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 newsletter@ief.org

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.

The story of Rahima and Kalam: Climate change and the coastal peoples of Bangladesh

By IEF Member Zobayer Raihan

When I met a local couple, Rahima and Kalam, on the banks of the Meghna River, the morning sun had just begun to spread its heat. Local boatman and passengers were starting their journeys to various destinations; traders were opening their shops near the landing platforms.

Kalam was building a new small house on the banks of the Meghna River. Only two days before, all of their belongings including cattle and crops had succumbed to the Meghna due to erosion. Kalam begged for some bamboo from a local businessman so they could erect a small shelter over their heads. Rahima, Kalam’s wife, was helping her husband interrupting her cooking. The house would be constructed from raw, unfinished bamboo planks. It hopefully would be a temporary shelter for them. But who knows? This house might also be entombed in the womb of the Meghna, and then they would have to make another shelter. At 30 years of age, Kalam could not remember how many times he had made a shelter like the one he was working on today. He lamented,

“I have been watching river erosion since childhood; it has been a regular occurrence for me. Houses break down and we rebuild them. But river erosion has been going out of control for the last few years, and the river water level is increasing day by day.”
I try to draw out their story. Sitting closer, I ask how they and their four-year-old baby will survive. Do they feel they are in danger? Kalam asked me, “What will you do after hearing our story?” Then he related the following:

“Our life is as uncertain as the Meghna River. A few years ago, we had a home, crop fields, and cattle. Then river erosion began and went out of control. With this, a new problem has emerged; the saltwater level is increasing day by day. Many localities around the coastal area are submerged when the tide comes in. The scenario was different a few years ago. Vast fields of watermelons, paddy rice, and wheat were all cultivated around the area. There was a smile on the farmer’s face. My father had four acres of cultivated land. But gradually, as the amount of saltwater increased, all of our cropland became submerged under saltwater. Now farmlands are abandoned; they no longer produce crops. We have become destitute. Presently, I work as a day laborer at the river basin. Sadly, I cannot procure three meals a day for my family.”

Kalam said that agricultural production was decreasing even in the region where saltwater had not entered because the underground freshwater level was being replaced by saltwater. As a result, agricultural lands far from the sea and river were not producing the same crops as before. Asking Kalam how does the future look, he replied, “We have no future at all. The river banks are eroding, saltwater is coming in from the sea, and cyclones and tidal waves are increasing day by day. We do not know what is going to happen or when this danger will be relieved.”

Rahima also talked about her problems. “The biggest problem for me is collecting drinking and cooking water. As the seawater level rises, saltwater, which is not drinkable, is coming out of almost every tube well. This saltwater cannot even be used for daily household activities. To collect drinking water, I must go to the local primary school, about two kilometers away, where freshwater is available in a deep tube well.

However, it is not possible to bring water every day from such a distance. So often we drink saltwater from the nearest tube well. As a result, our children are getting weaker day by day. Moreover, the production of crops and vegetables is gradually decreasing here. So, we have had to reduce the vegetables in our daily diet.”

Nearby, some fishermen are fishing on the river with a small boat and a net. I ask them about their catch today. Abdul Hakim, an elder fisherman brings his boat in to the riverbank and opens his fish basket. There is about one kilogram of fish in the basket, which is all he has caught for the whole morning.

Hakim related, “In earlier days, two hours of fishing would have filled my basket, but now after the entire morning, we are fortunate if we even catch one kilogram of fish. The freshwater fishes are gradually disappearing due to the day by day increases in saltwater. Fishing has been our profession since the days of our ancestors. It is not possible to change professions because we do not know any other work. The saltwater has made our lives very difficult. We do not have a big boat to fish on the open sea, so this freshwater river is the main source of our livelihood.”

These stories are not only typical for Rahima, Kalam, and Hakim. They are also the story of about 40 million people in the coastal areas of Bangladesh. The lives of the marginalized people in the coastal areas of Noakhali in Bangladesh have become very difficult due to the direct effects of climate change. Researchers are saying that by 2050, not only Noakhali, but also at least four million people in 15 coastal districts of Bangladesh could be directly affected by climate change.

According to a recently published research report, in Bangladesh the seawater level is rising at a rate of 1.6 millimeters per year. As a result there has been an increase in soil salinity, which has begun to directly affect agriculture and fish farming productivity. The report also says that about 1.5 million hectares of agricultural land, which is about 40% of the total coastal area of Bangladesh, have been affected by different levels of salinity.

Mr. Delwar Hossain, a Local Agriculture Officer told me, “Due to increasing temperature and
increasing salinity in the land, the varieties of high yield paddy rice are decreasing and the onslaught of wheat diseases is increasing. In Bangladesh, if the temperature increases by two degrees Celsius, wheat cultivation will not be possible. Climate change is the cause of the increasing onslaught of insects and various plant diseases. Now, attacks of millebagh, aphids, and bacterial and fungal diseases are more prevalent in different crops. In the last few years, around 50,000 people have left Noakhali to find work due to inadequate agricultural production.

Biodiversity in coastal areas has been mostly affected by global warming. More than 50 species of fish and animals have become extinct in the forest and rivers along the southern coast. The Sundarbans, which UNESCO has recognized as the largest mangrove forest in the world, has fewer trees in the forest due to increased salinity, and this has directly affected the ecology. As a result, the Royal Bengal Tiger is now at the door of extinction. Zoologists fear that, with the present conditions, this tiger will soon be completely extinct from the Sundarbans.

Returning to the story of Rahima and Kalam, they started building their house in the morning. At noon, the work was not yet finished. Their temporary home has been made of bamboo and plastic and will look like a tent. Kalam could not go to work today as he was building the home.

Kalam, at thirty years of age, is physically weak. Their four-year-old son also suffers from malnutrition. Now is not the typical storm season, so maybe their house will survive a few months. However, when the rains come, there will be danger. The water level will rise, and the family will probably be subjected to cyclones. During these monsoons it is not possible to stay in this vulnerable house with their baby. They will have to shelter on the primary school porch two kilometers away. There they may be joined by some other homeless families who have endured unbearable months of rain and been in indescribable misery. There is no pure water, not enough food, no work, and saltwater all around.

“We do not think about ourselves anymore,” Rahima says. “Our lives are almost over! How many more days will I live! Not many. But where will my son find shelter? Seeing nothing but an unsafe and terrifying future for him is my biggest fear.”

**Deforestation and COVID-19 - Emerging understanding of planetary and human health linkages**

by IEF Member Michael Richards

The evidence suggests that COVID-19 came from bats and was then passed to pangolins (scaly anteaters) and then, via wildlife traffickers in the Mekong region and a “wet market” in Wuhan, to people. COVID-19 is a “zoonotic” disease, i.e., it comes to people from animal hosts or vectors. Zoonotic diseases comprise up to three quarters of human infectious diseases according to expert estimates. COVID-19 is only the latest in a long line of zoonotics that can be traced back to birds or wild animals, and which seem to be increasing in frequency:

- The 1918 Spanish flu pandemic, which infected about a third of the global population and killed 50 million people, is thought to have passed from birds to horses (in first world war trenches);
- Asian avian flu from wild ducks killed about two million people in the 1950s and 1968;
- The HIV pandemic, which has killed about 35 million, is thought to originate from chimpanzees hunted in Cameroon and eaten in restaurants, e.g., “smoked baby chimp”, in Kinshasa;
- Severe Acute Respiratory Syndrome (SARS), which killed 770 people in 2003, came via horseshoe bats and civets;
- Middle East Respiratory Syndrome (MERS), which has killed 850 people since 2012, passes from bats to camels to people;
• Ebola, which has killed over 10,000 in West Africa, is linked to eating monkeys and bats;
• Nipah virus, which kills a few people in India each year, is also traced back to bats;
• Marburg Hemorrhagic Fever, which killed seven German lab staff working on green monkey tissue in 1967, is hosted by African fruit bats;
• Kyasanur Forest Disease is a tick-borne virus from monkeys that annually affects 400-500 people in southwest India, resulting in occasional human deaths and high monkey mortality;
• While not a zoonotic, African swine fever is a big killer of domestic pigs infected by ticks from wild pigs, bushpigs, and warthogs.

The link between deforestation and zoonotic diseases is being increasingly studied. In a recent blog, Kerstin Canby of Forest Trends notes that “without forests as a buffer, hunting, mining, and logging exposes people to animals. These interactions lead to the spread of animal diseases to humans. We’ve seen this with Zika, Avian Bird Flu, Ebola, and SARS, as well as Nipah, which leads to respiratory problems similar to those from COVID-19, and Kyasanur Forest Disease, spread by ticks.” Canby also points out the major role of poachers and others involved in wildlife trafficking; research shows that, at least in southeast Asia, the same actors are involved in illegal logging.

The loss of animal habitat, mainly due to deforestation, is forcing multiple animal species to crowd together in ever smaller areas, as well as bringing them more into contact with people, who are increasingly hunting and eating/selling them – especially as sustainable forest livelihood options are lost (also due to deforestation). Moreover it seems that at least some zoonotic diseases favour degraded environments: published research shows that Ebola vectors are mainly found in forest clearings and fringes, and that there is a statistical correlation between Ebola disease outbreaks and recent deforestation.

The problem is that in crowded (as regards bird/animal species) and degraded ecosystems, viruses are more likely to jump from one species to another. As noted by Dr Kate Jones of University College London: “we are creating habitats where viruses are transmitted more easily. Species in degraded habitats are likely to carry more viruses which can infect humans. Simpler systems get an amplification effect. Destroy landscapes, and the species you are left with are the ones humans get the diseases from.” Another researcher, Richard Ostfield of the Cary Institute of Ecosystem Studies, New York, observes that “rodents and some bats thrive when we disrupt natural habitats. They are the most likely to promote transmissions. The more we disturb the forests and habitats, the more danger we are in.” David Quammen, author of *Spillover: Animal Infections and the Next Pandemic*, also expresses it succinctly: “We disrupt ecosystems, and we shake viruses loose from their natural hosts. When that happens, they need a new host.”

It can also be noted that some of the main drivers of climate change are also bad for human health. Apart from the role of deforestation, which causes 12-15% of greenhouse gas emissions, as a major indirect cause of zoonotic diseases, fossil fuel pollution is severely exacerbating the impact of COVID-19. Harvard University researchers have found a strong statistical correlation between exposure to fine particulates, which damage the lungs, and COVID-19 death rates: an increase in urban atmospheres of one microgram per cubic metre is associated with a 15% increase in deaths.

We don’t know where the next pandemic will come from, but it will almost certainly be another zoonosis, and it is quite likely to be associated with deforestation and illegal wildlife trafficking. If, as is the case with many zoonotic viruses, it affects the respiratory system, fossil fuel pollution will exacerbate the impacts. A glimmer of hope in all this is that perhaps there will be a greatly increased realization that what is bad for the planet is also bad for human health – and this could increase political will to combat climate change. In fact the links between environmental and human health are the focus of an emerging discipline called “planetary health”. And of course this is another example of the interconnectedness of all things.
ebbf Conference

The International Environment Forum wishes ebbf (Ethical Business Building the Future) all the best for their annual conference which is currently taking place online (14 - 17 May)!

In Pursuit of Hope in a Time of Crisis
By IEF President Arthur Dahl

The Wilmette Institute and ebbf-Ethical Business Building the Future are organizing a series of weekly webinars on the general theme Addressing the Present, Building the Future. The webinar on Saturday 25 April was on In Pursuit of Hope in a Time of Crisis featuring IEF President Arthur Dahl.

Facebook Link: https://www.facebook.com/WilmetteInstitute/posts/3004453406244884
YouTube Link: https://youtu.be/rseYnGRUqyg

As COVID-19 sweeps the world, fear and panic are natural responses. The world was already in a mess, and now mass suffering is impacting everyone. For young people, their future already overshadowed by the climate catastrophe, hope may seem impossible. Yet this cloud does have a silver lining giving hope, which we can explore together. My recent book "In Pursuit of Hope", suggests ways to arm ourselves for the environmental, social and economic challenges we are now facing and those still to come. See if you leave this webinar with more hope in the future. The book In Pursuit of Hope is available at: Oxford: George Ronald Publisher, soft cover £10.99 / $18.99 204 pages. Order from http://www.grbooks.com/george-ronald-publisher-books/social-and-economi…. A Kindle version is available from Amazon.

This link brings you to an on-line version of the book which adapts its page size so that it can be read on a smartphone or tablet.

The Wilmette Institute Highlights Issues of Global Concern in Community Videos

Intergenerational Climate Collaborative Project, April 26, 2020
IEF member Sue Blythe facilitated this intergenerational, interfaith climate conversation with panelists Matteen Kashef, Savannah Roemhild, and Farhang Darabi. See article below.
https://www.youtube.com/watch?v=YW2KzoQHGIl&feature=youtu.be

Climate Change, Coronavirus, and One World; The Choice is Clear, May 2, 2020
with IEF members Gary Reusche and Daniel Truran, in collaboration with ebbf
https://www.youtube.com/watch?v=XY4xiW-X_eg&feature=youtu.be
Intergenerational Climate Collaborative Project
by Matteen Kashef, student at the University of Florida, who just applied for IEF Membership

Over the last two months I’ve had the pleasure of working with We, the World and Elders Climate Action on a youth and elder intergenerational climate conversation. I wanted to share some experiences with you all!

Over the last few years, I’ve become aware of the impacts of human activities since the 19th century on earth’s rising temperatures, and have decided to exert my efforts to learn more and become an advocate for sustainability. As said by Bahá’u’lláh, the founder of the Bahá’í Faith, “be anxiously concerned with the needs of the age ye live in, and center your deliberations on its exigencies and requirements.”

Every one of us has the responsibility of caring for the gigantic and magnificent ball of rock we all live on, and our decisions affect ourselves, people on the opposite side of the planet, and our great-grandchildren. As we have seen with the current COVID-19 pandemic turning the world upside down, we are interdependent world citizens.

These experiences have reminded me of one of my favorite passages from 'Abdu'l-Bahá regarding humanity’s relationship with nature and the interconnectedness of earth:

“Even as the human body in this world which is outwardly composed of different limbs and organs, is in reality a closely integrated, coherent entity, similarly the structure of the physical world is like unto a single being whose limbs and members are inseparably linked together...Co-operation, mutual aid and reciprocity are essential characteristics in the unified body of the world of being, inasmuch as all created things are closely related together and each is influenced by the other or deriveth benefit therefrom, either directly or indirectly.”

This view is also pronounced in the Earth Charter, an international declaration of principles launched in 2000 for building a just, sustainable, and peaceful world. The preamble states that “Everyone shares responsibility for the present and future well-being of the human family and the larger living world.”

Over the past two months, I have worked with Sue Blythe, Farhang Darabi, and Savannah Roemhild to plan how we can educate everyone, regardless of age, demographics, or faith, on the importance of fighting the impact of climate change. By enlightening individuals on the effects of human activities on
the rapidly warming earth, and cultivating patterns of action, we can decrease our future impacts-and maybe even reverse the actions of past generations as well as our own. Before we can act, we must all understand what we are working for and the impacts of our actions. Education must be a precursor to action. Although, what are words when they are not followed up by deeds? Nothing more than the pinnacle of inefficiency.

Our group has discussed the barriers for individuals from believing what is considered by the United Nation’s Intergovernmental Panel on Climate Change a “virtual certainty” that the climate system has warmed since the mid-20th century and that it is “extremely likely” that human actions are the “dominant cause of the observed warming”. One potential barrier is the interpretation of religious scriptures, which is why we would like to use an interfaith approach to promote the learning of the effects of climate change and how to limit its impacts. Based on the core teaching in the Bahá’í Faith of the oneness of religion, we would like to take a unified approach upon this unprecedented crisis in human history.

In our first step of working towards action, our group took part in an online panel discussion with the Wilmette Institute. The recording, can be found on YouTube. We discussed some of the ways which youth and elders can collaborate in the journey for environmental justice. This is our first step in the process of action in the work we can all do together. Events as these help us to “Integrate into formal education and life-long learning the knowledge, values, and skills needed for a sustainable way of life”. We look forward to continuing our efforts for a more sustainable future. We hope you will join us. We all have a role to play in ensuring the future well-being of life on Earth, our home.

International Day of Multilateralism

The International Environment Forum collaborated with UN2020: Civil Society Partnerships for the UN We Need, and Together First to support a week for multilateralism leading up to the International Day for Multilateralism on 24 April.

It is the time for us to send a strong unified message to our leaders on the critical need to #makeUN75count and a loud reminder that #multilateralismmatters more than ever.

On 24 April - International Day of Multilateralism, we celebrated the International Day of Multilateralism by reminding ourselves that addressing global challenges such as climate change, pandemics, poverty, and cross-border economic shocks requires unified action and collaboration. Watch the UN2020 video The Future We Want The UN We Need.

One special event on the International Day of Multilateralism was organized by the Global Challenges Foundation. It included a high-level book launch of Global Governance and the Emergence of Global Institutions for the 21st Century of which IEF members Maja Groff and Arthur Dahl were co-authors.
The Case for Transformative Public Education: Responding to Covid-19 now while addressing long-term underlying inequalities
by TESF (Transforming Education for Sustainable Futures)
Shared by IEF Member Terra Sprague

Educating the public is central to governmental and NGO responses to the COVID-19 pandemic. This briefing paper of the Transforming Education for Sustainable Futures Network Plus addresses the following topics:

- What is Transformative Public Education
- Why Transformative Public Education matters to the COVID-19 response
- Why Transformative Public Education matters for addressing long-term underlying risks to communities
- Examples of Transformative Public Education responses to COVID-19
- Suggestions for governments and state welfare actors seeking to work with Transformative Public Education
- Suggestions for community leaders working with Transformative Public Education
- Transformative Public Education in times of physical distancing
- Key readings and resources

TESF requests to share the briefing paper: https://tesf.network/resource/transformative-public-education/

World Environment Day - 5 June 2020: Time for Nature
from the UN Environment Faith for Earth 12 May Newsletter

It’s time to reimagine our relationship with nature. Hosted by Colombia, in partnership with Germany, the theme for this year’s World Environment Day, on 5 June is biodiversity, “Time for Nature”, an urgent call to combat accelerating species loss and degradation of our natural world at the hands of human activity. It will take not just one, nor just a village or neighbourhood but an entire global community. It’s time to raise our voices and tell our global leaders that we need nature at the heart of decision making.

Mindful of the need to respect public health protocols due to COVID-19, celebrations and activities are taking place online. We may be physically-distanced, but we can stay socially-connected and make digital discussions more important than ever. Take the Quiz to test your knowledge about biodiversity, and access a practical guide for individuals, cities, governments, faith communities, schools & universities, businesses and civil society. You can also create your own materials by downloading the campaign visual guidelines. Please register your faith-based activities to show the world your active involvement and to be featured in the global report.

Consequences of the Corona Pandemic and Climate Protection
Discussion paper of the Wuppertal Institute suggests a long-term perspective
Press Release by the Wuppertal Institut, 20.03.2020

Automakers close factories, the stock exchange crashes, empty streets and cafés everywhere and suddenly working from home is recommended or even required for a large part of the working population in Germany. The Corona pandemic is defining our current everyday life and hitting Germany, Europe and the world at a time when there are a multitude of huge challenges to be solved already. Economic aid is indispensable during and in the aftermath of such a crisis, but the primary
focus is to prevent the spread of the pandemic and limiting the health implications. Economic stimulus packages and structural aid are an effective means of overcoming the long-term economic consequences of such disruptive developments. However, they must not be distributed according to the "watering can principle"; financial support must be provided in a future-oriented manner for urgently needed investments. The aim must be to promote the necessary sustainable transformation processes within our economy and society, such as climate protection. According to the Wuppertal Institute’s Scientific Managing Directors, Prof. Dr. Manfred Fischedick and Prof. Dr. Uwe Schneidewind, the preparations must be made now. The current discussion paper shows which criteria and measures are needed.

Economically, Germany, Europe and the world are heading for a crisis situation that threatens to overshadow the dimension of the 2008/2009 financial crisis: companies and freelancers are under extreme pressure, supply chains and production must be maintained. The federal and state governments are currently creating a mix of economic measures to stabilise companies, businesses and industry in the short term. "This is right and necessary and it must be done as unbureaucratically and pragmatically as possible in order to have a quick impact. In the aftermath of the corona crisis, further investments are necessary. Economic stimulus packages are an effective means. However, the experiences from the economic and financial crisis of 2008/2009 have shown that these economic stimulus packages have a long-term effect and therefore need to reflect the broader range of transformation challenges of the coming years," says Prof. Dr. Manfred Fischedick, Scientific Managing Director of the Wuppertal Institute. Clear criteria are needed for measures to be aligned, he states.

Three-phase model for dealing with Corona pandemic
In the current discussion paper "The Corona Crisis and Climate Protection – Keeping Long-Term Goals in Mind", the two Scientific Managing Directors of the Wuppertal Institute, Prof. Dr. Uwe Schneidewind and Prof. Dr.-Ing. Manfred Fischedick, distinguish between health care (1), avert short-term economic crises (2) and long-term transformation (3).

Short-term economic support includes, for example, the recently adopted short-time working allowance, easier access to credit and state guarantees, as well as direct grants to affected groups. These emergency aid measures must now be implemented pragmatically and quickly, but: "The long-term aid measures must set clear priorities in terms of sustainable economic and social development," emphasise Schneidewind and Fischedick. According to the authors, the so-called "long-term transformation" includes mainly central measures for climate protection, for which state investment is indispensable. This applies, for example, to making the energy-intensive industry ready for the future and supporting important measures on the way to greenhouse gas neutrality. That includes the conversion of steel production to hydrogen-based (green) production processes and the gradual but consistent closing of material cycles as part of a more circular economy. In the building sector, further investments in building refurbishment and the replacement of heating systems are planned. Regarding transport, this means accelerating the switch to electromobility in the passenger car sector, but also in the freight transport sector – the latter can be achieved by setting up overhead line structures along motorways.

To download the paper, go to https://wupperinst.org/en/a/wi/a/s/ad/5020/

Laudato Si’ Week
from the Catholic Climate Covenant May 2020 Newsletter

Pope Francis invited the global Catholic community to commemorate the 5th anniversary of Laudato Si’ during Laudato Si’ Week (May 16-24). During that week Catholics will reflect, pray, and take action for a more sustainable future. For more information resources, and activities about Laudato Si’ week, visit Laudato Si’ Week website with information. Everyone is also invited to participate in a May Day of Prayer (24th at noon local time).
The United Nations Environment Programme (UNEP) is partnering with other Organizations to get people, including adherents of the world’s religions, to revisit our relationship with nature and rebuild a more environmentally responsible world. On 4 May, UNEP’s Faith for Earth initiative joined forces with the Yale Forum on Religion and Ecology (FORE). They have agreed to unite their efforts and strengthen environmental advocacy, and building on the Forum’s extensive work over the past two decades.

Twenty-five years ago, religion and ecology were not a linked field of study, nor a force for transformation. But after a series of conferences on religion and ecology in the late 1990s at Harvard's Center for the Study of World Religions (organized by Mary Evelyn Tucker and John Grim) things have changed. Programmes and courses on religion and ecology are being taught in colleges, universities, seminaries, and secondary schools around the world. You can access the Forum directly here or via the Faith for Earth Initiative here. The Yale Forum—with many partners, and through thousands of projects—has played an active role in raising awareness and encouraging action. To read the full partnership launch article, click here.

By the way, the IEF was recently requested to update the part of the Forum web site on the Bahá’í Faith which you can visit here.

50th Earth Day 1970 – 2020

22 April 2020 marked the fiftieth anniversary of the first Earth Day, which was organized in the United States on 22 April 1970, helping to launch the environmental movement. It was initiated by Senator Gaylord Nelson after he saw the environmental damage from the Santa Barbara oil spill on the California coast the year before, and was organized by a group of young activists in Washington, DC. Twenty million Americans took part.

Maria Ivanova, a leading expert on global environmental governance, has written a recent analysis of the significance of that moment in The first Earth Day was a shot heard around the world. She shows how it led to the first major environmental laws in the United States, as well as to the organization of the United Nations Conference on the Human Environment in Stockholm, Sweden, in 1972, which established the United Nations Environment Programme (UNEP). That will be another 50th anniversary to look forward to.

IEF President Arthur Dahl participated in the Earth Day events in Washington, D.C., the nation's capital, where he was a Visiting Post-doctoral Research Associate in the Department of Botany at the Smithsonian Institution's National Museum of Natural History. You can read his personal recollections in the March issue of LEAVES.