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From the Editor, Request for information for upcoming newsletters

This newsletter is an opportunity for IEF members to share their experiences, activities, and initiatives that are taking place at the community level on environment, climate change, and sustainability. All members are welcome to contribute information about related activities, upcoming conferences, news from like-minded organizations, recommended websites, book reviews, etc. Please send information to <u>newsletter@ief.org</u>

Please share the Leaves newsletter and IEF membership information with family, friends, and associates and encourage interested persons to consider becoming a member of the IEF.

Members Corner

Welcome

We warmly welcome the following new members and associates to the International Environment Forum:

New Members

Zoran Arputhaselan (Malaysia) Kamran Behinaein (Georgia) Jaspal Singh Chauhan (India) Mary Chiang (USA) Lin Deahl (USA) Pauline Grolin (Denmark) Defne Inhan (Belgium) Christian Lupemba (DR Congo) Marc Mohajer (UK) Victor Maduabuchi Onwukwe (Nigeria) Dan Perell (USA)

New Associate Naushad Ahamad (India)

We look forward to getting to know you better and invite your active participation with IEF!

IEF Newsletter News

IEF warmly welcomes Todd Chirko from China as language editor and Marc Mohajer from the United Kingdom as managing editor. Thank you for your service!

IEF: A Hidden Treasure – Help Distribute the Wealth

Have you ever talked with a friend about the International Environment Forum (IEF), only to hear your friend say: "The what?" That is understandable as the IEF is not well-known. However, at a time when our earth is experiencing a rapidly increasing environmental crisis, IEF resources and activities are becoming more and more relevant and important.

How can you help spread the word about IEF? You can help by telling a friend! If they already know about IEF, have them tell a friend.

The article below explains some of the things IEF does. You can submit it to your national or local Baha'i Newsletter. You may use it as it is or adapt it to the needs of your community and to the format of your newsletter. Let's support our IEF; let's support our local communities; let's support our world!

Do You Know about the Baha'i-inspired International Environment Forum (IEF)?

More and more people are becoming aware of the urgent and impending environmental crisis and are searching for solutions. Scientists and many people informed about the widespread decline and loss of animal and plant species as well as the serious implications of climate change, are in a state of despair, often asking existential questions.

The Baha'i teachings provide spiritual guidance that can help individuals and communities find reasons for hope and courage along with direction for action.

The Baha'i-inspired International Environment Forum (IEF) supports Baha'is and their friends in their efforts to apply the Baha'i teachings to public discourse and social action in the area of the environment and sustainability. It also offers practical resources and encouragement for implementing the Baha'i teachings with environmentally responsible actions in both our personal life and our community.

Examples of these resources include news and articles about environmental issues; compilations from the Baha'i Writings on topics related to the environment; position statements on conference themes; announcements and reports of interfaith collaboration to mitigate climate change; educational materials; and videos.

These materials are accessible to everyone on the IEF website: https://iefworld.org

The International Environment Forum is a Bahá'í-inspired professional organization of scientists and engineers, civil servants, and representatives of civil society in fields relevant to the environment and sustainability. Students and others with an interest in these fields are also represented.

The IEF, among other things, provides a forum for its members:

to deepen their understanding concerning the relevance of social and ethical principles in the Bahá'í Writings regarding the environment and the sustainable development challenges the world is facing;

to explore the application of these principles in their work and activities; and

to share knowledge and experience, as well as accompany others in their professional development.

The IEF also seeks to share its views and interact with other organizations in various international fora. The IEF was, for example, accredited to the United Nations World Summit on Sustainable Development (Johannesburg, 2002) as a scientific and technological organization and again to the United Nations Conference on Sustainable Development (Rio+20 in Rio de Janeiro, 2012).

Launched in October 1997, today the IEF has over 400 members in more than 70 countries on all 5 continents. Its annual international conferences have until now been organized in Australia, Bolivia, Brazil, Canada, the Czech Republic, Greece, the Netherlands, New Zealand, South Africa, the United Kingdom, and the USA, with each conference having an electronic version for those who cannot

attend in person. The next IEF conference will take place in partnership with ebbf (Ethical Business Building the Future) in Lisbon, Portugal, in May 2020.

Additionally, the IEF produces a monthly newsletter which covers experiences by its members; reports on IEF activities; and presents articles, news, and reports of interest.

IEF membership is open to everyone who is interested in these topics and is in agreement with its Baha'i-inspired approach. As a virtual organization, the IEF does not collect dues or fees from its members, and it is run entirely on volunteer work.

Members are invited to actively participate according to their interest and time. For instance, members have the opportunity to write articles on environmental/spiritual issues, to submit reports from conferences, and to provide summaries from relevant books for the IEF newsletter; they can produce educational materials or videos on specific topics; they can monitor issues and identify where IEF could contribute to social discourse; etc.

The IEF especially encourages grassroots (local level) initiatives and offers a platform for consulting about such efforts.

The <u>IEF website</u> is offered as a resource to everyone, and all those with a deeper interest in cultivating an environmentally sustainable and just society are invited to apply for IEF membership.

For membership information, go here: <u>https://iefworld.org/membership.htm</u> For any questions, contact the IEF secretariat at <u>ief@iefworld.org</u>

Calls for Climate Action Around the World

Many events are planned to create public pressure for climate action around 20-27 September. You may like to inform yourself what is going on in your area and support an activity that you feel is consistent with your values. The young generation needs encouragement and support! One place to find information is here: https://350.org



Education: a Key to Achieving the Sustainable Development Goals By IEF member Victoria Thoresen

UNESCO has been the lead United Nations agency on Education for Sustainable Development (ESD) since the U.N. Decade of Education for Sustainable Development (2005-2014). The Global Action Plan (GAP) on ESD, which started in 2015 with the objective of scaling up action on ESD and Global Citizenship Education (GCE), ends in 2019. A new program, *ESD: Towards Achieving the Sustainable Development Goals* (ESD 2030), is being launched for the period of 2020-2030. The program was developed through broad consultations with a wide variety of stakeholders during 2016-2018.

ESD 2030 builds upon lessons learned through, among other things, projects with over 26 million learners and two million educators. The main goal of ESD2030 is to put greater emphasis on the contribution of learning to the survival and prosperity of humanity. ESD2030 focuses on the following:

Transformative action: "stepping outside of the safety of the status quo or the usual way of

behaving or living. It requires courage, persistence and determination, which are best sourced from personal conviction and insight...ESD is needed to provide individuals with critical thinking skills to reflect on individual values, attitudes and behavior as well as lifestyle choices." (UNESCO 20 Feb. 2019 Annex p.4)

Structural changes: "ESD in the future will have to encourage learners to explore values which could provide an alternative to consumer societies, such as sufficiency, fairness and solidarity." (ibid p.5) Included in this focus area is also mentioned the need to ensure and restore human dignity and the right to live decently for populations in extreme poverty.

The technologic future: Technological solutions may bring new challenges or simply provide the illusion of having solved problems. ESD and GCE should emphasize critical thinking and consider the principles and values motivating behavior. For example, sensor-equipped buildings may make the behavior of turning off electric lights obsolete, but the value of saving energy should remain relevant.

ESD2030 underlines the importance of interdisciplinary, holistic approaches to learning in all situations —be it in schools, homes or communities. With its particular emphasis on competencies related to empathy, solidarity and action-taking, ESD and GCE are considered essential to the achievement not only of SDG#4 (Quality Education) but also to the underlying goals of Agenda2030 of dignity, well-being and collective prosperity for all.

Impacts of Climate Change on Global Fisheries

By IEF Member Elizabeth L Mclean, Ph.D.

Introduction

Around the world, resources from aquaculture and fisheries make a significant contribution to food security and the livelihood of many people. Today, as climate change causes an increase in water temperature and sea-level rise, numerous ecosystems are rapidly changing [1, 2]. In marine ecosystems, both increase in ocean temperatures and ocean acidification are already affecting the distribution of fish, their migration patterns, as well as their productivity. Although declines have long been attributed to overfishing [3, 4], the added stress of climate change will challenge our ability to protect and sustain global fisheries.

The different habitats that lend themselves to fisheries and aquaculture along the coasts as well as in rivers and oceans support a wide range of fishing activities from small-scale subsistence practices to large-scale commercial practices. Presently, there is a worldwide concern that the open-access nature of many fisheries has caused numerous fish populations to plummet. This is referred to in the literature as the tragedy of the commons [5]. To solve the overfishing dilemma, governments in several countries have established limit systems, such as the *Individual fishing quota* (see the United States, Canada, New Zealand, and Norway for some examples) to sustain fisheries and assist their industries [6].

Food security

As an industry, fishing is categorized as one of the fastest-growing food production systems [7]. Over three billion people rely (directly or indirectly) on fisheries and aquaculture; for millions of people in poor countries this represents up to 50% of the animal protein that they rely on [8]. Nevertheless, fisheries are a limited resource, which may be problematic as the world population continues to grow.

The wellbeing of humanity, its food security, and its ability to plan from season to season will be profoundly challenged by climate change. To better understand how climate change will impact global fisheries, livelihoods, and the stability of millions of people, it is important to recognize the interconnectedness of people, their environment, and their capacities. It is fair to say that different locations will respond differently to climate change; it is possible that some areas may respond favorably depending on the sensitivity, exposure, and stability of their environment. Without doubt,

though, areas with scarcity of resources will be disproportionately more affected than others.

Environment

We know that coastal fishing communities are vulnerable to sea-level rise, changing storm patterns, and unpredictable weather events; and that fish

habitats, such as coral reefs, mangroves, and estuaries, are crucial for sustainable livelihoods in these communities. However, the full measure of how global fisheries will be impacted is difficult to assess because of the complexity of the systems and the multiplicity of pathways that climate change affects [9].



Oceans and coastal ecosystems play an important part in the global carbon cycle with some reports indicating that oceans absorbed and thereby removed from the atmosphere up to 25% of the anthropogenic carbon dioxide emitted from 2000-2007 [10]. But this can all change. Already, changes in rainfall patterns due to drought and water availability affect freshwater fisheries and aquaculture; additionally, changes in ocean acidification processes will influence numerous biological and ecological processes.

Fish Productivity

As global temperature rises, fish productivity may be compromised with the ability of oceans to serve as a buffer likely to decrease [10]. Another factor in fish productivity is ocean acidification which is driven by an increase in greenhouse gases released into the atmosphere. Since many organisms undergo a process of calcification to form their skeletons, entire marine food chains could be compromised because of these organisms' inability to produce their calcium shells. As an example, a decrease in the commercially valuable fisheries of the Atlantic Cod in the Baltic seas can be linked to a decrease in the copepods (calcifying organisms) they rely on; cod fisheries are seeing a smaller population size and growth as well as a northward movement in distribution due to climate change stressors [11]. Already research models predict an 11% decline in fish catch for tropical areas (by 2050) influenced by greenhouse gas emissions and warmer temperatures [12].

Effects of climate change on ocean temperatures and currents can cause entire fish populations to shift; as an example, a shift in the tuna species of the Pacific can bring uncertainty to food security [13]. A comprehensive analysis of the global productivity of marine fisheries shows a 4.1% decline between 1930 and 2010 with some high-production areas experiencing losses of up to 35% [14]. Similarly, during the last decade the North Atlantic lobster populations have been moving northward and into deeper waters as ocean temperatures have increased.

An overfished population is also more susceptible to other environmental stressors such as fish becoming smaller, having a lower genetic diversity, and having a lower age distribution. Coastal areas with high concentrations of human populations can also release nutrients into coastal habitats. Areas with high nutrient content, eutrophication, and increased temperatures present unfavorable scenarios for fisheries because of the depletion of oxygen in certain areas and because of the ability of the oceans to capture and store carbon (biological pump). Hence, both production and distribution of fish globally, including species composition, are going to shift.

Countries with low-lying areas in the Pacific that are dependent on fisheries, like the Maldives and Tuvalu, are particularly vulnerable, not only to sea-level rise but also to flooding and typhoons. Livelihoods and fish production in some areas of the Mekong River in Laos, where over a million tons of catfish are produced annually, will suffer because of salt intrusion and sea-level rise [16].

Solutions

To reduce the impacts of climate change, mitigation and adaptation actions are needed. Such undertakings include the reduction of greenhouse gas emissions, the adoption of sustainable practices that reduce and economize water use, and the diversification of livelihood activities. To build resilience in coastal communities, protection and conservation of coral reef systems, restoration and protection

of mangrove forests, and the development of aquaculture systems are required. Addressing policies and governance needed to reduce the excess catch of fishing fleets in order to allow for rebuilding of the fish stocks is also important. A number of international organizations (such as the Food and Agriculture Organization and the World Bank) are helping communities around the world build their resilience by assessing risk and vulnerability, increasing awareness (through weather broadcasting), and assisting with adaptation plans (FAO) [17]. In more developed countries, efforts include supporting newer trends, developing renewable energy, and accessing and utilizing biofuels.

Finally, it is crucial that attention be given to the most vulnerable people so that they can continue to adapt to climate change, reduce their risk, and increase their resilience. Effective adaptations that strengthen and sustain the productivity of fisheries and aquaculture will, in the long run, benefit food security for millions of people by meeting their day-to-day needs when droughts, floods, and storms affect crops and other alternative livelihoods disrupted by climate change.

Questions to consider

- What regulations in my country promote adaptation and mitigation of sustainable fisheries?
- What are direct, and indirect, ways in which communities can participate in climate change resilience?
- How do we set boundaries to open access fisheries while still safeguarding traditional practices?
- How can we meet the demands of sea food production as human populations increase?
- What are some of the social and spiritual implications of climate change justice?

Suggested reading

- Blue Carbon and Carbon Sequestration
- Coastal Upwelling
- Individual fishing quota
- Summary of the FAO Fisheries and Aquaculture <u>Technical Paper 627</u>. Impacts of climate change on fisheries and aquaculture. Synthesis of current knowledge, adaptation and mitigation options Food and Agriculture Organization of the United Nations Rome, 2018
- Plagányi, Éva. 2019. Climate change impacts on fisheries. 2019. Science, Vol. 363 (6430): pp. 930-931

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Effective Advocacy

By IEF Member John Krochmalny

August 31, 2019

A common approach taken by many people attempting social change involves using a public medium to voice their concerns and offer a remedy. Usually, they are promoting an idea that they believe in and feel everyone should adopt. Often, this method of social change involves a desire for a government or other organization to make laws mandating everyone to follow. Asking these same persons to what extent does their life reflect their advocacy, seems to reveal a disconnect; many do not 'walk their talk.'

The term "Rankism" was first used in the 1990's to describe behaviors compelling someone else to follow a course of action that they do not follow themselves. It has been proven that telling someone else what to do almost never works in the real world. Perhaps a better method involves establishing actual models and having these models available for public consideration for adoption.

Organizations exist to carry on a mission. Reporting back to their stakeholders, rubrics are created as tools for self-evaluation and continuous improvement. Such rubrics, when properly constructed and applied, align organizational behaviors with their mission. Of course, these are only one method of calling one's self to account to determine if their words exceed their deeds. They are also used as indicators for improvement toward effective advocacy.

The <u>Advocacy Quotient</u> has been created for evaluating both personal and organizational advocacy effectiveness. The assessment involves 3 areas; Cause Social Capital, Education & Skill Level, and Impact. Several organizations were analyzed and used in constructing this document – all utilizing discoveries made through social science observations. This survey can be used by individuals and organizations but perhaps some questions may not apply to all cases. The results of one's answers to Effective Advocacy questions could indicate a pathway toward becoming better advocates to improve the world. For those interested in becoming integral parts in any community-building process, it may be in one's best interests to determine if they really are "walking that talk".

Access the Advocacy Quotient assessment here: https://drive.google.com/file/d/1Mrcvbr8HjXiYG4cWHYIAGIVIg8ODLykT/view?usp=sharing or https://tinyurl.com/yxgkwnrf_

The 2019 Sustainable Development Goals Report

From UN Environment https://unstats.un.org/sdgs/report/2019/

Since its inception in 2015, the 2030 Agenda has provided a blueprint for shared prosperity in a sustainable world—a world where all people can live productive, vibrant and peaceful lives on a healthy planet. The year 2030 is just over a decade away, and we must ask ourselves if our actions today are laying the right foundation to achieve the Sustainable Development Goals (SDGs). The Sustainable Development Goals Report 2019 provides evidence-based insights to answer this question.



The 2019 Sustainable Development Goals Report demonstrates that progress is being made in some critical areas, and that some favorable trends are evident. Countries are taking concrete actions to protect our planet: marine protected areas have doubled since 2010; countries are working concertedly to address illegal fishing; 186 parties have ratified the Paris Agreement on climate change, and almost all have communicated their first nationally determined contributions. About 150 countries have developed national policies to respond to the challenges of rapid urbanization, and 71 countries and the European Union now have more than 300 policies and instruments supporting sustainable consumption and production.

Despite the progress made, it is clear that a much deeper, faster and more ambitious response is needed to unleash the social and economic transformation

needed to achieve the 2030 Agenda. The natural environment is deteriorating at an alarming rate: sea levels are rising; ocean acidification is accelerating; the last four years have been the warmest on record; one million plant and animal species are at risk of extinction; and land degradation continues unchecked. The impacts of environmental deterioration are taking a toll on people's lives. Extreme weather conditions, more frequent and severe natural disasters and the collapse of ecosystems are causing Increased food insecurity and are worsening people's safety and health, forcing many communities to suffer from poverty, displacement and widening inequalities.

UNEP, UN Human Rights Office sign new agreement, stepping up commitment to protect the human right to a healthy environment

https://www.unenvironment.org/news-and-stories/press-release/unep-un-human-rights-office-signnew-agreement-stepping-commitment

GENEVA, 16 August 2019 – As threats to individuals and communities defending their environmental and land rights intensify in many parts of the world, the UN Environment Programme (<u>UNEP</u>) and the <u>UN Human Rights Office</u> have prioritised efforts to promote and protect environmental and human rights with the signing today of a new cooperation agreement.

The heads of the two UN bodies agreed that although more than 150 countries have recognised the human right to a healthy environment in their constitutions, national laws and jurisprudence, or through regional agreements, significantly more work is needed to inform policy-makers, justice institutions and the public on the various ways they can take action to uphold this right.

Strengthened cooperation between UNEP and the UN Human Rights Office will aim to drive better protection of environmental human rights defenders and their families, who frequently face violence – including killings and sexual violence, smear campaigns, and other forms of intimidation.

The partnership will also encourage greater acceptance by leaders and governments of the human right to a healthy environment pursuing efforts toward its global recognition. It will seek to increase support to national governments to promote human rights-based policies, particularly in terms of sustainable management of natural resources, development planning, and action to combat climate change.

The two organisations will now work more closely to monitor threats against environmental rights defenders; advocate for better protection; urge more effective accountability for perpetrators of violence and intimidation; develop networks of environmental human rights defenders and promote

meaningful and informed participation by rights defenders and civil society in environmental decisionmaking.

"A healthy environment is vital to fulfilling our aspiration to ensure people everywhere live a life of dignity. We must curb the emerging trend of intimidation and criminalisation of land and environmental defenders, and the use of anti-protest and anti-terrorism laws to criminalise the exercise of rights that should be constitutionally protected," UNEP Executive Director Inger Andersen said at the signing in Geneva.

"UNEP and the UN Human Rights Office are committed to bringing environmental protection closer to the people by assisting state and non-state actors to promote, protect and respect environmental and human rights. In doing so, we will move towards a more sustainable and just planet," she added.

"Our planet is being recklessly destroyed, and we urgently need stronger global partnerships to take action to save it," said UN High Commissioner for Human Rights Michelle Bachelet. "We call on leaders and governments to recognise that climate change and environmental degradation severely undermine the human rights of their people, particularly those in vulnerable situations – including the generations of tomorrow."

"We encourage every State to develop and enforce national legal frameworks which uphold the clear linkages between a healthy environment and the ability to enjoy all other human rights, including the rights to health, water, food – and even the right to life," she added. "We also strongly encourage greater recognition that the actions and advocacy of environmental human rights defenders are deeply beneficial to all societies. They must be better protected against the threat of violence and intimidation."

More than three defenders were killed across the world every week in 2018, according to the latest report by <u>Global Witness</u>. The latest death toll highlights the ongoing dangers facing those who are defending their environmental and human rights in the mining, logging, and farming sectors as well as other extractive industries.

Educational Material by the Climate Generation

Innovation and Renewable Energy: A Humanities Module for Grades 6-8

This standards-based, interdisciplinary humanities module uses the true story of William Kamkwamba and his windmill to bring the discussion of renewable energy to the English/Language Arts, social studies, and science classroom. Students read the book with guidance from literary worksheets; discuss renewable energy projects through the lens of geography, economics, and civics; and use the process of engineering design to solve a community issue brought on by climate change.

Water Scarcity and Perseverance: A Humanities Module for Grades 6-8

This standards-based, interdisciplinary humanities module uses historical fiction to tell the story of Nya and Salva to bring the discussion of water scarcity to the English/Language Arts, social studies, and science classroom. Students read the book with guidance from literary worksheets; research the causes and implications of the war in Sudan through the lens of geography, economics, civics and history; and learn about water management and desertification in science.

World Climate Simulation for adults and older youth

The World Climate Simulation is a role-playing exercise of the UN climate change negotiations for groups. It is unique in that it uses an interactive computer model to rapidly analyze the results of the mock-negotiations during the event. All the <u>materials</u> and tools for World Climate are available for free and many are available in multiple languages.

You can use the World Climate Simulation to build climate change awareness and enable people to experience some of the dynamics that emerge in the UN climate negotiations. The exercise is framed by current climate change science, using the interactive <u>C-ROADS</u> computer simulation which allows participants to find out how their proposed policies impact the global climate system in real-time.

Extreme Heat & Climate Change HOW OFTEN WILL YOU ENDURE EXTREME HEAT WHERE YOU LIVE?

The Union of Concerned Scientists produced an interactive tool that "shows the rapid increases in extreme heat projected to occur in locations across the US due to climate change. Results show the average number of days per year above a selected heat index, or "feels like" temperature, for three different time periods: historical, midcentury, and late century. Link to the interactive tool: https://www.ucsusa.org/global-warming/global-warming-impacts/extreme-heat-interactive-tool? https://www.ucsusa.org/global-warming/global-warming-impacts/extreme-heat-interactive-tool?

The tool is based on the July 2019 report <u>Killer Heat in the United States: Climate Choices and the</u> <u>Future of Dangerously Hot Days</u>.

Listening for Greensong

Excerpts from an article by Erik Assadourian - 3 Sept. 2019

<u>https://mahb.stanford.edu/blog/listening-for-greensong/</u> originally from <u>https://www.resilience.org/stories/2019-07-31/listening-for-greensong/</u>



All around us is Greensong—the sounds, vibrations, smells, and tastes of a living planet. Can you sense it? Are you listening? What does it tell you?

...most of us no longer hear greensong. Why is that?

First and foremost, we no longer hear greensong because we don't pay attention. Either we have our ears plugged up with earbuds or we're humming a tune or we're chatting, or our minds are simply distracted with whatever thoughts preoccupy us (whether that's work projects, what you need to do when you get home, or what's going to happen on the next episode of whatever show you're currently watching). When your mind is not quiet, it is nearly impossible to hear greensong (at least for non-native speakers like the majority of us).

Second, many of us live in deeply wounded environments, like cities, where greensong is almost gone. Sure, it's still there, faintly, in parks, in the occasional singing bird that's nesting in a street tree; in the pollen that spreads across the city in the spring; in the rustling leaves turning colors in the fall. Worse, even where we may still have access to greensong, people frequently close themselves off to

it. Many people start their days by entering their attached garages and exit their cars in a parking lot at their workplaces, perhaps never making it outside all day—and certainly not to a place with much greensong. We've cut off so many sources of greensong that, by this point, few of us even realize it's missing.

Third, many of us can no longer sense or understand greensong even when we are surrounded by it. What explains this? Is greensong like language-learning, where there is a period in early life where one's brain is more plastic and can easily learn and mimic new phonemes? That could certainly be the case—as it is certainly harder as an adult to learn simple things like tree identification, bird and birdsong identification, and many other Ancestral skills that children can quickly pick up (let alone the more complicated elements of greensong). But that doesn't mean we can't once again learn to hear greensong. Just as learning a language is still possible at an older age, we can retrain our brains to sense—and make sense of—greensong. With regular exposure to greensong, we should be able to start to hear it again, though that might not mean we'll be able to understand it. Just as with a language we'll need someone trained in hearing and understanding greensong to teach and guide us.

Anatomy of Action Challenge for Sustainable Living

Using 3 easy actions in 5 daily life domains (food, stuff, move, money and fun) this challenge will show that small actions, taken collectively, can have a positive impact on the planet. <u>The</u> <u>Anatomy of Action</u> was born out of a partnership project between the <u>United Nations</u> <u>Environment Program</u> and <u>The UnSchool of Disruptive Design</u> to define and communicate the most positively impactful actions anyone of us can take to add to the global movement around sustainable lifestyles to help achieve the Sustainable Development Goals.

- 1. Share your #AnatomyOfAction and challenge your friends to do the same! To join, follow these steps...
- 2. Take action! Reduce your environmental footprint by making small lifestyle changes in the Anatomy of Action (AoA) areas
- 3. Share your action on Instagram using #AnatomyOfAction, #TakeActionChallenge, #TakeActionForClimate and any relevant hashtags
- 4. Tag @unenvironment and @unschools
- 5. Share relevant facts and figures assets (available on the <u>website</u>) Challenge your friends! Tag at least 3 people to take action and stand up for change

Important Date(s): Take Action Challenge **15-30 September 2019** For more information and to see the challenge themes, <u>click here</u>.

The most effective ways to curb climate change might surprise you A Quiz from CNN

Lynda Richardson, a travel editor, writes: "Here's a fascinating quiz about the most effective — and often surprising — ways that individuals, policymakers and businesses can curb climate change. Even if you get just about everything wrong, you'll learn a lot." Enjoy the quiz! Please follow the link here: <u>The most effective ways to curb climate change might surprise you</u>.

Quality Unknown: The Invisible Water Crisis

The World Bank, August 20, 2019

https://www.worldbank.org/en/news/feature/2019/08/20/quality-unknown? cid=ECR_E_NewsletterWeekly_EN_EXT&deliveryName=DM43606

The world faces an invisible crisis of water quality. Its impacts are wider, deeper, and more uncertain than previously thought and require urgent attention.



While much attention has focused on water quantity – too much water, in the case of floods; too little water, in the case of droughts – water quality has attracted significantly less consideration. Quality Unknown shows that urgent attention must be given to the hidden dangers that lie beneath the water's surface:

Water quality challenges are not unique to developing countries but universal across rich and poor countries alike. High-income status does not confer immunity - challenges with pollutants grow alongside GDP. And as countries develop, the cocktail of chemicals and vectors they contend with change – from fecal bacteria to nitrogen to pharmaceuticals and plastics, for example.

What we think of as safe may be far from it. Water quality is complex and its impacts on health and other sectors are still largely uncertain. Worse, regulations guiding safety standards are often fragmented across countries and agencies, thus adding to this uncertainty. This report shows that some pollutants in water have impacts that were previously unknown and occur at levels below established safe norms.

<u>The forces driving these challenges are</u> <u>accelerating.</u> Intensification of agriculture, land use

changes, more variable rainfall patterns due to climate change and growing industrialization due to countries' development all continue to grow. This means increasing number of algal blooms in water which are deadly for humans and ecosystems alike.

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