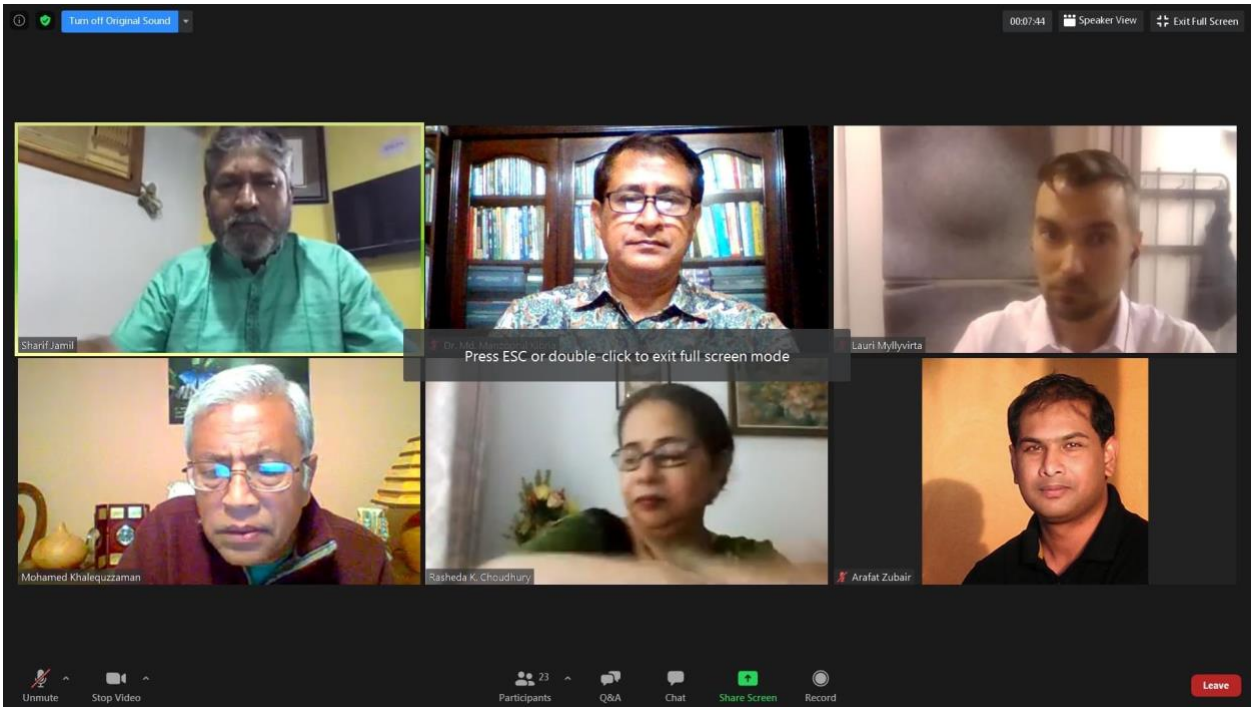
ENVIRONMENT NEWSLETTER

Year 17, No. 37-38 (September 27, 2020)
Presented by **Bangladesh Environment Network (BEN)**
www.BEN-Global.net and www.listserv.emory.edu/BEN

This issue of the Environment Newsletter includes the following items:

1) BAPA Webinar on Coal-based Power Plants and Air Quality
2) Relocation of stray dogs in Dhaka
3) Life on Venus?

1) BAPA Webinar on Coal-based Power Plants and Air Quality



Picture: A screenshot of the webinar organized by BAPA

The air pollutant emissions from the coal-fired power plants that the government is currently constructing in and around Cox's Bazar will be responsible for a projected 30,000 air pollution-related deaths over an operating life of 30 years. Other health impacts include 41,000 asthma emergency room visits, 32,000 new cases of asthma in children, 24,000 preterm births, 17 million days of work absence (sick leave) and 47,000 years lived with disability related to chronic obstructive pulmonary disease, diabetes and stroke. These were the findings of the recently released a report "*Air quality, health and toxics impacts of the proposed coal power cluster in Chattogram, Bangladesh,*" prepared by the Center for

Research on Energy and Clean Air (CREA). The report looked at detrimental impact of coal-based power plants in Cox's Bazar and Chattogram on people's health, air quality and environment.

Bangladesh Poribesh Andolon (BAPA) organized on September 22, 2020 a webinar to discuss the findings of the above report. Sharif Jamil, general secretary of BAPA, moderated the webinar, which was joined by eminent researcher on rivers Prof Manzoorul Kibria; Dr Rashid-E-Mahbub from Doctor's Platform for People's Health; Dr. Mohamed Khalequzzaman, professor of Lock Haven University, USA; Dr Abdul Matin and Fazlul Quader Chowdhury, president of BAPA, Cox's Bazar unit. The webinar was chaired by Rasheda K Choudhury, former advisor to the caretaker government.

Key findings of the study include:

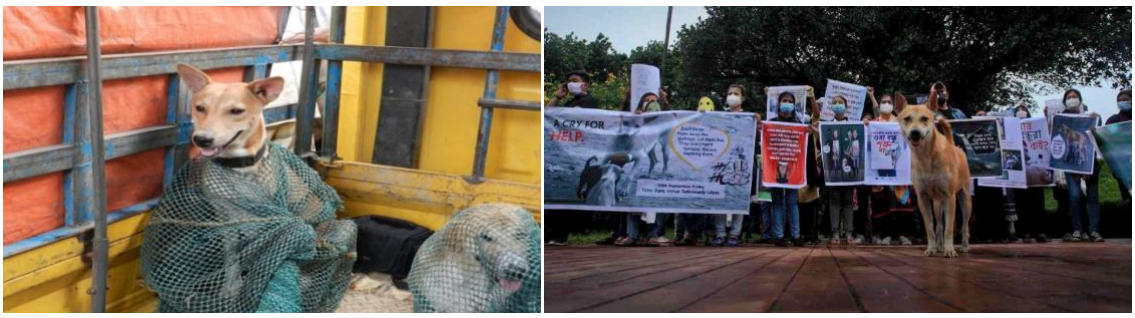
- Bangladesh and Chattogram are already suffering from high levels of air pollution, increasing the risk of many chronic diseases, lowering life expectancy and making the country more vulnerable to the COVID-19 pandemic.
- The eight coal-fired power projects proposed in Cox's Bazar constitute the largest proposed coal-fired power cluster anywhere in the world, in a location with very high population density and that is the tourism capital of Bangladesh.
- The plants will emit an estimated 1600 kg of mercury per year into the air, of which one third will be deposited into land and freshwater ecosystems in Bangladesh. Most of the deposition will take place onto cropland and into waterways, increasing the mercury concentrations in food. The levels of mercury deposition are potentially dangerous in an area with 7.4 million inhabitants. This does not include releases into water which would add to the impact.

Further Readings:

- Air quality, health and toxics impacts of the proposed coal power cluster in Chattogram, Bangladesh-CREA Report: https://energyandcleanair.org/wp/wp-content/uploads/2020/09/Chattogram-coal-power-cluster.pdf
- Recorded Webinar Link: https://www.facebook.com/108672827511396/videos/1918942061581191

2) Relocation of stray dogs in Dhaka

Stray dogs are characterized as unconfined dogs that live in urban areas. Historically Dhaka has a large number of stray dog populations. A study conducted in 2015 revealed that about 52 dogs live per square kilometer in Dhaka. Dhaka South City Corporation recently initiated a program of relocating stray dogs of the city to other areas. The program generated widespread debates and protests. The city corporation justified the program arguing that stray dogs were a risk to the human health. However, the protesters maintained that relocating stray dogs was not going to solve anything. Instead, it would transfer the issue to other areas.



Picture: Captured stray dog for relocation (left) and protest against relocating stray dogs (right).
Source: UNB & The Business Post

Stray dogs are a risk to the city inhabitants because of they might be bitten by the dogs. The biting may lead to rabies and other diseases. During the COVID-19 lockdown, because of the closing of a large number of restaurants, stray dogs were in shortage of food. Consequently, they might have become more aggressive. The city authorities wanted to avoid possible untoward incidents by removing stray dogs from the city.

However, the opponents emphasized that relocating stray dogs might not solve the issue. According to an article written by Orobi Bakhtiar and Nahaly Nafisa Khan, 98% of the human deaths from rabies are due to bites from rabid dogs, however, only 6 per cent of all dogs in Bangladesh have rabies. They mentioned that about 70 per cent of the stray dogs of the city have already been vaccinated against rabies in the first round of a health ministry project to eradicate the disease within 2022. If the dogs are relocated without vaccination, the risk of rabies infection in Dhaka South will rise, mostly because other dogs will occupy the areas if the old ones are relocated.

On the legal side, the Parliament of Bangladesh enacted the new Animal Welfare Act of 2019, replacing the old Cruelty to Animals Act of 1920. According to section 7 of the Act the killing or removal of stray animals is not allowed unless they are proven to be causing harm. So any relocation of stray dog population needs to be justified by showing that they are actually causing harm.

Historically humans and stray dogs have lived in Dhaka city with harmony. While some stray dogs can cause harm to the city dwellers, there are other solutions to this issue rather than relocating them to other places. Controlling the number of stray dogs can be achieved by sterilizing stray dogs. Moreover, an efficient vaccination program can reduce the possibility of infection from dog bites.

Further readings:

- Why relocation of stray dogs is not the right way to go about it: https://www.thedailystar.net/toggle/news/why-relocation-stray-dogs-not-the-right-way-go-about-it-1959213
- 'Don't throw them like garbage. Let them Live': https://unb.com.bd/category/Bangladesh/dont-throw-them-like-garbage-let-them-live/58039

- Free-Roaming Dog Population Estimation and Status of the Dog Population Management and Rabies Control Program in Dhaka City, Bangladesh: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4433337/

3) Life on Venus?

Picture: Global view of Venus. This view of the surface of Venus is centered at 180 degrees east longitude. Magellan synthetic aperture radar mosaics from the first cycle of Magellan mapping are mapped onto a computer-simulated globe to create this image.

Venus and Mars, being the two closest planetary neighbors of earth, always interest astrophysicists in searching for life on those planets. There are several reasons for humans to explore Mars. For instance, Mars is the most accessible place in the solar system. exploring Mars could possibly answer questions regarding the origin and evolution of life. It could someday be a destination for survival of humankind.

By contrast, Venus's location closer to the Sun and the extreme greenhouse effect make water-based life unlikely on the surface of this planet. Venus has a thick and toxic atmosphere filled with carbon dioxide and clouds of sulfuric acid that trap heat. This causes a runaway greenhouse effect resulting Venus being the hottest planet in our solar system. Theoretically however, if liquid water existed on its surface before this greenhouse effect, microbial life might have formed on Venus, though it may no longer exist. In 1950, German physicist Heinz

Haber put forward the idea that at the altitudes of about 50 km above the surface of Venus the temperature might be mild. Hence there are still some opinions in favor of the possibility of life in the atmosphere of Venus. Later in 1967, Carl Sagan and Harold Morowitz published an analysis of the issue of life on Venus. Their study hypothesized that life in the Venus clouds could be envisaged. According to their hypotheses, at the beginning of the greenhouse effect, organisms might have emigrated to the clouds, and might be awaiting there the first biological experiments to be performed in the vicinity of the Venus clouds.

A recent (September 2020) study conducted by scientists from UK and USA, that received media attention worldwide, indicated a detection of phosphine gas (PH3) in Venus's atmosphere. These findings are based on single-line millimetre-waveband spectral detections using the Atacama Large Millimetre/submillimetre Array Telescope and James Clerk Maxwell Telescopes. Scientists have concluded that this is not linked to any known abiotic method of production under the atmospheric condition of Venus and could originate from unknown photochemistry or geochemistry, or, by analogy with biological production of PH3 on Earth, from the presence of life. However, they also emphasize that the detection of PH3 is not a robust evidence for life, only for anomalous and unexplained chemistry.

More Read:

- Phosphine gas in the cloud decks of Venus: https://www.nature.com/articles/s41550-020-1174-4
- Life in the Clouds of Venus? https://www.nature.com/articles/2151259a0

"Environment Newsletter" is produced and circulated by the "Bangladesh Environment Network (BEN)," the global network of non-resident Bangladeshis and their international friends, geared toward protection of Bangladesh and global environment. It may be recirculated and its contents may be used for non-commercial purposes, provided appropriate acknowledgment is made. Send your comments queries to: ben.global.editor@gmail.com.