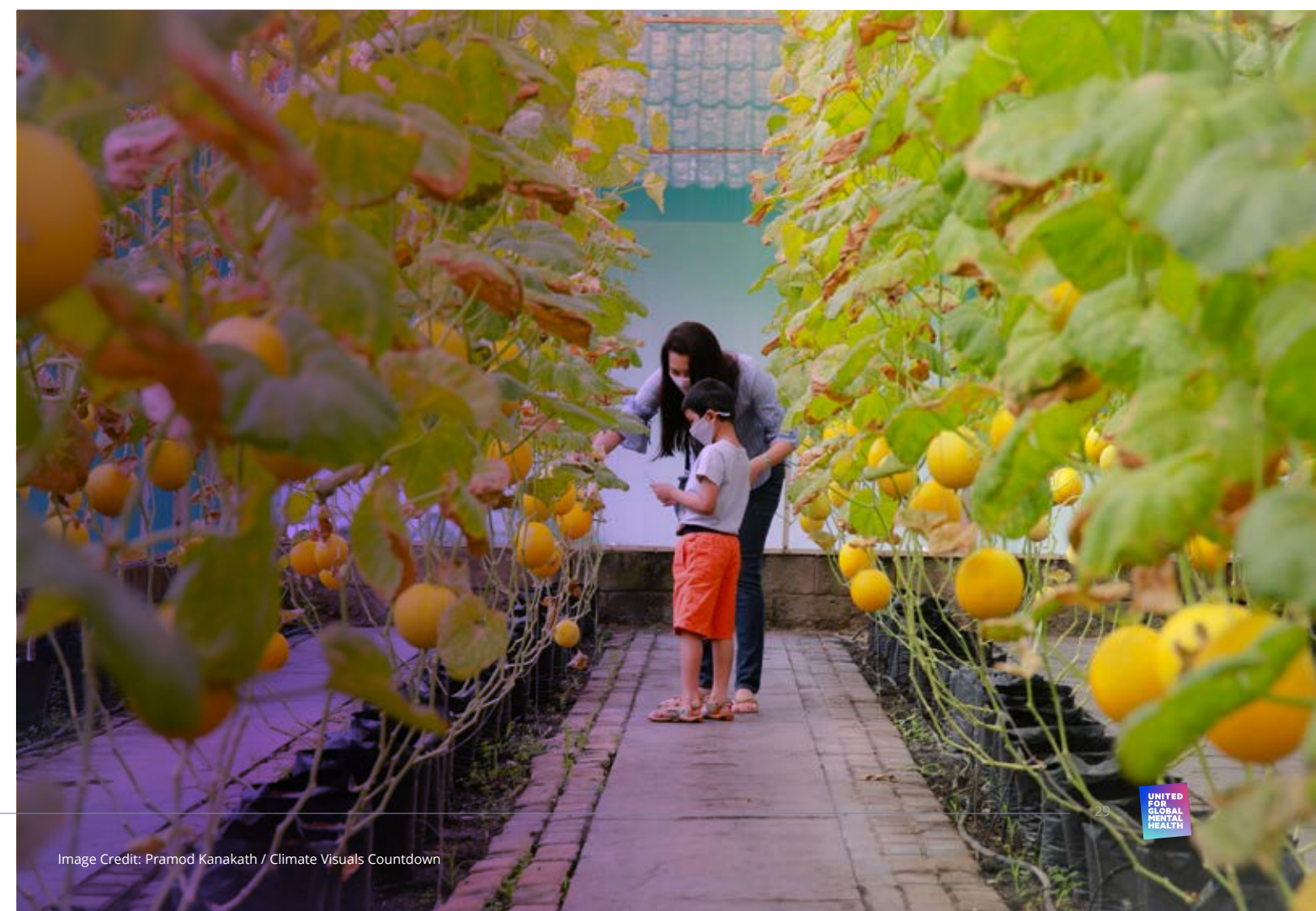

Image Credit: Pramod Kanakath / Climate Visuals Countdown

FINANCING

Suggested wording for NDCs and/or relevant NDC guidance:

"In order to safeguard physical and mental health from the impacts of climate change, climate action needs to be appropriately financed".

Globally, the additional societal costs of mental disorders due to changes in climate-related hazards, air pollution and inadequate access to green space are estimated to reach almost US$47 billion annually in 2030. This will further increase the already substantial economic burden of mental health problems globally, with depression and anxiety alone costing the global economy an estimated US$1 trillion every year. Climate change is likely to further increase this number. However, to date, only a small fraction of multilateral climate finance (approximately 0.5%) is allocated to projects that protect or improve human physical and mental health. Furthermore, within climate and health financing, mental health tends to receive few to no resources.

Potential actions to consider:

• Provide ambitious financial commitments regarding the implementation of the NDCs, given that mental health cannot be protected unless climate action is appropriately financed.

• Establish funding streams for health adaptation within the NDC with clear budget lines (e.g., the cost of making health facilities, including psychiatric facilities, more resilient to climate change) based on cost estimates and return on investment analyses.

• If resources allow, include financial support to developing countries for implementing climate action following the common but differentiated responsibilities and respective capabilities (CBDR-RC) principle and through accessible, grants-based, and flexible financing in order to ensure the mental health of the most vulnerable populations around the world is safeguarded.

• Ensure mental health is explicitly integrated in financial mechanisms or allocations of funding for health-related climate actions.

• Implement selective taxation systems on goods and services that are harmful to both physical and mental health as well as the environment, such as fossil fuels.

• Consider the inclusion of innovative financing mechanisms (e.g., climate-linked bonds) to implement climate action and therefore protect mental health.

• Ensure mental health and psychosocial considerations are integrated into Humanitarian Response Plans (HRPs) and other relevant resource mobilization instruments in the aftermath of extreme weather events.

Image Credit: Kunga Tashi Lepcha / Climate Visuals Countdown

ADAPTATION AND DISASTER RISK REDUCTION

Suggested wording for NDCs and/or relevant NDC guidance:

"*Integrating mental health considerations into adaptation efforts across the life course can contribute to considerable reductions in mental health problems, and can be an effective way of safeguarding population physical and mental health and psychosocial wellbeing in the context of climate change*".

According to the 2022 IPCC AR6 report, improving access to mental healthcare is considered a form of effective adaptation (see C.3.7). Mental healthcare should include mental health promotion, prevention, and treatment. However, to date, most countries do not consider mental health in the context of adaptation discussions. For example, according to WHO data, in 2021, only 5% of national adaptation plans (NAPs) included references to actions to address mental health and psychosocial needs. Even more surprisingly, none of 160 global national adaptation policies included references to children's mental health.

This finding replicates when looking at other types of policies relevant to adaptation such as heat health action plans (with only a minority of them including references to mental health (Stewart-Ruano & Parks, in press)) and disaster preparedness and disaster risk reduction policies. Indeed, only 28% of WHO Member States have mental health and psychosocial support programmes integrated into disaster preparedness and/or disaster risk reduction, according to WHO data.

However, integrating mental health considerations into disaster risk reduction efforts has been shown to lead to improvements in both mental health and disaster preparedness.

Possible actions to consider:

- Integrate mental health and psychosocial support considerations where relevant into adaptation policies such as National Adaptation Plans, Health National Adaptation Plans and other relevant adaptation policies such as Heat Health Action Plans. Concrete examples of integrating mental health into adaptation policies could include: training the health workforce on the mental health impacts of climate change as well as on appropriate mental health and psychosocial support interventions; ensuring psychiatric facilities are appropriately equipped to be resilient to climate stressors; or integrating targeted support to people living with mental health problems as part of early warning systems for extreme weather events.
- Integrate mental health and psychosocial support considerations into disaster risk reduction and disaster preparedness actions and policies.
- Ensure mental health is included when assessing and monitoring the health impacts of climate change (e.g., within heat morbidity and mortality surveillance systems, Climate and Health Vulnerability Assessments, and Vulnerability and Adaptation Assessments).

LOSS AND DAMAGE

Suggested wording for NDCs and/or relevant NDC guidance:

"*Mental health is an important non-economic loss and damage. Extreme weather events and disasters can negatively impact mental health by increasing the risk of people developing new mental health problems and by making people living with pre-existing mental health problems more vulnerable. It is essential for mental health and psychosocial support to be integrated as a cross-cutting consideration across responses to loss and damage due to climate change"*.

Extensive evidence exists on the negative mental health impacts of disasters and extreme weather events. Exposure to disasters can increase the risk of people developing new mental health problems such as depression, substance use disorders, and post-traumatic stress disorder. Additionally, people living with pre-existing mental health problems can experience a worsening of symptoms or a relapse in their condition as a result of the additional stressors. Mental health and psychosocial issues often persist long after physical infrastructure has been rebuilt, representing enduring non-economic losses. At the same time, decades of research and practice in the mental health and psychosocial support space have also highlighted multiple effective interventions which can both promote good mental health and address poor mental health in contexts affected by adversity. Extensive tools and resources exist on the topic. (including the IASC MHPSS Minimum Service Package, the MHPSS READY Package, and the MHPSS Preparedness Assessment Toolkit). The World Health Organization has also recently called for the need to create standardized methodologies to measure mental health as a non-economic loss and damage.

Possible actions to consider:

- Ensure appropriate and accessible mental health and psychosocial support is available to people and communities exposed to climate hazards.
- Develop standardized methodologies for measuring non-economic losses and damages, such as mental health.
- Ensure people with pre-existing mental health problems and/or severe mental illness are safeguarded and protected in the context of climate disasters.
- Allocate dedicated funding for MHPSS within loss and damage mechanisms and climate financing to ensure sustainable and predictable resources through domestic, bilateral, and multilateral channels, including international cooperation.
- Establish multi-sectoral MHPSS coordination mechanisms within national governance structures, to facilitate coordination across health, education, protection, and other sectors for comprehensive response strategies.
- Engage communities in participatory approaches to MHPSS program design, recognizing local knowledge and promoting community-led solutions that respect dignity, build on existing capacities, and address stigma and discrimination.

Image Credit: Kyle Miller / Wyoming Hotshots
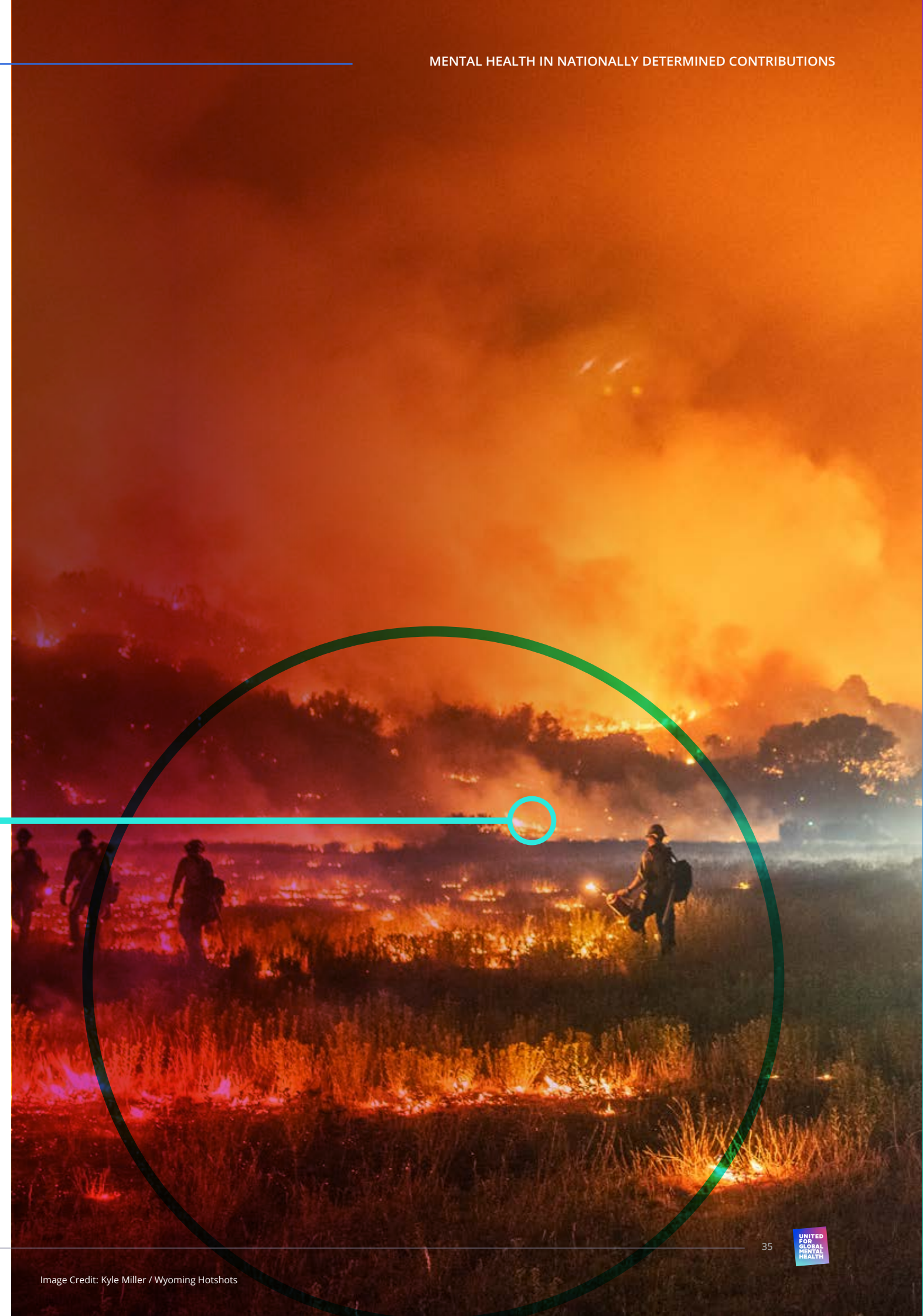
RESOURCES

WHO Quality Criteria for Integrating Health in Nationally Determined Contributions (WHO, 2024)

WHO 2023 Review of Health in Nationally Determined Contributions and Long-Term Strategies (WHO, 2023)

Global Climate and Health Alliance 2023 Healthy NDC Scorecard (GCHA, 2023)

Global Climate and Health Alliance Healthy NDCs 3.0 (GCHA, 2025)

UNFCCC NDC Registry

CONTACT INFORMATION

Briefing developed by Alessandro Massazza, Policy & Advocacy Advisor at United for Global Mental Health. **United for Global Mental Health** is an international NGO working on mental health policy and advocacy. You can read more about our work on climate change, the environment, and mental health **here**.

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If you have any questions on this document,
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Mental health in Nationally Determined Contributions: Current state and opportunities for integration

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