# **Summary Module 6 Main features of the Environmental Crisis**

“At this point, a very brief overview of the environmental crisis may be helpful. It is important to emphasise that a wide range of views about the nature and severity of the current environmental crisis exists, and some of the issues are highly controversial. Nevertheless, there is broad agreement that the environmental crisis encompasses the following main issues.

**a) Climate change**: Climate change, primarily caused by human activities such as the burning of fossil fuels, agricultural emissions, and deforestation, is recognized as a major global environmental problem. It leads to the accumulation of greenhouse gases and other pollutants in the atmosphere. This phenomenon has already begun to show ecological and social consequences, and if not mitigated, it could bring significant alterations to global temperatures, sea levels, ocean currents, rainfall patterns, climate zones, the distribution of species, and the functioning of ecosystems.

**b) Stratospheric ozone depletion**: the depletion of stratospheric ozone due to the pollution of the atmosphere by halocarbons (such as chlorofluorocarbons or CFCs) is another serious environmental issue. It is a significant concern because the lack of protective ozone at high altitudes results in increased levels of harmful solar ultraviolet (UV-B) radiation reaching the earth's surface, causing a range of health-related and ecological impacts.

**c) Degraded air quality**: other forms of air pollution are also significant, particularly at regional and local scales, as they may seriously degrade air quality; worldwide, approximately one billion people inhabit areas - mainly industrial cities - where unhealthy levels of air pollution occur. Many air pollutants are responsible for the degradation of air quality, but some key pollutants include particulate matter (such as soot), tropospheric ozone, oxides of nitrogen, oxides of sulphur, lead and various aromatic compounds (such as benzene). Many air pollutants may cause or aggravate respiratory and cardiovascular illnesses; some are known carcinogens; and some can cause damage to vegetation and, in turn, produce a range of ecological effects.

**d) Degraded water quality**: similarly, water quality can be seriously degraded by contamination with pollutants, giving rise to a range of health-related and ecological effects (such as the degradation of coral reefs). A major source of water pollution is the terrestrial run-off to inshore waters that occurs in many coastal locations; such run-off may contain significantly elevated levels of nitrogen and phosphorus from agricultural land and from human settlements. Many other human activities lead to water pollution, including mining and industrial processes, which may create toxic effluent. Oil spills, accumulation of plastics and the bioaccumulation of persistent organic chemicals are some of the other causes of serious degradation of the marine environment.

**e) Scarcity of fresh water**: besides the pollution of freshwater sources, there are a variety of other reasons for the scarcity of fresh water for drinking in many parts of the world - many of which are related to poor water resource management practices. For instance, the over-abstraction of water from rivers results in water shortages and problems of salinisation downstream. Irrigation practices may also be responsible for the depletion of local water sources and the salinisation of irrigated land. Vast differences in water security exist at the global scale, reflecting both demand for fresh water and the scale of public and private investment in water supplies, treatment and distribution.

**f) Land contamination**: land contamination occurs as a result of chemical or radioactive pollution, especially by long-lived (persistent) chemical species that enter the soil. Land contamination may cause profound ecological effects and it presents severe constraints to development, since contaminated land must typically be rehabilitated before it is safe to use for agriculture, construction or recreation.

**g) Deforestation**: it has been estimated that around half of the world's mature forests have been cleared by humans. Deforestation occurs for a variety of reasons, but the majority of deforestation now occurs when tropical forests are cleared for agriculture and pastoralism; other reasons include the destruction of trees for charcoal production and the selective logging of forests for timber. Whilst tropical forests cover only around 6% of the earth's surface, they are an essential part of the global ecosystem and of the biosphere: they help to regulate climate; they protect soils from erosion; and they provide habitats for a vast number of plant and animal species. One estimate suggests that around 90% of the world's species are found in tropical forests (Park 2001).

**h) Soil erosion and degradation**: concerns about soil erosion, soil degradation and the problem of desertification have become acute. In part, these concerns are based on the historical experiences of dramatic soil erosion and transport in New World countries including the USA (during the 'Dust Bowl' of the 1930s) and Australia. Whilst analyses of the problems of soil erosion and degradation have become more sophisticated, recently, it is clear that these problems continue to have important consequences for agricultural and pastoral productivity as well as for the functioning of natural ecosystems.

**i) Land use change and habitat loss**: these issues overlap with others, such as deforestation, but they are broader and include the clearance of forest for agriculture and pastoralism, the transformation of land during urban growth, the development of new infrastructure (such as roads), the drainage of wetlands, and the destruction and removal of coastal mangrove forests. The impact of land use change on forest and grassland environments is depicted in Figure 1.

**j) Biodiversity loss**: many plant and animal species are threatened with extinction, due to the spread of disease, the destruction and degradation of their habitats, and direct exploitation. In 1999, UNEP (1999) estimated that one-quarter of the world's mammal species and around one-tenth of the world's bird species faced a significant risk of total extinction. Threats to biodiversity are not confined to terrestrial ecosystems; serious concerns have been raised about the future of marine and coastal wildlife species as a result of the pollution, over-exploitation and acidification of ocean and seas.

**Other related issues**

Some issues associated with the environmental crisis are not strictly 'environmental' but are closely related to environmental issues. They encompass a range of economic, social, political and technological issues.

**k) Population growth**: the total human population has expanded since the introduction of agriculture, around 12 000 years ago, and its rate of growth has generally increased over time, largely as a result of increased food production and improved sanitation and health care. Achieving the first one billion of human population took most of human history, whilst the most recent increase of one billion was achieved in little more than a decade. However, recent declines in the rate of growth of population have occurred in many parts of the world, and in some countries populations are now declining. The total human population was around 5.9 billion in 1998; it currently far exceeds 7.3 billion people and is expected to have reached 9.4 billion people by 2050. The increasing human population inevitably places greater demands on the natural environment - for habitat, resources and waste assimilation - although the extent to which the human 'population explosion' is driving environmental degradation is a complex and controversial question. Significant differences exist in cultural attitudes to the issues of human population size and the rate of population growth.

**l) Urbanisation**: the issue of urbanisation is indirectly related to that of population growth, since urbanisation is occurring in response to increasing population pressures in rural areas and to the increasing concentration of economic opportunities in cities - often in so-called 'megacities' (cities with populations exceeding 10 million people). Urbanisation is often associated with a range of social and environmental problems including overcrowding, congestion, pollution, public health issues, shortages of water for drinking, and inadequate sanitation. Urbanisation is also related to another issue: the decline of rural communities.

**m) Poverty**: whilst poverty is complex and problematic to define, the persistence of poverty at all levels (from intra-household to global) represents an ongoing challenge, as acknowledged in most current development policies, initiatives and targets (such as the United Nations Millennium Development Goals (UNDP undated)). Vast differences in patterns of income, production and consumption are evident at all spatial scales, and those patterns are reflected in distinctive patterns of environmental impact (although in some cases environmental impacts are 'exported', as in the case of radioactive waste that is generated in one country before being transported to another for processing or disposal).

**n) Food insecurity**: in general, the rate of increase in total food production has exceeded that of total population growth over recent decades, mainly due to improvements in agricultural practices and in water management techniques. However, the average values conceal enormous differences in the distribution and quality of food, and the lack of food security remains a profound challenge in many parts of the world. Debates about food production raise important environmental issues such as the use of genetically modified (GM) and genetically engineered (GE) seeds and produce.

**o) Disease**: closely related to issues of poverty and food insecurity are problems of disease due to malnutrition, scarcity of water for drinking, poor sanitation, pollution, and inadequate shelter; those are often compounded by the spread of infectious diseases such as malaria, cholera, tuberculosis and HIV/AIDS. Large differences occur in the responses of human societies to diseases, reflecting vast inequalities in health care spending and in funding for pharmaceutical and medical research.

**p) Peak oil and energy security**: peak oil refers to the time at which maximum crude oil extraction occurs, after which the economically viable reserves become depleted and the rate of oil extraction declines. Some estimates suggest that peak oil will occur - or has already occurred - early in the 21st century, with the implication that alternative energy sources will need to be developed in sufficient time to serve as a substitute for oil. Regardless of the accuracy of predictions about peak oil, the issues of climate change and conflict respectively, are now driving debates about ‘green’ (decarbonised or renewable) energy sources and energy security.

**q) Conflict and displacement**: conflict between human societies continues to create severe environmental degradation in addition to human misery and a wide range of social impacts. For instance, the use of depleted uranium munitions causes significant land contamination, whilst the effects of the displacement of large numbers of people from zones of conflict can exert pressures on adjacent ecosystems. Displacement of people does not occur only in response to violence; globally, the effects of climate change are projected to result in the displacement of as many as 500 million environmental refugees.

**r) Natural disasters :**whilst not necessarily part of the environmental crisis, human populations are also faced with ongoing threats due to the occurrence of natural disasters such as earthquakes, landslides, floods, tsunamis and wildfires. Yet whilst these hazards may be natural in origin, it is important to acknowledge that human vulnerability to natural disasters is generally increasing, not least because human populations and settlements are growing in many marginal and dangerous areas, such as floodplains. Hence unsustainable practices - such as the construction of settlements on floodplains, or the intensive cultivation of marginal hill slope lands - may greatly increase the impacts of natural disasters on human societies and economies.

**s) The causes of the environmental crisis:** The causes of the environmental crisis have been the subject of considerable debate. However, in general, its main causes are now acknowledged to be:

* **technological developments** over the course of human history - and particularly since the Industrial Revolution - which have allowed humans to exert a greater influence over natural resources and ecosystems
* **rapidly increasing human population** which has led to significant increases in human population density in many parts of the world

**dramatic increases in resource and energy consumption** - particularly since the Industrial Revolution, and especially since around 1950 - which have accompanied economic growth and rising standards of living in some parts of the world

In evaluating the effectiveness of the Sustainable Development Goals (SDGs) in addressing the urgent issue of climate change and its impacts, it is clear that Goal 13, which specifically focuses on climate action, plays a crucial role in achieving overall sustainability. However, there are both strengths and weaknesses in the way Goal 13 and its targets have been formulated within the SDGs framework.

Strengths:

Comprehensive Approach: Goal 13 takes a comprehensive approach to combating climate change by addressing various aspects, including resilience building, policy integration, education, and financial support for developing countries. This reflects a commitment to tackling climate change from multiple angles.

Integration with Other Goals: Goal 13 acknowledges the interconnection between climate action and other sustainable development goals. It recognizes that addressing climate change is essential for achieving goals related to food security, clean water, clean energy, sustainable cities, responsible consumption, and biodiversity conservation.

Commitment to Climate Finance: The goal emphasizes the mobilization of $100 billion annually by 2020 from all sources to support developing countries in their climate mitigation and adaptation efforts. This commitment is crucial for equitable climate action.

Weaknesses:

Technocratic Approach: The SDGs, including Goal 13, tend to adopt a technocratic approach that prioritizes economic growth and environmental sustainability without addressing the structural barriers to sustainability. This approach may not fully account for the complexities of the climate crisis and the need for transformative changes.

Weak Implementation Mechanisms: Despite setting ambitious targets, the SDGs, including Goal 13, lack robust implementation mechanisms. The absence of clear enforcement mechanisms and accountability measures may hinder the actual achievement of these goals.

Limited Emphasis on Pollution Reduction: While Goal 13 primarily focuses on climate change mitigation and adaptation, it does not give significant emphasis to pollution reduction, which is closely linked to climate change and its impacts. Strengthening efforts to reduce pollution is essential for achieving the goal's objectives.

Incomplete Indicators: Some of the indicators associated with Goal 13 are not ambitious or are watered down, particularly in economic-related goals. This compromises the integration of climate action with other aspects of sustainable development.

In conclusion, Goal 13 of the SDGs is a critical component of the global effort to combat climate change and its impacts. It recognizes the interconnectedness of climate action with other sustainability goals and emphasizes the importance of financial support for developing countries. However, the technocratic approach, weak implementation mechanisms, and limited focus on pollution reduction pose challenges to the effective achievement of this goal. Addressing these weaknesses and fostering a more holistic and transformative approach to climate action will be essential in ensuring the SDGs are fit for the purpose of tackling climate change and achieving sustainability.

As the Chair of the International Disability Alliance said on the SDGs adoption in 2015

Disabled People and Accountability

**“Persons with disabilities were instrumental in creating this transformational roadmap to a better future. Now the hard work of real change lies directly ahead. Persons with**

**disabilities must be leaders, guiding the world towards achieving these goals for everyone. This journey demands our persistent and unwavering duty to hold our governments accountable to their own commitments. Our full engagement in the follow-up and review mechanism is fundamental. We cannot afford to be left behind again.”**

- Maryanne Diamond, Chair of the International Disability Alliance, 2015

**IFCO Independent Forum of Commonwealth Organisations suggest in the run up to CHOGM in Kigali in June 2021**

The following are suggested as essential in achieving meaningful change:

* 'North first' or equity, whereby, for example, cities and countries in the global North offer the greatest potential for reducing carbon emissions
* participatory governance (the key guiding principle of the Foundation's work)
* policy coherence: vertical and horizontal policy integration (i.e. multi-level and cross-sectoral governance)
* alignment with Commonwealth strategy and objectives where applicable
* a preventive, or precautionary approach to policy engagement (avoiding irreversibility)
* mutual learning, especially from responses by communities developing resilience to climate change, for example learning from SIDS' responses
* identifying Commonwealth good practice (replicable case studies)

recalibrating 'prosperity', new prosperity indices for development.

armed conflict and war have devastating effects on disabled people, both in terms of physical and mental impairment. The intentional violence and neglect faced by disabled individuals in conflict situations is a clear violation of their human rights. The long-term consequences of war, such as the use of chemical agents, landmines, and sexual violence, further exacerbate the suffering of disabled people.

It is essential for governments and international organizations to prioritize the protection and support of disabled individuals during armed conflicts. The United Nations Convention on the Rights of Persons with Disabilities (UNCRPD) provides a framework for ensuring the rights and well-being of disabled people, even in times of crisis.

Efforts must also be made to prevent conflicts and promote peaceful resolutions, as war ultimately leads to immense human suffering and disability. Sustainable Development Goal 16 emphasizes the importance of building inclusive and accountable institutions that can address the root causes of violence and conflict.

The goal has ten "outcome targets":

• Reduce violence;

• protect children from abuse, exploitation, trafficking and violence;

• promote the rule of law and ensure equal access to justice;

• combat organized crime and illicit financial and arms flows,

• substantially reduce corruption and bribery;

• develop effective, accountable and transparent institutions;

• ensure responsive, inclusive and representative decision-making;

• strengthen the participation in global governance;

• provide universal legal identity;

• ensure public access to information and protect fundamental freedoms.

it is crucial that the international community works together to prevent armed conflicts, protect disabled individuals during times of crisis, and promote peace and inclusive societies for sustainable development. Only by addressing these issues can we hope to reduce the impact of war on disabled people and ensure their full participation in society.

The Bhopal gas tragedy of 1984 is a stark reminder of the long-lasting and devastating impact that accidents can have on disabled people. The toxic gas leak not only resulted in immediate deaths and injuries but also left a legacy of disabilities that continues to affect generations of survivors.

The gas leak in Bhopal led to a significant number of disabilities among the survivors. Children born to exposed families have been born with a range of disabilities, including cerebral palsy, muscular dystrophy, Down's syndrome, ADHD, blindness, learning difficulties, and gross motor delay. Many of these innocent victims are completely immobile, unable to perform basic tasks such as washing, feeding themselves, and defecating.

The Indian government's response to this humanitarian crisis has been inadequate, to say the least. Despite a Supreme Court order in 1991 mandating the provision of medical insurance to the 100,000 children born to the exposed families, none of them have been covered to date. This failure to provide essential medical support further exacerbates the suffering of disabled individuals and their families.

The situation in Bhopal serves as a poignant example of the challenges faced by disabled people in humanitarian crises. It highlights the importance of not only addressing immediate medical needs but also providing long-term support and assistance to disabled survivors. In many cases, disabilities resulting from accidents can be permanent and life-altering, requiring ongoing care and rehabilitation.

Furthermore, the Bhopal tragedy underscores the need for corporations and governments to prioritize safety measures and disaster preparedness to prevent such accidents from occurring in the first place. The negligence of Union Carbide Corporation in this case had devastating consequences for the lives of countless individuals and their families.

The impact of emergency situations on persons with disabilities is even more severe due to the existing barriers and inequalities they face in their everyday lives. In situations of risk and humanitarian emergencies, these barriers are amplified, making it even more crucial for States Parties to take necessary measures to ensure their protection and safety, as mandated by UNCRPD Article 11.

Loss of income: Persons with disabilities often face discrimination and limited employment opportunities in normal circumstances. In times of emergency, job loss or the inability to access income-generating activities due to physical or communication barriers can lead to severe financial hardship.

Loss of shelters/home: Accessible housing options are already limited for persons with disabilities. During disasters, the destruction of infrastructure and the lack of accessible shelters can leave them homeless and exposed to further risks.

Internal displacement: Persons with disabilities may face difficulties in evacuating or accessing safe evacuation centers, leaving them vulnerable to the effects of disasters. They may also experience discrimination or neglect in overcrowded evacuation centers.

Loss of relatives/families: Separation from family members during emergencies can be traumatic for anyone, but it can be particularly challenging for persons with disabilities who rely on family support for daily living activities.

Loss of support services (i.e. personal assistant): Many persons with disabilities require support services and personal assistants for daily activities. Disruptions in these services during emergencies can result in loss of independence and increased vulnerability.

Loss of social assistance (pension, health coverage...): Government assistance programs that provide financial support and healthcare services to persons with disabilities may be disrupted during emergencies, leaving them without essential resources.

Seeking asylum in a third country: In extreme cases, persons with disabilities may be forced to seek asylum in another country to escape the dire conditions and lack of support in their own. This can lead to additional challenges and uncertainties.

In conclusion, persons with disabilities face unique challenges and vulnerabilities in situations of risk and humanitarian emergencies. It is crucial for States Parties to uphold their obligations under international law, including UNCRPD Article 11, to ensure the protection and safety of persons with disabilities during such crises. This includes addressing existing inequalities and barriers in their everyday lives to prevent further harm and exclusion during emergencies.

Lack of Access to Services

Main barriers that impede access to services :

- No information on what type of service existed

- No knowledge of where to access services

- The service was too far from temporary/home locations

- Couldn’t afford to get there

- Special services didn’t exist

- Special service was too expensive

- Special service was not physically accessible

- There were no trained staff to support

- The staff couldn’t understand needs

- The lack of empathy from service providers

- The lack of expert advice and prior knowledge of support staff

1. **Immediate Response to a Disaster**
   1. Disabled People and other at-risk groups need to be accommodated first not last.
   2. Development of end-to-end early warning system[[1]](#footnote-0) is fundamental to save lives when disasters occur.
   3. Developing and maintaining all feasible channels of open communication within and across vulnerable groups.
   4. Early warning system should be accessible for disabled people and other groups, especially people who are deaf and deafblind or have learning difficulties.
   5. Establishment of a 24-hour hotline for disabled people to call the local government councils.
   6. Transportation during rescue must be accessible.

CDPF will work to “Create Awareness (all), Orientation (government directly involved in disaster management) and Capacity Building of DPOs on Disaster Risk Reduction.”

The CDPF Charter sets out five principles:

- Acceptance of the fact that disabled people comprise a huge population and constitute a diverse group.

- Non-discrimination and respect for the diverse needs of disabled people by not following “one coat for all” policy.

- Disabled people must be involved in all stages of planning and at local, regional and national level.

- Humanitarian response and services must be inclusive in nature with priority to the most at risk.

- A policy must be developed at the global level with flexibility for local adaptations, to follow a uniform action across the globe.

Better coordination between inter-governmental agencies, civil society and development organizations to improve delivery of services to disabled people.

Disaster risk reduction and the Sustainable Development Goals

Disaster risk reduction cuts across different aspects and sectors of development. There are 25 targets related to disaster risk reduction in 10 of the 17 sustainable development goals, firmly establishing the role of disaster risk reduction as a core development strategy. CDPF will focus on:

Goal 1. Target 1.5 By 2030 to build the resilience of poor people and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other shocks and disasters.

Goal 2. Target 2.4 By 2030, to ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality.

Goal 3. Target 3.d Strengthen the capacity of all countries for early warning, risk reduction and management of national and global health risks.

Goal 4. Target 4.7 By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development including, sustainable development and sustainable lifestyles, promotion of a culture of peace. 4.a To build and upgrade education facilities that are child, disability and gender sensitive and provide safe, non-violent, inclusive and effective learning environments for all

Goal 6. Target 6.6 By 2020+, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes.

Goal 9. Target 9.1 Develop quality, reliable, sustainable and resilient infrastructure with a focus on affordable and equitable access for all.

Target 9.a Facilitate sustainable and resilient infrastructure development in developing countries through enhanced financial, technological and technical support to African countries, least developed countries, landlocked developing countries and small island development states.

Goal 11. Targets 11.1 By 2030, ensure access for all to adequate, safe and affordable and basic services and upgrade slums.

11.3 By 2030, enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management in all countries.

11.4 Strengthen efforts to protect and safeguard the world's cultural and natural heritage.

11.5 By 2030, significantly reduce the number of deaths and the number of people affected and substantially decrease the direct economic losses relative to global gross domestic product, caused by disasters, including water-related disasters, with a focus on protecting the poor and people in vulnerable situations.

11.b By 2020+, substantially increase the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters. Develop and implement, in line with the Sendai Framework for Disaster Risk Reduction 2015-2030, holistic disaster risk management at all levels.

11.c Support least developed countries, including through financial and technical assistance, in building sustainable and resilient buildings utilizing local materials.

Goal 13. Take urgent action to combat climate change and its impacts.

13.1 Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries.

13.2 Integrate climate change measures into national policies, strategies and planning.

13.3 Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning.

13.a Implement the commitment undertaken by developed-country parties to the United Nations Framework Convention on Climate Change to a goal of mobilizing jointly $100 billion annually by 2020 from all sources to address the needs of developing countries in the context of meaningful mitigation actions and transparency on implementation. Fully operationalize the Green Climate Fund through its capitalization as soon as possible.

13.b Promote mechanisms for raising capacity for effective climate change-related planning and management in least developed countries, including focusing on women, youth and local and marginalized communities.

Goal 14. Conserve and sustainably use the oceans, seas and marine resources for sustainable development.

14.2 By 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration in order to achieve healthy and productive oceans.

Goal 15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.

15.1 By 2020+, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements.

15.2 By 2020+\*, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally.

15.3 By 2030, combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land degradation-neutral world.

1. End-to-end early warning system deliver accurate warning information of potential hazards dependably and in a timely manner to both, authorities and population at risk, in order to prepare them for the danger and act accordingly to mitigate against or avoid it [↑](#footnote-ref-0)