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THERE IS NO SECURITY WITHOUT MEDIA FREEDOM

UNESCO Series on Journalism Education

Reporting the Environment

A Practical Manual for Journalists

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SHORT SUMMARY

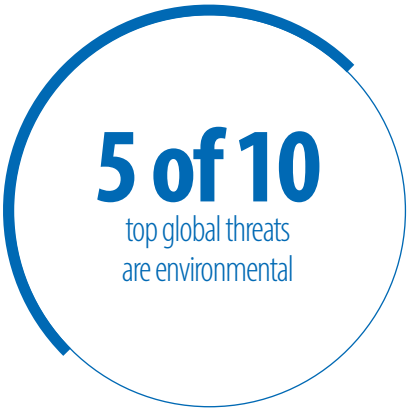
Telling the Story of the Earth We Share

From rising sea levels to declining biodiversity, the environment is at the heart of today's most urgent global challenges. Journalists play a vital role in helping societies understand these complex issues, hold power to account, and inspire informed action.

Reporting the Environment equips journalists with the knowledge, tools, and strategies to cover environmental topics across all beats — from politics and business to culture and local communities. Produced by UNESCO's International Programme for the Development of Communication (IPDC) in cooperation with the OSCE Representative on Freedom of the Media (RFoM), the manual explores the functions, methods, and evolving role of environmental journalism.

It offers practical guidance on how to:

- Investigate environmental harm and accountability;
- Use data and AI tools responsibly;
- Promote journalists' safety in the field;
- Build newsroom capacity for environmental coverage; and
- Strengthen accuracy, inclusion, and a rights-based approach in storytelling.



With examples, resources, and strategies from around the world, this manual supports journalists in strengthening media's contribution to an informed public discourse that drives more sustainable decisions and policies.

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"Since wars begin in the minds of men and women, it is in the minds of men and women that the defences of peace must be constructed"

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UNESCO Series on Journalism Education

Reporting the Environment:

A Practical Manual for Journalists

Joint Foreword: UNESCO and the OSCE Representative on Freedom of the Media

The launch of ***Reporting the Environment: A Practical Manual for Journalists*** comes at a decisive moment for both climate action and the integrity of public information. At the 30th Conference of the Parties (COP30), Information Integrity featured in the COP Action Agenda for the first time — an important acknowledgment that access to reliable, verified information is essential for effective environmental policymaking and building public trust. This commitment is being carried forward, among others, through the Global Initiative on Information Integrity on Climate Change, launched by UNESCO, the Government of Brazil, and the United Nations (UN), to strengthen reliable information ecosystems.

At the same time, however, journalists reporting on environmental issues in many parts of the world continue to face serious obstacles affecting their ability to work freely and safely, even as they are called upon to help counter the growing challenge of disinformation. The 2024 Joint Declaration on the Climate Crisis and Freedom of Expression, co-signed by the OSCE Representative on Freedom of the Media (RFoM) and the UN, Organization of American States (OAS), and African Commission on Human and Peoples' Rights (ACHPR) Special Rapporteurs on Freedom of Expression, highlights the important role of environmental journalism, particularly in remote and often underreported areas, to disseminate information, mobilize citizen action, and expose and hold accountable those who are responsible for environmental harm. The Joint Declaration also acknowledges the heightened risk faced by journalists when shedding light on environmental and climate-related issues. These are all important issues that underpin this manual.

In December 2024, the Intergovernmental Council of UNESCO's International Programme for the Development of Communication (IPDC) welcomed the Global Roadmap for Information as a Public Good in the Face of the Environmental Crisis, which underscores the need to strengthen the role of the media in addressing climate change and environmental degradation. Together with its partners, UNESCO is advancing media literacy, fact-checking, independent journalism, and informed public dialogue as key pillars of an effective and inclusive climate response. At the same time, the OSCE's comprehensive security approach recognizes that climate change and environmental degradation are risk multipliers, intensifying existing pressures on societies, especially where resources and governance are already under strain. As such, they represent security challenges and increase the risk of conflicts. This is further recognized in the Stockholm Ministerial Council Decision 3/2021 on Strengthening Cooperation to Address the Challenges Caused by Climate Change. Acknowledging media

freedom as a pillar of security, the OSCE stresses that independent, critical, ethical, and fact-based environmental journalism contributes to greater understanding about the importance of protecting the environment and provides a critical assessment of proposed strategies to address climate change and its consequences.

This manual offers journalists practical tools to translate complex scientific findings and policies into accessible, rights-based reporting that informs and engages audiences. Furthermore, it seeks to address some of the key challenges to environmental reporting, including safety concerns, dealing with news avoidance, countering disinformation, and using AI in the newsroom.

Developed jointly by UNESCO's IPDC and the Office of the OSCE RFoM, with contributions from Covering Climate Now, the Environmental Investigative Forum (EIF), Fondation Hirondelle, NICHE Centre for Environmental Humanities (Ca' Foscari University of Venice), the Pulitzer Center, and the Reuters Institute for the Study of Journalism (University of Oxford), and other experts, this publication is one of two complementary resources designed to strengthen environmental journalism training and education.

Together with ***Teaching Environmental Reporting: A Handbook for Journalism Educator***s, it provides a valuable tool for journalists and educators alike to ensure accurate, relevant and effective coverage of environmental crises. Part of UNESCO's Series on Journalism Education, this manual reflects our broader commitment to advancing professional standards worldwide.

Strengthening environmental journalism is not only an investment in journalism — it is a step towards more informed societies and a sustainable future for all.

Mariya Gabriel
Assistant Director-General for
Communication and Information, UNESCO

Jan Braathu
OSCE Representative
on Freedom of the Media

Contents

How to read this Manual

In each chapter, you will find:

Key takeaways for journalists at the end of each chapter

Info boxes with case studies, reporting experiences, and practical insights

Practical guides with step-by-step reporting methods

Tips with quick advice from reporting practice

Checklists with essential verification and review points

Resources via QR code: online and easy to access

To keep the manual concise while ensuring access to up-to-date tools, references are provided through a dedicated online resources page, accessible via QR code. Resources include datasets and investigative tools, safety and legal guidance, training materials and further reading.

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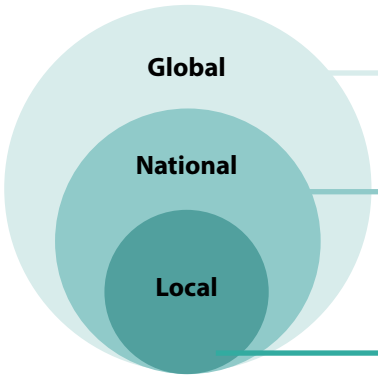
1. Introduction: What Is Environmental Journalism?

Environmental change affects every aspect of human life, from health and food to culture and livelihoods, making it one of the most important stories of our time. As we face the threats and impacts of climate change, pollution, biodiversity loss, and escalating environmental degradation, understanding our relationship with the natural world has never been more urgent. Independent journalism plays a crucial role in fostering this understanding, providing the public with independent, trustworthy information that enables individuals to form their own opinions and make informed decisions. To do so, independent journalism also seeks to hold those in power to account — be it political, economic, or cultural actors — and provides a forum for different perspectives within society.

Environmental journalism describes the journalistic coverage of issues related to the natural world: how it impacts human life and how human activity impacts ecosystems. Through greater awareness and exploration of this relationship, journalism can then shine a light on potential threats to the environment and those living in it. This often requires a nuanced understanding of complex scientific, social, and policy issues.

Environmental journalism spans local and global contexts, connecting planetary challenges with their impacts on communities and individuals. It deals with issues like greenhouse gases, plastic particles, and endangered species, which do not recognize borders. Such issues can affect international relations, for instance, when one country's use of water has consequences for its neighbours. Yet, the impacts of environmental degradation are always felt locally, shaped by regional politics, economies, and cultures — for example, as communities seek access to clean water downstream, or as decision-makers determine the location of a new waste landfill. International business activities can also create environmental conflicts at local levels. In today's world, global and local trends and actions continually impact one another.

For this reason, environmental journalism needs to operate on multiple levels:



Global, to convey the urgency of planetary crises;

National and regional, to highlight how governments and industries respond; and

Local, to show how environmental degradation affects communities and individuals, how local activities can have global impact, and how local authorities respond to environmental challenges.

By bridging these levels, journalists can shed light on the connections between human choices and their environmental consequences. They can also translate complex technical information and analysis into accessible narratives, giving the public the knowledge needed to understand issues, evaluate claims and support informed decision-making.

While international developments and events like global climate conferences often receive a large share of media attention, environmental journalists are needed across all levels. Local stories demand their investigative skills to identify, research, and report on issues that directly affect communities and policies on the ground. National or regional stories, in turn, are most effective when they stay connected to the realities of local communities, rather than treating environmental challenges as abstract global issues.

It is also important to remember that reporting on the environment is not just about describing problems. It is about showing how environmental change intersects with health, security, food, culture, and technology — and contributing to accountability and potential solutions. Environmental journalism therefore requires covering a broad range of topics, at several levels of society, while also bringing together a multitude of perspectives and interests. This manual aims to provide guidance in this complex field of journalism.

1.1. Origins

Environmental journalism, as we know today, emerged in the Global North in the 1950s and '60s as science journalism: journalists explained scientific findings to a wider audience often without much reference to the political, economic, or social dimensions. Earlier forms of environmental reporting, however, had long existed, including across Asia, Africa, and Latin America, often rooted in local struggles over land, resources, and public health.

In the 1970s and '80s, it began to go beyond the hard science and cover environmental issues from a somewhat broader perspective. Major environmental disasters — such as the explosion in Bhopal, India, and the nuclear crisis in Chernobyl, then Soviet Union — revealed the global scope and human impact on environmental risks and drove reporters to highlight their societal relevance. During this period, environmental journalism gained momentum worldwide; by 1990, the Society of Environmental Journalists (SEJ) was founded in the United States (US), and the Rio Earth Summit in 1992 brought together more than 100 national leaders and 10,000 journalists from around the world.

Environmental journalism has since expanded its scope well beyond science reporting, to include political, economic, and human-interest perspectives on environmental issues. In 2010, one study found that 9 out of

10 journalists surveyed in the US included coverage of governments, business, human interest, pollution, and nature in their environmental stories. Yet, despite this diversification and increasing examples of outlets in the Global South asserting and shaping their own climate narrative, Global North perspectives still continue to shape discourse within the field disproportionately.

1.2. Shift in sources

The inclusion of new perspectives came with new sources. Scientists were no longer a dominant or primary source of information. Companies with business practices linked to environmental issues increased their public relations (PR) efforts to influence the public debate. Governments and intergovernmental bodies entered the conversation as well, producing official reports, data, and policy statements to frame environmental problems and responses in their own terms. At the same time, activists and non-governmental organizations (NGOs) brought in their critical perspectives on these issues, sometimes challenging both corporate and governmental narratives.

Now, many companies and interest groups have diversified their PR activities by producing sponsored studies, setting up think tanks that produce and aggregate data in the interest of their sponsors, or compiling online archives with information that has helped shape journalistic and public opinion.

Journalism plays a very important role in countering disinformation, including greenwashing, commonly understood as misleading the public to believe that, for example, a company or entity is doing more to protect the environment than it really is.

However, the amount of data, scientific information, biased information, and even disinformation that journalists now have to analyze, fact-check, and properly assess when covering environmental issues creates a huge challenge for them. This is an even greater obstacle given the limited time and resources most journalists and newsrooms have available. This increases the risk of reproducing information that is biased, or even inaccurate.

1.3. Journalism vs. Activism

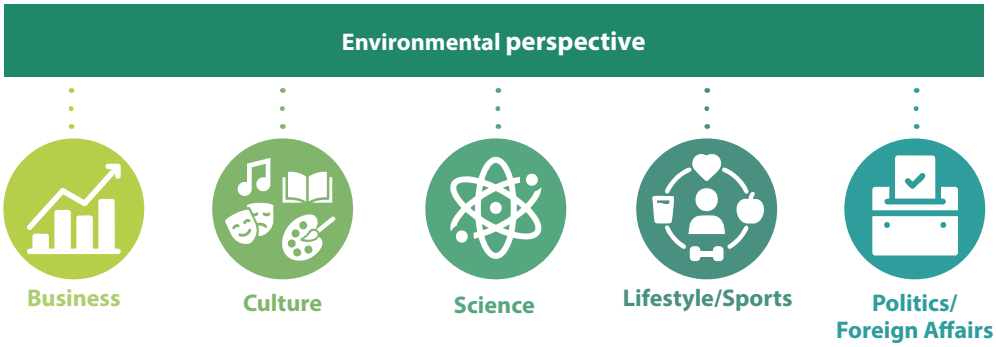
Environmental journalists often find themselves navigating a perceived tension between the journalistic norm of objectivity in conveying the urgency of the environmental crisis, and a more activist approach driven by the desire to spur audiences to action. Journalists' ability to do justice to the urgency and complexity of environmental change without departing from its professional standards is a measure of quality in journalism. The ways in which journalists interpret this balance vary across contexts, reflecting different media traditions and public expectations. As Table 1 shows, environmental journalists are neither scientists nor activists, but interact with these two spheres.

Table: Distinct roles of journalists, scientists, and activists in environmental issues

	Journalist	Scientist	Activist
Primary purpose	Inform and empower the public to make informed decisions and promote accountability	Create new knowledge about the environment	Mobilize public awareness and action to protect the environment
Topic	Issues of societal relevance	Any aspect of the physical and natural world	Issues of injustice requiring social or political change
Methods	Investigation, fact-checking, verification, storytelling	Empirical research, and scientific reporting	Diverse, in order to catch attention: from reports to campaigning, communication, protests, emotional appeal, and public mobilization
Target audiences	General public, policymakers, and other stakeholders	Scientific community, policymakers, and relevant stakeholders	General public, political/ economic leaders, policymakers and affected communities
Output	News stories and reports, accessible to a broad audience	Scientific evidence and data, publications	Advocacy materials, campaigns, or actions

1.4. The place of environmental journalism in the newsroom

Figure 1: Environmental journalism across news beats



The organization of environmental journalism in newsrooms has evolved alongside broader changes in newsroom structures. With growing economic pressure on media, specialization within thematic beats has increasingly been replaced by an expectation that journalistic professionals cover a wide spectrum of topics on different platforms. Integrating environmental stories across multiple beats can be seen as a positive development, as it allows environmental perspectives to be reflected in coverage of politics, business, culture, and daily life.

However, in many countries, while interest in environmental journalism has increased in recent years, the resources provided to it have declined. Some large media organizations have prioritized environmental coverage by dedicating time and staff to these topics, but increasing pressure on news editors to produce more content on more platforms has forced hard decisions about how newsrooms use their limited resources. Smaller outlets increasingly rely on reports from a handful of well-staffed media and institutional sources, which can limit the diversity and depth of coverage. Together with a significant increase in the amount of information provided by interest groups on all sides, this has left news organizations less equipped to question the environmental reports and studies they encounter, let alone to uncover stories on their own.

Placing natural disasters in the right context

Environmental journalists routinely cover natural disasters, including sudden-onset events (e.g., earthquakes, tsunamis, and flash floods) and slow-onset hazards (e.g., sea-level rise, salinisation, drought, desertification, and permafrost thaw). Assessing the relationship between the natural disaster they are covering, and the broader context of the climate crisis can be tricky and requires a thorough analysis of historical and contextual data to assess developments. Unfortunately, such data is not always available and easily accessible.

While it is important that journalists highlight the climate change connection and remind their audiences that many of the phenomena we are experiencing are a consequence of or contribute to climate change, it is also important that they assess the extent to which climate change plays a role, as not all natural disasters are climate change driven.

1.5. Structure and purpose of this manual

This manual contains nine chapters, designed to guide journalists with key aspects of the field of environmental journalism. It provides a comprehensive approach to understanding the field, grounded in the knowledge and experience of experts, and offers practical advice. It is meant to inspire environmental reporting, while also reflecting on what environmental journalism is all about.

Chapter 2 provides a systematic approach to the object of environmental journalism — the environment itself — to demonstrate the full range of related issues. Chapter 3 introduces the relevant actors and sources in environmental journalism. Chapter 4 provides an overview of policies and regulations regarding the environment, which are typically referred to when evaluating human activities against duty-bearers' commitments.

The second half of this manual deals with the practice of environmental journalism. Chapter 5 looks at the necessary skills, including reporting techniques, data journalism, the use of open-source data and artificial intelligence (AI) tools for verification and data analysis in environmental journalism, and techniques to engage the audience. Chapter 6 introduces a solutions-oriented approach to covering environmental issues. Chapter 7 addresses journalists' safety, as environmental journalists are frequently threatened, harassed or otherwise pressured by powerful actors whose interests may be challenged by investigations into environmental harm. In Chapter 8, organizational and newsroom strategies for environmental journalism are presented. Journalism ethics and dilemmas in environmental reporting are discussed in Chapter 9. Finally, relevant resources related to the content of this manual can be found in a separate online file, accessible through the QR codes in the manual.

Key takeaways for journalists — CHAPTER 1

- Consider all relevant dimensions of an environmental issue — political, economic, scientific, moral, legal, cultural, and social — and reflect these perspectives in your reporting.
- Link global, national, and local levels in every major story to show how policies, industries, and environmental changes interact across scales.
- Translate scientific research into clear, accessible language, while ensuring that the facts presented remain accurate when simplified.
- Clarify sources' roles when quoting them — scientist, activist, community member, official — to avoid blurring expertise with advocacy or opinion.
- Identify who holds power over the environmental issue you are covering and who is most exposed to its consequences.
- Place environmental events in the broader context, showing how they relate to longer term trends, structural causes, and ongoing policy or community responses. Review your newsroom's coverage to ensure that dramatic events are framed within wider long-term environmental patterns whenever possible.

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2. The Environment as the Object of Environmental Journalism

As its name suggests, the object of environmental journalism is the environment. Yet, what exactly counts as "the environment" is rarely examined. A closer look shows that definitions vary, and without clarity, journalists risk overlooking or oversimplifying complex issues. This chapter explores the meaning of "the environment" and provides a systematic approach to the themes and stories central to environmental journalism.

The United Nations (UN) defines the environment as "the totality of all the external conditions affecting the life, development and survival of an organism." This includes both natural and human-made surroundings, as well as social and psychological conditions. The European Environmental Agency (EEA) adopts a similar perspective, describing the environment as "all aspects of the surroundings of humanity, affecting individuals and social groupings," and "the combination of elements whose complex interrelationships make up the settings, the surroundings and the conditions of life of the individual and of society, as they are or as they are felt."

In other words, the environment encompasses not only natural resources such as air, land, and water, but also constructed spaces like cities or workplaces. However, in practice, environmental journalism concentrates primarily on the physical environment. According to the UN Environment Programme (UNEP), "Environment means surroundings, including water, air, soil and their interrelationship as well as all relationships between them and any living organisms."

Environmental journalism focuses on the human relationship with the physical environment — a relationship shaped not only by natural science but also by social, economic, legal, political, technological, psychological, aesthetic, and ethical dimensions.

2.1. Spheres of the environment

The natural environment can be classified into four interconnected spheres: the atmosphere, the hydrosphere, the lithosphere, and the biosphere. For simplicity, this manual places the cryosphere — which encompasses ice and snow — under the umbrella of the hydrosphere, though some environmental scientists distinguish it as a fifth sphere. Each sphere faces distinct pressures, yet they are deeply interdependent, meaning no sphere can be considered in isolation.

The atmosphere

The atmosphere is the life-sustaining layer of gases surrounding the Earth. Environmental issues in this sphere include:

- Greenhouse gas buildup: Rising concentrations of carbon dioxide, methane, and other gases trap heat, leading to global warming and cascading impacts across all other spheres.
- Air pollution: Pollutants such as sulfur dioxide, nitrogen oxides, and particulate matter damage human and animal health, harm vegetation, and reduce visibility.
- Acid deposition: Sulfur and nitrogen emissions cause acid rain and acid deposition, which erode soils, damage aquatic systems, and degrade forests.
- Ozone depletion: The thinning of the ozone layer reduces protection against harmful ultraviolet radiation, increasing risks for ecosystems and human health.

The hydrosphere

The hydrosphere includes all water resources: oceans, seas, rivers, lakes, streams, glaciers, polar icecaps, and groundwater. Key issues include:

- Global warming of waters: Rising temperatures threaten marine life, disrupt weather systems, and intensify storms. Together with the melting of glaciers and polar icecaps, this also adds to rising sea levels.
- Water pollution: Chemical runoff, plastics, and pathogens degrade water quality, threatening access to clean drinking water, endangering human health and ecosystems.
- Ocean acidification: Absorbed carbon dioxide lowers ocean pH, weakening corals and shellfish, and destabilizing marine food webs critical to global food security.

The lithosphere

The lithosphere consists of Earth's crust and soil, including minerals and nutrients vital for life. Major concerns include:

- Soil degradation: Overgrazing, intensive cultivation, deforestation, and the excessive use of pesticides erode soil fertility.
- Erosion and contamination: Mining, industrial activity, and landfills not only reshape landscapes, but also contaminate soil and groundwater with heavy metals and toxins.
- Habitat disruption: Land-use change undermines ecosystems, causes biodiversity loss, and creates new risks such as landslides or dam failures.

- Soil sealing — the covering of soil surfaces, often due to urbanization and population growth — reduces fertile land, impedes water absorption, heightens flood risks, and contributes to biodiversity loss and urban heat-island effects.

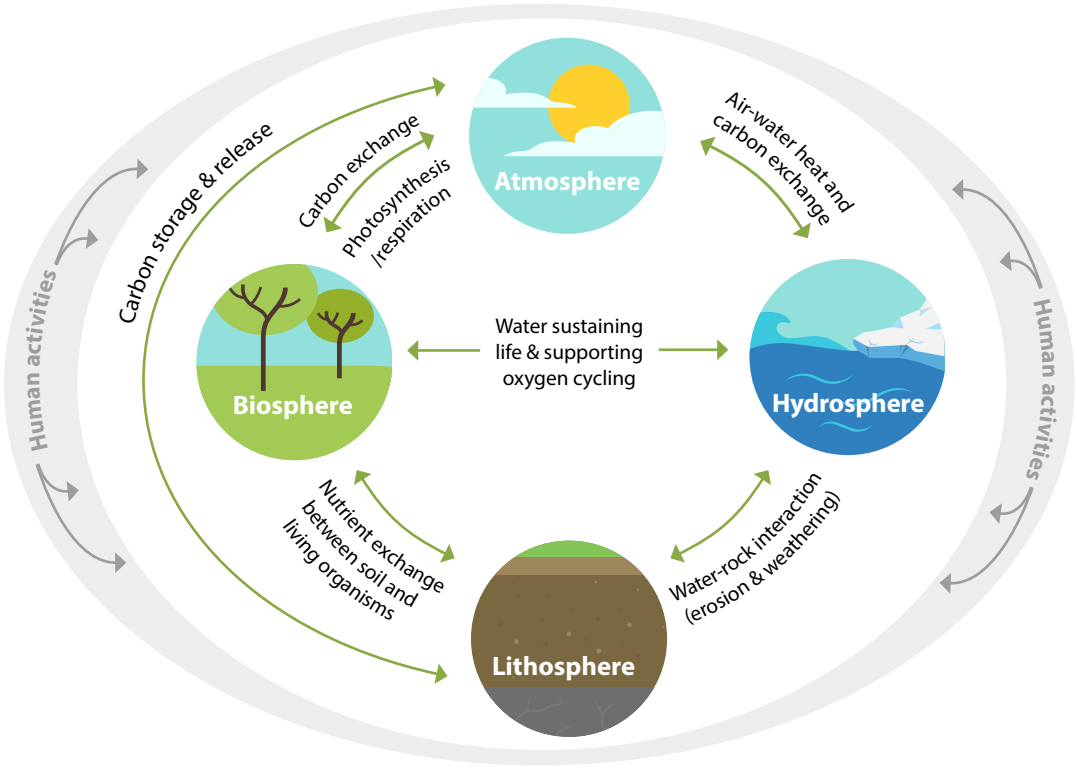
The biosphere

The biosphere encompasses all living organisms and their interactions with the atmosphere, hydrosphere, and lithosphere. It is shaped by these other spheres, while also shaping them in return.

Human activity, ranging from deforestation to industrial agriculture, alters ecosystems, accelerates greenhouse gas emissions, and diminishes biodiversity. It also creates feedback loops which intensify existing threats. For example, cutting forests not only destroys habitats, but also releases stored carbon dioxide and thus contributes to climate change.

Environmental problems are rarely confined to one domain. Major threats to the environment ripple across all of these spheres, creating interconnected challenges that demand integrated solutions.

Figure 2: The four spheres of the environment



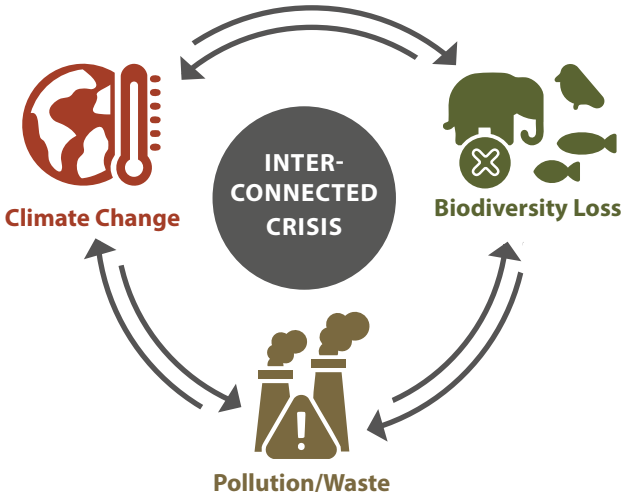
2.2. The triple planetary crisis

Humanity today faces what UNEP calls a "triple planetary crisis": climate change; the loss of nature, land, and biodiversity; and pollution and waste.

Each of these crises cuts across the spheres of the environment, reinforcing the urgency for comprehensive reporting. At the same time, the three crises are interconnected through various feedback loops. For example, excess greenhouse gases from pollution cause climate change, which in turn impacts biodiversity. A solution

to one crisis can also exacerbate other crises. For example, the production of renewable energy with biofuels or hydroelectric power often has detrimental effects on biodiversity. As will be shown below, this makes the development of sustainable solutions even more complicated, as it requires integrated approaches that take into consideration effects linked to all three crises.

Figure 3: The triple planetary crisis



Climate change

The United Nations Framework Convention on Climate Change (UNFCCC) defines climate change as "a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere, and which is in addition to natural climate variability observed over comparable time periods." Since the 1800s, fossil fuel combustion, deforestation, and intensive agriculture have caused the release of vast amounts of greenhouse gases — primarily carbon dioxide and methane — which then trap heat. The scientific consensus is that human activities have unequivocally warmed the atmosphere, ocean, and land.

Climate change does not simply mean warmer weather. It drives extreme events — like droughts, wildfires, floods, and catastrophic storms — and destabilizes ecosystems as well as human societies. In addition to the destruction caused by extreme events, consequences of climate change include inter alia:

- Rising sea levels displacing coastal communities;
- Desertification forcing migration;
- Droughts;
- Heat waves;
- Ocean warming and acidification damaging marine ecosystems; and
- Food and water insecurity leading to conflict and displacement.

The crisis is already unfolding, affecting people worldwide. Responses to address this crisis fall into two categories:

- **Mitigation:** Reducing emissions by transitioning to renewable energy, improving energy efficiency, and changing consumption habits (e.g., reducing food waste and shifting diets away from energy-intensive meat and dairy). International agreements such as the Paris Agreement aim to cap warming through global cooperation.

- **Adaptation:** Building resilience to inevitable impacts, such as reinforcing infrastructure, building cities that are more resilient to warmer climate, and protecting vulnerable populations.

Climate change denial and disinformation, often spread by vested interests seeking to prevent or delay regulation or accountability measures, is a serious and pervasive problem. Journalists should be prepared to detect and counter false or misleading claims about climate science and policy, as further discussed in Chapter 5.

Journalists can clearly explain the science and consequences of climate change, counter disinformation, and hold governments, industries, and other actors accountable for their commitments, actions, and inaction.

Nature, land, and biodiversity loss

"Nature loss" refers to the decline of ecosystems through human exploitation and land conversion. Biodiversity, or the variety of life on Earth, is vital for healthy ecosystems, which in turn provide humans with life's essentials, like food, clean air, and water. It is also, for instance, a resource for the development of new medicines.

But biodiversity is declining at alarming rates. Extinction — usually a slow, natural process occurring over geological time scales — is now estimated to be tens to hundreds of times faster than the natural rate due to human activity. Causes include:

- Habitat destruction from agriculture, logging, and urban expansion;
- Overexploitation of wildlife and marine fish stocks;
- A wide range of air, land, and water pollution poisoning ecosystems; and
- Climate change shifting habitats faster than species can adapt.

The loss of biodiversity undermines ecosystems' resilience, weakens food webs, and increases vulnerability to invasive species and disease outbreaks. The disappearance of keystone species, such as pollinators or large predators, has especially cascading effects that destabilize entire ecosystems.

Pollution and waste

Pollution affects every sphere of the environment. While some waste and emissions are unavoidable, poor management has grave consequences.

Besides threatening the habitats of animals and plants, unsafe or polluted water remains one of the world's leading causes of preventable death, responsible for more than a million fatalities every year, mostly in low-income countries.

Air pollution, including harmful gases and fine particles, causes millions of premature deaths each year and is a major risk factor for respiratory and cardiovascular diseases.

- Plastic pollution is now everywhere, with microplastics contaminating rivers, oceans, food webs, and even the human body.
- Per- and polyfluoroalkyl substances (PFAS), commonly referred to as "forever chemicals," have accumulated in soils, plants, and animals, and thus in the human food chain. Some are considered to be carcinogenic and have been linked to other diseases.
- Rapid device turnover and limited recycling create electronic waste (e-waste) streams that expose workers and communities to heavy metals and persistent pollutants.

The problem is aggravated by population growth and changing lifestyles, which drive demand for energy, water, and consumer goods. Overconsumption leads to deforestation, water shortages, soil erosion, and mounting waste streams. Digitalization and AI, importantly, have had a growing physical and energy footprint. Large data centres consume significant electricity and cooling water, while device production depends on rare metals and resource-intensive supply chains.

Tackling pollution requires robust policies, corporate responsibility, and public awareness — all areas under the scope of environmental journalism.

Info box 1

Environmental humanities

"Environmental humanities" is an interdisciplinary field of study that has emerged over the past few decades in response to growing ecological awareness among scholars and practitioners in the humanities, social sciences, and arts.

From religious rituals to artistic expression and philosophical theories — all this contributes to efforts to understand, raise awareness, and provide solutions for the environmental challenges of our times. The novel approach of environmental humanities strongly suggests that responses to environmental catastrophes are multifaceted, involving emotional resilience, cultural narratives, ethical commitments, and policy actions. Effective recovery and adaptation depend on integrating these levels, fostering a sense of interconnectedness and shared responsibility to create sustainable futures.

Journalistic coverage can contribute to promoting an understanding of the interconnectedness and complexity of environmental subjects and their all-encompassing nature, while also providing inspiration and vision on issues related to the environment that go beyond scientific, legal, and political developments and complement them. Additionally, by connecting scientific facts with people's identities and lived experiences, journalists are more likely to engage their audiences.

The field of environmental humanities is diverse and reflects discussions across disciplines — ranging from philosophy and political theory to art and Indigenous studies — about how to interpret and respond to environmental change. In large part thanks to these diverse insights, the field has opened up new avenues of inquiry, such as on the impact of colonial legacies and political-ecological justice.

The significance of traditional knowledge systems practiced by Indigenous and local communities for addressing the human-made crises has been recognized in recent years, resulting in the establishment of the International Indigenous Peoples Forum on Climate Change (IIPFCC). The Intergovernmental Panel on Climate Change (IPCC) and its subsidiary reports now recognize the importance of Indigenous territories for the Earth system, noting that these lands often overlap with areas of high biodiversity, intact ecosystems, and significant carbon storage. Moreover, there is growing recognition that today's unequal global socioeconomic relationships and land degradation were heavily shaped by centuries of colonization and conflict.

The pluralistic character of the environmental humanities today is a mirror of the strength of the debates within and outside of academia. Recent years have also witnessed significant efforts at institutionalization.

Some examples are, to name but a few, the Anthropocene Working Group (under the International Commission on Stratigraphy (ICS), based within the International Union of Geological Sciences), an interdisciplinary research group working towards the validation of the Anthropocene thesis since 2009; the Stockholm Resilience Centre, which has established the planetary boundaries for the assessment of rising anthropogenic pressure on the Earth's stability and resilience; the Rachel Carson Centre for Environment and Society in Munich; the interdisciplinary Environmental Humanities Research Cluster at Nanyang Technological University of Singapore; and the NICHE Centre for Environmental Humanities in Venice.

Tips: How to apply environmental humanities in your reporting

- Look beyond the hard sciences when assessing environmental issues.
- Explain that addressing environmental issues in a sustainable way requires a holistic approach.
- Consider the cultural and ethical aspects of environmental subjects, keeping in mind that the relationship between humans and nature is often deeply rooted in culture, religion, and philosophy.
- Cover artistic expression related to the environment, expanding the perspectives and tools available to you and your audience to understand the effects of environmental changes on society and tackle them.
- Look into Indigenous culture and land rights as they relate to environmental issues, communities' relationship with the environment, and its preservation.

2.3. Solutions to the environmental crises

There are four main approaches to tackling the environmental crises that face the planet today. These approaches can be understood together as consistency (also known as "transition"), efficiency, sufficiency, and restoration.

Consistency (or transition)

Usually refers to the shift in the sources of energy from non-renewable to renewable, e.g., by replacing coal with hydroelectric power, or by switching from gas-powered to electric cars. The amount of energy used may be the same, but its source and use have a much smaller impact on the environment. Consistency also includes efforts to strengthen circular economies.

Efficiency

Means that humans maintain their ways and standards of living but use less energy and other resources to do so — for example, by using more advanced technical solutions. This depends largely on technological innovation, like by improving resource efficiency in industrial production processes.

Sufficiency

Entails a change in the way humans live, work, and consume. In this logic, rather than driving an electric car (consistency) or using a more fuel-efficient model (efficiency), people would drive less. Sufficiency is often seen as the most difficult approach, as it requires a departure from what is often considered human progress.

Restoration

Of the natural environment presents a fourth solution, besides these three strategies to avoid environmental degradation. This includes, for instance, through reforestation, the renaturalization of waterways, or the protection of natural habitats. Carbon capture and storage (CCS) — the process of collecting carbon dioxide and storing it for long-term isolation from the atmosphere — can be seen as a form of restoration of the natural environment.

In concrete terms, pursuing solutions in these areas requires testing and implementing numerous technological and policy efforts, as well as taking individuals and society along on the journey to a more sustainable interaction with the natural environment. Environmental journalists help critically assess the proposed solutions. This is also discussed further in Chapter 8, which addresses solutions journalism.

Info box 2

Why climate-related security risks matter for environmental journalism

Climate change is also a security issue. As a risk multiplier, climate change intensifies existing pressures on societies, especially where resources and governance are already under strain. The ways in which climate change translates into security risks are diverse, complex, and highly context-dependent. For instance:

- **Competition over natural resources:** Changing weather patterns heighten competition over land, water, forests, and fisheries. This can trigger disputes between communities and exacerbate tensions between states. Such dynamics can fuel conflicts between farmers and herders, and disputes between upstream and downstream users of rivers.
- **Livelihood insecurity:** Loss of climate-sensitive livelihoods often leaves people with few alternatives, pushing many into informal work, some to migrate, and others even to join armed or criminal groups. Climate-related migration is projected to rise substantially, with potentially destabilizing impacts on both the countries of origin and the destination countries.
- **Food price shocks:** Crop failures due to extreme weather can trigger spikes in food prices, fuelling protests and instability.
- **Disasters and state legitimacy:** Floods, storms, and droughts can overwhelm governments, erode public trust, and create opportunities for non-state actors such as militias or terrorist groups to gain influence, particularly where state-provided relief is inadequate.
- **Unintended consequences of climate policy:** Poorly designed adaptation or mitigation measures such as land grabs for bioenergy can deepen social divisions and spark new conflicts.

These risks are already visible today and are projected to grow. The effects are most severe where governance is weak, social divisions are deep, and past conflicts have left communities vulnerable.

Tips: How to report on climate-related security risks

- **Understand the full range of the issues,** rooted in a broad understanding of what the environment is and what the threats to it may include.
- **Report the full spectrum**. While climate change is a major focus, other environmental issues also drive insecurity and often interact with climate risks.
- **Go beyond natural science**. In order to explain the urgency of the issue to society, go beyond scientific facts and also consider the contributions of arts, social sciences, and humanities to gain perspectives about the environment.
- **Reveal hidden connections**. Journalists are uniquely positioned to "connect the dots" between impact on the environment, climate change, resource competition, migration, and instability.

Key takeaways for journalists CHAPTER 2

- Be explicit, where relevant, about which part of the environment your story covers (air, water, land, ecosystems) and who or what is affected.
- Use the triple planetary crisis framework to identify the type of environmental impact you are reporting on climate change, nature/biodiversity loss, or pollution and waste.
- Check whether environmental changes have consequences across spheres. For example, an air pollution issue may also affect water, soil, biodiversity, or livelihoods.
- When covering proposed solutions, identify whether they rely on consistency/transition, efficiency, sufficiency, or restoration, and assess their potential impacts.
- Investigate potential trade-offs and unintended consequences of "green" measures such as biofuels, large dams, carbon offsets, or new infrastructure, including who benefits, who bears the risks, and whose voices are missing.
- Use insights from environmental humanities — including arts, religion, cultural narratives, and philosophy — when they help audiences connect scientific facts with identity, values, and lived experience.
- Draw on Indigenous and local knowledge to inform environmental conditions, stewardship, and rights issues (such as land tenure), as content that may be verified and quoted on equal footing with other sources.
- Avoid simplistic explanations when reporting climate-related security risks; examine *how* environmental change interacts with political, social, and economic factors.

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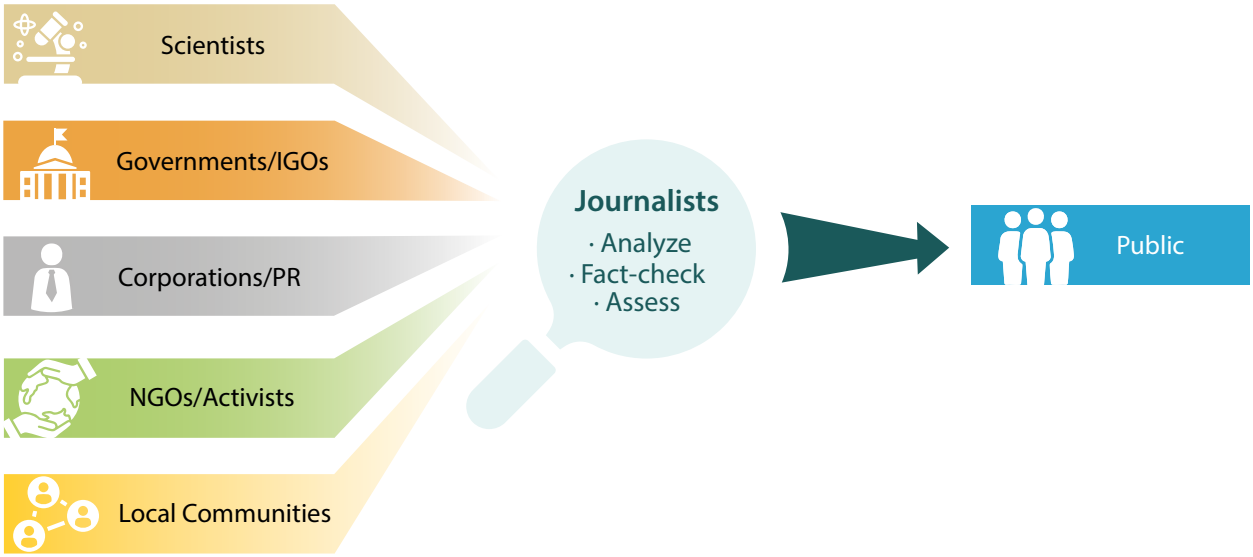
3. Actors and Sources in Environmental Reporting

The availability of information about environmental actors varies a lot per region, country, and sometimes even province or county. This chapter's main focus is on official sources of information that can be found online. There may be many local unofficial channels available as well, depending on the jurisdiction journalists are working in. It is also vital to take into account the perspectives of impacted individuals and communities, who can offer first-hand experiences and insights as informal sources.

Figure 4: The ecosystem of sources in environmental reporting



3.1. State actors: National governments and state agencies

States and governments are accountable for protecting not only their citizens, but also the natural resources of their countries. In some contexts, government agencies may frame information in ways that reflect institutional priorities and limit access to environmental data. In many cases, systematically collected data may also be incomplete or unavailable for similar reasons. Government information is best interpreted within the broader context of the administration's information-sharing policies and practices.

Relevant agencies provide official government information on their websites, which usually include reports, press releases, and contact information to access sources.

There are also databases online with leaked documents that may contain more information on governments, such as WikiLeaks and the Organized Crime and Corruption Reporting Project's Aleph database.

3.2. Private companies

Similar to states, companies carry a responsibility towards the environment. For example, most countries request companies to file environmental impact assessments when undertaking new projects such as construction or require them to meet certain environmental standards. The degree to which private companies are held accountable differs widely across countries, and is sometimes limited to a moral responsibility.

The commitments included in corporate reports of public companies can be a good starting point for a story. Many private companies make great efforts to portray themselves as environmentally responsible, sometimes supported by organizations that help companies be "green," or at times to "greenwash" their image. For instance, the "green" or "sustainable" labels on products are often from such organizations, which themselves can be a good focus for environmental journalists. It is crucial to verify what it really means when a company claims to be "green" and to see who is behind any environmental label tied to a company or product.

A good example for this is the carbon credit industry, which provides a system in which quantities of avoided or removed greenhouse gases are traded. Because this is a relatively new system with few agreed upon standards, information on how carbon credits reduce the emission of greenhouse gases should be checked carefully. For example, a company might offset the carbon it produces by buying credits from a company engaged in reforestation. Neither company has an economic interest in checking whether the newly planted trees fit the chosen biome or are left to grow long enough to actually absorb the carbon the reforestation company claims to offset.

Obligations for private companies to document their environmental impact vary widely from country to country. If a private company is required to file public reports, this will usually happen via the national company registry, many of which are online and publicly accessible. The amount of information on such registries varies: from a paid search to confirm the existence of a company, to free access to all the filed documents. A good example of the latter is the United Kingdom (UK) Companies House website, which ensures that all of the required filings made by private companies to the government are freely accessible.

At times, a citizen ID or a lawyer is required to access the corporate registry online. In some states, there will be no private company information available online, and only the corporate registry office provides guidance on what information can be accessed. A good alternative can be government gazettes, which are periodical publications by states that often include the registration and management or ownership changes information of private companies.

3.3. Lobbyists

Some countries require registration of lobbying activities. Freedom of information requests or online databases can provide access to this information. For instance, OpenSecrets collects data on lobbying groups in the US and other initiatives provide information on interactions between groups and public officials. OpenSecrets collects their data from transparency disclosures.

The European Union (EU) has a transparency register, where lobbyists seeking to influence EU policy may register themselves, but the registration is voluntary, meaning that the register may not capture all lobbying activities. It lists people as well as organizations, which can be useful for finding sources. The Corporate Europe Observatory (CEO) has a website called LobbyFacts.eu, which makes EU data more easily searchable. Similarly, Transparency International's Integrity Watch collects information on lobby meetings, political finance, and public procurement for the EU and for European countries. The EU, and a few countries such as the US, Chile and Mexico provide online access to lobbying information, but most countries do not.

Information on lobbyist activists can also be found in reports by NGOs focused on accountability and transparency, such as Global Witness. Global Witness reports delve into the impacts of actors like fossil fuel lobbyists and mining trade deals around the world, highlighting the human and environmental costs at national and local levels.

Additionally, international lobby firms frequently publish annual reports or press releases highlighting their success. Outlets specialized in trade and financial news usually publish stories about specific agreements between states and companies, and those news stories can give insights on lobby groups influencing a specific environmental issue.

Some non-profits and foundations engage in lobbying efforts as well, so it can be useful to look at databases of those types of organizations, which often need to be registered in corporate registries or specific non-profit registries.

3.4. Civil society actors

Civil society includes a wide variety of actors and organizations. They are neither profit-oriented nor part of a government structure, and they are usually based on a common value or a shared purpose. The nature of this value or purpose helps to understand and assess the quality of the information a specific organization provides.

Searching for ".org" sites online can sometimes help identify non-profits and NGOs working on a specific topic in a specific region, although a .org domain does not guarantee that an organization is a non-profit or that the information is reliable. There are different databases to look up NGOs as well, such as the World Association of Non-Governmental Organizations, GlobalGiving, and NGO Base. Some countries have online registries of non-profits, and sometimes non-profit and for-profit companies are registered in the same database. These will include NGOs as well.

NGOs can be good guides and partners when going into the field and reporting in a new area. When working closely with an NGO, it is important to stay critical and unbiased.

3.5. Intergovernmental organizations

Many intergovernmental organizations (IGOs) operating at the regional or global level play an important role on environmental issues, both in monitoring developments and, even more importantly, in setting environmental standards for state commitments. In this sense, IGOs play a dual role: both as actors and as sources of information. As actors, their decisions and dynamics in global environmental governance are major subjects of coverage. As sources, they provide key datasets and analysis for evidence-based reporting, such as UNEP's Data Explorer.

3.6. Scientific actors: Universities and researchers

Academics and university departments can be great sources of information for environmental reporting, especially when the topic is scientifically complex. For example: When is the groundwater's mercury level high enough to be considered toxic? How does the planting of a specific tree as part of a carbon credit scheme actually affect the local biome? Experts can help explain difficult topics to a general audience and, as a result, get them to care about the issue. Scientists and area experts are often reluctant to oversimplify complex realities into simple cause-and-effect relationships, and it is important that journalists craft a narrative that is clear for a broader audience without sacrificing or misrepresenting the facts.

Educational institutions and their departments can be found by using the ".edu" search term, and colleges and universities often have staff listed on their websites. Alternatively, academic papers can be found on databases like LexisNexis, journal platforms like Springer, or search engines for academic publications like Google Scholar. Academic publications and journals are a good source for the names of researchers and experts and provide important references themselves and in citations. Universities and libraries often offer free access to paid versions of academic journal databases.

Info box 3

Karla Mendes: Building trust as a process

About

Karla Mendes is an investigative journalist based in Rio de Janeiro, Brazil, who focuses on covering environmental, land, and property rights issues.

Challenge

Limited access to Indigenous communities and related media mistrust

Practical experience

Indigenous perspectives are often missing from coverage, and Indigenous journalists continue to be significantly underrepresented in newsrooms. Mendes explains that the exclusion is frequently rooted in editorial constraints, where dependence on advertising revenue and pressure from powerful business interests can discourage investment in critical or community-based reporting. The isolated locations of some Indigenous communities, language barriers, and long-standing distrust of media can further exacerbate this problem.

A key issue is the lack of dependable long-term relationships between journalists and Indigenous sources. Without sustained engagement and the resulting trust, communities may feel invisible and misrepresented, deepening their distrust towards media organizations. Even when access is granted, time constraints often prevent journalists from sourcing widely, which can cause repetitive or skewed narratives.

Dedicated mentorship programmes for Indigenous speakers and (aspiring) journalists can empower communities to tell their own stories, either independently or in collaboration with national or international outlets. But deeper institutional change is necessary. Newsrooms can benefit from including more Indigenous journalists and sources in order to fully reflect the diversity of society.

Lessons learned

- Covering developments and perspectives from Indigenous communities requires time and knowledge, in order to challenge misleading preconceptions.
- Building relationships of trust between journalists and Indigenous communities is a worthwhile investment of time and resources, with mutual benefits.

Info box 4

Helene Lindmark: From tokens to partners

About

Helene Lindmark is Sweden-based environmental advocate and guardian of ancestral wisdom of the Sámi community.

Challenge

Instrumentalization of Indigenous voices in environmental reporting

Practical experience

Environmental advocates, particularly Indigenous leaders, are invaluable sources for journalists seeking to enrich their reporting with holistic perspectives. However, this collaboration often faces significant challenges. Chief among them is the instrumentalization of Indigenous voices to reinforce predetermined narratives.

As Lindmark highlights, including Indigenous advocates should never be a symbolic gesture or a token checkbox to lend credibility to a story. Similarly, chasing dramatic quotes solely to generate clicks undermines genuine discourse.

To address this, journalists and Indigenous advocates can benefit from engaging in open-minded, mutually respectful dialogue to uncover deeper issues and convey the real-life impacts of environmental harm. Journalists should avoid perpetuating harmful stereotypes about Indigenous communities, instead recognizing their centuries-old knowledge and experience as a vital component of contemporary environmental research and reporting. Investing time in researching and building rapport with Indigenous sources leads to more insightful, accurate reporting. Ultimately, journalism that includes marginalized voices rather than treating them as an afterthought has the power to foster more respectful and informed public discourse about environmental matters.

Lessons learned

- Clarifying — and understanding — expectations and perspectives during interviews enhances the depth and accuracy of reporting.
- Integrating robust data with relatable personal narratives strengthens storytelling and enhances audience engagement with environmental coverage.

Info box 5

Timur Idrisov: From climate science to agency

About

Timur Idrisov is an independent journalist based in Tajikistan who focuses on environmental reporting.

Challenge

Disconnect between academia and media professionals

Practical experience

Scientific research plays a vital role in addressing climate change and exposing the impacts of environmental crimes. Yet, journalists often face barriers accessing reliable data, and when available, scientific findings are frequently too complex and convoluted for general-interest journalists to interpret and communicate.

Idrisov believes that a more collaborative approach between academia and media professionals can help bridge this gap. Structured platforms for mutual dialogue can serve as effective tools for impactful explanatory reporting, as well as more accessible research. For instance, inviting media professionals to participate in and report on field research can offer valuable learning opportunities. Such engagement deepens journalists' understanding of the practical implications behind abstract environmental issues and enhances the visibility of scientific work in the public sphere.

Jointly developing accessible toolkits for environmental journalism and infographics can further support fact-based awareness-raising about pressing environmental developments and their consequences. Closer collaboration also helps both journalists and scholars build reciprocal trust, which is particularly important when dealing with highly technical or sensitive topics.

Lessons learned

- Journalism that plausibly connects environmental harm to scientific data in demonstrating its root causes and potential solutions empowers communities to drive informed, lasting change.
- Strong collaboration between journalists and researchers enables deeper investigations beyond surface-level data and more impactful reporting.

Key takeaways for journalists

CHAPTER 3

Story-level

- Identify the key actors involved in your story and reflect on their interests, mandates, and potential influence on the issue.
- Consider the potential biases and motivations of each source; ask what they may gain or lose and cross-check their claims with independent evidence.
- Use available registries and databases to verify who is behind an initiative or claim. This may include, for instance, company registries, NGO databases, lobbying transparency tools, court records, or leaked-document archives.
- When using NGO or advocacy reports, extract their data and methods and verify them independently where possible, rather than reproducing conclusions uncritically.
- Avoid simplistic cause–effect narratives when reporting on environmental conflicts or security risks; show how multiple actors, interests, and historical factors interact.

Longer-term professional habits

- Build a diverse contact list — taking into account gender, expertise, and community experience — that includes not only officials and corporate spokespeople, but also local residents, unions, Indigenous leaders, youth groups, and watchdog organizations.
- Invest time in building trust with Indigenous and marginalized communities; be transparent about expectations, avoid tokenism, and seek informed consent before using sensitive information.
- Develop a small "toolkit" of go-to databases and platforms (for companies, lobbyists, environmental violations, and scientific papers) and reuse them systematically across stories.

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4. Environmental Policy and Regulation

Principles and rules relating to international environmental protection are one of the fastest growing areas of law. Over time, environmental law has evolved from pure conservation of species and ecosystems into a cross-cutting discipline that interlinks science, economy, trade, development, social policies, and geopolitics. More recently, environmental law has also expanded beyond its human-centred foundations to include the rights of nature and ecosystems. In this context, Earth law — defined as "the body of law for protecting, restoring, and stabilizing the functional interdependency of Earth's life" — seeks to redefine and reorient environmental law as a realm of fundamental rights.

Implementation and compliance are central to the effectiveness of environmental legislation. Without accountability, legal efficacy is unlikely. This is where journalism can draw attention to relevant treaties, laws, and international principles, breaking them down for different audiences to understand their significance in a given context, and holding those responsible for their implementation or lack thereof.

For these reasons, it is imperative that journalists covering environmental topics not only familiarize themselves with rules and regulations in this area, but also know about their application and implementation. Many countries have excellent laws on paper, but lack of accountability and transparency means they are often flouted.

4.1. Milestones of international environmental law

International environmental law has developed gradually, often in response to pressing incidents or new scientific discoveries.

Until the late 20th century, international legal instruments largely focused on the protection of wildlife — fauna and flora — emphasizing species and habitats, rather than broader ecological or systemic concerns. Milestones in this regard were the 1973 Convention on International Trade in Endangered Species (CITES) and the 1972 Stockholm Declaration on the Human Environment, which called for flora and fauna to be safeguarded for the benefit of present and future generations.

Beginning in the late 1980s, comprehensive, framework-based treaties redefined the scope of environmental governance. Landmark instruments — such as the 1992 Rio Declaration on Environment and Development, the United Nations Framework Convention on Climate Change (UNFCCC), the Convention on Biological Diversity (CBD), and the UN Convention to Combat Desertification (UNCCD) — signalled a shift from narrow, species-focused protections to a more holistic approach addressing ecosystems, climate stability, and sustainable use of natural resources. In particular, the principles articulated in the 1992 Rio Declaration have since provided the foundation for the development of detailed legal arrangements across multiple domains. Today, binding conventions and treaties coexist with non-binding declarations, which, while lacking formal enforceability, exert strong political influence.

Major milestones of international environmental law

1972 Stockholm Declaration on the Human Environment: First global statement of principles for environmental protection; called for safeguarding flora and fauna for present and future generations.

1972 Creation of UNEP: Established after the Stockholm Conference as the UN's central body for environmental coordination.

1973 CITES (Convention on International Trade in Endangered Species): Regulates international trade in endangered species of wild fauna and flora.

1987 Montreal Protocol: Binding treaty phasing out ozone-depleting substances; widely considered a success in international cooperation.

1992 Rio Declaration on Environment and Development: Defines key principles guiding sustainable development and environmental governance.

1992 UNFCCC (UN Framework Convention on Climate Change): Establishes the global architecture for coordinated climate action.

1992 Convention on Biological Diversity (CBD): Framework treaty on conserving biodiversity, sustainable use, and equitable benefit-sharing.

1994 UN Convention to Combat Desertification (UNCCD): Addresses land degradation and promotes sustainable land management.

1998 Aarhus Convention: Guarantees access to environmental information, public participation, and justice — relevant to transparency and media freedom.

2001 Stockholm Convention: Regulates persistent organic pollutants ("forever chemicals"), linking pollution control with public health.

2015 2030 Agenda (SDGs): Integrates environmental protection across goals on climate, oceans, and biodiversity.

2022 UNGA Resolution on the Right to a Healthy Environment: Recognizes the universal human right to a clean, healthy, and sustainable environment.

4.2. Legal sources: Treaties, soft law, and customary international law

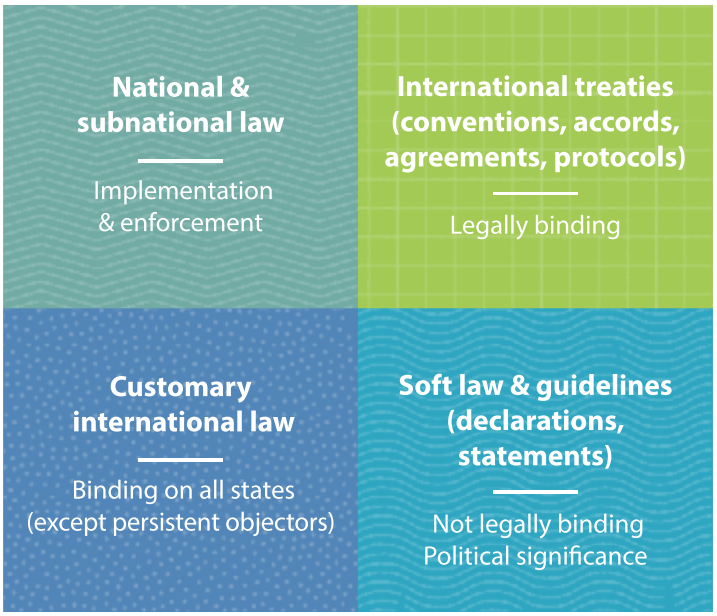
Binding and non-binding instruments

Treaties — which include conventions, accords, agreements, and protocols — are the primary source of international rights and obligations in environmental protection. They are legally binding. By contrast, "soft law" instruments, such as declarations and statements, are not legally binding but retain political significance. In the field of international environmental law, they frequently indicate the likely direction of future binding obligations.

Importantly, some principles articulated in such instruments may acquire binding force once they are recognized as part of customary international law. Customary law plays a pivotal role by creating obligations binding on all states (except persistent objectors). The UNEP InforMEA portal is a useful resource for journalists, as it collects Multilateral Environmental Agreements and international environmental law, including ratification and implementation status.

A distinctive feature of environmental law is the widespread use of framework conventions supplemented by protocols and annexes. For instance, the UNFCCC is supplemented by the 1997 Kyoto Protocol and the 2015 Paris Agreement. Similarly, the CBD is complemented by the 2000 Cartagena Protocol on Biosafety and the 2010 Nagoya Protocol on Access and Benefit Sharing. This approach allows flexibility, enabling legal adjustments in response to political, scientific, or economic developments. The "framework" nature of these conventions implies that they are deeply intertwined with national legal systems. Ultimately, the effectiveness of international agreements depends on their translation into domestic legal orders, where implementation and enforcement take place.

Figure 5: Types of environmental law and regulation



The Paris Agreement

After more than a decade of negotiations, the 2015 Paris Agreement marked a major turning point in global climate governance. Unlike earlier climate treaties, this introduced a bottom-up model: each country sets its own targets for cutting emissions, known as nationally determined contributions (NDCs), which form the backbone of the international response to climate change.

The Paris Agreement aims to strengthen the global response to the threat of climate change, in the context of sustainable development and efforts to eradicate poverty, by:

a. holding the increase in the global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5°C above pre-industrial levels;

b. increasing the ability to adapt to the adverse impacts of climate change; and

c. making finance flows consistent with a pathway towards low greenhouse gas emissions.

The Paris Agreement also provides insights that were not previously explored in climate agreements, including human rights, the protection of biodiversity, and the importance of climate justice (discussed in Box 6). It further recognizes the specific needs and special circumstances of developing countries, particularly those most vulnerable to climate change. National adaptation plans are expected to address vulnerable groups, communities, and ecosystems, with the aim of "integrating adaptation into relevant socioeconomic and environmental policies and actions."

"Adaptation" refers to measures that reduce the impacts of climate change, whereas "loss and damage" denotes harms that cannot be avoided or mitigated. In recent years, loss and damage have become a central theme in climate negotiations. Developing countries — particularly Small Island Developing States (SIDS) — have long advocated for the formal recognition of loss and damage in climate governance.

The debate on loss and damage is closely tied to the broader concept of climate justice. From this perspective, states with a long history of emissions and fossil-fuel–based economic growth bear a disproportionate responsibility for the crisis. Conversely, communities in the Global South, including Indigenous peoples and

economically marginalized populations, have contributed least to global emissions while facing the most severe impacts.

The ICJ advisory opinion and broader legal obligations

In July 2025, the International Court of Justice (ICJ) delivered a landmark advisory opinion on states' legal obligations under international law related to climate change. While an advisory opinion is not binding *per se*, it provides an interpretation of the binding obligations related to climate change. Specifically, the ICJ held that states have concrete legal obligations regarding climate change on mitigation, adaptation, and loss and damage.

It also clarified that obligations derive not only from climate treaties, but from a plurality of sources: (1) customary international law, including the duty to prevent significant environmental harm and the duty to cooperate; (2) other treaties, such as the UN Charter, the UN Convention on the Law of the Sea, and the UNCCD; and (3) international human rights law, recognizing the right to a clean, healthy, and sustainable environment as a prerequisite for all other human rights.

Thus, the Court dismissed the argument of major emitters that climate treaties are the only source of obligations. States remain bound under customary international law, human rights law, and other treaties, even if they are not party to climate treaties.

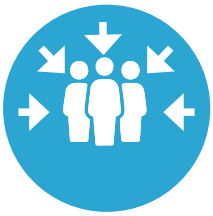
4.3. New frontiers: Ecocentrism, rights of nature, and ecocide

The principle of sovereignty over natural resources is premised on the notion that nature exists primarily to serve human needs and economic development. In the framework of Earth law, however, this approach is critiqued as exploitative, as it protects ecosystems only to the extent that they sustain human well-being, placing humans above the natural world.

Indigenous peoples and local communities have long articulated alternative worldviews. Their legal and cultural traditions emphasize that humans are part of nature and bear reciprocal responsibilities towards it. This relational perspective is increasingly informing global debates. For instance, several jurisdictions have granted legal personhood to rivers, forests, or ecosystems, thereby recognizing their intrinsic value and rights to protection, while embedding eco-centric principles within domestic and international legal systems.

In parallel, the campaign to codify "ecocide" as an international crime has gained global traction. In 2021, an independent expert panel defined ecocide as "unlawful or wanton acts committed with knowledge that there is a substantial likelihood of severe and either widespread or long-term damage to the environment." If incorporated into the Rome Statute of the International Criminal Court, ecocide would join genocide, crimes against humanity, war crimes, and the crime of aggression as an international crime, thereby providing a powerful legal instrument to hold corporations and states accountable for catastrophic environmental destruction.

Figure 6: Emerging eco-legal concepts in environmental governance



Anthropocentric (human-centred)

- Sovereignty over natural resources
- Nature serves human needs
- Ecosystems protected for human well-being

Earth law / Ecocentric (nature-centred)

- Humans are part of nature
- Intrinsic value of ecosystems
- Legal personhood

Ecocide: Emerging accountability mechanism

- Proposed international crime
- For severe, widespread or long-term environmental damage
- Accountability for corporations and states

Info box 6

Elfredah Kevin-Alerechi: The path to just reporting

About

Elfredah Kevin-Alerechi is an investigative journalist from Nigeria, based in the United Kingdom, whose work focuses on environmental and climate justice in Africa.

Challenge

Reluctance to include a climate justice lens in reporting

Practical experience

Climate justice is a crucial component of impactful environmental reporting, as it centres the experiences of those most affected by environmental crimes and degradation. Despite its significance, however, climate justice is often absent from news stories.

In some cases, editors may perceive climate justice stories as too complex or niche for general audiences, making them less likely to be prioritized. Tight word limits further restrict meaningful inclusion, causing the lived experiences and voices of marginalized communities on the frontline of environmental degradation to remain unheard. The influence of powerful political and business interests also complicates coverage, especially when those implicated are linked to an outlet's funding. Additionally, journalists reporting on these issues may face threats or violence — sometimes backed by the very actors exposed in their articles — raising serious concerns around editorial duty of care.

To address these challenges, it can be helpful to examine the root causes of editorial hesitation. Building awareness of the importance of a climate justice lens can help prevent incomplete reporting. Even with limited resources, newsroom leaders can support climate justice-centred storytelling and pursue collaborations that ensure these critical, often overlooked stories are told.

Lessons learned

- Environmental reporting without a climate justice lens risks being incomplete.
- Providing space to affected community voices builds media trust and supports justice.

Key takeaways for journalists CHAPTER 4

- When covering an environmental issue, check whether relevant treaties or soft-law commitments apply in your country or region, and whether authorities report on their implementation.
- When officials cite international commitments, examine how these obligations are reflected in national laws, budgets, or enforcement, and look for gaps between commitments and practice.
- Follow the money: examine whether funds earmarked for climate, biodiversity, or pollution control reach their intended targets, and who profits if they do not.
- When covering climate politics, explain the difference between mitigation, adaptation, and loss and damage, and link these to real-world policies and people's lived experience.
- Stay alert to emerging legal developments — such as rights of nature, ecocide debates, or new court rulings — and consult local legal experts to understand their relevance for your context.
- Include the perspectives of affected communities, especially marginalized groups and Indigenous peoples, and apply a climate justice lens when reporting on environmental law.
- Use specialized portals and legal databases to check treaty status, case law, and national transposition, and translate legal jargon into plain language for your audience.

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5. Journalistic Reporting

At the core of environmental journalism is the practical research and reporting on environmental issues. This chapter looks at the journalistic production process, from the research of environmental stories to strategies for localizing them, ways to tell and illustrate these stories, and, finally, reaching out to the audience.

5.1. Investigative environmental journalism

The Panama and Pandora Papers, initiated by the International Consortium of Investigative Journalists (ICIJ), are some of the most emblematic large-scale journalism collaborations of all time. These financial and leaks-based projects have had significant national and global impacts, demonstrating the potential strength of cross-border collaborations. Environmental investigations have historically received less attention than major financial leaks, although this has started to change. In some journalistic circles, serious investigations are still expected to prioritize significant financial components or a major information leak, something that has not yet occurred in environmental journalism. This disconnect has left environmental reporting trailing behind in terms of both funding and editorial attention.

However, in recent years, investigative environmental journalism has been gaining importance and space in journalism, as is evident in initiatives like Amazon Underworld, Deforestation Inc., and the Forever Pollution Project. In the process of giving the complex field of environmental journalism more attention, newsrooms have also realized that appointing a single "climate reporter" is no longer sufficient.

Grassroots organizations around the world have pioneered investigative techniques in the field of environmental investigative journalism, notably using geographic information systems (GIS), remote sensing, and AI. These approaches are also used by specialized geo-journalism platforms and networks (see "Geo-journalism outlets" below), as well as by networks such as the Earth Journalism Network and the Pulitzer Center, which have supported and scaled up such initiatives.

The non-profit journalism sector, including its donors, has also become an important accelerator of this shift: by funding cross-border collaborations, training, and open-data infrastructure, it has helped turn environmental journalism from an awareness-raising niche into an accountability-driven field. Investigations such as Amazon

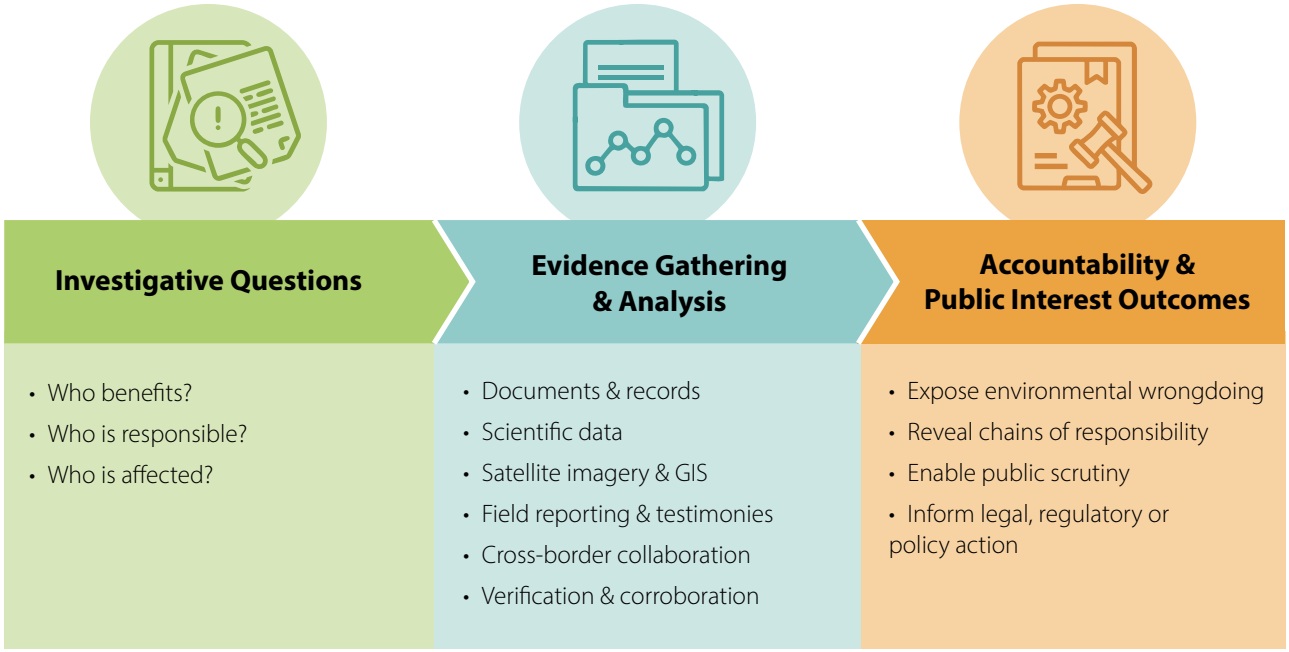
Underworld exemplify this evolution, bringing together grassroots media organizations and international outlets in "glocal" collaboration.

Defining environmental investigative journalism

Investigative journalism is the practice of unveiling hidden truths which carry a strong public interest, often by connecting disparate datasets and documents, such as financial records, environmental permits, satellite imagery, and on-the-ground testimonies. It differs from daily reporting by its methods, depth, and the intention to hold power accountable by uncovering what would otherwise be hidden.

Environmental investigative journalism seeks to answer questions — Who is responsible? Who benefits? Who suffers? — in an effort to not only describe the climate emergency, but also explain systemic root causes in the chain of accountability, ranging from weak public policies to greenwashing, lobbying, organized criminality, corporate wrongdoings, or state complicity. To do so, it uses the same hypothesis-driven, deductive, and systematic approach as scientific research to uncover information of public interest that would not have been made publicly available otherwise. This is distinct from climate and science reporting, though it can heavily rely on academic sources and practices.

Figure 7: From Investigative Questions to Public Accountability



Source: Original material by Authors.

Issues to investigate spread across all geographical scales, from hyperlocal journalism to regional, cross-border, and even global issues. Relevant stories also range across sectors, including the "big five" global sectors: oil, tech, pharmaceuticals, agriculture, and finance, which cuts across all of them. Additionally, a single wrongdoing covered by environmental investigations can often be approached from multiple angles along a chain of accountability: from corporate to state enablers, to industrial or commercial practices, to weak policies or deregulation.

Investigative projects in environmental journalism

Environmental journalism can investigate visible and measurable negative consequences of human action regarding biodiversity, climate, public health, and even human rights. Such investigations can focus on public and private spheres, from weak or poorly enforced regulations to conflicts of interest, and on how powerful actors bend or circumvent legal frameworks to serve their own interests.

Environmental journalism can also do preventive reporting, such as investigating and raising awareness of foreseen or potential negative impacts linked to megaprojects, energy ventures, natural resource exploitation, and extractive projects.

A third category of investigations looks at practices of greenwashing, lobbying, and corporate interference in public decision-making. These investigations scrutinize the enabling mechanisms and entities that allow environmental harm to persist.

Environmental journalists may also engage in "follow the money" investigations into illicit financial flows (IFFs), tax evasion, corruption, or conflicts of interest that have an environmental dimension.

While many investigations focus on particular angle or topic, large international collaborations into specific companies, processes, or regions can enable a single project to cover a variety of angles. Such multilayered investigations — like Amazon Underworld, Deforestation Inc, — combine strong reporting from different angles all under a single umbrella project.

The online resource repository that accompanies this manual includes examples of investigative environmental initiatives, illustrating the wide range of issues and angles.

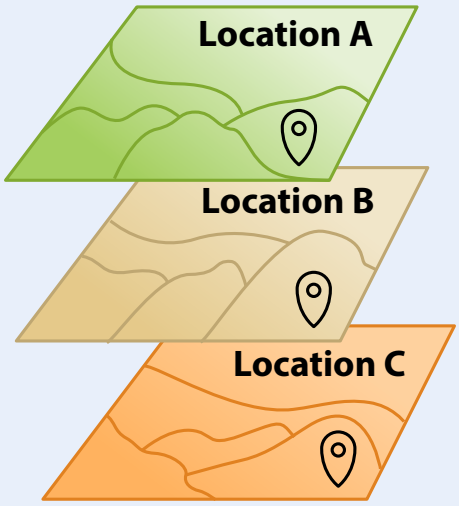
This chapter offers practical advice on numerous approaches to carrying out environmental journalism, including data-driven analysis, for instance, and it is important to keep in mind the variety of tools available. Many strong stories begin with basic methods — reviewing company disclosures, permits, and inspection reports; filing information requests; comparing corporate claims with government data; and verifying whether promised actions actually occurred. These traditional tools remain the entry point for most environmental journalists and can yield powerful reporting.

Practical guide: Finding leads for environmental investigations

While leaks make for great stories, investigations do not necessarily come from a whistleblower serving a set of exclusive information. Good investigative leads will often come from the journalists' ability to question what they read and hear, from scientific studies and NGO reports to governmental and corporate announcements. Finding what is not widely visible or concealed and of public interest can also happen by critically looking at what is already known.

Transposing and testing hypotheses based on what is already public can lead to new investigations. Strategies include: 1) geographically examining whether a pattern of environmental wrongdoing linked to a given activity recurs in other regions or countries where the same activity takes place or where the same corporation is active, 2) scaling up the application of investigative methods, and 3) adding an environmental angle to an existing, non-environmental story.

The examples below illustrate how these strategies can be applied.

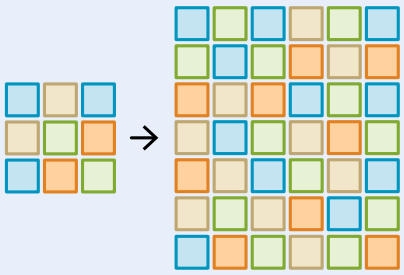


Apply hypothesis across regions

1. Geographical transposition

Testing the hypothesis of a global pattern of environmental abuse can sometimes prove useful, for example when investigating global corporations. After investigating a certain environmental wrongdoing in a certain context, journalists can apply the same approach by identifying comparable datasets across different regions – such as land use records, environmental permits, or conservation data – and analyzing whether the same pattern of abuse recurs.

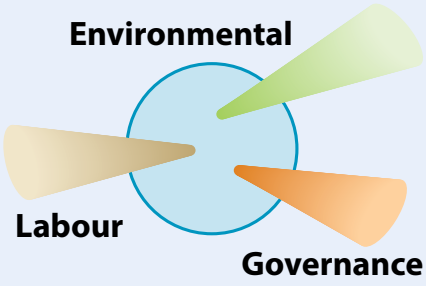
By comparing similar datasets across multiple locations, journalists can assess whether an issue is isolated or reflects broader, systemic dynamics that may not be visible when reporting on a single site. This approach is useful in investigating the environmentally abusive practices of international corporations that operate in different countries.



Expand volume or scope of investigation

2. Scaling up investigative methodologies

The BurningSkies investigation demonstrated how scaling up investigative methodologies involves expanding the geographic scope or data volume of an investigation to identify trends that may not emerge at a smaller scale. Journalists can do this by combining open-source data, satellite imagery, and other remote-sensing tools to analyze environmental phenomena across wider areas. Examining patterns at scale can help contextualize local findings, highlight discrepancies between different data sources, and reveal cumulative environmental or public interest impacts that warrant further scrutiny.



Add a different investigative lens

3. Finding new angles to a known story

Revisiting a widely reported issue through a different analytical lens can open new investigative pathways. Journalists can apply this strategy by introducing additional perspectives — such as environmental, labour, or governance dimensions — to stories that may have previously focused on a single aspect. By combining field observations, documentary research, and technical analysis, journalists can surface under-reported elements of an issue and provide audiences with a more nuanced understanding of its broader implications.

5.2. Data journalism for environmental reporting

Data analysis practices in environmental journalism range from basic statistical analysis in Excel, Python, or OpenRefine, to complex geo-analysis. This section demonstrates key uses and tools for data journalism in this field. For instance, the analysis of large datasets can be used to parse emissions registries, compile corporate and financial records to uncover hidden links, or conduct vast textual analysis. Data-driven visualizations and contextualization of findings can make journalistic stories more engaging, including, for instance, through the creation of interactive maps. Similarly, geo-journalism — which involves the use of GIS and satellite imagery analysis — has been pioneered by investigative outlets to detect oil spills, illegal extraction sites, or fires in areas of high biodiversity value, for example.

Platforms like Google Earth Engine, Global Forest Watch, and Global Fishing Watch provide journalists with access to satellite imagery and real-time environmental data, enabling them to produce data-driven reporting on issues such as deforestation, illegal fishing, and ecosystem impacts.

Data skills for environmental journalism can be seen from different lenses: from editorial content and format to the conceptualization of editorial projects, and to hands-on investigative applications ranging from "follow the money" stories to more complex, data-intensive investigations.

AI tools can also assist in analysing large datasets — for example, by classifying satellite images or clustering documents — but their results should always be verified by humans. Chapter 5.3 discusses the use of AI tools in journalism.

Data-driven environmental journalism content

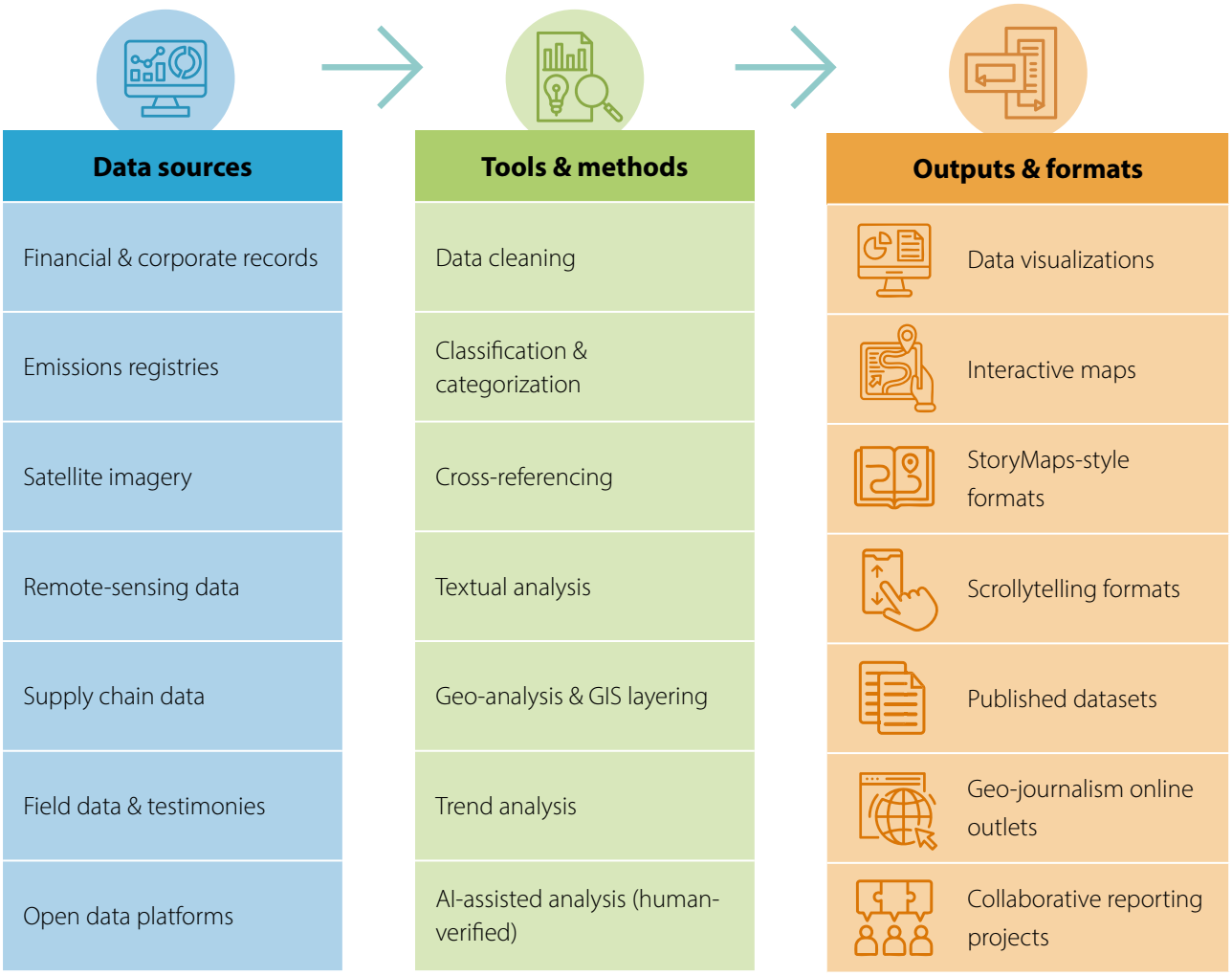
Data skills and techniques have been mobilized for financial stories on the energy sector — from exposing greenwashing to uncovering corruption — and to create content specifically focused on environmental issues. This includes the production of data-driven stories and visualizations designed to reveal environmental patterns and impacts, such as interactive formats, geo-journalism online outlets, and open-source resources that foster transparency and public engagement.

Data visualization for environmental storytelling

Charts, histograms, and maps are a data journalist's best friends. While not exclusive to environmental reporting, data visualization tools such as Datawrapper, Tableau, and Carto help transform complex datasets into clear, accessible narratives that make environmental evidence easier for audiences to grasp.

Moreover, as field reporting elements can be intertwined with data analysis, a growing number of outlets have found innovative ways to merge these elements into immersive and dynamic formats, such as in "scrollytelling." Some collaborative environmental reporting projects have combined field reporting and interviews from multiple locations into a single narrative, supported by cartographic and interactive elements. Other outlets have used StoryMaps-style formats, in which mapping plays a central role in storytelling, to explore relationships between natural resource extraction and local environments.

Figure 8: Data Journalism Workflow in Environmental Reporting



Geo-journalism outlets

Investigative outlets have pioneered the use of GIS and satellite imagery analysis to detect oil spills, illegal extraction sites, fires, and other cases of environmental degradation and its impacts. In this way, cartography is not useful only as a means for visualization, but also as an investigative tool. Recently, some outlets have also begun to centre their work around geo-data content and geographical information, ranging from satellite imagery to maps, remote sensing analysis, or complex layering of geographical coordinates. For instance :

- Oxpeckers applies investigative reporting, data analysis, and geo-mapping techniques to expose eco-offences and track organised criminal syndicates.
- InfoAmazonia combines data, maps, and geolocated reporting to tell stories about the planet's largest continuous tropical forest in the nine countries of the Amazon Basin. The non-profit newsroom collaborates with local and international journalists and outlets to "promote innovative and in-depth investigations on environmental and social issues."
- MekongEye engages local journalists, thinkers, leaders, and multi-stakeholders to produce stories that investigate a wide range of environmental issues and the possible solutions to address them.

- InfoCongo uses data and interactive maps to record environmental impacts to cover topics such as deforestation, illegal logging, wildlife trafficking and climate change.
- InfoNile, initiated by Water Journalists Africa, applies data-driven multimedia storytelling to cross-border water and environmental issues.

In addition, the JEO geojournalism WordPress theme, used by several organizations working in this space, is available as an open-source tool for developing geo-journalism platforms.

Practical guide: Investigating greenwashing with financial data

As the world has become increasingly environmentally conscious, greenwashing has gained global attention as a misleading and deceptive practice — with potentially serious financial implications.

In an article for the Pulitzer Center, Sasha Chavkin, senior reporter at The Examination, explained how his newsroom and their partners investigated mega-polluters taking advantage of green loans. Their "Toxic Bonds" investigation revealed that, between 2018 and 2023, $300 million in sustainability-linked loans (SLLs) went to companies in polluting industries such as fossil fuels and mining.

He narrows down the reporting steps for this investigation as follows:

1. Finding the data sources	Data on SLLs was available, but not on an open-source basis. The Examination reached out to partners to gain access to Bloomberg Terminal (a software providing real-time global financial information) and to LSEG (London Stock Exchange Group) data, which provides detailed information on SLLs worldwide.
2. Analysing the data for trends	Once obtained, the SLL data came out as a single spreadsheet containing 4,500 payments that totalled more than $1.5 trillion. "It wasn't feasible to assess the environmental impact of each company, so we focused instead on identifying loans that went to companies in polluting industries," the reporter explains. They had to come up with a categorization methodology. The team cross-referenced this data with other sources to classify listed companies from the dataset around a common taxonomy, and further categorized the companies into sectors — fossil fuels, mining, food and agriculture, timber, and companies linked to tropical deforestation — to help identify loans that went to polluting companies. This step also involved cleaning the data to avoid duplicates and double counting.
3. Highlighting key case studies	They then narrowed down an illustrative case that could suit their reporting: *"We decided to focus on a UK-based energy producer that generates electricity by burning wood pellets and presents itself as a leader in renewable energy because it is switching away from coal power. But there is a major catch: scientific studies show that burning wood biomass is actually even worse for the climate than coal."*
4. Storytelling and communicating results	To communicate these findings in an engaging way, The Examination chose a compelling scrollytelling format for the publication. The team also decided to publish the resulting dataset of their analysis, developing a publicly available resource directly from their reporting.

Practical guide: Exposing extractivism with geo-data

Effective data investigations rely on cross-referencing — systematically comparing information from multiple independent sources to confirm accuracy and reveal hidden links. In environmental journalism, this often means combining financial, geographic, and field data to verify and contextualize findings. When investigating extractive industries, geographic data becomes particularly powerful: crossing different layers of spatial information is the key to understanding and illustrating what is happening in any given location where natural resources are being exploited.

Below is EIF's approach when collaborating on a cross-regional geo-data investigation into environmental pressures and biodiversity-related concerns:

1. Finding sources for geo-data	The journalists' starting hypothesis was to examine the proximity between extractive activities and protected areas in Tunisia and the Democratic Republic of Congo — but were these isolated cases, or more systemic issues? The journalists used open data from national oil and gas registries and purchased maps from data providers such as Energy Year. These datasets were then compared with official conservation boundaries sources from open platforms such as Protected Planet.
2. Finding the right tool for projecting information layers	Using QGIS, the EIF team systematically organized and projected multiple layers of information covering all locations where the extractive operations of interest were reported. By visualizing these datasets together, they were able to identify recurring spatial intersections between industrial activity and protected areas across different regions.
3. Overlaying pollution and other environmental indicators	To enrich their analysis, the journalists incorporated additional spatial data related to pollution – such as satellite-based flaring maps from Skytruth and other remote-sensing indicators – to provide further context at each site. Public reports and documentation from civil society organizations were also used to better understand local environmental conditions and to contextualize the mapped areas within broader environmental and pollution dynamics.
4. Connecting the analysis with fieldwork	The geospatial analysis helped identify locations where field reporting could yield the most relevant insights in the Congo Basin and the Peruvian Amazon. Regional partners then used this information to guide on-the-ground investigations, combining spatial evidence with direct observations and interviews to understand the environmental situation at a finer scale.

Environmental reporting with supply chain data

In addition to financial investigations and geo-data analysis, analysing supply chain routes can be undertaken on its own or merged with the two techniques above. Whether identifying environmental pollution, illegal natural resource exploitation, or forced labour, tracing the supply route can help determine which companies are ultimately benefiting from these devastating actions at the end of the chain.

Investigations may focus on specific segments of a supply chain or cover a whole route, including producers, manufacturers, processors, exporters/importers, and distributors and retailers, up to consumers.

5.3. AI in environmental journalism: Tools, threats, and safeguards

Journalists are increasingly using AI tools to process, visualize, and verify information, especially in data analysis. This section outlines how AI can support environmental reporting, and highlights the related risks, safeguards, and transparency standards, including the impact of the use of AI on the environment.

As these tools are gradually adopted across newsrooms, building AI literacy and risk awareness among staff is essential to ensure informed and accountable use.

Tips: Using AI tools in environmental reporting

- AI tools have a growing effect on journalism practices, and their rapid development brings new challenges. While specific tools change quickly, a few general rules remain constant:

Use machine power but apply human intelligence.	AI tools offer great support when reviewing large volumes of information or long documents; for instance, they can be used for geospatial analysis, multilingual transcription, and data clustering. These tools enhance efficiency. However, since the workings of AI tools can be both opaque and prone to produce mistakes, decisions and verification must remain human.
Be aware of manipulative potential.	AI makes it easier to produce disinformation, deepfakes, and bot-driven amplification. Always assess whether content may have been AI-generated or manipulated. AI-generated visuals and sensor data can also pose privacy risks. Avoid tools that endanger vulnerable communities or rely on biased datasets skewed, for example, towards Global North contexts. Seek expertise to ensure representativeness and balance.
Document your AI use.	Keep records of data sources, model name and version, and prompt and output logs for traceability. Provenance and auditability are essential for credibility and replication.
Be transparent about how you use AI.	When AI substantially assists analysis, translation, or visualization, include a short disclosure note in the publication. Archive inputs and outputs with timestamps.
Uphold governance and security standards.	Define approved and prohibited AI uses, correction protocols, and editorial sign-offs for high-risk applications. Never upload sensitive or source-identifying data to external AI platforms. Choose vendors with clear data and security policies, respect intellectual property, remove metadata before sharing, and keep sensitive data offline or air gapped.

Investigating AI's environmental footprint

AI is not only a reporting tool, but is also itself a subject for environmental reporting. The industry's rapid growth has major environmental costs, from data centre energy demand to water used for cooling. When covering technology, seek independent data on energy sourcing and emissions rather than relying solely on corporate reports. Ask where electricity comes from and whether renewable claims match reality — linking digital transformation to resource use and accountability.

✓ Checklist: AI in the newsroom — five safeguards

1. **Transparency:** Document all AI use and methods.
2. **Verification:** Never rely on AI output without human confirmation.
3. **Scepticism:** Treat synthetic or automated content as unverified until proven authentic.
4. **Security:** Keep sensitive data offline, use sandboxed devices, and vet third-party tools for privacy and data protection.
5. **Accountability:** When AI contradicts evidence, evidence prevails.

5.4. Local environmental journalism

Environmental journalism connects global challenges to local realities, and a recent study from the Reuters Institute suggests that audiences would like to see more climate news particularly as it intersects with local news and emphasizes personal relevance. There are various ways in which local newsrooms can tackle the climate story. Adding new reporters to cover environmental issues, when critical beats like government and criminal justice are going unfilled, is often unrealistic, but it is also not always necessary. Rather than adding environmental reporters to their payrolls, newsrooms can add the environment to the reporting of the issues they already cover.

As described below, there are countless local stories to be told about how environmental concerns play out in everyday life, across issue areas and beats. These are urgent stories not only for the science and climate desks, but also for journalists covering business, politics, housing, health, food, and more.

Food and agriculture

Climate change is already having a massive impact on the food we eat. In some places, crops that once flourished now wither from excess heat and insufficient rain. Elsewhere, extreme weather flattens crops and sends food supply chains reeling. Food is also where we observe climate solutions through efforts to reduce the carbon footprint of farming and more sustainable food innovations, like the alt-meat movement.

Tips: Ideas for local stories

- How does climate change threaten the food and nutrition that communities need and love?
- What new foods, including alternative proteins, are entering our diets?
- To what extent have some people changed their diets to have less of an environmental impact? What drove them to make the switch?
- How and to what extent have local food producers changed their practices to cope with their impact on the environment?

Housing and real estate

Environmental changes and the climate crisis are increasingly affecting where and how people live. For instance, many disadvantaged communities live in locations especially susceptible to storms and flooding, such as along rivers or coasts. As climate change drives more extreme weather, these populations are further at risk if sufficient adaptation measures are not taken. And in places where wildfires or rising seas imperil housing, homeowners are finding it more difficult to obtain and afford insurance.

Tips: Ideas for local stories

- How does climate change affect the cost of living (e.g., due to cooling infrastructure, changing energy consumption and costs, etc.)?
- How does the threat of natural disasters like floods, hurricanes, or wildfires affect local property markets?
- How can owners safeguard and insure housing, and what effect is this having on the local housing market?

Politics and government

Climate change and the preservation of the environment can be deeply political. Covering environmental politics is not itself a partisan act, even if some try to frame it that way. Helping audiences understand the key role of politics for the local environment is foremost a matter of enabling individuals to develop their own opinion.

Tips: Ideas for local stories

- How do national environmental policies or commitments relate to the local situation and actions taken?
- How do local communities experience the impact of environmental policies?

Business and finance

As climate and environmental coverage increasingly engages audiences, business stories with a link to environmental issues can be expected to have wide appeal — whether they examine accountability to prevent the pollution of the environment, rapidly shifting cultures of investing, or the wide range of startups that will thrive or falter amid a clean energy transition.

Tips: Ideas for local stories

- The production of renewable energy is often more local than non-renewable energy production. How is renewable energy produced in the area?
- How does this affect the local economy?
- Do actions to mitigate or adapt to climate change create new opportunities for certain professions, and/or pose a threat to others?
- Are employees or shareholders pressuring specific companies to change their behaviour related to climate change? How are companies responding?

Culture and society

Protection of the environment, climate change, and especially climate anxiety are already common themes in the arts and popular culture, and this is also changing how people think about such basic aspects of the human experience as having children. At the same time, certain climate solutions are changing how people think about their relationships with the planet and each other, often for the better. As climate change intensifies and we ramp up efforts to combat it, journalists should note what is changing about how we think, feel, and live, and how the climate emergency — and corresponding emotions of climate despair and fortitude — are reflected in art, literature, music, and film.

Tips: Ideas for local stories

- How present is the topic of climate change and environmental degradation in everyday discourses among people in the local community?
- What are their fears, hopes, and ideas about climate change and the environment in general?
- What are shared understandings or myths about environmental issues? Who influences these? To what extent do they reflect or contradict scientific knowledge?
- How do the beliefs and ideas of different communities impact their understanding of the climate crisis and its solutions?

Activism and climate advocacy

For decades, climate activists have pressed for action, even as most governments and companies have resisted change. In recent years, younger climate activists in particular have set the pace for climate debate and action, prioritizing racial, gender, and economic justice in the name of fighting the climate emergency.

Tips: Ideas for local stories

- What issues are climate and environmental activists tackling on a daily basis in their own communities?
- How are activists seeking to change minds in communities, on campuses, and online?
- How are the climate and environmental movements intersecting with other social movements, like movements against racism or xenophobia?

Climate and water resilience

Changes in rainfall patterns, droughts, and floods are among the most visible local impacts of climate change. Access to clean water, sustainable irrigation, and wastewater management are becoming urgent public concerns in many communities.

Tips: Ideas for local stories

- How do changing rainfall patterns affect local water availability and quality?
- What local strategies exist for rainwater harvesting, water recycling, or groundwater management?
- How do water shortages or floods impact agriculture, health, and household economies?

5.5. Reporting techniques and storytelling in environmental journalism

Environmental degradation and climate change are impacting more and more people around the world, and there are numerous, evolving ways of telling their stories. Many journalists today are exploring narratives that go beyond the mere presentation of scientific data and doom and gloom projections, to look at how climate and environmental changes are affecting people in their everyday lives. Below are some guiding principles for journalists as they approach reporting on environmental issues.

Know your audience

People increasingly understand that climate change and environmental degradation are real, happening now, and caused by human activities. The depth of this knowledge, however, varies widely. Being aware of audiences' beliefs and feelings about climate change and the environment helps journalists deliver stories that resonate and build trust. In many cases, meeting audiences where they are and paying attention to how their views

might change as their exposure to the climate story increases can support more responsive reporting. No matter who your audience is, and regardless of their expertise, environmental reporting works best when it is centred on people, also taking into consideration their media use habits and preferred platforms, whether television, print, online, or social media.

Connect causes and consequences

Climate change is caused mostly by the burning of oil, gas, and coal, and is driving more extreme heat waves, droughts, storms, and rising sea levels. Yet these foundational facts are often missing from news coverage, leaving audiences misinformed. Making the climate connection — to both the causes and the consequences of climate change — is a must. And doing so does not need to distract from the rest of the story; a few well-chosen words can do the trick.

As the effects of climate change and environmental degradation have become more pronounced, the science of attribution has improved. That is, it is now easier than ever to accurately connect extreme weather events to the broader effects of climate change. While this connection still needs to be assessed on the basis of available data, not making that connection is not telling the whole story.

Include the environment in every beat

Environmental degradation and climate change are the defining stories of our time. Rising global temperatures affect everything, and in turn are affected by everything from government elections and corporate decisions to social forces. Climate coverage is not limited to science and weather beats; no matter the specialty, many stories have environmental dimensions worth highlighting.

Coverage of the climate crisis has been compared to that of the global COVID-19 emergency: just as many reporters eventually integrated pandemic dimensions into their beats, many journalists are likely to include environmental angles in their stories. Climate reporting is rooted in science, but that science is fundamentally in agreement and not that complicated. Getting oneself educated on climate basics is part of being a prepared journalist at this moment in time.

Humanize the story

Climate change and environmental degradation are huge, global stories, but they manifest differently in different places, and at their core, they are stories about ordinary people and their daily lives. Audiences want coverage that reflects this, including first-hand perspectives on how people are experiencing the environment and climate change, and what they can do about it.

Reporting of any kind works best when it is intensely grounded in the specific and told through the eyes of those most affected. It is no longer hyperbole to say that no one on earth is exempt from the effects of climate change. According to recent global studies — including the UN Development Programme's Peoples' Climate Vote 2024 and Pew Research Center's 2022 global poll — between 80 and 90 percent of people worldwide express concern about climate change and support stronger government action.

Report with an environmental justice perspective

Marginalized groups generally suffer first and worst from heat waves, floods, pollution, and other environmental impacts, yet their voices and stories are often omitted from news coverage. Good environmental reporting highlights their experiences and recognizes that sometimes marginalized communities, particularly including Indigenous peoples, are innovators in the fight to protect the environment.

In the Arab region, for instance, journalists have documented how prolonged droughts in Iraq and Syria have displaced rural populations and worsened food insecurity or how water scarcity in Jordan and Yemen affects low-income households first and how industrial and traffic-related air pollution in densely populated urban areas disproportionately impacts low-income neighbourhoods. Using a justice lens helps make such local impacts and affected communities visible. Telling climate and environment stories through a justice lens is not advocacy — it is telling the whole story, and, in the best journalism tradition, giving space to marginalized voices.

Beware of greenwashing

Companies and governments are responding to public demands for eco-conscious practices. However, pledges to "go green" often amount to marketing campaigns that mask business as usual. Be fair but sceptical of claims about "sustainable" products and "net-zero" emissions, especially from actors with a record of environmental harm. Verify such claims through data and evidence. There is a long history of mis- and disinformation from the fossil fuel industry, much of it aimed at the press (see also Chapter 5.8). Treat industry claims with the scepticism that the history warrants.

Work with visuals

The images that accompany a story shape how audiences understand environmental change. Use visuals that reflect the real people, places, and conditions in the story, and avoid generic or stock photos that mislead or oversimplify. For example, stories about extreme heat are better illustrated by people at cooling centres than by "fun in the sun" beach scenes. Whenever possible, show the communities directly affected and include clear, factual captions — who is shown, where, and when.

Research across three countries (Germany, the UK, and the US) found that audiences respond most positively to images seen as authentic and credible, particularly those featuring human subjects. In contrast, protest imagery often polarises viewers, while solutions-oriented visuals tend to evoke positive emotions but less motivation for action. These findings can help journalists choose images that engage audiences without reinforcing fatigue, cynicism, or polarisation, and underscore the importance of visual authenticity in environmental storytelling.

5.6. Covering gender aspects of climate and environment

Effective environmental reporting requires understanding how climate and ecological issues intersect with gender — while environmental degradation affects everyone, its consequences often fall hardest on the most vulnerable populations. Women, children, and marginalized groups, who constitute the majority of the world's poor, experience more severe impacts due to existing inequalities and social dynamics.

In many contexts, unequal access to resources and decision-making impact women's capacity to adapt their livelihoods in response to climate change. Cultural norms and discriminatory practices further restrict their ability to cope with and recover from both sudden disasters and slow-onset environmental changes.

Women also play critical roles in managing biodiversity, water, land, and other natural resources at local levels. Their knowledge and practices are essential to sustainability, yet their expertise and perspectives remain under-represented in policy, media, and project implementation. For example, in many households, women manage water and waste, but community-level decisions about these systems are typically made by men who may overlook women's practical experience. This gap between responsibility and decision-making authority creates inefficiencies and inequities.

While documenting vulnerabilities is important, journalists should avoid framing women solely as victims. Women are also powerful agents of change in climate action, bringing distinct knowledge, experiences, and leadership to environmental solutions.

Gender-responsive climate journalism does not mean covering only "women's issues." It means reporting more accurately and completely by recognizing how gender shapes environmental challenges and responses. Integrating gender analysis provides audiences with more nuanced, comprehensive, and solutions-oriented reporting.

✓ Checklist: Gender-responsive environmental reporting

- **Assess gendered impact.** Examine how environmental crises affect women and men differently in specific communities and use gender-disaggregated data when available.
- **Diversify sources and perspectives** to ensure the inclusion of women and marginalized community members, including Indigenous people, youth, and persons with disabilities.
- **Highlight leadership.** Profile women environmental leaders and innovators or investigate how women's participation influences climate policy and community outcomes.
- **Analyze representation** by tracking whose voices appear in your story and whose are missing. Review your source ratios quarterly or by project.
- **Check framing.** Avoid stereotypes and ensure visuals, headlines, and language reflect equality and agency. Check headlines and captions for hidden bias.
- **Expand expertise** by adding at least one under-represented expert to every story to broaden perspectives and improve parity.

5.7. Audience engagement

Social media and video platforms have become a primary focus for marketing, entertainment, commerce, and news, diminishing the influence of journalism and fragmenting the media environment. At the same time, globally, about 40 percent of people surveyed for the Digital News Report 2025 said they sometimes or often avoided news. Traditional news coverage's focus on conflict and suffering, along with its portrayal of politicians as the sole arbiters of events, leaves people feeling depressed and powerless, respondents said, causing many to tune out.

Recent global research further illustrates these shifts in media ecosystems and audience behaviour. A 2024 study analysing 71,922 respondents across 68 countries found that social media has overtaken traditional news outlets as the main source of science information in 53 countries, with marked regional and economic differences — including, for example, higher online engagement in lower-GDP contexts. In terms of environmental coverage, a separate study focused on climate change and news audiences in eight countries found that since 2022, there has been "a stagnation in public views on, attitudes to, and engagement with climate issues and information over time, despite the growing urgency of the crisis." Even though people in those countries reported seeing climate stories on a weekly basis, their understanding of the risks, institutional responses, and views on climate change policies had not changed. For newsrooms, these findings underscore the importance of maintaining a presence on multiple platforms and adapting innovative, engaging content and formats for each target audience, from concise social clips to long-form explainers or podcasts.

Climate stories that resonate

Researchers have found that audiences are most interested in "climate news that intersects with local news (52%) and weather (54%), emphasizing the importance of personal relevance." Journalists reporting on extreme weather events can help audiences connect the abstract topic to concrete experiences, showing how more frequent and more intense events are linked to climate change. Reporting on attribution studies and other scientific research that explains how the warming planet is changing our lives further contributes to this comprehension.

Stories are most likely to resonate when they accurately take into account specific contexts and interests. In countries where dependence on fossil fuels remains high, journalists could reframe climate mitigation measures through an economic lens, demonstrating how cutting fossil fuel dependence reduces national costs and household energy expenses.

Video is king

For environmental journalism, video offers a powerful way to visualize complex data and show real-world impacts, from floods and droughts to community adaptation.

Video continues to grow in importance as a source of news. Across all markets analyzed in the Digital News Report 2025, the proportion of people consuming social media video grew from 52% in 2020 to 65% in 2025, and any video from 67% to 75%. In the Philippines, Mexico, Thailand, Kenya, and India, more people now say they prefer to watch rather than read the news, accelerating the shift to personality-led news creators. A majority of news video consumption now takes place on social media platforms, as opposed to directly on news websites or apps. While some of the content circulating on these platforms still originates from established newsrooms, audiences increasingly encounter it through platform-native creators and intermediaries, adding further evidence of the diminishing direct influence of legacy media.

To better engage your audience, keep in mind, for instance, that each platform requires a different type of video: TikTok favors short, emotion-driven clips; YouTube supports longer explainers and field reports; and X and LinkedIn work better for expert commentary and updates. Tailor tone and length accordingly.

First impressions count

Attention spans are short — media research shows that audiences decide within the first few seconds whether to keep watching or scroll away. It is therefore crucial that the beginning of a video be compelling enough to capture attention and convince viewers to continue watching. One of the best ways to do this is through frequent cuts or transitions that match fast-paced viewing habits. Similarly, with posts and stories on platforms such as Instagram or LinkedIn, the attention needs to be captured with that first slide or first sentence in order to engage audiences to stop scrolling.

There is no ideal length for a video, and each social media platform has its unique audience and algorithms. As a general guidance, keeping videos short (between 30 seconds to 1.5 minutes) often works well. While short videos tend to perform better, journalists can choose to use longer videos when deeper context demands it. Experiment with different lengths and formats to see what resonates with your audience.

Beyond social videos, environmental journalists can also reach audiences through podcasts, visual explainers, and cross-platform storytelling — formats that engage "climate-fatigued" audiences with accessible, conversational, and solutions-oriented coverage.

5.8. Information integrity and disinformation: History, tactics, and workflows

Environmental issues often intersect with powerful political or economic interests. To shape opinion and influence policy, strategic actors may deploy disinformation — false or misleading information spread deliberately to deceive. Misinformation is false information shared unknowingly, while malinformation uses true information out of context to cause harm. Legal intimidations (such as SLAPP suits) and online harassment are also part of this information control.

For decades, parts of the fossil fuel industry, allied groups, and stakeholders with similarly vested interests have denied or downplayed climate science. Campaigns have included denial networks, misleading advertising about renewable energies, and attacks on journalists, scientists, and activists. More recently, tactics have also included greenwashing, greenhushing, astroturfing (fake grassroots efforts), narrative laundering, and micro-targeted ads.

Platform dynamics amplify these tactics, as sensationalist content spreads faster than nuanced factual information. Algorithmic virality, recommendation loops, and coordinated inauthentic behaviour — including bots, cross-platform reposts, and AI-generated imagery — help mis- and disinformation quickly reach vast audiences and polarize debate.

Disinformation not only discredits journalists, but also floods information spaces with falsehoods, undermining public trust in science and journalism. Well-equipped journalists, newsrooms, and fact checkers can help detect and counter false or misleading content and disinformation campaigns.

Practical guide: A practical process for detecting and countering disinformation

1. **Verify:** Trace the information's origin, and capture and archive the content before it disappears. Work to identify where it first appeared, who produced or funded it, and how it spread across platforms.
2. **Test and fact-check:** Cross-check facts with multiple independent, trustworthy, and transparent sources. Review original studies, datasets, or official records, and consult relevant experts or local reporters to confirm accuracy.
3. **Analyze the frame:** Check for sensationalist claims, selective wording, or misleading comparisons. Note whether the information exaggerates conflict, promotes false balance, or serves particular interests.
4. **Contextualize and communicate:** Place the claim in its wider context. Explain what is missing or misrepresented and highlight verified evidence. When publishing, avoid repeating falsehoods in headlines or visuals, as this can unintentionally amplify them, and be transparent about how the information was verified.

These steps need to be accompanied by actions beyond individual articles.

→ **Prebunk:** *Anticipate common false narratives by keeping yourself updated on disinformation campaigns in the public discourse. Prepare short explainers that expose manipulation techniques.*

- **Collaborate:** *Partner with scientists, fact-checkers, NGOs, data labs, and other journalists for rapid verification and explanation.*
- **Promote media and information literacy:** *Include short notes that explain how and why a story was reported — for example, "how we verified this," "why we are covering this issue," and "why we chose these sources." Such transparency helps build audience trust and understanding of journalistic work.*
- **Newsroom standards:** *Maintain internal verification protocols and a corrections log, linking verification with threat assessment processes when journalists are targeted.*

Key takeaways for journalists CHAPTER 5

Throughout this chapter, we introduced a range of practical approaches for researching, analysing, and telling environmental stories. The list below highlights key techniques you may wish to apply in your daily reporting.

- Start investigations with what is already public — such as company filings, environmental permits, inspection reports, satellite imagery, procurement data, and budget documents — and look for contradictions or gaps.
- Experiment with data tools to uncover patterns in emissions, land use, pollution, or resource extraction. This may include utilizing spreadsheets, basic statistics, mapping platforms, or open satellite imagery.
- Use geo-journalism techniques — such as overlaying protected areas, concessions, and flaring data — to identify hotspots worth visiting on the ground.
- Localize global issues. Show how climate, biodiversity, and pollution trends shape daily life, business, housing, food, or health in the community you are reporting on.
- Humanize your stories by centring people directly affected by environmental change, including women, youth, Indigenous peoples, and persons with disabilities, and make your formats as accessible as possible.
- Apply an environmental justice and gender lens. Ask who faces the greatest risks, who has the least power in decisions, and whose knowledge is ignored, and reflect this in your sourcing and framing.
- Be systematic in checking for greenwashing. Compare corporate or official claims with independent data, timelines, and on-the-ground observations before repeating them.
- Use visuals thoughtfully. Choose images, video, maps, or graphics that accurately portray the context, avoid clichés, and help audiences understand scale, trends, and lived impacts.
- Adapt your storytelling to different platforms. For instance, tailor video length and tone to where your audience is (TikTok, YouTube, Instagram, LinkedIn) and ensure the opening seconds capture attention.
- When reporting claims or viral content, follow verification workflows: trace origins, cross-check with independent evidence, avoid amplifying falsehoods, and be transparent about how you verified information.
- When using AI tools, treat outputs as drafts or leads, keep sensitive data off of external platforms, and clearly document and disclose how AI assisted your work where relevant.

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6. Solutions Journalism in the Environmental Sector

Most environmental reporting, especially climate coverage, has focused on the problems thus far, which makes sense. Scientists talk of crises and emergencies for a reason. This reporting has helped audiences better understand that climate change is already happening and that the environment faces irreparable damage, with significant impacts for everyone worsening by the day. But that's only part of the story — there are also options to address environmental problems.

Reporting on solutions does not mean downplaying the dangers or urging a particular outcome. It means telling the entire story and helping audiences and policymakers make informed choices about what to do going forward. Solutions-focused stories are also what news consumers say they want, as they can be more engaging than traditional problem-focused journalism and more relevant to their own lives.

Like the environmental challenges themselves, the solutions side of the story covers so much ground that it can feel overwhelming. Transformational changes will be required in every major sector — from energy, transportation, and agriculture to housing, finance, and industry — to phase out the burning of fossil fuels, reverse deforestation, and work to restore natural habitats and ecosystems.

But just as the causes and impacts of climate change and environmental degradation deserve to be featured front and centre in journalistic reporting, so do the solutions. Coverage about solutions helps audiences understand what can be done by a wide range of actors, including governments and businesses to change course. Solutions journalism often highlights community-driven and locally adapted responses, especially those led by groups most affected by environmental change. Such stories help connect global challenges with local realities and show how resilience and innovation emerge from the ground up.

Figure 12: From Crisis Coverage to Solutions Coverage

In short, better news coverage is itself an essential part of the solution. As always, this requires journalistic rigor and integrity. Rather than promoting a certain approach, it is about interrogating those approaches to inform the public and policymakers about what works and what does not. The below chapter outlines the variety of solutions related to politics, business and economics, technology, civil society, and culture, and offers a clear framework to guide solutions journalism.

6.1. Politics and government

Policies that shape the economy are arguably the biggest drivers of climate change and therefore have the greatest potential to spur solutions. The private sector, with its control of financial capital, is immensely influential, but it deploys that capital in response to the laws, regulations, and systems of taxes and subsidies imposed by governments. Government policies are necessary to reduce or stop activities which pose a threat to the environment and contribute to climate change, and help people and economies adapt to a warming planet. The action or inaction of governments, from local to global levels, warrants media coverage and scrutiny.

For example, governments may consider putting a price on carbon, with the aim of reducing emissions by incentivizing businesses and consumers to switch to low- or zero-carbon alternatives. This may entail, for instance, putting in place a carbon tax to directly charge emitters, or implementing a cap-and-trade system that sets a limit on greenhouse gas emissions and distributes tradable permits among companies.

6.2. Economics and business

The actions of consumers and companies around the world have profound impacts for climate change and environmental degradation. Their behaviour is strongly influenced by the economic policies, including subsidies, investments, taxes, and regulations, as well as companies' business models and the demands of investors and consumers. Journalists may consider scrutinizing any or all of these factors to gauge how they affect environmental and climate goals. This includes tracking where public and private investment flows, how green-finance mechanisms function in practice, and whether corporate sustainability reporting meets transparency and accountability standards.

As companies make commitments to reduce their environmental footprint and climate impacts, journalists are called to investigate the extent to which these efforts are genuinely effective or greenwashing, as is further discussed in Chapter 5. For instance, often, the "solutions" offered by fossil fuel companies aim to delay rather than embrace the rapid phase-out of fossil fuels that scientific assessments strongly call for. At the same time, it will be important to keep in mind both direct and indirect impacts of company actions and inactions, including in the areas of climate justice and a just transition, for example, to ensure that individuals whose livelihoods currently depend upon the fossil fuel industry are not left behind.

Similar scrutiny is warranted for pledges to achieve "net zero" emissions, a scenario in which a country or company produces no more emissions than it offsets — often by making or financing emissions reductions elsewhere. For example, a company might offset its own emissions by paying someone else to plant trees, but the effectiveness and unintended consequences of this approach are not always clear, and carbon offsets may be abused or worsen environmental injustice. Probing such strategies and their on-the-ground impact is an example of solutions journalism that holds stakeholders accountable.

6.3. Technologies and practices

Technological solutions to climate and environmental crises — including renewable energy sources such as wind and solar, carbon capture, and reforming farming practices, to name a few — are abundant and constantly evolving. Since most of humanity's emissions come from burning fossil fuels, technologies and behaviours that phase out fossil fuels can provide the most bang for the buck. Organizations like Project Drawdown offer resources on current science-based, financially viable, and scalable practices and technologies. They maintain a comprehensive list of a wide variety of climate solutions, which can serve as inspiration for story ideas.

Journalists should also consider who benefits from technological solutions and whether they are accessible, equitable, and culturally appropriate in different contexts. Particularly when covering solutions such as renewable energy technologies, journalists need to be prepared to address common myths and disinformation (see Chapter 5.8). They should also carefully assess real and perceived impacts of the approach under scrutiny.

6.4. Civil society

Civil society, including environmental activists, has a crucial role to play, and solutions reporting should take seriously what civil society representatives seek to achieve, applying the same principles outlined above.

Some newsrooms have been wary of covering activism, for fear that the coverage itself would be perceived as a form of activism and therefore biased — but reporting on a protest, voter registration drive, or any other activist action does not make a journalist an activist any more than covering a ballgame makes them an athlete. As with government and corporate officials, activists can be treated as newsmakers, and their actions covered accurately and fairly. In such cases, solutions coverage should report not only what an activist or group has done, but also evaluate how effective the action is, ideally supported by interviews and insights from scholars and other relevant experts.

Journalists should keep their conclusions open-minded when examining such actions. It can take years for a course of action to bear fruit, and evaluations of impact can vary depending on context and perspective.

6.5. Culture

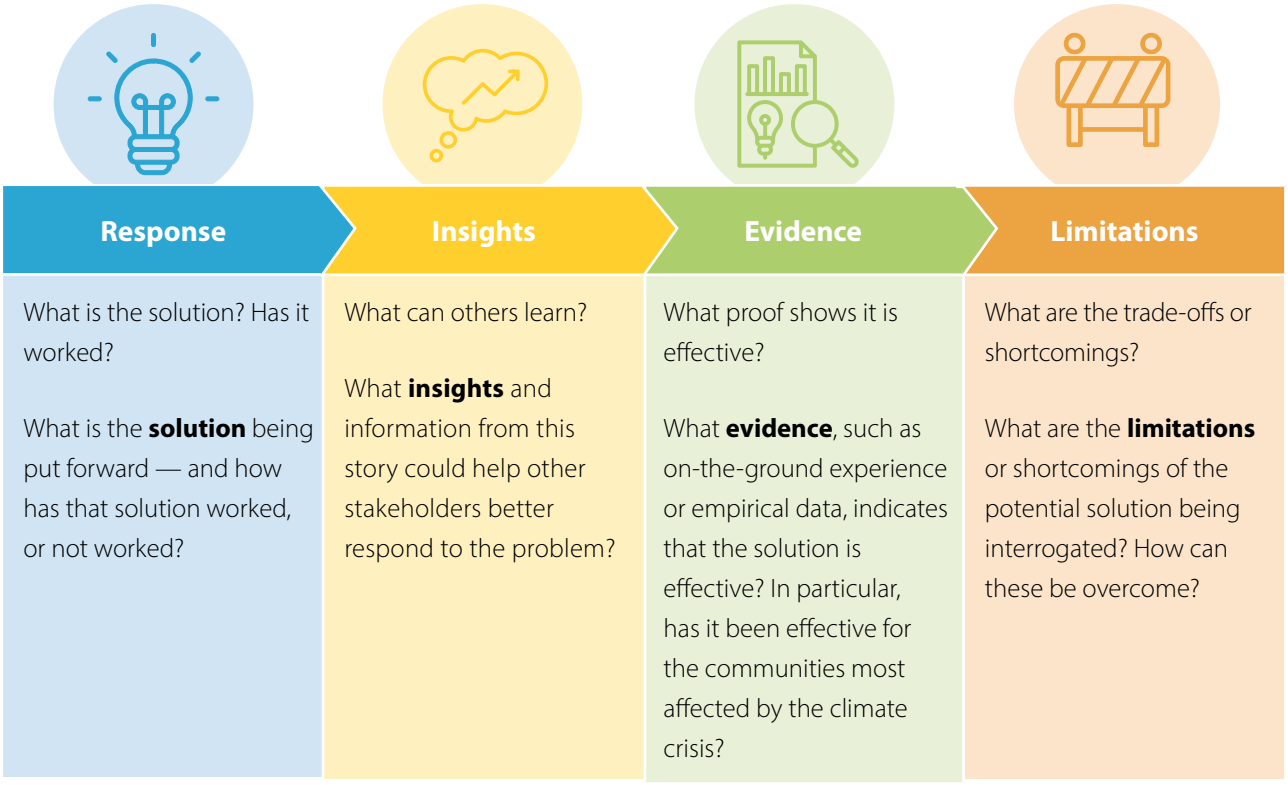
Culture, broadly defined, shapes people's thoughts and inspires them to action. As discussed in the *Environmental Humanities* box (Box 1, Chapter 2), cultural practices and traditions — including those of Indigenous and local communities — also offer valuable lessons for environmental solutions. These worldviews and knowledge systems often emphasize balance, reciprocity, and long-term stewardship of natural resources, offering insights for adaptation and resilience. Drawing from such practices, alongside contemporary innovations, allows journalists to show how culture itself can be a source of environmental solutions.

In recent years, artists, entertainers, and public figures have increasingly brought attention to the environmental cause and climate change through music, movies, television, literature, and the visual arts. Covering cultural expression helps the climate story reach new audiences.

6.6. A framework for solutions reporting

A framework developed by the Solutions Journalism Network (SJN) provides guidelines for solutions reporting that can readily be applied to coverage of climate and environment. SJN encourages journalists to consider the following questions in such reporting:

Figure 13: Four Questions for Solutions Reporting



Journalists may also wish to apply this framework by reworking a conventional "problem" story into a "solutions" story, as a practical exercise in applying the four pillars — response, evidence, insight, and limitations.

Key takeaways for journalists

CHAPTER 6

- Start solutions stories by clearly defining the problem and its scale to ensure that audiences understand what the response is trying to address.
- Focus on responses, not just intentions: investigate policies, technologies, business models, or community initiatives, and interrogate their claims rather than presenting them at face value.
- Look for evidence: ask for data, independent evaluations, or real-world results, and talk to both beneficiaries and critics to assess effectiveness.
- Examine limitations, trade-offs, and unintended consequences of each solution, including equity impacts (who can access it, who is excluded, and who carries the risks).
- Follow public and private finance flows to see which "solutions" are heavily promoted and whether they genuinely align with climate, biodiversity, and justice goals.
- Highlight community-driven and Indigenous-led solutions, especially where they challenge dominant models of development or resource use.
- Show how lessons from one place might (or might not) be adapted elsewhere, being explicit about contextual differences such as law, culture, or infrastructure.

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7. Safety of Environmental Journalists

Covering environmental stories often entails physical, digital, and legal risks. Between 2009 and 2023, at least 749 journalists, media outlets, and reporting teams covering environmental issues were attacked in 89 countries, demonstrating a growing threat evident in all regions of the world. And risks increase sharply when investigations challenge the interests of powerful political or business actors — journalists may uncover criminal networks that profit from exploiting forests and natural resources, damaging ecosystems and the livelihoods of dependent communities. Revealing these hidden links exposes journalists to heightened threats and retaliation.

Assessing risks can be difficult but is vital, especially in contexts where illegality is widespread or the rule of law is weak. Shifting power dynamics can make even experienced reporters vulnerable, and may limit the reliability of local knowledge and contacts. Safety awareness and preparedness are therefore essential. A systematic, organization-wide safety approach helps journalists, teams, and sources reduce risk and respond effectively. Clear safety plans, training, and protocols are vital, even when time and resources are limited.

With growing recognition of these dangers, more newsrooms are integrating safety measures into environmental reporting. This chapter outlines key steps to strengthen security from investigation to publication, including risk assessment and safety protocols for journalists and their sources.

7.1. Risk assessment

Zero risk does not exist. A story that might seem harmless at first glance can become risky if, for instance, the person behind an environmental crime turns out to be a high-profile figure. Mining that pollutes the rivers of a local or Indigenous community, for example, may be backed by powerful corporations with political connections. It is therefore essential to assess all potential risks before undertaking an environmental story.

Assessing the risks means mapping and evaluating the threats that may arise during reporting. Organizations often classify risks by likelihood and severity (very high, high, medium, low, very low). Conducting a sound risk

assessment requires understanding the context in which the reporting takes place and should begin early in the investigation, not just before fieldwork.

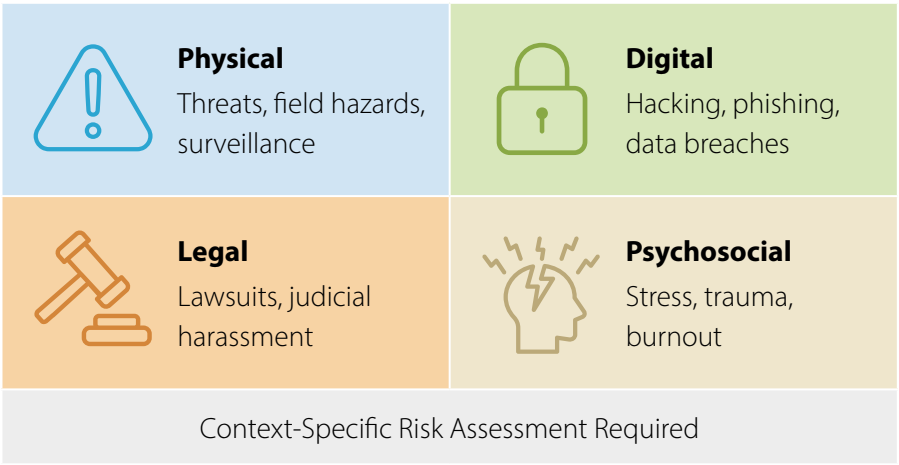
"There is no way to enter the field without understanding the geographical, social, and political characteristics of the territory where the research will take place — and ensuring that this knowledge is shared among the entire team: reporters, editors, and project coordinators."

> — Bram Ebus, who coordinated the Amazon Underworld project, which entailed an international team of 37 journalists and media professionals on a 16-month investigation of armed groups and illicit economies in the border regions of six Amazon countries.

Environmental journalists should analyze the socioeconomic, cultural, and political forces that shape their subject and identify actors and stakeholders with official or potential hidden interests. Knowing the local media landscape, laws governing freedom of expression, and the degree of respect for the rule of law are also key elements of risk assessment.

During fieldwork, teams should map local conflicts, transport routes and exits, access to water, electricity or internet, and the behaviour and culture of communities and stakeholders. Team members should jointly identify potential threats and agree on mitigation measures. Consulting security experts with contextual experience can also provide valuable insight.

Figure 9: Main Risk Categories in Journalism



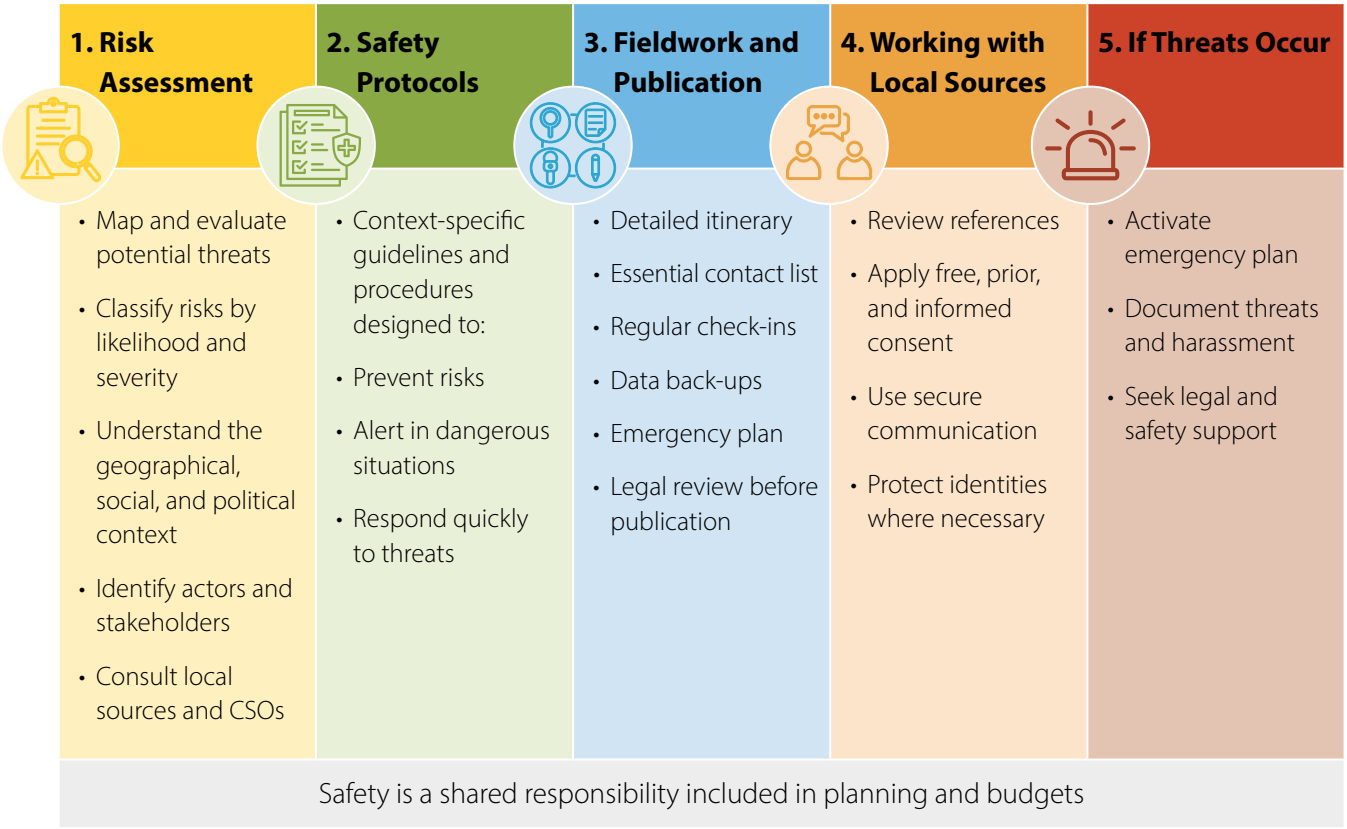
Tips: Assessing the risks in environmental investigations

- Consult local sources or networks of journalists for preliminary information.
- Review existing news coverage of the areas involved in the investigation.
- When possible, make preliminary visits to assess on-the-ground conditions and plan the field trip.
- Talk with local civil society organizations and researchers to gather contextual information.

7.2. Safety protocols

Safety protocols are context-specific guidelines and procedures designed to prevent risks, alert in dangerous situations, or respond quickly to threats to journalists, their newsrooms, or their sources. They are developed collaboratively by team members based on a prior risk assessment and contextual information about the reporting or investigative area. Effective safety protocols also provide a rapid response mechanism and contingency plans for emergencies.

Figure 10: Safety of Environmental Journalists



Several organizations specializing in environmental journalism have developed such protocols covering online research, fieldwork, and publication. For example, phone or online communications among team members conducting environmental investigations may be monitored by government authorities or criminal networks, highlighting the need for secure channels and data protection. The following categories outline the main types of risks and corresponding protocols that can guide newsroom preparedness.

TYPES OF RISKS	PROTOCOL
Physical risks Threats, fieldwork hazards, attacks, intimidation, or surveillance, especially when covering remote sites, illegal resource extraction, or environmental protest.	Maintain discreet travel plans, secure logistics, regular check-ins, and updated emergency contacts.
Digital risks Hacking, phishing, or data leaks, particularly when investigations expose powerful economic or political interests in natural resources.	Use encrypted communication, secure cloud storage, strong password management, and regular software updates.
Legal risks Lawsuits, defamation claims, or judicial harassment linked to reporting on corporate misconduct, corruption, or land and resource conflicts.	Consult media lawyers before publication, especially when stories involve powerful economic or political actors.
Information security risks Loss or theft of collected data, such as GPS coordinates, imagery, or field evidence that could expose sensitive sites or sources.	Back up field data in multiple locations and use secure transfer methods.
Psychological risks Stress, trauma, and burnout from exposure to environmental destruction, threats, or community suffering.	Set clear work–life boundaries, schedule rest periods, and ensure peer or professional support when needed.

Following a rigorous risk assessment, the security protocol is implemented within the newsroom or network of journalists working jointly on a story. It should be gender-responsive and take into account specific risks based on gender, ethnicity, or other personal characteristics. Before field reporting, additional measures are designed and adapted to the specific context during field visits. These too must be tailored to the context.

✓ Checklist: Key elements for an effective security protocol

- **Detailed itinerary**: Include dates, times, sites to visit, and people to interview.
- **Essential contact list**: Include the contact details of field team members, key sources, trusted community leaders, authorities, and embassies.
- **Regular check-ins**: Scheduled at the start, middle, and end of each day.
- **Data back-ups:** Use multiple memory cards and secure cloud storage for transferring and protecting collected materials.
- **Geolocation tracking tools:** Particularly important when reporting in remote or high-risk areas with poor network coverage, enabling communication within the team and any necessary emergency alerts.
- **Emergency plan:** Pre-defined steps and contact chains to activate in case of danger.

At the editing and publication stage, safety protocols should include legal review by lawyers familiar with relevant national laws and the actors involved, particularly when reporting on issues with major economic interests. Pre-publication legal review has proven effective in preventing lawsuits and strengthening journalists' defence if challenged in court. When resources are limited, journalists should seek pro-bono or low-bono legal support.

7.3. Dealing with (local) sources

Local sources can be extremely valuable in environmental journalism, as discussed in Chapter 3. Working with them requires caution, as both journalists and their sources may face risks. Security experts recommend that environmental reporters take specific measures to ensure the safety of all involved, particularly local collaborators.

Local sources can include a wide range of people, from experts and activists to ordinary citizens. Fixers or guides familiar with the sociocultural, economic, and political context are often invaluable for planning logistics and navigating sensitive environments.

Before engaging, journalists may need to carefully consider the individuals they intend to turn to for information. Reviewing past reporting, speaking with civil society actors or researchers who have worked with those sources, and verifying references can help build a profile of each source, understand their reliability and potential risks, and avoid manipulation or entrapment.

When working with local sources, it is good practice to apply the human rights principle of "free, prior, and informed consent" (FPIC). This ensures that sources fully understand the implications of participating in a story, the potential risks they face, and the options for protecting their identity. For instance, a community member helping to expose environmental damage by a powerful company may wish to speak openly but could face reprisals after publication. FPIC helps them make an informed decision about whether to appear on record or anonymously.

Ensuring source safety may also involve using secure communications channels, meeting in safe locations, or anonymizing identities. Journalists can encourage sources to use encrypted apps, arrange meetings outside of their communities, or protect identities through the use of pseudonyms, data visualizations, or illustrations instead of photos.

Promoting safety in environmental journalism is a shared responsibility, involving editors, managers, freelancers, and reporters, as well as sources themselves. Everyone involved should be aware of their role and collaborate closely towards this goal. A safety-first approach does not need to be costly, but should be included in planning and budgets, including in grants or story pitches. Increasingly, journalism networks and associations offer safety resources and peer support remains a vital element of protection.

Info box 7

Asad Asnawi: Protection against retaliation from criminal actors

About

Asad Asnawi is a journalist based in East Java, Indonesia, specializing in "nature crime" reporting.

Challenge

Risk of backlash from actors implicated in investigations

Practical experience

The term "nature crime" covers activities from poaching and unreported fishing to illegal mining and land conversion. Investigating and uncovering these crimes poses significant risks of retaliation against journalists, sources, and whistleblowers. Safety measures must therefore be integrated from the outset of the investigation, through to publication.

According to Asnawi, rigorous fact-checking is a key safeguard: presenting indisputable facts reduces the risk of lawsuits. Cooperation with organizations offering legal support to journalists (see the Resources webpage) further helps address concerns before and after publication. Digital safety protocols — including VPNs, secure backups, and source anonymization — are also essential.

A persistent challenge is the scarcity of reliable data and documents, which raises the risk of inaccuracies and legal exposure. Using verified data and real-time monitoring platforms helps provide solid evidence and counter retaliatory or misleading narratives. All collected evidence and documentation should be securely stored and backed up.

Safety training is critical for journalists investigating nature crimes, and dedicated financial support can enable the establishment of safe houses for those facing high personal risks.

Lessons learned

- Strategic use of trusted digital tools enhances both depth of reporting and safety.
- Protecting vulnerable sources is vital to the integrity of investigations.

Key takeaways for journalists CHAPTER 7

- Conduct a risk assessment before you start. Map potential physical, digital, legal, and psychological risks related to your story, actors, and locations.
- Develop a simple safety protocol for each assignment (even as a freelancer). Include a travel plan, check-in schedule, emergency contacts, and clear rules for what to do if communication fails, taking into account gender- and identity-specific risks.
- Use secure communication and storage methods — such as encrypted messaging, password managers, and secure backups — when dealing with sensitive data, locations, or sources.
- Apply "free, prior, and informed consent" when working with local sources. Explain potential risks of being named or identifiable, and agree on anonymity or pseudonyms if needed.
- Coordinate with editors, partners, or supporting organizations on legal review when your reporting involves powerful actors, organised crime, or serious allegations.
- Document threats, harassment, or attempts at intimidation, and seek support from legal, safety, or press freedom organizations where available.
- Build in time and space to process emotionally heavy stories, and, where possible, use peer or professional support to manage stress and avoid burnout.

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8. Organizing Environmental Journalism

Environmental issues are complex, multidisciplinary, and increasingly urgent. To report on them, news organizations need structures to support an integrated approach — one that combines specialized expertise with the integration of environmental topics into everyday reporting.

8.1. Environmental journalism in the newsroom

A dedicated environmental desk with trained reporters and editors in science, policy, and related fields forms the core of professional expertise in environmental coverage. Such teams lead investigations and major stories on climate change, pollution, and biodiversity. Yet, few outlets can afford such specialized units, and even when they exist, environmental coverage risks remaining a niche beside politics, business, or culture.

To avoid silos, newsrooms should foster collaboration between the environmental desk and other beats — such as politics, economics, health, science, and international affairs — so that environmental angles are part of wider narratives.

Ideally, all newsroom staff could receive regular training to improve environmental literacy. However, because time and budgets rarely allow for that, many outlets rely on one environmental specialist who can advise colleagues and inform story development. This practice builds newsroom-wide environmental literacy and accuracy.

Given the complexity of environmental stories, coverage should also involve data and multimedia teams to create interactive graphics, videos, and podcasts that help make environmental issues clear and engaging.

✓ Checklist: Operationalizing the environment beat in the newsroom

- **Daily check-in:** Add a short "environmental angle" prompt to editorial meetings.
- **Cross-desk pairing:** Match a beat reporter with the environmental lead.
- **Quarterly theme:** Choose a shared focus (e.g., water stress) for coordinated coverage using common data and visuals.
- **Source commons:** Keep a newsroom database of experts, scientists, communities, NGOs, and regulators, with notes on access and risk.

Ultimately, newsroom management and leadership should ensure structures that combine a small expert team with newsroom-wide environmental literacy, collaborative workflows, and flexible editorial routines so that environmental stories get due attention and have impact.

8.2. Training environmental journalists

The complexities of the field and issue areas, as discussed above, require some specialized skills for environmental journalists to be successful. In addition to foundational training in media and information literacy (MIL), as well as critical thinking, ethical reporting, and storytelling, journalists covering environmental issues may also need to build their scientific literacy and understanding of policy and regulation.

Scientific literacy: Environmental topics often involve technical details, like climate data, biodiversity loss, pollution statistics, and renewable energy technologies. A solid understanding of these concepts can prepare journalists to accurately translate complex topics and research into clear, accessible language.

Policy literacy: Understanding how government actions, corporate practices, and international agreements shape the environment enables journalists to see the connections, hold stakeholders accountable, and explain broader implications and context.

MIL and critical thinking: All journalists navigate abundant information, and environmental reporting often demands assessing conflicting data or biased sources. It is important to integrate MIL into training for verification, context, and audience awareness (see UNESCO's Media and Information Literacy in Journalism).

Ethical reporting: A key competency for all journalists, it is necessary to uphold accuracy and fairness, avoid sensationalism, and respect the voices of affected communities, especially marginalized groups and those most impacted by environmental harm. Chapter 9 further discusses the specific dilemmas that environmental journalists can be prepared to grapple with.

Storytelling: The success of environmental coverage may, to some extent, rely upon a journalist's ability to turn distant or technical problems into relatable narratives. This includes, for instance, using creative formats that inform and inspire. Chapter 5 offers further discussion of story ideas, reporting techniques, and audience engagement.

Whom to train

Training can extend beyond dedicated environmental reporters, helping to avoid silos in the newsroom and highlight areas of overlap among different beats. Building environmental awareness among reporters who cover politics, business, health, and science can help identify new and relevant story angles. Similarly, investigative teams may benefit from understanding key concepts to pursue cross-cutting stories.

Editors, producers, and digital content producers often play a key role in recognizing environmental relevance across formats — including print, broadcast, web, and social video — which helps ensure sufficient attention to, accuracy, and visibility of environmental stories. At the same time, photojournalists and multimedia teams can ensure that visuals accurately reflect environmental realities and support clear, data-driven storytelling that resonates.

8.3. Collaboration in environmental journalism

The transnational nature of environmental issues adds layers of complexity to journalistic work. Many of the sectors under scrutiny, ranging from energy and mining to agribusiness and transport, operate across borders and through potentially opaque financial structures. Illegal economies and organized crime also threaten some of the world's most biodiverse yet vulnerable ecosystems.

Collaborations between journalists are an effective way to confront these challenges. Over the past decade, multidisciplinary and transnational collaborations have increased, often driven by security concerns, data access needs, or the value of local knowledge. Such cooperation offers several advantages:

- Greater access to information, such as pooled data sources and multilingual documentation;
- More skills by combining expertise in data, visual, and investigative techniques;
- More diversity through the inclusion of journalists from different regions and backgrounds;
- Greater reach, such as cross-border publication;
- Greater impact through coordinated stories and campaigns; and
- Greater security through shared responsibility, reducing individual exposure to risk.

A good collaboration rests on three foundational pillars:

1. **Solid data analysis to ensure factual depth.**
2. **Rigorous and relevant fieldwork grounded in local realities.**
3. **Integration of work into a network, meaning that findings are shared within a wider community of journalists and partners to enhance reach and verification.**

Success depends on assembling teams with complementary experience and clear communications channels. Criteria for secure information exchange should be agreed upon early, and collaborators may formalize these through memoranda of understanding (MoUs) outlining data access, confidentiality, and publication procedures.

Once these frameworks are in place, collaborative teams can begin addressing complex topics through shared evidence and data. Access to or creation of reliable databases is often essential — for example, when tracing supply chains of commodities such as meat, soy, palm oil, or minerals, or investigating illegal networks that exploit natural resources. While data availability may differ by country, collaborative and often transnational teams can combine complementary skills to navigate and analyze vast datasets more effectively.

Working within networks

Diversity of resources and people in a project is often beneficial to journalism projects. The multiplicity of perspectives, skills, and knowledge allows journalists to get to the heart of highly complex environmental issues. Specialized journalist networks have proven to be successful cooperation platforms, and may also collaborate to publish major reports. Among them are specialized networks such as the Earth Journalism Network, Environmental Reporters Collective, and Ocean Reporting Network, which have provided proven platforms for cooperation. Regional and national networks, like the Arab Investigative Journalism Network (ARIJ) and the Brazilian Association of Investigative Journalism (Abraji), can also identify and strengthen opportunities for collaboration.

Some media organizations have established their own collaborative initiatives to increase diversity and local engagement, and to more effectively cover vast regions and issue areas. Networks make it possible to capture a fuller picture of environmental dynamics and impact across borders. Such networks can also help extend journalists' access to training programmes that strengthen core skills in areas like data analysis, satellite imagery, and using satellite images and maps in environmental reporting.

The trend towards greater collaborations, above all, reflects the importance of involving local outlets and journalists in major environmental coverage, as their knowledge and access are vital for credible and inclusive reporting.

Whole-of-society collaboration

Environmental journalism benefits from partnerships that extend beyond media circles. Collaborating with scientists, community leaders, humanitarian actors, educators, and public institutions enhances accuracy, relevance, public trust, and potential impact. Engaging with state actors, where political conditions allow — not just as sources (see Chapter 3.1) or subjects of investigation, but as dialogue partners — can also foster transparency and strengthen the culture of evidence-based policymaking.

In recent years, some of the most influential investigations have involved partnerships between journalists and civil society experts. To maintain credibility, journalists need to understand each potential partner's mission and funding sources, and ensure reporting remains independent of advocacy goals.

Such partnerships can bring in valuable expertise, and tools like Global Forest Watch (World Resources Institute) and Earth Index (Earth Genome) demonstrate how NGO-led innovation can support investigations. In many contexts, activists and local associations may also be able to facilitate safe access to remote or high-risk areas, including Indigenous territories, while helping journalists engage communities respectfully and securely.

Info box 8

Bhrikuti Rai: The power of cooperation

About

Bhrikuti Rai is a Nepali journalist who reports on human rights, the environment, and migration.

Challenges

Lack of specialized environmental journalists on staff

Risk of retaliation by individuals or companies covered by a story

Practical experience

Breaking down complex environment-related topics into clear, engaging stories can be particularly challenging for journalists without specialized knowledge in the field and working on a deadline. Media professionals are often left with a difficult choice: publish broad articles with a risk of factual inaccuracies, or report reactively on specific events with limited insights on the broader context.

Rai notes that a network of trusted external experts — including civil society organizations, scientists, or freelance journalists who focus on environmental issues — is crucial in such situations. Collaboration partners can help reporters link complex environmental issues to tangible stories, creating relatable narratives that highlight the consequences of environmental degradation.

When covering sensitive issues that may lead to retaliation, broad collaboration with multiple partners, like several newsrooms working together on a special investigative series, can also help spread and mitigate the risk of lawsuits and other forms of targeted harassment, creating a sense of solidarity and protection.

While civil society representatives and researchers will appreciate gaining visibility for their work through media coverage, journalists should be aware of potential biases and avoid becoming spokespersons for any single organization or expert.

Lessons learned

- Reliable contacts can provide journalists with information and access to useful resources, including specialized expertise, unpublished research, or direct quotes.
- Collaborative journalistic projects not only help ensure greater accuracy, but also limit the risk of retaliation and promote visibility.

8.4. Funding environmental journalism: Challenges and approaches

Quality coverage is resource-intensive, demanding expertise, time for in-depth investigation, and multimedia work. And though awareness of environmental issues has grown, funding remains scarce, and outlets around the world are facing increasing obstacles to achieving financial viability.

Private outlets typically rely on subscriptions, advertising, and sponsorships. Environmental coverage can strengthen these revenues by highlighting its value while attracting potential new audiences. For instance, an outlet may develop a special environmental section that could be monetized through targeted advertising or premium subscriptions. Such reader-driven opportunities and diversified sources of revenue are all the more important as official development aid to the media sector remains limited and international donor priorities shift.

Philanthropic foundations increasingly recognize the importance of environmental journalism and often provide grants or project-based funding. Organizations like the Pulitzer Center, the Knight Foundation, the ClimateWorks Foundation, and the Ford Foundation, among others, have supported investigative reporting, training programmes, and specific environmental initiatives. Local and international NGOs focused on conservation, climate change, or social justice may also partner with media outlets to fund relevant reporting. More broadly, multilateral organizations and international organizations such as UNESCO, UNEP, and the International Center for Journalists (ICFJ), for instance, frequently prioritize environmental issues and provide grants to strengthen local journalism. Initiatives like Report for the World also offer innovative models, funding reporters directly within local newsrooms to increase coverage of underreported environmental issues.

While such grants are valuable, as with much other media development support, they can be short-term and project-specific, and require time for regular fundraising, proposal preparations, and reporting requirements. It is also vital to ensure that grant-supported work does not impede editorial independence or inadvertently steer coverage away from local needs or priorities. Where possible, long-term, core funding is ideal to support an outlet's sustainability and improve newsroom operations and staff capacities in line with their identified needs.

Faced with financial obstacles, some outlets have also looked to pool resources. Collaborations between media outlets, academic institutions, and environmental organizations, as discussed in Chapter 7.3, can reduce costs and increase reach and impact. Direct support from audiences, including through crowdsource platforms like ThundaFund or Ideame, may also help environmental journalists launch campaigns for specific investigations or ensure ongoing coverage.

The private sector may also offer opportunities for funding, as some corporations support environmental journalism and sustainability initiatives as part of their corporate social responsibility (CSR) programs. Again, however, maintaining editorial independence is paramount to avoid conflicts of interest or perceived bias. Similarly, while integrating branded content aligned with environmental themes can help fill funding gaps, it can also raise ethical concerns if it is perceived as blurring editorial boundaries. It is vital to be as transparent as possible regarding received funds, donors, and sponsored content, and uphold professional journalistic integrity throughout.

Opportunities for direct support or capacity building may also be available at national and regional levels, another key benefit of tapping into available networks. For instance, some countries have established media development funds or press councils that provide grants for special projects, including environmental journalism. Regional journalism networks or consortia, such as the Earth Journalism Network Asia-Pacific, may also offer funding, training, and collaboration opportunities. At the national level, public broadcasters or government-

supported media funds may provide resources for environmental journalism, recognizing it as a public good. Such funding can sustain investigative and educational reporting but requires careful management to safeguard editorial independence and ensure transparency and fairness in how funds are allocated.

As discussed above, investment in training local journalists in environmental reporting enhances both the quality and credibility of the reporting, which can also, in turn, make it easier to attract funding. Some donors now prioritize grants that combine financial support with capacity development to ensure long-term impact.

Figure 11: Funding ecosystem for environmental journalism

Key takeaways for journalists CHAPTER 8

- Introduce a simple "environmental angle" question into editorial meetings: for each major story, ask how it connects to climate, biodiversity, pollution, or resource use.
- Help your newsroom keep a shared list of environmental experts, local contacts, and useful data sources, including notes on accessibility, availability, and any risks.
- Encourage cross-beat collaboration. For instance, pair environmental reporters with politics, business, health, or culture reporters to co-produce stories with richer context.
- Participate in or initiate collaborations with other newsrooms, networks, and relevant external partners, such as scientists or community organizations, for cross-border or data-heavy investigations, especially when tracking global companies or supply chains.
- Be transparent about who funds environmental projects and how that funding is managed internally. Insist on clear editorial independence from donors and sponsors.
- Think beyond single stories. Consider pitching a thematic series or ongoing beats — for instance, on water, energy transition, urban air quality, or land conflicts — to build depth and audience loyalty.
- When planning big projects, budget for safety, translation, data work, and fair compensation for local partners and freelancers, particularly those in high-risk areas.

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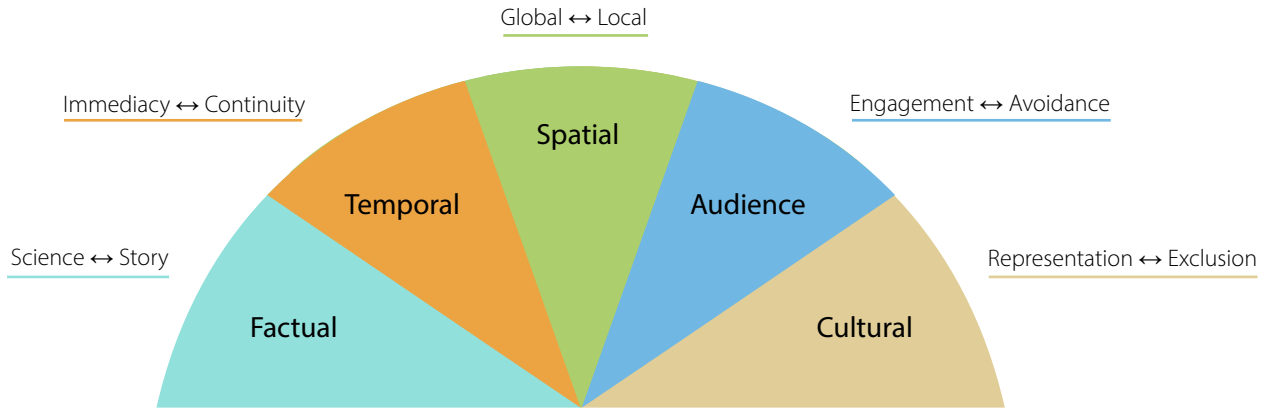
9. Journalism Ethics in Environmental Reporting

Journalists reporting on environmental issues do more than convey information: they interpret complex scientific findings, mediate between expert knowledge and public understanding, and hold powerful institutions to account. News media remain the primary source of climate change information for much of the public, placing environmental reporting at the intersection of science, politics, activism, and public sentiment. This position brings with it distinctive challenges: informing audiences without inducing fatigue or despair, investigating with rigour while avoiding partisan framing, and connecting global environmental processes to local experiences. These challenges are not merely technical, or editorial — they are fundamentally ethical.

Understanding what makes them ethical requires attention to the conditions under which environmental journalists work. Climate change is scientifically complex, unfolds over long timeframes, and remains contested in political and cultural arenas. Journalists often operate under scientific uncertainty, navigate institutional and commercial pressures, and confront public disengagement, all while being expected to uphold accuracy, fairness, and the public's right to know about this existential crisis.

Various editorial dilemmas derive from these tensions, and there is no single rulebook. This chapter outlines five dimensions — factual, temporal, spatial, audience, and cultural — to guide reflections on professional choices and practices. As discussed in Chapter 7.4, editorial independence and transparent funding remain essential to maintaining high professional standards in environmental journalism.

Figure 14: Balancing Ethical Dimensions in Environmental Journalism



9.1. Factual dimension: Journalistic storytelling and scientific reporting

One of the most persistent ethical tensions in environmental journalism lies in balancing narrative storytelling with scientific reporting. Journalists seek to engage audiences through human-centred stories, while environmental science is data-driven and provisional. This creates a dual responsibility to make complex information accessible and meaningful without oversimplifying or distorting the facts.

APPROACHING THE DILEMMA	ASPECTS TO CONSIDER IN PRACTICE:
The factual dimension of environmental journalism is not about choosing between science and story, but about cultivating practices where accuracy and accessibility can reinforce each other. Meeting these standards requires humility about the limits of knowledge, collaboration across disciplines and communities, and a commitment to the public's right to understand the world they are being asked to care for.	• Do the voices and perspectives in this story accurately reflect their significance in reality? • Are the covered aspects of an issue the most relevant ones, or have they been put on the agenda by special interest groups? • Have I avoided giving undue attention to "fringe" or "denialist" positions? • Have I sufficiently simplified the story or situation without distorting or misrepresenting the facts? • Are my sources, data, and methods transparent, and do I clarify their limitations in order to prevent misinterpretation or unwarranted confidence in the findings and their broader implications?

9.2. Time dimension: Breaking news and long-term observation

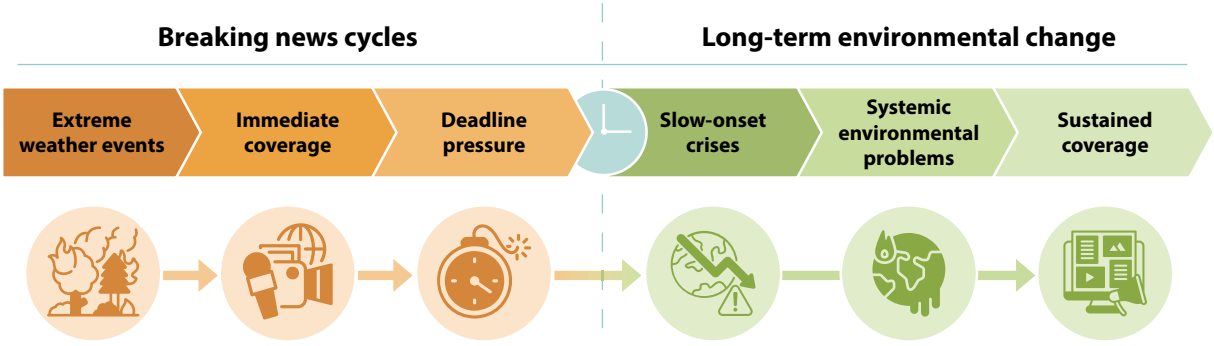
Environmental journalism is shaped by time: the urgency of fast-moving extreme weather events fuelled by climate change, such as wildfires, floods, and droughts, demands immediate coverage, often under intense deadline pressure. Yet, the ecological processes underlying these events often unfold slowly, across years or decades. This creates a fundamental tension between the breaking news cycles and the long-term nature of environmental change.

For instance, sudden-onset disasters such as floods and wildfires are an essential part of environmental journalism and catch public attention — but slow-onset crises (e.g., soil degradation or ocean acidification), which often underpin these disasters in the first place, rarely receive comparable attention. Ethical disaster reporting requires the ability to verify under pressure.

Focusing on an episodic event alone fails to demonstrate the systemic character of ecological collapse, and one-off reports cannot substitute for sustained coverage that traces causes, consequences, and long-term responses. For example, recognizing this, Climate Tracker, a youth-led organization that supports reporters across the Global South, trains journalists to conduct multi-month investigations into systemic environmental problems. In the Philippines, for instance, Climate Tracker has supported stories on the energy transition and farming that go beyond isolated factoids, weaving together testimonies, policy analysis, and clear journalistic angles to frame complex issues in ways accessible to wider audiences.

APPROACHING THE DILEMMA	ASPECTS TO CONSIDER IN PRACTICE:
Ethical environmental journalism often looks beyond immediacy and commits to continuity, foresight, and narrative patience. What matters is not choosing between short- or long-term coverage, but linking them: connecting immediate events to longer-term environmental processes and responses. Strengthening these skills ensures that rapid and in-depth forms of environmental reporting complement each other.	• What is the balance between short-term events, their long-term impacts, and slow-onset crises in my reporting? • When reporting on individual catastrophic events, is there sufficient context given regarding the political, scientific, and social dimensions? • Is there a link from short-term events to longer-term developments provided in the reporting?

Figure 15: Breaking News and Long-Term Environmental Change



Link short-term events to longer-term processes and responses

9.3. Spatial dimension: Localising journalism

Environmental degradation and climate change are global issues, but their impacts are experienced unevenly across places and communities. Rising sea levels threaten small island states, drought intensifies agrarian crises in sub-Saharan Africa, and heatwaves strain urban infrastructures in Europe. Yet international reporting often flattens these differences, framing climate change, pollution, and biodiversity loss as universal problems without attending to local realities. The ethical challenge of the spatial dimension lies in *localisation* — making global processes legible in specific contexts while avoiding provincialism or neglect of transnational connections.

This localisation has implications for both the sources and content of environmental coverage. Often, reporting relies on experts from the Global North, sidelining scientists and practitioners with local knowledge. To counter this imbalance, the Reuters Institute and Carbon Brief launched the Global South Climate Database, linking journalists with experts from Africa, Asia, Latin America, and the Pacific. At the newsroom level, Mongabay India provides another practical model, frequently collaborating with district-level reporters to cover sand mining, mangrove loss, and community conservation.

Similarly, much environmental reporting focuses on international summits or national policies, neglecting subnational dynamics that directly impact people's daily lives. Locally grounded investigative reporting can reveal how environmental decisions and resource management can shape communities' rights, livelihoods, and access to services. It can also show how power dynamics and governance frameworks influence outcomes at the community level, underscoring the importance of sustained presence and contextual knowledge. Ethical environmental journalism recognizes place not only as backdrop but as an active dimension of knowledge and justice.

APPROACHING THE DILEMMA	ASPECTS TO CONSIDER IN PRACTICE:
Spatial awareness means recognising the diversity of contexts and amplifying underrepresented voices so that environmental coverage reflects both the global systems and the local realities shaping them. To do this, ethical environmental journalism may need to recognise the complexity of place, its histories, politics, ecologies, and communities. It asks not only "where is the story?" but also "who tells it, who benefits, and who is left out?"	• What determines a story's relevance in geographical and cultural terms? Reflect on which stories are selected, especially regarding their geographic origin. Are smaller events nearby more newsworthy or relevant than larger but distant ones? • Whose expertise and perspectives are represented, and whose are missing? • What is the balance between global, national, and local scales?

9.4. Audience dimension: Dealing with news avoidance

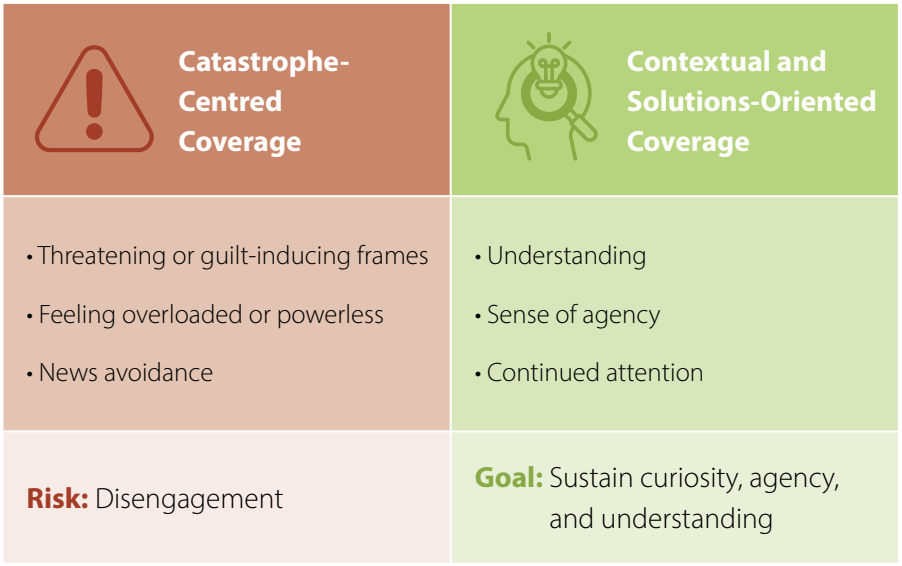
- Every act of journalism involves an implicit relationship with its audience. Decisions about tone, framing, and format are shaped not only by editorial priorities, but also by expectations of how the public will respond. In environmental reporting, this relationship carries particular weight: climate change is both urgent and overwhelming, and audiences rely heavily on journalists to make sense of a crisis that often feels unmanageable.

- When people feel overloaded or powerless, they may actively disengage altogether, a phenomenon known as news avoidance. Research shows that repeated exposure to threatening or guilt-inducing frames can prompt disengagement, while catastrophe-centred coverage risks fostering fatalism rather than motivation. The challenge is to resonate with readers without fuelling disengagement.

This requires communication that informs audiences without overwhelming, challenges without alienating, and mobilises without manipulating. Evidence suggests that audiences respond positively to stories that show how individuals, organizations, and communities address environmental challenges. For instance, see Chapter 8 for further discussion on solutions journalism. At the same time, journalists may need to be careful not to present incremental fixes as sufficient or obscure systemic causes.

APPROACHING THE DILEMMA	ASPECTS TO CONSIDER IN PRACTICE:
Ethical engagement may involve listening to audiences, recognising their emotional states, and treating them not merely as consumers of information, but as co-navigators of a shared planetary future. Engage audiences in ways that sustain curiosity, agency, and understanding.	• Does the coverage provide avenues for audiences to engage, for example, through local examples and feedback channels? • To what extent does the coverage trigger feelings of sadness, guilt, exhaustion, or hopelessness? • Does the article present solutions?

Figure 16: Audience Fatigue vs. Constructive Engagement



9.5. Cultural dimension: Navigating values, symbols, and worldviews

Environmental journalism does not simply report facts; it is produced and circulated within cultural contexts that shape its meaning. Media narratives that ignore this context rest on weak footing — for instance, by reproducing colonial hierarchies, over-representing Western perspectives, or oversimplifying issues in the Global South, framing it as zones of disaster or vulnerability. The cultural dimension underscores the importance of recognising that how stories are told — through language, metaphor, and imagery — determines whose perspectives are amplified or excluded.

For instance, reporting filtered through English or other dominant languages can flatten nuance, mistranslate cultural meanings, or sideline audiences who consume news in regional tongues. Analysis of Indian coverage of the 2022 heatwave showed that English-language outlets were more likely to link the event to climate change than Hindi or regional-language papers, leaving large sections of the public with less understanding of its structural causes. Similarly, metaphors and symbols carry different meanings. In some contexts, religious language frames extreme weather as divine punishment; in others, nationalist narratives present crises as threats to sovereignty. Ethical environmental reporting requires recognising such frameworks without either dismissing them as unscientific or reproducing them uncritically.

Visuals — a key tool for engaging your audience and conveying meaning themselves (see Chapter 5.5) — also carry cultural weight, and while images like polar bears adrift on melting ice or aerial shots of burning forests have become globally recognizable, they may not resonate everywhere. At the same time, the visual vocabulary of climate change, with urban narratives that celebrate electric vehicles or green consumerism, for instance, typically feature middle- and upper-class lifestyles, while overlooking the everyday realities of informal workers or those living in energy poverty. Ethical use of imagery requires cultural sensitivity and awareness of classed exclusions that may be shaping how the crisis is seen.

A cross-national study on climate imagery found that perceived authenticity and credibility strongly shape audience trust, while protest visuals often polarise. Such findings highlight how cautious image choices — including whose stories and emotions are represented — can influence understanding and engagement across culture.

APPROACHING THE DILEMMA	ASPECTS TO CONSIDER IN PRACTICE:
Report accurately while being culturally conscious, historically aware, and inclusive of diverse epistemologies. Reporting that strengthens public understanding pays attention to how language, metaphor, and imagery shape whose perspectives are legitimised or sidelined. Ethical reporting is attentive to how diverse communities interpret and experience climate change.	• Which are the narratives emphasised, and which are overlooked? • How does language affect meaning and access? • What metaphors or symbols are used in my reporting? • What images are transported in the visuals? Do they favour a particular perspective or risk misrepresenting the intended focus of the story?

Info box 9

Zofeen Ebrahim: Breaking barriers in reporting

About

Zofeen Ebrahim is an independent journalist based in Karachi, Pakistan, who reports on environmental and social issues.

Challenge

Lack of representation of marginalized groups, including women, in newsroom and expert panels

Practical experience

Despite progress, marginalized groups remain underrepresented among journalists and quoted experts, even where qualified gender-diverse professionals are available.

Ebrahim notes that one cause is the heightened safety risks faced by non-male journalists, who encounter distinct physical and digital threats — particularly in field reporting. Editors may, often unintentionally, assign major stories to male colleagues citing safety concerns or logistical constraints, which can nonetheless reinforce gender gaps and limit the visibility of non-male reporters in environmental journalism.

To address these disparities, newsroom management should invest in support systems and acknowledge the multiple roles women and other marginalized groups hold inside and outside the workplace. Empowerment and targeted training are key first steps to increasing representation in reporting, editorial, and speaking roles. It can also be helpful to establish peer-to-peer mentorship programmes, linking early-career non-male journalists with senior mentors, and create dedicated fellowships or awards that recognise gender-diverse reporting. Involving men as allies is also necessary to address structural discrimination and harmful workplace norms.

By embracing diversity among journalists and sources, media outlets can expand environmental journalism's perspective, accuracy, and reach.

Lessons learned

- Excluding non-male insights narrows understanding and risks skewed reporting.
- Senior management support for clear diversity policies and equitable sourcing guidelines is essential for lasting institutional reform.

Info box 10

Accessible and Inclusive Environmental Journalism

Inclusive reporting means considering accessibility at every stage — from story choice to format. Journalists can highlight how environmental change affects persons with disabilities and make space for their perspectives in climate action, ensuring that information is understandable and usable by all through sign-language interpretation, captioning, screen-reader-friendly design, and easy-to-read versions. Persons with disabilities face distinct barriers to mobility, health services, and communication that heighten their vulnerability to environmental hazards. Yet, their perspectives are rarely reflected in news or policy. Environmental journalists can help close this gap by making accessibility part of environmental storytelling. When information is inclusive, communities can better understand, prepare for, and respond to the environmental challenges shaping our shared future.

1. Disproportionate impacts of environmental change

According to a Harvard School of Public Health study, persons with disabilities — about 15 % of the world's population — are two to four times more likely to die or be injured in disasters such as floods, hurricanes, and heatwaves.

→ *Environmental journalists can expose how environmental crises deepen inequality and highlight inclusive solutions that already exist.*

2. Gaps in climate policy and planning

Despite the Sendai Framework, Paris Agreement, and UN Convention on the Rights of Persons with Disabilities (UNCRPD), most climate and resilience plans still omit disability inclusion. Climate-finance and "just transition" programmes rarely budget for accessibility.

→ *Journalists can examine to what extent national and local climate plans include persons with disabilities in planning and review. For instance, an IDDC–BOND Report titled Unequal Climate Justice for People with Disabilities documents systematic exclusion from climate adaptation, finance, and communication processes.*

3. Accessibility of early-warning and environmental information

Access to forecasts and disaster alerts can be a life-or-death issue. When climate data or warnings lack captions or sign language interpretation, many may be excluded from vital information.

→ *Work to ensure that your newsroom's content is as accessible as possible and consider utilizing or highlighting innovative approaches. For instance, a 2025 Earthquake Early Warning Brief shows how excluding Deaf users from alert design leads to dangerous misunderstandings and higher disaster mortality — and sets out practical measures for making early-warning systems inclusive.*

4. Lived experience and local knowledge

Persons with disabilities are not only at risk — they bring essential lived experience and community knowledge to understanding how environmental barriers shape daily life, resilience strategies, and climate impacts.

→ *Including their perspectives enriches storytelling through evidence-based accounts of leadership and expertise. See for instance, Connecting Disability to the Climate Beat by Unbias the News which equips journalists to integrate disability justice into climate coverage and newsroom practice.*

9.6. Conclusion

Environmental journalism, in an era of ecological crisis, disinformation, and political polarisation, does more than report facts: it frames risk, amplifies voices, interrogates power, and mediates between science and society. The five dimensions explored here — factual, temporal, spatial, audience, and cultural — show that ethics is not a checklist, but rather a constant balancing act.

Environmental journalists operate with the understanding that their reporting actively shapes how societies perceive and respond to ecological breakdown. Public interest reporting therefore lies in cultivating reflexivity, resisting reductive frames, and accurately representing the perspectives and experiences of impacted individuals and communities that are often overlooked. By doing so, environmental reporting can uphold truth while expanding the scope and inclusivity of public debate.

Reflecting on these dilemmas and finding constructive ways to navigate them strengthens both journalistic integrity and public trust in the media, reinforcing journalism's central importance in confronting the defining crisis of our time.

Key takeaways for journalists — CHAPTER 9

- Check whose perspectives dominate your story and whose are missing; adjust your sourcing to reflect the real distribution of impacts, power, and expertise.
- Avoid false balance: do not give fringe or denialist positions equal weight with established scientific consensus just for the sake of "both sides."
- When covering breaking events, such as fires, floods, heatwaves, or spills, link them to the broader environmental and political context when evidence supports it, rather than treating them as isolated accidents.
- Localise global issues. Use concrete examples, places, and people your audience recognises while still explaining the wider systems, histories, and responsibilities involved.
- Be mindful of audience fatigue by pairing information about risks with context, agency, and, where appropriate, evidence-based responses or pathways forward.
- Pay attention to the language, metaphors, and images you use. Avoid stereotypes or narratives that reinforce colonial, elitist, or discriminatory views of communities or regions.
- Be transparent about your methods, data, and funding. Explain how you verified information, how potential conflicts of interest are handled, and how corrections will be made if needed.
- Set up simple routines to reflect on editorial challenges — for example, a brief post-story review with a colleague or an occasional check of your own sourcing, framing, and verification habits — and use these reflections to strengthen your future reporting.

From rising sea levels to biodiversity loss, the environmental crisis is reshaping societies worldwide. By translating complex science, connecting global developments to local realities, countering disinformation, and holding power to account, journalists help societies understand and respond to these changes. Reporting the Environment: A Practical Manual for Journalists is a practical guide for journalists covering environmental issues.

Produced by UNESCO's International Programme for the Development of Communication (IPDC) and the OSCE Representative on Freedom of the Media (RFoM), with contributions from Covering Climate Now, the Environmental Investigative Forum (EIF), Fondation Hirondelle, NICHE Centre for Environmental Humanities (Ca' Foscari University of Venice), the Pulitzer Center, and the Reuters Institute for the Study of Journalism (University of Oxford), the manual provides practical guidance for environmental reporting.

Part of the UNESCO Series on Journalism Education, this manual supports global efforts to reinforce information integrity and contributes to the Global Initiative for Information Integrity on Climate Change (GI4C). It complements Teaching Environmental Reporting: A Handbook for Journalism Educators.

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