

FORMAT		
1. Name of resource	Interconnected Disaster Risks	
2. Location	https://i.unu.edu/media/ehs.unu.edu/attachment/23907/UN Interconnected Disaster Risks Report 210902 Full Report.pdf	
3. Alternative location		
4. Author[s]	O'Connor, J., Eberle, C., Cotti, D. and others	
5. Publisher/producer/host	United Nations University - Institute for Environment and Human Security (UNU-EHS)	
6. Year	2021	
7. Suggested citation	O'Connor, J., Eberle, C., Cotti, D. and others (2021). Interconnected Disaster Risks. United Nations University - Institute for Environment and Human Security (UNU-EHS), available at https://i.unu.edu/media/ehs.unu.edu/attachment/23907/UN Interconnected Disaster Risks Report 210902 Full Report.pdf	
8. Languages in which available	English	
9. Geographic area resource relates to	Global	
10. Does the resource relate to a specific time frame?		
11. Type	Report	Yes
	Toolkit/Framework/Roadmap	Yes
	Sign-post to other resource (database)	
	Case studies	Yes
	Other	
12. If this is part of an initiative, what is the initiative?		
COLLECTIONS AND COLLECTIONS-BASED INSTITUTIONS		
13. Explicit links to collections	No	
14. Explicit links to museums/libraries/archives	No	
15. Types of institutions the resource covers	Museums	X
	Archives	X
	Libraries	X
	Other	X

16. Does the resource relate to specific disciplines?	Arts, humanities and social sciences: philosophy, psychology, religion, social sciences, law, politics, language, arts and recreation, architecture, literature, history, geography and ethnology, anthropology, archaeology	X
	Science, natural history, technology, medicine, engineering, manufacturing	X
17. If no explicit links to collections, justification for inclusion	The resource can be used by collections-based institutions to inform training and educational activities linked to Disaster Risk management and reduction and Education for Sustainable Development.	
HOW IT CONTRIBUTES TO SUSTAINABLE DEVELOPMENT		
18. Collections-related activities the resource relates to (mark all that apply)		
Develop collections to protect and safeguard wider cultural and natural heritage more effectively, for example by targeting collecting to threatened forms of heritage in strategic ways		
Use collections to promote learning and educational opportunities that contribute to sustainable development more effectively, for example education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development and/or skills development relating to collections		X
Use collections to promote cultural participation/social inclusion more effectively, for example by reducing barriers to participation, to ensure no-one is 'left behind'		
Use collections to promote sustainable tourism more effectively, for example by developing new products based on local cultural heritage, and/or considering the rights of stakeholder groups in relation to collections		
Use collections to support research that contributes to sustainable development (including all forms of personal and self-directed research at all levels that make use of stored collections) more effectively, for example by providing effective facilities, collections and information to meet researchers' needs		
Make decisions around collections that contribute to sustainable development more effectively		
i. employment (recruiting, staff training, staff safety)		X

ii.	energy consumption, greenhouse gas emissions, reduction, monitoring and reporting	
iii.	waste management and reduction of waste	
iv.	transport (forms of transport, energy use)	
v.	commercial activities including copyright and IP	
vi.	governance and management	X
vii.	security, disaster preparedness and risk reduction	X
Direct external leadership, partnerships and collaborations towards sustainable development more effectively , for example by developing impactful partnerships		X
19. Does the resource relate clearly to any international conventions (mark all that apply)?		
Culture conventions:		
1952, 71 Protection of Copyright and Neighbouring Rights		
1954 Protection of Cultural Property in the Event of Armed Conflict		
1970 Fighting Against the Illicit Trafficking of Cultural Property		
1972 Protection of the World Cultural and Natural Heritage		X
2001 Protection of the Underwater Cultural Heritage		
2003 Safeguarding of the Intangible Cultural Heritage		
2005 Protection and Promotion of the Diversity of Cultural Expressions		
Rio Conventions:		
Convention on Biological Diversity (CBD), Convention to Combat Desertification (UNCCD), Framework Convention on Climate Change (UNFCCC)		X
AIMS AND CONTENT		
20. What issues does the resource aim to address?	<p>“Nobody is an island. We are interconnected. Our actions have consequences – for all of us. As we become evermore interconnected, so do the risks we share. To manage these risks, we need to understand why and how they are interconnected. Only then can we find appropriate solutions.</p> <p>Our world today is facing an unprecedented level of extreme events impacting people and nature, evident in the ever-increasing frequency of severe weather events, epidemics and human-made disasters. In 2020/2021, the world witnessed a number of record-breaking disasters that showed us clearer than ever before how interconnected we are, for better or worse.</p> <p>Society will likely remember most of these disasters as tragic, but largely isolated events that affected certain parts of the world for a period of time. This report explains that these events are only the tip of the iceberg,</p>	

	<p>by highlighting how these events are interconnected with each other, with other larger processes, as well as with our action or inaction. They can lead to future disasters or will worsen existing problems such as biodiversity loss or poverty. The report analyses 10 interconnected disasters that took place in 2020/2021. They were selected for their notoriety and representation of larger global issues, which have changed or will change our lives across the world:</p> <p>Amazon Wildfires – Wildfires fueled by global appetite Arctic Heatwave – Spiraling into a climate disaster Beirut Explosion – When the global community abandons ship Central Viet Nam Floods – When being prepared is no longer enough Chinese Paddlefish Extinction – The fish that survived the dinosaur extinction but not humankind COVID-19 Pandemic – How a pandemic is showing us the value of biodiversity Cyclone Amphan – When a cyclone and a pandemic combine Desert Locust outbreak – How manageable risks spin out of control Great Barrier Reef bleaching – Losing more than a natural wonder Texas cold wave – A preventable catastrophe?” (p.7)</p>
<p>21. Intended audience of resource</p>	
<p>22. Process of development</p>	<p>“The German Federal Ministry of Education and Research (Bundesministerium für Bildung und Forschung, BMBF). We thank them for their support.</p> <p>We would also like to thank our colleagues who granted us their time and expertise in reviewing this report or providing support such as access to specific information and contacts:</p> <p>Kehinde Balogun, Sumana Banerjee, Eike Behre, Jazmin Campos, Nguyen Dang Giang Chau, Mostapha Harb, Lisa Hartmann, Oscar Higuera, Margaret Koli, Soenke Kreft, Hnin Wuit-Yee-Kyaw, Isabel Meza, Minh Tu Nguyen, Robert Oakes, Sofia Panchi-Robles, Jennifer Phillips, Simone Sandholz, Federico Alberto Sanchez Santillano, Konstantin Scheffczyk, Stefan Schneiderbauer, Lorina Schudel, Philippa Schwarzbach-Dobson, Viktoria Seifert, Himanshu Shekhar, Xiaomeng Shen, Maxime Souvignet, Edward Sparkes, Joerg Szarzynski, Manuel Urrutia and Saskia Werners. We thank all colleagues at United Nations University, Institute of Environment and Human Security,</p>

	<p>who participated in our outreach meetings to discuss the ten events.</p> <p>We extend further thanks to those who allowed us to ask questions and gain insight from their experience, helping readers understand the impact of some of these disastrous events: Arnoldo Becho, Sudhansu Maity, James Muhia and Susan Mumbi Karanja.” (p.3)</p>
<p>23. Organisation/structure/contents</p>	<p>Chapter 1 Executive Summary Introduction Chapter 2 10 disastrous events, 2020/2021 Amazon Wildfires Arctic Heatwave Beirut Explosion Central Viet Nam Floods Chinese Paddlefish Extinction COVID-19 Pandemic Cyclone Amphan Desert Locust Outbreak Great Barrier Reef Bleaching Texas Cold Wave Chapter 3 Chapter 3.1 Connecting the dots: Interconnectivity, root causes and emerging risks Deep dive into the interconnectivity of 10 disastrous events How disastrous events in 2020/2021 are interconnected We are all interconnected to disastrous events Chapter 3.2 Deep dive into the root causes of 10 disastrous events Root cause 1 - Human-induced greenhouse gas emissions Root cause 2 - Insufficient disaster risk management Root cause 3 - Full environmental cost undervalued in decision-making Chapter 3.3 Emerging risks Accelerating climate change Increasing societal challenges for disaster risk management Escalating biodiversity crisis Chapter 4 Solutions No regrets Win-win-win</p>

	<p>Examples of integrated approaches</p> <p>Addressing trade-offs</p> <p>Enablers</p> <p>Chapter 5</p> <p>Conclusion</p> <p>Works Cited</p>
FRAMEWORKS	
24. Framework structure	<p>The ten disasters are presented in a consistent way that can be considered as a framework.</p> <p>Key root causes</p> <p>Wider picture/symbolic event of</p> <p>Key interconnections</p> <p>Impacts</p> <p>Emerging risks</p>
25. Relevant policy considerations	Yes
26. Resources for implementation identified	Yes
27. Specific assessment points/indicators/milestones/action plan for monitoring	Yes
28. ASPECTS OF SUSTAINABILITY COVERED BY RESOURCE (mark all that apply)	
People (social sustainability)	X
Planet (environmental sustainability)	X
Prosperity (economic sustainability)	X
Peace	X
Partnerships	X
29. CROSS-CUTTING CONSIDERATIONS COVERED BY RESOURCE (mark all that apply)	
Gender perspectives	X
North and South perspectives	X
HOW THE RESOURCE CONTRIBUTES TO AGENDA 2030 AND THE SDGs	
HOW AGENDA 2030 AND THE SDGs FEATURE IN THE RESOURCE	
30. SDGs and Agenda 2030 specifically mentioned?	No
31. SDGs specifically mentioned?	No
32. SDG targets specifically mentioned?	No

33. SDG indicators specifically mentioned?	No
SDGs AND SDG TARGETS AND LINKAGES	
34. Comments on SDG linkages	<p>The resource can help support SDG targets linked to education relating to sustainable development including Education for Sustainable Development (4.7), information for lifestyles in harmony with nature and sustainable development (12.8), and climate change education, awareness and institutional capacity (13.3). These contribute to a wide range of targets that aim to reduce disaster risk and the impact of disasters, for example 1.5 (reduce the vulnerability and exposure of poor people to disasters), 3.D (prepare for national and global health risks), 11.4 (protect and safeguard cultural and natural heritage), 11.5 (reduce the adverse effects of natural disasters), 11.B (adopt Disaster Risk Reduction approaches) and 13.1 (enhance resilience and adaptive capacity to climate change and natural disasters) and 13.2 (implement climate change planning in all countries), 15.5 (prevent degradation of natural habitats and species extinctions), 16.1 (reduce violence and associated deaths), and 16.10 (access to information).</p>
35. SDGs and SDG targets the resource helps advance	
<p>SDG 1: End poverty in all its forms everywhere 1.5 By 2030, build resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters.</p>	<p>Number of collecting programmes that aim to build resilience to climate-related events and other shocks and disasters, for example by forming collections that can contribute to related educational and research programmes.</p> <p>Number of educational programmes drawing on collections that incorporate resilience perspectives.</p> <p>Number of targeted programmes drawing on collections that are aimed at vulnerable groups, to build their resilience to climate-related and other shocks and disasters.</p> <p>Number of research programmes drawing on collections that are aimed at building resilience to climate-related and other shocks and disasters.</p> <p><i>Strengthen the resilience of employees, communities and suppliers by paying at a minimum the living wage and</i></p>

	<p><i>offering insurance to employees and their families, such as accident insurance; and by paying fair prices to all suppliers</i></p>
<p>SDG 3: Ensure healthy lives and promote well-being for all at all ages 3.D Strengthen the capacity of all countries, in particular developing countries, for early warning, risk reduction and management of national and global health risks.</p>	<p>Number of collecting initiatives that aim to build capacity for risk reduction to national and global health risks, for example by storing and preserving collections that may be of use in post-disaster scenarios, or that can be used in early warning and risk communication activities.</p> <p>Number of educational programmes incorporating perspectives on early warning, risk reduction and management of national and global health risks.</p> <p>Number of awareness raising programmes that target marginalized and vulnerable groups most exposed to health risks.</p> <p>Plans in place for early warning, risk reduction and management to national and global health risks.</p> <p>Relationships and partnerships in place for risk reduction and management in light of national and global health risks.</p>
<p>SDG 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all 4.7 By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture’s contribution to sustainable development</p>	<p>Numbers of people in each type of programme drawing on collections from different demographic groups.</p> <p>Increases in numbers of people in each type of programme from different demographic groups.</p> <p>Proportion of people involved in such programmes in relation to overall audience size.</p> <p>Evidence that learners have acquired knowledge and skills to promote sustainable development.</p>

<p>SDG 11. Make cities and human settlements inclusive, safe, resilient and sustainable</p> <p>11.4 Strengthen efforts to protect and safeguard the world’s cultural and natural heritage</p>	<p><i>11.4.1 Total expenditure (public and private) per capita spent on the preservation, protection and conservation of all cultural and natural heritage, by type of heritage</i></p> <p>Plans, policies and procedures in place for the safe use of collections for a variety of purposes, protecting and safeguarding both collections and those who use them.</p> <p>Plans, policies and procedures in place for the identification, safeguarding and protection of cultural and natural heritage at risk.</p> <p>Collecting programmes in place to protect, safeguard and make use of cultural and natural heritage, addressing the needs of communities and stakeholders, and ensuring that collections can be an effective resource for sustainable development.</p> <p>Number and diversity of educational, awareness-raising, research programmes, and partnerships that aim to strengthen protection of cultural and natural heritage.</p>
<p>SDG 11. Make cities and human settlements inclusive, safe, resilient and sustainable</p> <p>11.5 By 2030, significantly reduce the number of deaths and the number of people affected and substantially decrease the direct economic losses relative to global gross domestic product caused by disasters, including water-related disasters, with a focus on protecting the poor and people in vulnerable situations</p>	<p>Collections-based research that supports the understanding and management of disasters of all kinds.</p> <p>Plans in place for public education and awareness drawing on collections and collections-based institutions to reduce exposure and vulnerability to disasters of all kinds.</p> <p>Plans in place to ensure collections-based institutions steadily work to reduce their contributions to disaster risk, for example by reducing pollution and waste of all kinds.</p> <p>Plans in place to ensure collections-based institutions, and people related to them (including workers) are protected from economic losses as a result of disasters.</p> <p>Plans in place to provide special support/protection to poor and vulnerable people and groups in and following disasters.</p>
<p>SDG 11. Make cities and human settlements inclusive, safe, resilient and sustainable</p>	<p><i>11.B.1 Proportion of local governments that adopt and implement local disaster risk reduction strategies in line</i></p>

<p>11.B By 2020, substantially increase the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters, and develop and implement, in line with the Sendai Framework for Disaster Risk Reduction 2015-2030, holistic disaster risk management at all levels</p>	<p><i>with the Sendai Framework for Disaster Risk Reduction 2015-2030a</i></p> <p>Disaster Risk Reduction strategies and plans in place, in line with the Sendai Framework for Disaster Risk Reduction, to ensure collecting institutions and collections are factored into planning, and contribute effectively to Disaster Risk Reduction.</p>
<p>SDG 12 Ensure sustainable consumption and production patterns 12.8 By 2030, ensure that people everywhere have the relevant information and awareness for sustainable development and lifestyles in harmony with nature</p>	<p><i>12.8.1 Extent to which (i) global citizenship education and (ii) education for sustainable development (including climate change education) are mainstreamed in (a) national education policies; (b) curricula; (c) teacher education; and (d) student assessment</i></p> <p>Extent to which global citizenship education and education for sustainable development (including climate change education) are mainstreamed in formal, informal and non-formal education programmes and activities drawing on and related to collections.</p>
<p>SDG 13. Take urgent action to combat climate change and its impacts 13.1 Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries</p>	<p>Plans in place for near and longer term to withstand and actively adapt to climate-related hazards and natural disasters.</p>
<p>SDG 13. Take urgent action to combat climate change and its impacts 13.2 Integrate climate change measures into national policies, strategies and planning</p>	<p>National organisations, institutions and networks relating to collections and collections-based institutions to have integrated climate change measures into policies, strategies and planning relating to collections and collections-based institutions, including funding and other resourcing considerations.</p>
<p>SDG 13. Take urgent action to combat climate change and its impacts</p>	<p>Plans in place to enhance positive contributions to addressing climate change through use of collections. Plans in place to ensure collections, collections institutions</p>

<p>13.3 Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning</p>	<p>and broader society can adapt effectively to climate change.</p> <p>Plans in place for effective education and awareness raising on climate change mitigation, adaptation, impact reduction and early warning.</p> <p>Plans in place to reduce negative contributions of collections-related functions, e.g. measuring greenhouse emissions with plans and targets in place to reduce them.</p>
<p>SDG 15 Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss</p> <p>15.5 Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and, by 2020, protect and prevent the extinction of threatened species</p>	<p>Number and proportion of habitats, notably endangered habitats, and species with favourable conservation status, with special reference to locally, nationally and globally endangered species.</p> <p>Information on, programmes relating to, collections development, and partnerships relating to habitats and species drawing on collections in place, to support their protection and continued existence.</p> <p>Measures taken to enhance biodiversity value of green space associated with collections institutions.</p>
<p>SDG 16. Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels.</p> <p>16.1 Significantly reduce all forms of violence and related death rates everywhere</p>	<p>Collections development that relates to violent crime, and violence of all kinds, and the relationships between violence and mortality.</p> <p>Number of educational, awareness-raising and partnership programmes drawing on collections that aim to reduce violence and related mortality.</p>
<p>SDG 16. Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels.</p> <p>16.10 Ensure public access to information and protect fundamental freedoms, in accordance with national</p>	<p>Adopt and implement constitutional, statutory and/or policy guarantees for public access to information.</p> <p>Plans in place, and plans implemented to enhance public access to information relating to collections.</p> <p>Plans in place, and plans implemented to support fundamental freedoms, in line with human rights, national and international agreements and legislation.</p>

legislation and international agreements		<p>Plans and procedures in place for public access to information relating to the operation and management of collections-based institutions.</p> <p>Complaint mechanism in place for public to use where public access to information and fundamental freedoms not supported or fulfilled.</p>			
1	2	3	4	5	6
7	8	9	10	11	12
13	14	15	16	17	