Dialogue Support on Health, Environment and Climate Change

For Health Specialists

GREEN TOOL BOX: DIALOGUE AND ASSESSMENT TOOL 2021

The health and well-being of humans, animals and ecosystems are closely interconnected. Cross-sectoral work is, thus, often necessary to obtain both healthy and sustainable solutions. This Dialogue Support serves as a practical tool that aims to engage, inspire, and identify entry points for professionals in the area of health to improve programming and create conditions for cross-sectoral collaboration within the area of environment and climate change. For a general understanding of environment, climate change and health linkages and Sida's overall point of view, please see Sida's brief "Health and Linkages to Climate Change and Environment".

Photo: Hermes Riviera.

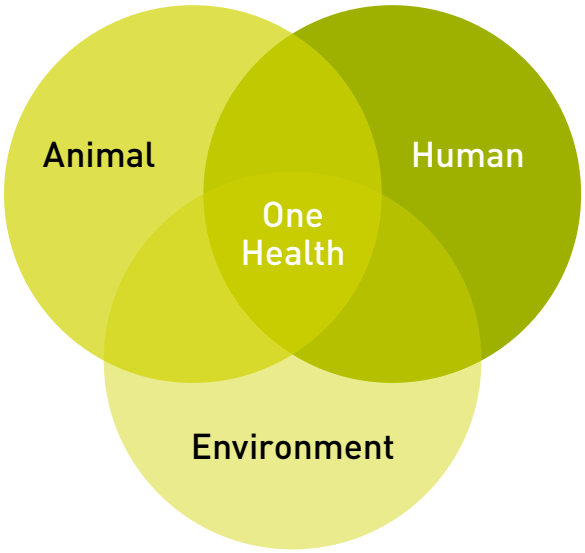
A HOLISTIC APPROACH TO ENVIRONMENT, CLIMATE CHANGE AND HEALTH PROVIDES GREAT SOCIETAL GAINS AND BENEFITS

All human beings have the right to live in a clean and healthy enviroment. Achieving the Sustainable Development Goals (SDGs) and universal health coverage requires a holistic approach. Climate change, pollution, environmental degradation, and socioeconomic conditions are all closely linked to human health. Climate change is the defining global public health threat of the 21st century and has profound implications for nearly every aspect of health.[1] Pollution is the world's largest environmental cause of disease and premature death and nearly 92% of pollution-related deaths occur in low-income and middle-income countries.[2] Children, men, and women living in poverty are more likely to live and work in polluted areas and have fewer means to protect themselves. Air pollution is assessed to generate annual welfare losses equivalent to 7.5% of GDP in East Asia and the Pacific and 3.8% of GDP in Sub-Saharan Africa. Costs of poor sanitation are estimated to be more than 2% of GDP in East Asia and the Pacific and Sub-Saharan Africa, 4% in South Asia, and 2.4% in Latin America and the Caribbean.[3]

Biodiversity and healthy ecosystems provide ecosystem services that are fundamental for human health and well-being. Environmental degradation, biodiversity loss and climate change do not only affect human health and result in large economic losses; they also threaten the capacity of health systems to provide health services. Flooding, for example, may reduce access to healthcare services, disrupt the supply chain of medicines and other essential items, and cause spreading of water pollution and water-borne diseases. Climate change increases the risk of havoc in disaster-prone areas, threatens food security, water access and livelihood opportunities, and can cause migration. Furthermore, climate change contributes to heat-related deaths and disorders that are aggravated by air pollution, outbreaks of vector-borne diseases, and may cause mental distress. Investing in health adaptation to climate change and climate-resilient health systems is, in addition to climate mitigation measures, necessary for achieving better health for all. This is increasingly recognized in the Nationally Determined Contributions under the Paris Agreement on climate change, where countries present their climate adaptation and mitigation priorities.[4]

1 The Lancet, 2018. The Lancet Countdown on health and climate change: shaping the health of nations for centuries to come.
2 The Lancet, 2017. The Lancet commission on pollution and health.
3 World Bank, 2016. The Cost of Air Pollution: Strengthening the economic case for action.
4 WHO, 2018. COP24 Special report: Health & Climate Change.

The One Health Approach, promoted by WHO, OIE and FAO,[5] recognizes that health and well-being of humans, animals and ecosystems are closely interconnected; see Figure 1.



One Health is a coordinated, multidisciplinary, and cross-sectoral approach to manage and reduce risks and impact originating at the animal-human-ecosystems interface. WHO identifies areas of particular concern as food safety, zoonotic diseases, and antibiotic resistance. One Health approaches are also inextricably linked to climate change.

WORKING ACROSS SECTORS

It is important to integrate environment and climate change in health programmes and to include health in environment and climate programmes. This will create synergies and co-benefits as well as possibilities to avoid goal conflicts. Collaborations with other sectors such as energy, agriculture, urban planning, and infrastructure are important to consider as well. The UN has estimated that the global population growth during this century will mostly occur in cities.[6] Creating climate-resilient, sustainable and healthy cities will require considerable cross-sectoral collaboration. Choosing solutions that have multiple benefits, such as nature-based solutions and/or combined climate mitigation-adaptation measures, will both reduce costs across sectors and have positive effects on health.[7]

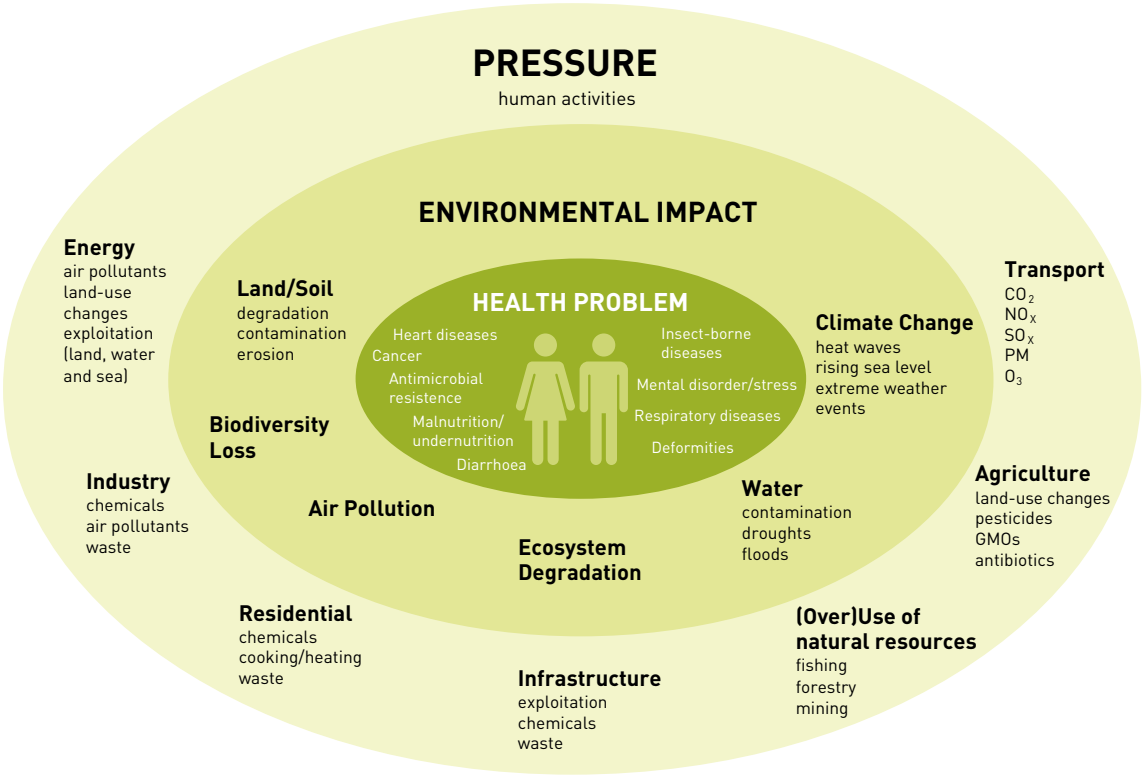
Health professionals are a credible voice in raising awareness of the importance of addressing the environmental determinants of poor health, e.g. air and water pollution, and of highlighting the overall health benefits of climate action.[8] The health sector is in turn in need of good environmental data and cross-sectoral collaboration to assess risks and develop sustainable public health measures. Environmental ministries often have a relatively strong coordination role in the multisectoral climate change related political processes, e.g. development of Nationally Determined Contributions. Ensuring that the health perspective is considered in such inter-ministerial processes is vital. Fora for inter-ministerial coordination between sectors are important entry points for improving health and environmental outcomes simultaneously. However, the capacity for multi-sectoral action tends to be limited and requires strengthening.

The possible natural origin of the COVID-19 pandemic has illustrated the importance of the One Health approach for the mitigation of future emergence of new diseases. The COVID-19 pandemic also painfully highlighted the importance of functional health systems and access to water, sanitation, and energy. Response measures, for instance Building Back Better[9] programmes to cope with a post-pandemic world, are examples of inter-ministerial policy- and investment processes. Engaging in these processes is in line with WHO's call for responses that promote a healthier, fairer, and greener world.[10]

Figure 2 below provides an overview of environment-health linkages. The figure is explained in greater depth in Sida's brief on Health and Linkages to Climate Change and Environment.

5 World Health Organization, Food and Agriculture Organization and World Organisation for Animal Health.
6 United Nations, Department of Economic and Social Affairs, Population Division (2019). World Urbanization Prospects 2018: Highlights (ST/ESA/SER.A/421).
7 Directorate-General for Research and Innovation (European Commission). Evaluating the impact of nature-based solutions. A handbook for practitioners. Publications Office of the EU. May 4, 2021.
8 Watts, et al, 2019. The 2019 report of the Lancet countdown on health and climate change: ensuring that the health of a child born today is not defined by a changing climate.
9 Building back better: A sustainable, resilient recovery after COVID-19 (oecd.org).
10 WHO (2021) Manifesto for a health recovery from COVID-19.

Figure 2: Illustration of the interlinkages between environment impacts, caused by different pressures, and health problems (not exhaustive). Source: Sida's Helpdesk on Environment and Climate Change.



This section is divided into three parts that give guidance on cross-sectoral collaborations and how to identify co-benefits and risks of specific actions, as well as synergies/opportunities and goal conflicts/obstacles between different programmes. The first part focuses on co-benefits and opportunities for positive environmental impact caused by the health programme. The second part deals with possible negative environmental and climate change impact from the health programme, and how to reduce such risks. The third part gives guidance on how to identify and manage risks from climate change and environmental degradation on the sustainability and resilience of the health programme.

OPPORTUNITIES AND CO-BENEFITS OF CROSS-SECTORAL COLLABORATIONS: GUIDING QUESTIONS

Collaboration with environment and climate actors can bring benefits in terms of better access to data (e.g. respiratory diseases/air pollution, residues of hazardous chemicals in the blood), additional access to important policy debates/decision-making fora, and more voices speaking up for preventive action to address the environmental determinants of health.

Issues of common concern include air and water pollution, building resilience to avoid climate-related disasters, adaptation to heatwaves, sustainable healthy cities, improved water and sanitation, vector-borne diseases, indiscriminate use of antibiotics, and restricting the use of hazardous chemicals and biohazardous waste, food safety, and promotion of healthy diets with a low environmental footprint.

Potential actors to collaborate with include the Ministry of Environment, the Ministry of Water, Climate Change task teams, Environmental civil society organisations (CSOs), water, sanitation and hygiene (WASH) CSOs, informal settlement CSOs, Ministry of Agriculture, and consumer groups demanding healthy, sustainably produced food.

Examples of processes/frameworks for collaboration include One Health programmes, national SDG programmes, national climate change strategies and governmental post-COVID-19 recovery efforts (Build Back Better).

Questions to be considered

National/regional level:

- Is there awareness and knowledge of the interlinkages between health and climate change and environment at the level of national decision-makers?
- Does a political framework for collaboration between the health sector and the areas of environment and climate exist?
- Do global or national partners make use of opportunities to engage, benefit from, and link to health in the development of national climate change strategies, investment plans or climate vulnerability assessments?

For example, health sector involvement in the development of Nationally Determined Contributions (NDCs) and National Adaptation plans.

Programme/local level, and advocacy:

- Explore whether the partner/programme interacts with the environmental community and other actors working on One Health. If relevant, what are the areas of common concern and have benefits of collaboration been explored?
- If the partner works at the local level, could the partners' dialogue with local communities be more effective if carried out in collaboration with actors in the area of environment and climate change?

Collaborations could include the development of information materials and the involvement of local environmental professionals in awareness-raising. Benefits include the leveraging of resources, networks, and knowledge of environmental professionals.

- Does the programme generate data that can be used to promote the right to a clean and healthy environment? If yes, is it shared and used for monitoring and/or to inform decision-making outside the health sector (energy, agriculture, urban policies, water, etc)? If not, is there a potential to collect additional information or collaborate with partners who could generate and/or disseminate information?
- Does the partner and their network refer to environmental regulations, policies or procedures such as mandated Environmental Impact Assessments to advance their objectives?
- Does the partner have the potential to become a strong voice for a clean and healthy environment in the public domain and multi-sectoral processes?
- Are there opportunities in the health programme to explore the use of renewable energy resources?
- Could the use of IT (including eHealth) increase the outreach to target groups, and could it be a means to improve data collection and strengthen capacity?
- Have opportunities for programmes to reduce the environmental determinants of poor health been assessed?

For example, a maternal healthcare programme could include information to target groups on the health risks related to indoor air pollution and the benefits of improved stoves.

- How are issues of access to safe water resources, water supply, sanitation and hygiene understood and managed by the partner? If relevant, do interventions target both households and institutions such as health facilities and schools?

See SDG 6 Clean water and sanitation.

- Do programmes that include training of healthcare workers have components that raise awareness on topics such as environmental-related health risks and preventive measures, including WASH and climate-resilient health systems?

See WHO and UNICEF guidance. For example, training programmes such as "Children and chemicals" not only focus on health risks and treatments but also on the reduction of children's exposure to hazardous chemicals found in the environment.

Example 1: Strengthening a health partner's capacity and systems in environment and climate for more leverage and sustainable outcomes.

The environmental impact of hospitals and the health sector at large contributes to approximately 4.4 % of global greenhouse gas emissions.[11] Therefore, it is important to look at technological options that could reduce the environmental impact of the health sector. By preventing infections and the need for hospital care, vaccines indirectly contribute to the reduction of the health-related environmental footprint. When appraising the core support to the International Vaccine Institute (IVI), Sida identified opportunities to strengthen the partner's system for managing environmental impact. The first step was to conduct an environmental assessment that was used as a base to establish an environmental working group at IVI, which developed environmental goals and conducted training. One concrete result of the work was the replacement of waste burners, which significantly lowered emissions. IVI also took the opportunity to test a renewable energy-based vaccination supply management system to expand the cold-chain in settings with limited energy and power infrastructure. IVI has escalated its environmental ambition by initiating the development of a certified environmental management system that can lead the way for other vaccine producers to become more environmentally concerned and sustainable.

11 ARUP, 2019, Healthcare's climate footprint.

MANAGING NEGATIVE ENVIRONMENTAL IMPACTS OF THE PROGRAMME: GUIDING QUESTIONS

- How are the possible risks of negative environmental impacts caused by the programme identified and managed? Are available guidance documents used for analysis and action?

Key aspects include resource efficiency in operations (e.g. water, energy, food), reduction of carbon emissions (buildings and travelling) and waste discharge (including hazardous types of medical waste, infectious and sharp waste, chemical and radioactive waste and wastewater).

See for instance WHO's guidance for "Climate resilience and environmentally sustainable healthcare facilities".

- Does the partner have environmental health expertise and/or systems for managing environment and climate change risks and opportunities? If so, are systems well applied at decentralised levels? Are there specialist functions or pilots that could be utilized to increase environmental health outcomes of the programme?

VULNERABILITIES TO AND RISKS FROM THE ENVIRONMENT (INCL. CLIMATE CHANGE) THAT MAY AFFECT THE PROGRAMME

Climate change poses, as mentioned above, a large burden on health systems through impacts on people's health. Weather-related events, such as flooding and storms, also affect the operations of health systems and people's access to healthcare.

Pollution levels, industrial accidents, and over-exploitation of natural resources, such as fisheries or grazing land, can have recurrent or sudden direct or indirect impact on public health.

- Have climate change, or other environmental degradation risks that can jeopardize the results of the intervention, been assessed?

National climate vulnerability assessments can provide guidance and ideally inform all sector plans, including health sector plans.

See WHO's guidance.

Example 2: How did health facilities in Zimbabwe become more resilient to the effects of climate change?

One-third of health facilities in Zimbabwe lack connection to the national electricity grid. This limited and unreliable electricity supply hampers the delivery of health services since electricity is key in e.g. the operation of medical equipment, cooling of medicines, and laboratory work for diagnostics. To address these challenges, Sida facilitated the inclusion of a component on Sustainable Energy for Health Facilities in the UNICEF Health Development Fund. As a result, all clinics are now provided with solar power generation and water supply. Since 50% of pneumonia cases among children under five years of age are caused by household air pollution,[12] health facilities now support awareness raising related to both indoor air pollution and nutrition when promoting the use of improved stoves. The programme empowers women by providing micro business skills for maintenance of solar panels and production of improved cooking stoves. This directly contributes to health benefits, particularly for women and children, while reducing the demand for wood for cooking that otherwise leads to deforestation and degradation of ecosystems.

Understanding how health, the natural environment, and societies are closely interlinked is the key to developing sustainable and healthy programmes and actions based on the local context. The programme should include capacity building and information to local partners and stakeholders on the need for a holistic approach to capitalize on co-benefits, reduce costs and avoid goal conflicts.

ADDITIONAL READING

UNEP Global Environment Outlook 6: Healthy Planet, Healthy People (2019) and related regional reports.

Planetary Health Alliance, Planetary Health Case studies.

12 Household air pollution and health (WHO.int).

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