

# NEWSCLIPPINGS

*JANUARY TO JUNE 2018*

## ENVIRONMENT



## Urban Resource Centre

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## **KPT spending Rs500m more on ships' maintenance because of sea pollution, Senate body told**

The Karachi Port Trust (KPT) is spending between Rs350 million and Rs500 million extra on maintenance of its ships due to increasing pollution in the sea, KPT chairman Rear Admiral Jamil Akhtar told a parliamentary committee on Tuesday.

"We have to dock our boats and tugs to clean the propellers and the shafts of plastic and polythene bags. Pakistan Navy is facing the same problem of having to spend five times more on maintenance of its ships. It will not be long that foreign ships stop coming to our harbours," Jamil Akhtar told the Senate Standing Committee on Maritime Affairs.

The committee met for a briefing on steps taken to clean the polluted water containing sewage and industrial waste that is fatal for marine life, poisoning seafood and degrading human environment.

Describing himself a victim, Rear Admiral Jamil Akhtar said that increasing sea water pollution had created an emergency situation that demanded immediate action.

"Seeing is believing. We will like to invite the committee to see the disaster happening on the ground," Jamil Akhtar said.

The director general of Ports and Shipping, Asad Chandna, shared similar concerns when he told the committee that from 450 million gallons and 500 million gallons raw sewage was being discharged daily directly into the sea without any solution in sight to stop the pollution.

"It has caused severe degradation for our eco system, marine life, and destruction of mangroves and causing damage to naval ships anchored and operational in and around naval jetty and dock yard," said Asad Chandna.

According to the official, the severity of inflow of solid waste and slurry material into the navigational channel was so high that the KPT required Rs1.5 billion annually to dredge the harbour. The department has also hired four boats which scoop the inorganic waste and floating marine debris from the water on a daily basis including polythene and plastic. Approximately five to ten tons of debris is collected from the navigational channel daily which costs the KPT Rs10 million annually, the official lamented.

Asad Chandna informed the Senate committee that following the Supreme Court's order, a judicial commission had been formed that had now made its personal issue to solve the problem of increasing pollution. "The commission summons a progress report from all departments concerned fortnightly," he said.

The commission also published a report spread on 300 pages highlighting the seriousness of the pollution along the coast where the once red sandy beaches have now turned grey and black.

The official read some excerpts from the report for the committee, saying that all 6,000 industrial units including the 1,400MW thermal power plant and Pakistan Steel Mills, one of the largest industrial units, were dumping their untreated waste directly or indirectly into the Karachi and Gharo Creek areas. Approximately 500MGD industrial and domestic waste water was being generated and discharged through Lyari and Malir rivers into coastal areas, the report said.

"Untreated industrial and domestic waste water are a source of serious hazard to the coastal areas of Karachi, which is one of the highly polluted coastal belts in the world resulting in massive economic losses to the country through decrease in the export potentials of fisheries. Industries are continuously discharging untreated effluent and appear to refuse to conform to the Sindh Environmental Protection Act," Asad Chandna quoted from the report submitted with the Supreme Court.

The chairman of the committee, MQM Senator Muhammad Ali Khan Saif, accepted the invitation of KPT chairman Rear Admiral Jamil Akhtar to visit the ports and harbours to examine the situation on the ground.

(By Jamal Shahid Dawn, 27, 03/01/2018)

## **CM directs plantation of two forests near Karachi and Hyderabad**



Chief Minister Murad Ali Shah has directed the forest department to develop two separate blocks of forests, each spreading over 10,000 acres near Karachi and Hyderabad to help control environmental pollution.

The CM issued these directives on Friday while presiding over a meeting of the forest department at CM House. The meeting was attended by Chief Secretary Rizwan Memon, Principal Secretary to CM Sohail Rajput, Forest and Wildlife Secretary Asif Hyder Shah, chief conservators and other concerned officers.

Vast lands of the forest department were lying barren near Karachi and Hyderabad, the CM maintained. "Both cities are facing environmental pollution, therefore two separate blocks of forest may be developed near them," he said, adding that each block should be spread over an area of 10,000 acres and watered through a drip irrigation system.

Giving a presentation to the CM, the forest secretary said the total forest land in the province comprised around 10% of its surface area. The forests included mangroves, riverine forests, rangelands and irrigated plantations. According to the forest secretary, irrigated plantations covered an area of 202,622 acres in the province, while riverine forests, rangelands and mangroves spread over 595,511 acres, 1.13 million acres and 1.5 million acres respectively.

Thousands of acres of forest land under encroachment, govt admits

The forest secretary informed the meeting that mangroves had been planted over an area of 175,000 acres in the province during the last five years. "We set the Guinness World Record of planting the most mangrove trees in a single day in 2009 and again set a new record in 2013," he said. The CM gave the forest department a new target of planting one million mangroves in March. "I will personally launch the drive on March 23," Shah said.

The CM was also informed that around 100 million seeds had been dispersed for planting riverine forests over 5,000 acres in Sindh. The forest department had also carried out linear plantation alongside roads and canals spreading over 400 kilometres, the meeting was told.

The CM directed the forest secretary to issue notices to land occupiers who had violated lease conditions. He also directed to remove encroachments from the forest land in the province.

(THE EXPRESS TRIBUNE , 05, 20/01/2018)

## **NED university to plant 2,500 trees, plants**



The NED University of Engineering and Technology has initiated a green campus project in view of the university turning 100 years old in 2021. Under the project, a campaign has started to plant 2,500 plants and trees, out of which 100 have already been planted.

The site plan of the project has been prepared in which 16 types of plants and trees will be planted. Initially, 70 date trees have been planted from the central door of NED till the walls of Karachi University (KU).

100 saplings planted during SEPA plantation drive

Other projects were also initiated which includes changing the lighting at the varsity to LED lighting. The expenditure of the projects will be borne by the alumni of the varsity.

An ex-student, Sohail Bashir, who works for a Japanese company has taken the responsibility of planting date trees and has already planted 70 of them. The company involved in planting the trees will also be responsible for maintaining these trees for a year.

The date trees will be planted as far as the wall that unites NED with KU. Inside the university, the plantation will take place in the soccer field, car parking area, vicinity of Habib Bank Limited and National Bank of Pakistan, tennis court, basketball complex and other places.

100,000 trees to be planted in District Central by 2017 end, says DMC chairperson  
According to the plan, Royal Palm, coconut palm, washing to new palm, Senegal date palm and traveler palms and other types of trees and plants will be planted.

NED University Vice Chancellor (VC) Sarosh Lodi said that a graduate of the varsity, Asad Jafar, works as the chief executive officer of a company that has agreed to install LED lighting. Lodi said talks were held with Jafar, who agreed to install the LED lights without any profits. Funds for the installation are being arranged, Lodi said.

The VC said that details of the project will be published on the website soon and everyone can choose a position of their choice to plant a tree with their name. He said those cooperating with the university include two alumni members, Ajmal Farooqi and Bashir from Saita Corporation. Others include Arif Raza from Amcorp Engineering and Construction (Pvt) Limited, Faisal Naqvi from Gasco Engineering, Ameerul Islam from Jersey Precast, Kazim Mansoor from Soilmat Engineers and Ghulam Farooq and Farhat Adil. (THE EXPRESS TRIBUNE, 05, 18/01/2018)

### **Some 20,000 premature deaths linked to air pollution**

Pakistan's urban air pollution is among the worst in the world. The horrific impact of air pollution is causing more than 20,000 premature deaths among adults and almost 5,000,000 cases of illness among children each year, according to the World Bank's report titled, 'Cleaning Pakistan's Air: Policy Options to Address the Cost of Outdoor Air Pollution'.



"Pakistan is [one of] the most urbanised countries in South Asia, and it is undergoing rapid motorisation and increasing energy use... Air pollution, particularly in large urban centres, damages the population's health and quality of life and contributes to environmental degradation," the report states.

Smoking, air pollution behind surge in COPD

It mentions that the concentrations of particle pollution — or particle matter (PM) — in Pakistan's urban areas are much higher than those experienced in other regional countries such as Bhutan, India and Sri Lanka. In addition, while these countries have adopted a number of measures that have resulted in reduced urban air pollution, Pakistan has yet to follow suit and is paying the costs of increasingly high outdoor air pollution.

The study reveals that — from 2007 to 2011 — the reported levels of PM, sulfur dioxide (SO<sub>2</sub>), and lead (Pb) were many times higher than the World Health Organization (WHO) air quality guidelines.

However, former Pak-EPA Director General Asif Shuja Khan adds that the report was commissioned in 2014, and the alarming figures may have been increased since — keeping in mind the impact of the smog in 2017 on health, economy and agriculture. "Currently, the impact of climate change is making matters worse, which we witnessed in the form of the dense smog last," says Khan. "But it's important to understand that smog alone cannot be controlled at a local level, as it requires regional cooperation."

Pakistan's economic hub — Karachi — is perhaps the worst hit. Its population is exposed to outdoor ambient air concentrations of PM that are much higher than WHO guidelines. Annual average PM2.5 ambient air concentrations are estimated at 88 micrograms per cubic meters. "Nearly 80% of the 9,000 premature deaths caused each year in Pakistan by high PM2.5 concentrations are in Karachi," reads the report. The report outlines a broad spectrum of research on Pakistan's air pollution challenges and identifies a comprehensive set of steps to improve air quality. The Express Tribune outlines some of the significant findings from the report:

#### Street smart?

The number of vehicles on Pakistan's streets have jumped from approximately two million to 10.6 million over the past 20 years — an average annual growth rate of 8.5%. The number of motorcycles grew more than 450% and motor cars close to 650%.

#### Toxi-cities

Emissions from large-scale facilities such as cement, fertiliser, sugar, steel and power plants — many of which use furnace oil that is high in sulfur content — are a major contributor to air quality.

Environment pollution: People call upon government to shift factories from residential areas  
Where there's smoke...

More than 54,000 tons of solid waste are generated daily, most of which is either dumped in low-lying areas or burned. Moreover, farmers in Pakistan burn sugarcane fields to ease harvesting. Predominately, dry weather in arid conditions and strong winds also generate substantial dust in most parts of Sindh and southern Punjab, elevating PM10 levels in the air.

#### Health hazard

The worst impact of poor air quality was witnessed on the health sector. Outdoor air pollution alone causes 80,000 hospital admissions per year; nearly 8,000 cases of chronic bronchitis; and almost five million cases of lower respiratory cases among children under the age of five.

#### It's the economy, stupid

By 2005, the direct cost of the damage associated with outdoor air pollution was estimated at 1.1 % of Pakistan's GDP (US \$1.07 billion).

( THE EXPRESS TRIBUNE , By Sehrish Wasif, 02, 29/01/2018)

## Curbing smoking

THE health services ministry recently issued an SRO under which the pictorial health warning on a cigarette pack will be increased to cover at least 50 per cent of the packaging. This comes after the tobacco industry's lobbying led to the withdrawal of an earlier SRO which would have increased the pictorial warning to 85pc.



The government's retreat is being perceived as a major setback in our effort towards curbing smoking, considering that the WHO Framework Convention on Tobacco Control also encourages the printing of large pictorial warnings. On closer inspection, the retreat is not as bad as it first looks. A 25pc increase from 50pc to 85pc may have attracted smokers' attention but, as a policy tool, would have had a limited impact in inducing behaviour change. To understand why, a short detour might be useful.

In neoclassical economics that dominated the late 20th century — around the same time when pictorial warnings became popular — the conventional view was that consumers are rational economic agents who act to further their individual self-interest. In markets where consumers lacked perfect information, however, this was not possible and so the government would intervene to correct the information asymmetry. A popular policy tool was a regime of mandatory disclosure that required sellers to make certain informational disclosures to buyers prior to sale.

*The law has been rarely invoked to de-normalise smoking.*

Since policymakers felt the market for cigarettes was beset by information asymmetry as the tobacco industry was working hard to suppress evidence of risks associated with smoking, governments responded by making pictorial health warnings on cigarette packaging mandatory. The solution was based on the (neo-classical) assumption that once smokers were informed about the risks associated with smoking, they would, as rational economic agents, stop engaging in the activity.

However, the warnings failed to induce the large-scale changes in smoking patterns that had been predicted. As it turns out, people do not always act rationally and the decisions they make may not necessarily be in their individual self-interest.

Humans suffer from what Sunstein and Thaler call bounded rationality and bounded willpower, a phenomenon that shows people often knowingly act in a manner that is inconsistent with their long-term interests. A typical example is smoking where the benefits are immediate but the costs deferred to the long run.

In that case, increasing the size of the pictorial warning serves a limited purpose only. It might help in changing some attitudes towards smoking but is not very effective as a behaviour-changing technique. Hence, policy prescriptions that solely focus on strengthening the regime of mandatory disclosure by reserving even greater space for pictorial warnings will not do the job. Any effort by the government to curb smoking should focus on addressing the underlying problem which has more to do with the bounded willpower of smokers than with their lack of information or the insufficiency of existing health warnings.

To this end, the government can utilise a number of other policy tools available and use them in conjunction with one another. For instance, it can nudge new smokers away from the activity by making tobacco products less salient in our everyday lives. Currently, many stores display cigarettes at the point of sale. The placement makes them more visible and salient which, as studies suggest, increases consumption. A decent policy intervention would prevent retailers from displaying cigarettes at the point of sale.

From the supply-side, salience can be reduced further by enforcing a licensing regime that restricts the number of stores that can sell tobacco products. The Tobacco Vendor Act, 1958, in Pakistan not only requires retailers to obtain a licence before selling tobacco products but also criminalises the illegal sale of cigarettes. However, governments have shown very little appetite for the proper implementation and enforcement of this law.

The Prohibition of Smoking and Protections of Non-Smokers Health Ordinance, 2002, appears to have met the same fate. Section 3 of the ordinance empowers the government to “declare any place of public work or use” to be a no-smoking place. This power has been rarely invoked even though it can potentially change social norms and de-normalise smoking.

Alternatively, the government can also raise taxes on the consumption of cigarettes. This option is perhaps the most effective way to reduce smoking among the young and the poor who are more sensitive to price changes.

To be sure, a successful campaign to curb smoking requires a multipronged strategy that utilises all the tools available at the government’s disposal. Focusing solely on increasing the size of pictorial warnings will not suffice. As in almost every other area in Pakistan, the laws are already there; it is only that the government will is lacking.

(By Bakhtawar Bilal Soofi Dawn, 09, 31/01/2018)

## **Sindh govt imposes ban on polythene bags across province**

The Sindh government on Wednesday imposed a complete ban on manufacture, sale and purchase of non-biodegradable polythene bags (plastic bags) across the province.

The ban was imposed under Section 144 of the Criminal Procedure Code by the Sindh home department with immediate effect and until further orders.

“In exercise of the powers conferred under Section 144 (I) CrPC, the Government of Sindh, do hereby impose a complete ban on manufacture/sale/purchase of non-biodegradable polythene bags/plastic products in the territorial jurisdiction of the province of Sindh with immediate effect till further orders,” reads a notification.

It said the Sindh government was satisfied that it was necessary to take ‘immediate measures’ to avoid environmental pollution (land and water), choking of drains, and the risks to the health of citizens associated with the use of non-biodegradable polythene bags, or plastic products, as the carriers for food or drinkable substances, or for carriage of other materials in contravention of the Sindh Prohibition of Non-degradable Plastic Products (Manufacturing, Sale and Usage) Rules 2014 and Sindh Environmental Protection Act (Sepa) 2014.

The home department asked the officer authorised under the Sindh Prohibition of Non-degradable Plastic Products (Manufacturing, Sale and Usage) Rules 2014 to initiate strict legal action under the said rules; and, in addition to Sepa against the violators of that order.

Besides, the notification said, in pursuance of Section 195(i)(a) of the CrPC the SHO of the police station concerned was authorised to register complaints regarding the issue under Section 188 of the Pakistan Penal Code against the violators of the government order.  
(By Hasan Mansoor Dawn 17, 22/03/2018)

### **Experts point out flaws in govt strategy to curb plastic pollution**

Simply slapping a ban on polythene bags will have little impact on their mass use unless the government creates awareness of their hazards and provides the people with inexpensive, reusable environment-friendly alternatives.



Moreover, the management of plastic refuse is only a part of a bigger problem — the absence of an efficient waste collection and management system across the province. The first step towards the solution to the problem lies in segregating waste at source, a strategy successfully adopted by many countries.

These points were raised by experts Dawn spoke to on the recent government ban on polythene bags that includes all kinds of (non-biodegradable) lightweight plastic material used for packaging, wrapping etc.

They also questioned the need for a notification on the ban given the fact that rules on prohibition of non-degradable plastic had existed since 2014 as part of the Sindh Environmental Protection Act.

The March 21 notification of the government said: “In exercise of the powers conferred under Section 144 (I) CrPC, the government, do hereby impose a complete ban on manufacture/sale/purchase of non-biodegradable polythene bags/plastic products in Sindh with immediate effect till further orders.”

#### ***Stress segregating waste at source, refuse management, recycling and enforcement of laws***

According to the notification, the ban has been imposed to avoid environmental pollution, choking of drains and to minimise health risks to citizens associated with use of these non-biodegradable polythene bags and plastic products or any other material “in contravention of Sindh Prohibition of Non-degradable Plastic Products (Manufacturing, Sale and Usage) Rules, 2014 and the Sindh Environmental Protection Act, 2014.”

Apart from the Sindh Environmental Protection Agency (Sepa), it authorises the SHO/police station concerned to register complaints under Section 188 of the Pakistan Penal Code against violators.

Studies have found that plastic harms the environment and all forms of life in numerous ways. The long list of plastic's harmful impact on the environment includes release of toxic chemical/s both into the air and the soil, if it is burnt or it remains buried in the soil.

It can also seep into the ground and mix with groundwater, making water unhealthy both for humans and agriculture. It may also cause death of marine life.

Internationally, there is a difference of opinion over how environmentally safe biodegradable plastic carrier bags are. Many believe that though they do not last as long as non-biodegradable plastic bags do, they still do not present a clear improvement.

### **Segregation of waste**

Sharing his opinion on the ban, Dr Moazzam Ali Khan of Karachi University's Institute of Environmental Studies, pointed out that the government needed to look at the bigger picture to effectively address the problem of plastic refuse, which constituted around 13 per cent of the 60pc recyclable waste.

"Unfortunately, we neither have a uniform system for waste collection nor waste disposal. A large quantity of refuse generated in the city daily is not picked up at all by civic agencies and remains in the city, causing environmental pollution," he said.

According to him, an absolute rejection of plastic carrier bags is neither possible nor a solution as they are used for waste segregation and collection. "While we must cut down on their massive use and find environment-friendly alternatives, there is a need to focus on refuse management and recycling industry."

The first step, he said, should be containment of the waste through its segregation at source. Municipalities in many countries used colour-coded plastic container system for segregating waste and its collection.

"The segregated waste is handled and treated separately. In our case, however, the entire waste, including the highly infectious medical waste constituting around 25pc of the total waste, is thrown out in the street."

This hazardous practice, Dr Khan pointed out, turned the entire waste infectious. "This practice not only poses a serious threat to public health at large but directly puts health and safety of hundreds of waste pickers at grave risk."

Trash, he said, often remained at garbage dumps for at least a day before it was picked up by civic agencies, increasing public health risks.

Dr Khan also raised concern over the open burning of garbage, a routine practice in many areas. "People are generally unaware of how polluted air is damaging our health. They should intervene if they see someone doing this in their neighbourhoods and the government should also play its role by taking up such cases."

Seconding his opinion, Dr Atif Mustafa, associated with NED University of Engineering and Technology as an environmental engineer, said public awareness of plastic hazards was the key to the solution.

"Apparently, there is a government ban on using polythene bags but you can see every one of us is using them. What we desperately need is awareness of the issue and providing people with economical, reusable environment-friendly alternatives," he said.

According to him, biodegradable plastic carrier bags are being manufactured and used at a very limited scale in the city. "It raises their cost. I think one strategy to discourage the use of polythene bags is to start charging consumers for them. Right now, they are almost free."

Dr Mustafa also referred to his study conducted in the Jacob Lines area which showed that segregation of waste and its proper collection was possible with community's cooperation.

"Segregation of waste at source makes collection and recycling easier and reduces transportation cost as well as carbon footprint," he said.

### **Need to strengthen Sepa**

Zubair Ahmed Abro, a senior environmental lawyer, said the government did not need to issue a notification on the ban since detailed rules on this subject already existed.

"The government only needs to strengthen Sepa to enforce the existing rules and regulations instead of giving powers to the police where there is always a chance of misuse."

He explained that Section 188 of the PPC dealt with disobedience to an order promulgated by a public servant, and the punishment was one month and a fine up to Rs600.

Asked about their role and actions, Sepa officials in a written reply to Dawn's queries stated that they "have been relentlessly pursuing stakeholders to adopt the technology for manufacturing biodegradable plastic products for the last three years and have issued numerous notices to solicit support of the industry."

Three companies, Sepa officials said, had been issued licences to sell their oxo-biodegradable additive in Sindh whereas three companies had already adopted this technology.

"Efforts are under way to bring other major sectors like sugar, cement, textile, hospitals etc into following the law and enforce it on small shopkeepers as well."

According to Sepa data, 20 million kilograms of "flexible plastic has been converted into biodegradable plastic from 2014 to 2016 whereas last year 97,940kg of flexible plastic was converted into biodegradable plastic."

The department also plans to launch a mass awareness campaign on the hazards of plastic.  
(By Faiza Ilyas Dawn, 17, 03/04/2018)

## **The Karachi plastics ban**

The recently announced ban on the use of plastic bags in Karachi was devised by somebody — or something — that is several sandwiches short of a picnic, a fact obvious to anybody born with even a modicum of common sense. Nobody has been arrested for the illegal use or issuance of plastic bags, and nobody languishes behind bars for their failure to comply with a directive that has been written with a complete absence of knowledge of the real world. The directive was preceded by no government-driven awareness campaign as to the perils of plastic, nor has there been any attempt to provide inexpensive, re-usable, biodegradable and environmentally-friendly alternatives. Traders and retailers remain in blissful ignorance of the directive. Further, there is an almost complete absence of any efficient waste disposable system that includes collection and the separation of recyclable materials and no system introduced, or likely to be introduced in the foreseeable future, whereby households are provided with the means of segregating waste at source.

All of the above is self-evident even to the most myopic, and it is now supported by a panel of experts who have questioned the need for a notification because there is already legislation in existence — the 2014 Sindh Environmental Protection Act — that nobody has ever heard of and never appears to have been enforced anyway. The ban has been imposed — or not — to avoid 'environmental pollution, choking of drains and environmental health risks to citizens' which is weapons-grade nonsense given the widespread understanding of the harm that plastics do to the environment globally.

Anybody living in or visiting Karachi will see at first-hand the willful damage being caused, be able to smell the blocked drains, tread through the filth and carry their children across puddles of effluent all

having discarded plastic as their prime source. The Sindh government claims to be working hard to find solutions to the problem with as yet no timeline on when the festering wen that is Karachi may have its face washed by. But there are no votes in waste plastic bags? Expect no early result.  
(By Editorial The Express Tribune, 16, 04/04/2018)

## Steps against plastic pollution

ABOUT two years ago, a groundbreaking initiative was launched in Morocco. Called Zero Mika, the initiative announced a ban on plastic bags. The ban did not apply to all plastic bags. Those used to gather household trash and agricultural and industrial products, as well as isothermal bags for maintaining medicine and other medical supplies at certain temperatures, were exempted from the ban.



The ban did, however, apply to the largest contributor of plastic bag pollution — bags used for carrying groceries and other purchased items. In short, bags that are easily and unthinkingly discarded on the streets.

The Zero Mika (zero plastic) law implemented by Morocco aims to reduce the polluting effects of the many tonnes of plastic bags that are produced every year. According to reports, Morocco has seized 420 tonnes of plastic bags since the implementation of the ban.

In choosing to take active steps against plastic pollution, Morocco and other countries that have implemented plastic bag bans have chosen to be part of the solution rather than the problem. Few people, including many reading this article today, realise that an average single-use plastic bag takes 1,000 years to decompose.

*We are temporary beings but the filth we produce will last almost forever.*

Given that human beings have produced 8.3 billion tonnes of plastic so far, and continue to do so at distressingly fast rates, the time may soon come when the plastic we create begins to crowd out life itself.

There is evidence of this in the oceans. Seabirds like gulls and others along with sea mammals like seals, turtles and dolphins routinely get tangled in plastic bags and choke. Marine turtles, once the pride and delight of beachgoers in Karachi, cannot distinguish between jellyfish which they eat, and plastic bags which kill them. The result: the ever-dwindling numbers of marine life on the plastic-polluted shores of the Arabian Sea.

Fish ingest plastic too and the cancerous effects of humans eating marine creatures that have consumed plastic will likely become apparent in the next few years as the incidence of cancer and other pollutant-related ailments increases even more.

The amount of plastic dumped in the ocean is reaching such staggering levels that there are actually three 'islands' made of plastic waste in the Pacific Ocean. They aren't going away for hundreds and hundreds of years, long after the humans who used them for the sake of convenience, without a thought to the larger impact of non-biodegradable plastics, are dead. We are temporary beings but the filth we produce will last almost forever.

Pakistanis, most of whom do not live by the sea, find it hard to care for the health of the oceans that they may never have seen, let alone the fate of generations to come.

At the same time, one can only hope that they may be convinced to care for what they see. A cursory glance at any part of Pakistan is guaranteed to reveal the ugly spectre of a plastic bag or several plastic bags either hanging from phone and electric wires, waving merrily from rubbish heaps and clogging gutters, or simply blowing around in the wind in a street or alley.

The bags are everywhere, and the rich and poor and concerned and completely thoughtless can all see for themselves just how horribly they transform the environment. If civic concern cannot galvanise them

into action, perhaps a concern for the fact that nearly every view in every part of the country has been tainted by the plastic bag can bring about some action.

This is the reason why the example of Morocco is particularly pertinent. Unlike in Balochistan, which supposedly already announced such a ban, but whose enforcement seems lax if not non-existent, and the Sindh government, which had also announced such a ban but has since forgotten about it, Morocco has actually devoted resources to ensuring that it remains one.

It is not that the country has not faced a struggle in the form of a black market in which plastic bags are sold illegally, following the legislation that was passed with fines imposed on violators. The main point is that the bags are banned and their numbers are being drastically reduced since the time before the ban. That in itself is a victory.

Others are following suit. The Indian state of Maharashtra, whose coastline also borders the Arabian Sea, fed up with watching debris pile up on the beaches and in drains and city streets, has imposed a ban on all plastic goods. The ban imposed by the state government lays out exemptions for items such as garbage bags, packing for processed goods, milk pouches, medical supplies and other essential items. The use of plastic for any other purpose, given the thoughtless convenience of not having to use an alternative, will not be allowed.

Early reports showed an eagerness to comply; vegetable and fruit sellers on the streets of Mumbai had put up small handmade signs asking people to please bring bags from home, as they were no longer permitted to provide them.

There was, of course, a time in South Asia before the plastic bag became ubiquitous, a time when jute and cane baskets and rope bags or reusable plastic baskets were used to transport things. Unlike the Western world, admittedly the largest producer of plastic waste, Pakistanis only have to remember old habits, not necessarily learn new skills.

If the plight of the seagulls and the fish and the birds doesn't move you, then just look outside, up and down and around. Wouldn't it be simply wonderful, completely amazing, to never ever have to see the black and blue and striped shreds of plastic as the backdrop to every moment, every scene and every site?

(By Rafia Zakaria Dawn, 08, 04/04/2018)

## **Poor quality fuel, coal-based plants seen as key causes of air pollution in city**

The long absence of a mass transit system in Karachi and use of poor quality fuel are major factors behind the city's highly degraded air. What has added to the environmental disaster is the government decision to allow operation of a number of coal-based projects with little checks.



These points were raised by experts at a seminar on pollution-free transport organised by the National Forum for Environment and Health, a non-governmental organisation, at a hotel here on Wednesday.

Giving a presentation on the subject, Dr Mohammed Raza Mehdi, a professor and co-chair at the department of urban and infrastructure engineering, NED University of Engineering and Technology, referred to the World Health Organisation's data according to which polluted air caused around 865,000 premature deaths every year and emissions from transport were a major factor degrading air quality.

"It is high time that public awareness is created on transport emissions. The situation has reached a point that suggests that doing nothing is no longer an option," he said.

According to him, traffic problems in developing countries such as Pakistan are different from what is experienced in the developed world.

“Apart from the fact that we lack traffic discipline and compliance [with] the law, not all of our oil refineries have the capacity to develop a fuel according to the European specifications,” he said, adding that Pakistan’s transportation largely consisted of buses and trucks being run on diesel, causing air pollution.

Pointing out some other transport problems causing air pollution, Dr Mehdi said that unlike Western and some African countries where goods were transported by railway, an eco-friendly system, around 90 per cent cargo in Pakistan was transported through roads that not only destroyed the network and led to traffic congestion, but also degraded air.

Data suggested that carbon emissions had steadily increased in Pakistan and there was a dire need that a system was developed to monitor these hazardous emissions.

He recommended improvement in fuel quality and ensuring fitness of vehicles as important measures to check air pollution.

“The government needs to properly implement relevant laws relating to registration, licensing as well as fitness of vehicles. In addition, awareness should be created about the hazards of air pollution and how people could play their role in this regard,” he said, warning that Pakistan would have to face huge economic challenges if nothing was done about increasing air pollution.

Transport operators, he suggested, should be given representation on the National Highway Authority’s executive board as they were not satisfied with its services.

In the end of his presentation, he shared results of a study conducted on diesel-based passenger transport in Karachi that showed that nitrogen oxide acquired the highest concentration among all greenhouse gases discharged from these vehicles.

‘Forty people for one seat’

Saqib Ejaz Hussain, an air quality expert, highlighted the challenges posed by poor air quality across the country and how provincial governments had turned a blind eye to the problem.

“Only the Balochistan Environmental Protection Agency has submitted a reply to the notice the Supreme Court had sent to all provincial governments over air quality,” he said, adding that tests had shown that indoor pollution was much more serious than outdoor pollution at some places in the country that had no standards on indoor pollution.

According to him, only two detailed studies had been conducted on Pakistan’s air quality so far. The last one was in 2005-06, which showed that the concentration of extremely hazardous pollutants was much higher than the WHO permissible limits in Karachi, Lahore, Rawalpindi, Islamabad, Peshawar and Quetta.

On Karachi, he said that an absolute failure on part of the government to bring about a mass transit system and develop the fast-growing city according to a master plan had led to what he described as a “collapsed state of the city”.

“From 2005 to 2015, 50pc of city’s area has been used for infrastructural development constituting largely high-rises. And, regrettably, this process continues as we see new big residential and commercial projects within and around the city’s limits,” he said.

The 14-kilometre-long coastal belt of Karachi, Mr Hussain said, had been declared a high-density zone that means development of more high-rise buildings.

Speaking about Karachi’s transport woes, he said there had been an exponential increase in vehicle ownership in recent years as public transport had almost vanished from the roads and it was estimated a few years ago that 40 people compete for one seat in the public transport of Karachi.

One solution to the transport problem, he said, was revival of the Karachi Circular Railway for which the Japan International Cooperation Agency had extended full financial support but asked for land to settle and rehabilitate displaced persons.

“But the government refused,” he said, referring to government decisions which degraded environmental conditions, including commercialisation of 26 city roads, declaring Block 1 and Block 2 of Clifton as high-density zones and allowing the establishment of coal yards near residential areas.

“We can’t meet air standards even at night and that’s because we have allowed this practice of burning municipal waste,” he informed the audience, citing recent data from the Sindh Environmental Protection Agency that showed high concentration of hazardous air pollutants in city’s air.

Assistant commissioner Sara Javed, representing the DC South office, underlined the need for inculcating a sense of responsibility in individuals and communities.  
(By Faiza Ilyas Dawn, 17, 12/04/2018)

### **Curbing air pollution**

More than 12 years have passed since Pakistan last measured the quality of air in its largest cities. And while the results were found to be downright disturbing, there is no reason to suspect that transport emissions may have improved since then. Convinced that such emissions have grown exponentially worse with each passing year, environmental experts are at a loss to explain why no new study has been undertaken. Karachi, the country’s largest city, has been at the thick end of the environmental stick. The quality of air in Karachi is highly degraded due to several major factors, including the substandard quality of fuel. The fact that it has no mass transit scheme in place only exacerbates the problem. Diesel-run buses and trucks are the backbone of our country’s transportation and are a major cause of air pollution. Far greater environmental risks lie ahead though. The government is resolute in its decision to allow operation of a number of coal-based projects.

Unlike many other countries that rely on the more environmentally-friendly rail sector, the bulk of Pakistan’s cargo is transported by road — posing a threat to the network’s sustainability and contributing to overall traffic congestion. If ways are not found to tackle air pollution soon, Pakistan will have to contend with stiff economic challenges.

There are a few measures that are of critical importance such as cutting back on the use of fossil fuels because this would help to reduce emission of particulate matter and lessen carbon and nitrogen emissions from vehicle exhaust.

Collaborative efforts, as well as long-term commitment, are needed to reduce emissions that contribute to poor air quality. Communities, industries, businessmen all need to do their part in pushing for a healthier and a more sustainable environment. Such efforts have the potential of bringing about a stark improvement in the overall health of the planet.  
(By Editorial The Express Tribune, 16, 13/04/2018)

### **Urban flooding threat**

THOSE fortunate enough to have access to a proper drainage pumping system and sanitation in their neighbourhood might be safe during the monsoons — but millions of others across the country should get ready to deal with urban flooding. By 2050, Pakistan’s population would have swelled from 207 million today to 242m. Almost half the people will be living in the urban areas. There is an immediate need for an improved urban infrastructure.

SDG 11 targets the reduction of losses in cities from water and other disasters to protect vulnerable communities. The rising incidence of urban flooding — caused by torrential rains, flash floods, storm rush or overflowing rivers — has obstructed sustainable development.

Karachi, Hyderabad, Islamabad, Rawalpindi, Peshawar, Lahore and Faisalabad have all faced urban flooding and its attendant devastation during the monsoon season. Measures to cope with flood risks are administered by provincial and other authorities, such as the Met department, disaster management bodies, the irrigation department and the military. But they may not always be successful. The provincial disaster management authorities continue to warn of heavy rain patterns that cause urban flooding.

True, some efforts have been successful in reducing urban flooding and can be emulated. For example, the Leh Nullah in Rawalpindi is subjected to drainage flows from Rawalpindi and Islamabad and from rainwater from the southern part of the Margalla Hills — three pressure points. A project was initiated by the government in 2016-17 to clean up the Leh Nullah and the storm-water drains at vulnerable points. A clear improvement was witnessed after the effort.

#### *Are our cities prepared for the approaching monsoon season?*

Another solution for improving the urban system focuses on developing smart cities. The idea, discussed in Vision 2025, is to improve the resilience of cities. The Vision 2025 document discusses urbanisation and smart cities together with infrastructure to facilitate urban development. This is fine but the question remains: when and how will urban governance be implemented? It is worth searching for possible solutions to urban flooding in international case studies.

One example is of the 'Wait...' campaign in New York City, which provides unique solutions to deal with urban floods. The campaign asks urban residents, particularly of the Brooklyn area, to avoid the use, as much as possible, of water during rainstorms. This reduces pressure on the drainage system and helps flush out rainwater from urban areas. This campaign uses volunteers to send text messages to residents before the rain starts to avoid the use of water during rainfall. It is found to have made quite a difference.

To their credit, commercial enterprises have also highlighted ways of reducing urban flooding, often by giving examples. One solution is found in China, where urban flooding has increased over the years. It involves the creation of 'sponge' cities; Wuhan is one example. 'Sponge' cities 'hold, clean and drain water in a natural way', instead of just channelling away the rainwater. It can help in the reuse of water for gardens and urban farms, recharging depleted aquifers, and cleaning and processing flushed water for other purposes. Similarly, rooftops gardens in Europe store rainwater and reduce pressure on the drainage system during the rains.

Yet another solution focuses on separating the drainage system from rainwater — something that many cities are looking into. Installing separate infrastructure can reduce the pressure on the drainage system during the rainy season.

Perhaps one of the most obvious ways to minimise the damage caused by the monsoons in the cities is simply to keep the drainage system unclogged, as discussed in the Leh Nullah example; regular cleaning of storm-water drains is needed, ensuring that pipelines are not choked with sediment, debris, waste, etc.

Unfortunately, poor municipal services and non-functioning local governments hinder this most sensible of measures. In large cities, such as Karachi, clogged storm-water drains have caused streets to be flooded with dirty water and disease-causing waste.

When such basic measures are not taken, it is perhaps difficult to imagine the government rising to the challenge and studying international measures that have turned vulnerable cities into clean, green, livable spaces. Nevertheless, these examples can provide a blueprint for ways to minimise losses from urban flooding — especially in conjunction with local solutions.

There are several innovative solutions being applied in different part of the world. Along with examining these and seeing how appropriate they are to local conditions, suggestions for viable options must also

be taken from students of city and town planning, urban development, architecture, etc, apart from engaging the development authorities. We would do well to begin now, before the problem of urban flooding exacerbates as it has done over the decades.

(By Ghamz e Ali Siyal Dawn, 09, 17/04/2018)

## **Pakistan sets world record by planting over one million mangroves**

The Sindh forest department successfully broke its earlier Guinness World Record of planting the most trees in 24 hours by planting 1,129,294 mangroves on an island near Ketu Bunder in Thatta district of Sindh..



Pakistan Peoples Party Chairperson Bilawal Bhutto Zardari and Chief Minister Murad Ali Shah separately planted saplings on the island to launch the plantation drive.

Bilawal, Murad, Parliamentary Minister Nisar Khuhro, Transport Minister Nasir Hussain Shah and MPA Ghulam Qadir Malkani were taken to the island where the drive was launched.

The department held the previous record of planting the most trees in 24 hours and was attempting to break its own record. The earlier record was set in 2013 by planting 847,275 trees in Kharo Chaan, Thatta.

As per the standard fixed guidelines mandated from the Guinness World Record authorities, the record has to be set in a 24-hour period by 300 planters during daylight hours.

Briefing Bilawal, Forest Secretary Sohail Akbar Shah said since they were attempting the record in estuarine intertidal mudflats, the availability of maximum time was critical.



After using the navy's tidal data, they selected April 19 as the most suitable day on which the maximum amount of daylight, 12.5 hours, could be availed. He informed Bilawal that the attempt was made from 6:30am till 7pm.

### **Sindh's mangroves are in danger**

Murad said the purpose of their attempt is to highlight and showcase the importance of Indus delta mangroves, its affiliated biodiversity and most importantly the communities dependent on this precious but threatened ecosystem.

"Our experience of setting the Guinness World Record in 2009 and 2013 has brought the coastal areas into the limelight and socio-developmental activities are on the rise in these areas," he explained.

The CM said that the current attempt is being financed by the Sindh government with logistical and material support provided by the Pakistan Navy.

"We expect support and active participation from the media, civil society, local representatives and a large number of members of the community in this important national event," he said.

(By Our Correspondent The Express Tribune, 05, 20/04/2018)

## **World Earth Day: Give up use of plastic and save the environment**

The increasing use of plastic poses a serious threat to freshwater and marine life in Pakistan.

This was stated by experts during an event held to mark World Earth Day, which will be held on Sunday, organised on Friday by the World Wildlife Fund (WWF) – Pakistan in collaboration with Karachi University (KU) at the Institute of Environmental Sciences under the sustainable fisheries entrepreneurship project supported by the Engro Foundation.

Experts shared that plastic products take hundreds of years to decompose as they have strong chemical bonds that make them last longer. The simplest plastic normally used in grocery store bags take at least 100 years to break down, while the complex ones take between 100 and 600 years or can last even beyond that. During this period, these plastic products keep damaging the environment until they are completely decomposed.

### **Mangroves planted to mark Earth Day**

Close to 48 years ago, in April, 1970, millions of people took to the streets to protest against the negative impacts of 150 years of industrial development and since then it has become a regular feature to celebrate World Earth Day on April 22 to address environmental issues.

The event shed light on threats emerging from plastic pollution and suggested practical solutions to mitigate the issue. It mobilised participants, especially students, to develop innovative ways to help end plastic pollution in Pakistan.

The theme for this year's World Earth Day is 'End Plastic Pollution', which is aligned with WWF-Pakistan's upcoming campaign to curb the use of single-use plastics.

KU Faculty of Sciences Dean Tasneem Adam Ali said that using an excessive amount of single-use plastics in our daily lives is devastating the environment. In Pakistan, plastic is becoming an environmental catastrophe in both the rural and urban areas, Ali said, adding that plastic bags choke drains, which results in flooding.

She emphasised the promotion of the 4R concept, which is to reject, reduce, reuse and recycle plastic products.

"The theme for Earth Day this year stresses that every individual, policymaker and business must take action against plastic pollution in order to protect our ecosystems," she added.

### **On World Health Day 2017, WHO urges you to talk about depression**

Studies carried out by WWF-Pakistan indicate that the number of incidents of marine animals trapped in plastic products in the sea is increasing. It is estimated that globally, around eight million tons of plastic is deliberately dumped in the sea or finds its way there through the wind or river flow and urban runoff. This is approximately equivalent to the dumping of a garbage truck into marine waters every minute.

WWF-Pakistan Technical Adviser for Marine Fisheries Muhammad Moazzam Khan shared that plastic products, mainly in the form of household utensils and low quality toys, have been used in Pakistan even prior to its creation in 1947.

However, from 1965 to 1975 there was a noticeable increase in the use of plastic when it became an integral part of our lives, he said, adding that today, plastic material constitutes the fourth largest item of import and this sector alone contributes significantly to the national exchequer in different heads.

The industry is growing at an annual average of 15 per cent and has surpassed all other industrial sectors, he said.

"Today, the domestic consumption of plastics stands at more than 2.7 kilogrammes, which is far less than the international average. Yet, Pakistan is the second largest domestic market in the Southeast Asia after India," Khan said.

The issue of plastic pollution along Pakistan's coast is worsening due to an inadequate solid waste disposal system in the city, KU Institute of Environmental Science Director Professor Omme Hany said.

WWF-Pakistan Sindh Manager Conservation Altaf Hussain Sheikh said that urbanisation has increased demand of plastic products and since these products are much cheaper and affordable compared to metal, wood and ceramic, its use is increasing day by day.

The event was attended by more than 100 participants, particularly faculty members, students and media representatives. A solid waste collection activity took place by students and volunteers to change behaviour towards plastics and educate the general public about the issue.  
(By Our Correspondent The Express Tribune, 04, 21/04/2018)

### **Plastic devastating environment, experts warn**

Plastic pollution is playing havoc with environment and fast degrading marine and freshwater life in the country, warned experts at an Earth Day event held at Karachi University's Institute of Environmental Science on Friday.

The World Wide Fund for Nature-Pakistan (WWF-P) had collaborated with KU for the event organised under the Sustainable Fisheries Entrepreneurship Project.

"The large-scale use of single-use plastics in our daily life is devastating our environment. Plastic, in fact, is becoming an environmental catastrophe in both the rural and urban areas," said KU dean faculty of sciences Tasneem Adam Ali, emphasising the need to promote the concepts of rejecting, reducing, reusing and recycling plastic products.

Professor Omm-e-Haney, the director of the Institute of Environmental Science, KU, said that plastic pollution posed a serious threat to marine life and its ecosystem. The issue of plastic pollution along Pakistan's coast, it was observed, was a major concern and was worsening due to an inadequate solid waste disposal system in the city.

Muhammad Moazzam Khan, technical adviser (marine fisheries) at WWF-P, said that plastic products, mainly in the form of household utensils and low-quality toys, had been used in this region even prior to 1947.

"From 1965 to 1975, there was a noticeable increase in the use of plastics when it became an integral part of our lives. Today, plastic material constitutes the fourth largest item of import and this sector alone contributes significantly to the national exchequer in different heads," he told the audience.

The plastic industry, he said, was growing at an annual average of 15 per cent and had surpassed all other industrial sectors.

"Today, the domestic consumption of plastics stands at more than 2.7kg, far less than the international average. Yet, Pakistan is the second largest domestic market for plastics in the [region] after India," he observed.

Citing an assessment survey undertaken by WWF-Pakistan this year, he revealed that even remote beaches of Balochistan, including Jiwani (which is located near Iran's border), were not spared of plastic, which made up a large part of the debris accumulated on some of the most fragile beaches of the area.

At the conclusion of the event, a group of students and volunteers carried out a solid waste collection activity to demonstrate the need for changing behaviour towards plastics and educating the general public on this growing issue.

(By The Newspaper's Staff Reporter Dawn, 18, 21/04/2018)

### **Met office's heatwave warning system starts functioning**

According to Germanwatch's Global Climate Change Index, Pakistan is included in its top 10 disaster prone countries' list, standing at the seventh position.

This was stated by National Disaster Management Authority (NDMA) Operations Member Brigadier Mukhtar Ahmed at the Sixth Monsoon Forum seminar organised on Friday.

The seminar was first organised in 2013 to discuss the effects of hot weather on monsoon rains and devise strategies for awareness campaigns with the departments concerned.

Members of an international forum, Regional Integrated Multi-Hazard Early Warning System, associated with the World Meteorological Association, representatives of K-Electric and the municipalities participated in the seminar. Various experts, including the Pakistan Meteorological Department's (PMD) chief meteorologist, Dr Muhammad Hanif, addressed the seminar.

### **Monsoon likely to catch municipal authorities unaware**

PMD Director-General Dr Ghulam Rasool said it would be too early to give monsoon predictions, however, according to a survey of South Asia Outlook and various other international institutions, the monsoon season in Pakistan and South Asia will be normal because no change has been witnessed in the two important components of the surface of sea, el-nino and la-nina, and no uncertain situation has surfaced in the Indian Ocean.

"The monsoon system across the country is as per routine. However, not every part of the country will receive the same amount of showers," Dr Rasool said, adding that the northern areas, Islamabad and Khyber Pakhtunkhwa will receive more showers, while Sindh and Balochistan are likely to receive less rain.

There will be dryness in May and June, while the temperatures will increase by one to 2<sup>0</sup> Celsius. For predicting heatwaves, the early warning system has begun functioning from April.

### **Ahead of the monsoon: Arrangements to counter floods reviewed**

A warning will be given beforehand to the citizens through the National Disaster Management Authority (NDMA) about heatwaves, Dr Rasool assured, adding that the K-E will also be informed to keep their system balanced and avoid any problematic situation.

This year, the hottest week was recorded in March end, breaking the records of 30 cities, he said. On the other hand, continuous showers for eight days were recorded in Islamabad and K-P during March and the temperature dropped as it does in the winters, he informed, adding that the rapidly changing situations are signs of global warming and climate change.

According to Brig Ahmed, the Met department will give its prediction about the monsoon season in June after which a contingency plan will be devised.

A conference will be held on the national level through which a strategy will be devised according to the predictions, he said, adding that the provincial national disaster management authority will store food and non-food items in its warehouses and all items used in rescue operation such as boots, life jackets and other equipment.

He said that 33% of the assistance in the emergency warehouses of the four provinces will be by NDMA and it will serve as back up support for the provinces.

(By Aftab Khan The Express Tribune, 04, 28/04/2018)

## **'Environmental interests damaged by 18th Amendment'**

The 18th Constitutional Amendment has badly damaged national environmental interests. Subjects like health, education and environment, as is the case in many other countries, should come under federal purview, said secretary ministry of climate change while speaking to journalists on the sidelines of a meeting organised at a local hotel on Wednesday.

The media briefing followed the 18th meeting of national coordinating body (NCB) of Mangroves for the Future (MFF)-Pakistan organised by International Union for Conservation of Nature (IUCN).

“There should be maximum provincial autonomy. But, there are certain subjects which need federal purview (as these subjects require uniformity and harmony in policy across the country),” Khizar Hayat Khan, secretary climate change and chair NCB-Pakistan, said in response to a question.

He, however, couldn't defend the federal government's decision to allow the establishment of coal-fired power plants in the country when asked about the pollution being created by unsafe handling and transportation of coal, especially in Karachi.

“I agree with your concerns but use of coal has both positive and negative sides. It's difficult to make a choice when it comes to development.”

Mehmood Akhtar Cheema, the country representative of IUCN-Pakistan, regretted the destruction of mangroves due to different projects, particularly in the Port Qasim area, and said that there was a need for creating awareness on coastal ecosystem and the role mangroves played in the environment and the economy.

“We need to develop a vision for development which is sustainable. We must have a larger picture, long-term considerations when we plan for development projects,” he said, adding that the Port Qasim Authority had set up a committee to look into the possibilities of mangrove plantation at some other place to compensate for the mangroves lost to infrastructural development.

Asked about plantation of mangroves under the MFF project in Pakistan, Mr Cheema said it's biodiversity platform focused on the whole coastal ecosystem and mangroves were a part of it.

“A number of public and private sector institutions as well as non-government organisations are participating in the project being implemented through various grants in different sectors,” he explained, adding that the navy had established a biological waste-water treatment system using aquatic reed plants with MFF support on Manora Island.

The MFF programme was launched by IUCN and United Nations Development Programme in 2006 in response to the 2004 Indian Ocean tsunami.

It aims at improving natural coastal infrastructure and strengthening resilience against future natural disasters. It's operational in Pakistan since 2010.

(By Faiza Ilyas Dawn, 18, 03/05/2018)

## **Karachi hit by heatwave as temperature reaches 44°C**

After weeks of rising temperatures, the city was hit by a heatwave on Thursday. The health department issued a red alert for both Thursday and today (Friday) after the Pakistan Metrological Department's warning for the Karachi division.



The warning was issued to the Jinnah Postgraduate Medical Centre (JPMC), National Institute of Child Health (NICH), health services director of all divisions and medical superintendents of all the government hospitals of the city.

### **Karachi heatwave to continue till Friday, says met dept**

The temperature in the port city soared to 44° Celsius on Thursday and the Met department has forecast that the heatwave will continue today, with temperatures reaching 42°C.

“The mercury reached 44°C in Karachi on Thursday afternoon with an 8°C rise in a single day as the temperature in Karachi was 36°C on Wednesday, which is a normal temperature for the month of May,” said Metrological Department Regional Director Shahid Abbas.

According to him, the humidity on Thursday afternoon at 5pm was recorded at 21% whereas it was recorded at 78% at 8am.

“The rise in temperature in Karachi resulted due to a shift in wind. The direction of the south-easterly wind has shifted to north-west due to a low pressure developing in upper Sindh,” he explained.

However, Abbas predicted that the change in wind direction will be normal from Saturday onwards and result in lowering the temperature in the range of 34°C for the entire next week in Karachi and coastal belt of Sindh – Badin, Thatta and Sujawal.



According to him, the change in direction of wind also resulted in hazy weather due to suspension of dust particles, resulting in reduced visibility. “The sea breeze resuming on Saturday will blow with more speed and hence will result in more moisture and cloud formation and a general improvement in the weather.”

The Karachi health director, commenting on a letter issued by the provincial health department, said that implementation of round the clock emergency is being ensured with all leaves of medical and paramedical staff cancelled. The availability and timely provision of all essential medicines and conducting of health awareness campaigns among masses has been advised, he added.

Karachi Mayor Wasim Akhtar declared an emergency in Karachi Metropolitan Corporation-run public hospitals and clinics across the city and instructed medical staff to take all appropriate measures to handle heatstroke affected patients.

### **As temperatures rise, sales of lassi skyrocket**

Faisal Edhi of the Edhi Foundation and JPMC’s Dr Seemin Jamali confirmed to *The Express Tribune* that no cases of heatstroke related deaths were reported on Thursday.

Dr Jamali advised the residents of Karachi to drink plenty of water and try to balance their electrolytes when the temperature rises in the city. She also said people should wear light coloured clothes and not remain outside unnecessarily in hot weather.

According to the Met department, there are no chances of rain in the city and the temperature usually crosses 40°C in May.

In Karachi, the highest temperature ever recorded in May was 46°C, recorded on May 22, 1981. In the months of May and June, Karachi along with other parts of the country will experience frequent heatwaves, warned the Met department official.

On Thursday the maximum temperature in Sindh was recorded in Nawabshah at 45.5°C, while Dadu recorded a maximum temperature of 45.1°C, Mohen Jo Daro and Jacobabad 44.5°C, Larkana 44°C, Mithi 43°C and Chorr Cantt 42.2°C.

Keeping in mind the 2015 heatwave that claimed 1,000 lives, this year residents were seen handing out water to pedestrians and motorists in the city. Welfare organisations set up stalls where they provided free of charge drinks while many took to the streets to hand out beverages to people in vehicles.

(By Mudaser Kazi The Express Tribune, 04, 04/05/2018)

### **Unsafe coal handling degrades environment, puts industrial units at risk**

The Port Qasim Authority (PQA) has allowed major coal handling operations in its jurisdiction with complete disregard for public health and environmental safety, and without waiting for a decision by the Sindh Environmental Protection Agency (Sepa) on the project’s Environmental Impact Assessment (EIA) report.



These points have been raised in a letter Sepa has sent recently to the chairman of the Port Qasim Authority (PQA) and the project developer, Huaneng Fuyun Port and Shipping (Pvt) Ltd.

Sources say that it is the third time Sepa has raised concerns over this project whose EIA it did not approve in 2016 and the project developer was asked to remove 'deficiencies' in the report.

"We are further disappointed by the fact that instead of receiving a response from you, Huaneng Fuyun Port and Shipping (Pvt) Ltd and PQA have rushed through the project in utter disregard for the provisions of Sindh Environmental Protection Act 2014," says a Sepa letter dated April 24.

The operation going on for over a year without Sepa's approval involved unloading of coal from motherships, its transfer to small vessels, its dumping in a yard and then transportation to Sahiwal through a rail link for a 1320MG power plant, a China-Pakistan Economic Corridor (CPEC) project.

### **Contaminating products**

Speaking to Dawn, visitors to the area said that transportation, lifting and dumping of coal in the absence of any safety measures had badly affected the area, particularly the nearby offices.

"The whole area remains covered in a thick blanket of coal dust all day, making breathing extremely difficult. The road being used to transport coal and the area's plantation have been ruined by coal dust and spillage," a person hired for some work in the area told Dawn on condition of anonymity.

This continuing environmental disaster also poses risk to the safe operation of many industrial units running in the area including food processing, pharmaceutical and chemical units, water purification units, edible and crude oil facilities, refineries and automobile manufacturing units.

Their representatives, however, refused to talk on record as they feared a backlash from the PQA on whose land they had their assets on.

Second, they said, law-enforcement agencies monitoring the area could trouble them later as the Sahiwal project was part of the CPEC.

No action against the project developer or PQA has been taken by Sepa so far, not even an inspection of the affected area.

According to media reports, the first consignment of 43,999 tonnes of coal imported from South Africa for the trial operations of Sahiwal Coal Power Plant was unloaded at Port Qasim in January last year.

These reports also show that the Sahiwal coal fired project was made operational much ahead of its scheduled time which explains the haste shown in making the Port Qasim project functional as it aimed at providing fuel to the \$1.8bn Sahiwal project.

To question how unsafe coal handling could affect public health and environment, Saquib Ejaz Hussain explained that degraded airshed might subject Karachiites to unacceptably high pollution levels and health risks that may arise from contamination of products being processed in the affected area.

"It may also negatively affect production costs and discourage new or expanding businesses. The approach to wait until a problem develops can result in the need for costly retrofit solutions."

Coal dust covers a plant leaf.

### **A controversial project**

Titled Coal Transshipment Project at Berth 3 and 4 of Port Qasim, the project aimed at transforming the existing berths three and four of Port Qasim into a specialised coal handling/transshipment facility. Its EIA report was presented in a public hearing in September 2016.



The project, sources said, was controversial from day one on account of serious environmental and technical concerns.

Highlighting these concerns, the four-page Sepa letter says, “The coal terminal at berth three and four were never part of PQA master plan and seem to have been included as an ad hoc arrangement. All ad hoc arrangements have a large footprint on environment and social values of society and as such their desirability and legality is questionable.

“The EIA document of the project has totally ignored the establishment of Pakistan International Bulk Terminal that’s the only coal terminal designated in the PQA master plan and has the capacity to meet the requirements of coal handling up to 20m tonnes of coal.

“In our opinion, the project shouldn’t have been considered by the PQA to start with. This also shows that the project is being thrust upon the sustainability of Karachi’s coastal area at the cost of development in Punjab.

“The coal terminal at berth three and four is negatively impacting the assets in the neighbourhood and along the route on which there is a considerable stake of the members of Bin Qasim Association of Trade and Industry,” the letter says.

On environmental concerns, it points out: “It is also a matter of concern that coal is being dumped at marginal wharves 3 and 4 without any environmental control measures and without waiting for the decision of Sepa on [the project’s] EIA [report].

“There are a number of sensitive units around berth 3 and 4, all of them maintain air-conditioned units and suck air into their system. The airshed [of the industrial zone] has already reached a saturation point with regard to primary pollutants particularly particulate matter. Exceeding the limit of saturation will be at the cost of the processing units which need to be free of any amount and size of dust.”

The letter once again reminds the PQA and the Chinese developer of ‘deficiencies’ in the EIA report, including lack of data on environmental audit.

“The EIA report should have [also] assessed the cumulative impact of all the coal-related projects which have been approved by Sepa to estimate the impact of coal handling on such a large scale in PQA,” it says.

Upon contact, PQA chairman Asaf Rafi Chandana, who has taken charge of the authority two weeks ago, said that he recently visited the site, met stakeholders and found that there had been genuine concerns regarding handling and transportation of coal causing environment degradation and pollution.

“The management has taken cognizance of the issue and issued clear instructions to operators to adopt all mitigation measures. The National Engineering Services Pakistan (the project’s consultants) has been asked to assist operators in getting an NOC from Sepa,” he said.

To question why the berths were made operational without Sepa approval, he explained that after the project’s public hearing, the environmental watchdog formed an expert committee to propose mitigating measures.

“Subsequently, the report was improved, incorporating all recommendations to ensure safe environment. Owing to the prevailing energy crises in the country and delays in receiving the NOC from Sepa, the project was made operational in national interest,” he said.

About violation to PQA’s master plan, Mr Chandana insisted that marginal wharf berths 3 and 4 were part of the master plan as multipurpose jetties and coal was being handled manually on these berths since 1978.

“The two berths have a restricted use only for self-use power plants whereas the PIBT meant for commercial purpose cargo.

“The PQA has signed an agreement for conversion of berths 3 and 4 into self-use coal terminal, which has been designed and developed as per international standard. Hence, there was no violation of PQA’s master plan.”

(By Faiza Ilyas Dawn, 15, 07/05/2018)

## **Environment sector handed third straight budget cut**

Despite the fact that environmental conditions are worsening in Sindh and the temperature climbed up to as high as 50° Celsius in Nawabshah on April 30, the environment does not seem to be a cause for concern for the Sindh government as funds for the sector were decreased for the third consecutive year in the Annual Development Programme (ADP).

An environmental expert, Christopher Burt, claimed that the temperature recorded in Nawabshah was the highest April temperature that was reliably observed on the planet in modern records.

The allocation for environment, climate change and coastal development in the ADP for the coming fiscal year is a mere Rs375 million. In the 2017-18 budget, Rs400 million was allocated for the environment after a decrease of 12% from the 2016-17 budget when a total of Rs455 million was allocated for the environment and coastal development.

Of the Rs375 million allocated for the environment and coastal development in the recent budget, Rs157 million has been earmarked for the environment, whereas Rs217 million has been reserved for the coastal development. Like other sectors, no new schemes have been included in the environmental sector.

Most development projects in the environmental sector that were approved between 2012 and 2016 have yet to be completed.

### **Development schemes: ‘Sindh’s pace of work quicker than last year’**

A study on environment and health impacts of pesticides and chemical fertilisers in Larkana, Mirpurkhas, Jacobabad, Kashmore, Ghotki, Sukkur, Shaheed Benazirabad, Tando Allahyar, Thatta and Badin was supposed to be completed by June 2018 at an estimated cost of Rs33 million. However, like many other projects, it has been delayed and it is now targeted to be completed in June 2019.

The key environmental authority in the province, the Sindh Environmental Protection Agency (Sepa), has yet to establish its offices in different districts of Sindh. For the last several years, schemes such as establishment of Sepa’s regional offices in Sukkur and Hyderabad and expansion of Sepa’s building in Korangi Industrial Area in Karachi have been reflected in the budget. According to the last budget, these offices had to be constructed by June, 2018, however, the recent budget has extended the completion deadline to June 2020.

### **Sindh government increases salaries and pensions**

Things are as bad regarding projects for coastal development. A new scheme had been introduced in last year’s budget under which the government was to initiate a study on the impact of sea intrusion. The scheme has been wiped off this year.

### **Forest and wildlife budget**

Funds for the development projects of the forest and wildlife departments have also been decreased in the current budget. In the last budget, Rs840 million was allocated for the departments, whereas the amount has been reduced to Rs750 million this year.

### **Sindh budget to be announced today**

However, in his budget speech, Chief Minister Murad Ali Shah stressed the importance of environmental and plantation projects. The world is going into a new era of ecosystem restoration, motivated by the Aichi Targets that include the Bonn Challenge, he said. The Bonn Challenge was

initiated in 2011 and it calls for the restoration of 150 million hectares of deforested and degraded lands across the globe by 2020, and 350 million hectares by 2030.

The CM said Pakistan ranked seven on the list of countries on which global warming was likely to have the greatest impact. The country has one of the highest deforestation rates in Asia, he added.

“Pakistan’s total forest area was 3.3% back in 1990 which fell to an alarming 1.9% in 2015,” he said, adding that it was a foreboding sign for all Pakistanis.  
(By Oonib Azam The Express Tribune, 05, 12/05/2018)

### **Heatwave has claimed 60 lives, says Edhi; govt rejects claim**

The persistent heatwave in the metropolis claimed around 60 lives in three days.

Faisal Edhi of the Edhi Foundation said on Monday that his charity used to receive around 25 dead bodies every day but it received 160 of all age groups and both genders during the last three days.

“Families of at least 60 victims believe that their loved ones died because of hot weather,” he said. The Sindh health secretary, however, denied reports that any person died of heatstroke.

Meanwhile, the city experienced yet another very hot day on Monday as the mercury hit the 44 degrees Celsius mark.

Though Monday was the first working day of the week, people preferred to remain indoors while streets and markets wore a deserted look with thin traffic on roads. Loadshedding took place as usual in several parts of the city.

Responding to Dawn’s queries, a Meteorological department official said the minimum temperature recorded in the city was 28°C. He added that the humidity was 17 per cent during the day and 7pc in the evening.

He said the weather in the city was expected to remain hot and dry on Tuesday and the maximum temperature would be around 42°C to 44°C.

The Met department in its heatwave alert issued on Monday said hot to very hot weather was likely to prevail in Karachi till Friday when the maximum temperature would be around 42°C to 44°C.

### **Cyclone developing**

It further said potential cyclonic conditions were developing in the South Arabian Sea which, though did not pose a threat to the city, was being observed closely.

The Met official said the winds blowing from the north-western side (Balochistan) took the temperature up in the entire province.

The hottest place in the province on Monday was Chhor where the maximum temperature reached 46.5°C.

He said some other towns where high temperatures were recorded were: Mithi (46°C); Moenjodaro, Sukkur, Thatta (43.5°C); Badin, Jacobabad, Nawabshah, Rohri (43°C); Mirpurkhas (42.5°C); Dadu (42.4°C); Larkana, Padidan, Sakrand (42°C); and Hyderabad (41.5°C).

### **Exams postponed**

The University of Karachi and the Board of Intermediate Education Karachi have postponed all exams till Thursday and Wednesday respectively in view of the hot weather.

A KU press release said, "The schedule for exams starting from Friday will remain unchanged." A notification issued by the BIEK said the exams will take place on Thursday as decided earlier. (By Dawn Report Dawn, 17, 22/05/2018)

## **Over 60 reported dead in Karachi heatwave**

Over 60 people have died due to the heatwave in Karachi, Edhi Foundation head Faisal Edhi said while quoting relatives of the deceased.



Edhi said that the number of bodies in their mortuaries in Korangi area has tripled, while in Sohrab Goth, the flow has doubled since Saturday – the day the heatwave hit the metropolis.

He told The Express Tribune that more than 160 bodies have been reported at the two mortuaries, with the relatives of 60 claiming heatstroke to be the cause of death.

"On normal days, the Korangi mortuary receives six or seven bodies, whereas the last few days have seen 20 to 25 bodies per day. The flow at the Sohrab Goth facility has doubled from 20 bodies to 40 in a single day," he added.

### **Karachi to swelter till Thursday, says Met department**

The ages of the deceased range from 16 years to 78 years and they include both men and women.

According to Edhi, people should avoid going outside during the peak heat hours and must maintain their electrolytes. He added that a majority of those suspected of being heatstroke victims were fasting.

Korangi Mortuary Station Manager Muhammad Shafiq said that between 55 and 60 bodies have been received by their facility in the last three days, while the normal daily average is only six to seven bodies. "The Korangi mortuary caters mostly to blue-collar workers and labour class in Landhi and Korangi."

According to Shafiq, only a few of the death certificates of the deceased mention heatstroke as the cause of death.

Tayyaba, 28, a resident of Orangi Town, who was also pregnant, died on Sunday evening. According to her husband, Sheeraz, there was no electricity in their area for four hours in the afternoon, and when Tayyaba's condition worsened, they were unable to get her to a hospital in time.

### **Karachi morphs into a giant baking oven**

Harris, the nephew of Shabbir Ahmed, 68, a resident of Liaqatabad, said his uncle died due to heatstroke. "It was 11:00am on Sunday when my uncle said he felt unwell due to the heat and asked us to switch on the fan, but since there was no electricity, we could not help him," he added. An hour later, when his condition deteriorated, they took him to a nearby hospital, where he was pronounced dead.

Jinnah Postgraduate Medical Centre Executive Director Dr Seemin Jamali said that a full ward has been established to accommodate the expected influx of heatstroke patients. However, she added that no heatstroke patient has been reported at JPMC so far, only a few with vertigo.

Civil Hospital Medical Superintendent Dr Mohammad Tofique said that no death due to heatstroke had been reported at the facility till Monday evening. He said only two people had been brought to the dedicated heatstroke ward during the current heatwave. He added that most potential heatstroke victims use the shower facility set by the hospital to reduce the body temperature of those coming in with complaints of heat fatigue.

The maximum temperature in Karachi remained 44 degrees Celsius for the second consecutive day and the port city remained the third hottest city in the province after Chorr Cantt at 46.5 degrees and Mithi at 46 degrees. The humidity in Karachi was six per cent on Monday.  
(By Mudaser Kazi The Express Tribune, 01, 22/05/2018)

## **Mass killing of freshwater turtles continues**

Remains of four turtles lie in a field in Sukkur.



Mass indiscriminate killing of freshwater turtles, a protected species, has been continuing on both sides of the River Indus from Guddu Barrage to the Indus delta for more than a month, sources told Dawn.

The recent surge in poachers' activities, according to the sources, has been due to prevailing acute water shortages, making these endangered reptiles vulnerable.

A number of poachers' groups, they said, were involved in the brutal slaughter of turtles; some were poisoning them while others bludgeoning them to death as they came out of water to feed on the bait.

According to sources, a poachers' group, including four women, was recently spotted in Alif Kacho, an area located along upstream Sukkur Barrage, last week before the wildlife department took notice and arrested one person.

"I saw people hitting turtles with a sharp object. They also got a jute bag filled with dried parts of turtles," Mohammad Khan, a Sukkur-based resident, told Dawn on the phone.

Mr Khan happened to be in the same area with his friends when a poachers' group was active. According to sources, some poachers' groups have come from Rahim Yar Khan and are coordinating with each other to meet a certain target.

"Often, turtle meat/parts are dried and later smuggled out of the country either through Karachi or Lahore," a wildlife department official said on condition of anonymity.

The killing of turtles was indiscriminate and all species of hard and soft shelled-turtles had been targeted. However, only soft-shelled turtles were being picked up for collection as they were in high demand in the Chinese market, he added.

### **Devastating loss**

Upon contact, conservator wildlife Taj Mohammad Sheikh said that he couldn't confirm poachers' alleged activities, but had ordered an inquiry.

"The report being prepared by the deputy conservator of Sukkur will be available next week which I will share with you," he said, adding that so far the department had arrested one person who claimed that he had come from Rahim Yar Khan in Punjab.

On turtle mortalities, he said: "The man was caught with two dead turtles. Another alleged trafficker dealing in turtles has been arrested from Shikarpur. But no turtle was found from his custody," he said. It is important to recall here that illegal trade of freshwater turtles, a protected species, has seen a dramatic increase in recent years, especially in Sindh and Punjab, where their population has declined up to 80 per cent.

Eight species of freshwater turtles are found in Pakistan and their habitat exists in Sindh, Punjab and Khyber Pakhtunkhwa.

Experts describe loss of these endangered reptiles as devastating for environment as turtles are among the key species which keep aquatic environment clean by feeding upon dead organic material and dead fish.

Recent surveys conducted by the International Union for Conservation of Nature in collaboration with Sindh wildlife department have identified districts of Thatta, Sujawal, Sanghar, Shaheed Benazirabad (Nawabshah), Badin and Karachi as hotspots of illegal turtle trade in Sindh.

“There is no defined season for collecting freshwater turtles and the species is caught throughout the year. It was noted during field surveys that some poachers during their hunt for turtles, also catch other reptiles and mammals that they may encounter. For instance, snakes, monitor lizards, hedgehogs, jackals, jungle cats, otters and crocodiles,” said the report.

Citing some other surveys, the report said that freshwater turtles caught in the interior districts of Sindh were destined for Karachi, from where these turtles or their body parts were smuggled to other countries such as Hong Kong, other parts of China, South Korea and Vietnam (via air or sea routes).

Some traffickers, the report said, had extended their network to Quetta, and used the Pakistan-Afghanistan border to smuggle wildlife through illegal means.

It also pointed out that locals, particularly fishermen, were found unaware of the ecological role the turtles played in the river ecosystem and considered them as harmful to fish economy.

In Balochistan, freshwater turtles were seen in three canals of Jaffarabad and Nasirabad districts but there was no evidence of turtle targeting.

Apart from other factors, according to the report, degradation and destruction of habitat was also contributing to decline in turtle population.  
(By Faiza Ilyas Dawn, 18, 23/05/2018)

## **Ongoing heatwave**

THE impact of global warming came home in a brutal way three years ago when a record-breaking heatwave in lower Sindh resulted in around 2,000 fatalities, mainly in Karachi, over the course of a few days.

The rising temperatures across much of the country this week, which rendered major cities into ‘urban heat islands’, are reminiscent of those deadly days in June 2015.

As reports of fatalities in Karachi emerged on Monday, meteorological experts warn of impending heatwaves liable to occur more frequently and for longer durations.

However, there is evidence of increased official preparedness to tackle the weather crisis, particularly in Karachi.

Unlike in the past, early weather warnings were circulated by the Met department and short-term disaster management plans swung into action involving city administrations, hospitals and philanthropic organisations.

Contingency planning is particularly critical especially when climate scientists warn that severe weather conditions will become annual occurrences.

This must include public messaging campaigns explaining measures to combat heat emergencies, with life-saving information for those most at risk.

However, more viable long-term solutions for cities will help prevent an unendurable increase in temperature and reduce deaths.

Because global warming is a potential instigator of lethal heatwaves that pummel vulnerable populations, focusing on urban design and construction material is crucial.

Instead of felling trees and erecting monstrous high-rises that elevate city temperatures, more public parks and green belts must be encouraged.

Public-private partnerships have previously proven successful with open spaces turned into parks. One way to combat the vagaries of the weather is to plant more shady trees — a mitigating measure at work in KP.

Additionally, a well-laid out public transport system for major cities will also reduce carbon emissions, another factor strongly correlated with rising temperatures.

For Pakistan, at ever increasing risk of extreme weather, combating climate change requires action on a war footing.

With the latest heatwave in the country setting off alarm bells that a recurrent pattern is setting in, the message could not get any clearer.

(By Editorial Dawn, 08, 23/05/2018)

## **Five things to do for heatwave management in Karachi**

KARACHI has finally received some respite from simmering temperatures that prevailed over it during the past few days.

The city responded proactively to the extreme weather condition with Met department issuing timely alerts along with increased official preparedness for emergency situations.

But the heatwave still took its toll with more than sixty fatalities reported across the city by Edhi Foundation.

The government has contested the death toll claiming that many of the deaths were due to 'underlying conditions'. The outgoing government can address these underlying conditions during its last week in office, and prevent deaths if the heatwave was to recur again during the election campaign.

### **ARTICLE CONTINUES AFTER AD**

There are still capacity and knowledge gaps in the city's response mechanism for extreme heat episodes. With another 'severe' heatwave forecasted in the coming week, there is urgent need to strengthen disaster response mechanisms and plug the existing gaps.

Drawing on recommendations from the heatwave management plan adopted by Karachi city along with some global best practices, we have identified five priority actions that the city can undertake before the interim government sworn in.

### **Colour coding for heatwave alerts**

The Pakistan Meteorological department deserves credit for timely and accurate forecasting for heatwaves in recent past. But making the alerts end-user friendly can contribute towards increasing the impact and efficacy of such warning.

Karachi heatwave management plan developed a system for colour coded heatwave alerts (red, orange, yellow) with associated triggers and institutional protocols to enable swift response and accountability.

Such warning system enables easier understanding for general public as a red alert will trigger much stronger response as opposed to some statistics on ambient temperatures and humidity.

A case in point is the hurricane warning system that relies on assigning categories to each storm without disseminating the details of meteorological variables which have little value for end-user.

### **Enhanced coordination between stakeholders**

Heatwave presents a challenge for coordination especially in developing countries where typically institutions work in silos.

The fact that death toll from heatwaves in Karachi are released by philanthropic foundations as opposed to disaster management authorities also speaks volume about the scale of coordination challenge.

Based on the recommendation of Karachi heatwave management plan, an emergency coordination committee was notified last year which comprised all relevant city authorities along with representatives of CSOs/NGOs.

This committee can serve as an important platform for leveraging strengths and capacities of various departments in a coordinated manner.

Absence of institutionalised coordination between stakeholders will eventually lead towards duplication of efforts and gaps in response.

### **Leveraging support from private sector**

Karachi is the business hub of Pakistan with a vibrant and informed private sector community that is deeply committed to the city.

Facilitating informed engagement of private sector in heatwave response is imperative to protect the expansive metropolis.

The city has already witnessed great philanthropy and social responsibility from private sector during previous heatwave episodes but such interventions remain isolated and scattered.

There is a need for city government to methodically engage support from private sector so that it complements and bolsters pre-existing disaster response efforts.

### **Identification of hotspots**

Heatwave impacts are differentiated across city depending upon demographics, socio-economic conditions and land use characteristics.

Hence some poor and congested neighborhoods are much more vulnerable to extreme heat impacts than others.

The existing Karachi heatwave management plan attempted to identify such hotspots using GIS based proxy methods.

The reason is that city prevention and response efforts should be focused on hotspots to create maximum impact.

Vehicle mounted weather stations along with remotely sensed land use data provide an economical and efficient tool for identification of hotspots within a city.

A similar exercise was recently conducted in various cities of South Asia including Faisalabad as part of a regional research project on climate change impacts.

There is a need to conduct a comprehensive hotspot mapping exercise in Karachi as well to guide city response towards extreme heat events.

Sustainable urban planning and land use management When it comes to heatwaves, our rudimentary and skewed development priorities for urban centers are coming back to haunt us in many ways.

Concrete and asphalt based built environments contribute to keeping urban localities several degrees hotter than surrounding non-urbanised areas. This Urban Heat Island (UHI) effect is a major culprit behind blistering weather conditions that our urban centers are experiencing with alarming regularity.

One of the simplest solutions to reducing the urban heat island effect is to provide more shade, with trees and other vegetation.

Regrettably, green belts and parks are often the first victim of land-grabbing mafias, China-cutting and development projects.

Over the years, this relentless destruction of trees and vegetation has transformed our cities into barren concrete jungles.

The urban development itself has also been inequitable, congested and suffocating, often leaving no ventilation zones for neighborhoods and houses.

Hence the momentum generated by heatwave emergency should be channelised to transition towards sustainable urban planning and land use management in Karachi city.

This single act can do wonders to reduce the heat vulnerability of the city and create several other co-benefits.

Ali Tauqeer Sheikh is CEO while Bilal Khalid is coordinator Climate Change Programme at the Islamabad-based think tank LEAD Pakistan.

(By Ali Tauqeer Sheikh | Bilal Khalid Dawn, 17, 28/05/2018)

### **At 46°C, Karachi endures hottest day of year**

Most parts of the province remained in the grip of intensely hot weather conditions on Wednesday with Karachi experiencing its hottest day of the year at 46 degrees Celsius whereas the mercury rose to 48 degrees Celsius in the districts of Sukkur, Dadu, Mirpurkhas, Larkana and Jacobabad.



Fortunately, however, there were no media reports of any heatwave related deaths.

The temperature, according to the meteorological department, is likely to drop in Karachi on Friday onwards unlike in the rest of the province.

The highest temperature was recorded in Larkana district (48.5 degrees Celsius) followed by Padidan, part of Larkana district (47), Dadu (48.1), Jacobabad, Mirpurkhas and Sukkur (all three districts had 48), Chhor and Mithi in Tharparkar district (46 and 44.5 respectively), Thatta (46) and Hyderabad (43.5).

*City's temperature is likely to drop on Friday*

The maximum and minimum temperatures recorded in Karachi were 29.5 and 46. The city is predicted to have temperature ranging between 40 and 42 degrees Celsius.

The wind is likely to blow from northwest to north during the period.

According to the information available on the met department website, the maximum temperature (47.8) recorded in Karachi in the month of May was on May 9, 1938.

### **Relief for Karachi**

While the rest of the province is expected to have hot to very hot weather in coming days, met officials have stated that coastal winds will help break the heat spell the city has been experiencing for the past few days, providing the much-needed relief residents want in the month of Ramazan.

The sea breeze, according to the department, will restore gradually from Friday along the coastal belt bringing Karachi temperature to normal range of 35-37°C during next week.



“Today (Wednesday) was Karachi’s hottest day of this year,” said Shahid Abbas, regional director of the met department in Karachi, adding that it was the peak hot day.

Explaining the factors contributing to hot weather conditions in the city, he said: “First, there was light/calm wind, which supports rise in temperature. The moisture content level was 4 to 6pc that also contributes to dry, hot weather. In addition, the atmosphere was laden with dust particles, which trap heat and shoot up temperature.”

According to him, these factors made the day different and created intensely hot conditions. People who protected themselves from the hot wind and remained indoors felt comfort even without using their air-conditioners.

He predicted that temperature in the city would normalise in coming days, though upper areas of the country would experience warm weather as well as Multan to Nawabshah belt.

“The time between mid May to mid June has been the warmest period in Pakistan over 50 years. Presently, there is no forecast for a weather system this year that could provide some relief,” he noted, adding that weather patterns were changing and weather becoming intense.

Dr Seemin Jamali, the executive director of Jinnah Postgraduate Medical Centre, also overseeing its emergency section, said though a few people came with symptoms of heat exhaustion, there was no serious case related to heatwave.

“There has been no serious case so far (which can be attributed to the current heat spell). A few people came post-Iftari with complaints of fever and loose motions, but that is a normal occurrence in Ramadan,” she said, adding that there had been no death exclusively due to heatstroke.

Dr Jamali advised people to continue with the preventive steps they had taken.

“This time is different because people are generally more aware and practically taking steps to protect themselves. I think the media needs appreciation for playing a positive role in this regard. It’s also good that schools have been closed down in this season,” she said.

(By Faiza Ilyas Dawn, 17, 31/05/2018)

### **‘Green cover can protect Karachi from heatwave’**

By protecting agricultural fields and fruit farms in the rural areas surrounding the city, a green shield can be created, which would not only help provide protection against hot weather conditions but make these places economically viable.

This suggestion was put forward by noted town planner and architect Arif Hasan at a consultative meeting organised by a group of concerned citizens at the Urban Resource Centre on Thursday.

The programme was titled ‘Exploring strategies to respond to heatwave in Karachi’.

*Shortage of water pushed people to give up farming, leading to decline in agricultural produce: expert*

Recalling Karachi’s past weather conditions, Mr Hasan said heatwave in Karachi was not an unusual phenomenon as city’s temperature had been recorded as high as 47 degrees Celsius to 48 degrees Celsius. In fact, Karachi’s greenery was once destroyed by a devastating cyclone that hit the city in 1906, he pointed out.

Speaking on the challenges the city and its residents today faced, Mr Hasan criticised what he described as flawed development and said that rural area of Karachi had become barren now whereas the natural flows of rivers had been obstructed, affecting agriculture and recharging process of underground water.

He expressed concern over severe water shortages currently being experienced in Malir, which was once famous for its high-quality guavas as well as for production of eggs and chicken.

“Malir and Gadap areas were once green because of widely practised agriculture and fruit farms. “If we can help revive agriculture and orchard farming in city’s rural areas, Karachi can definitely be cooler,” he said, adding that acute water shortage had affected Malir so badly that people associated with agriculture no longer take interest in their lands, leading to a steep decline in agricultural produce.

Mr Hasan also underscored the need for community engagement in development and said that about 60 per cent of Karachi’s population lived in slums and old areas and that city’s problems would not be solved without their involvement. He suggested making residential buildings insulated and using material which absorbed less heat.

Buildings, however, were generally designed in a way that there was no cross-ventilation, which increased temperature inside homes.

Prof Noman Ahmed, the dean faculty of architecture and management sciences at the NED University of Engineering and Technology, said that many factors were involved in causing severe hot weather conditions in Karachi including ill-planned development and environmental pollution.

“Our luxurious lifestyle has not only increased cost of living but has posed threats to environment. We use air conditioners which cool the homes inside but cause an increase in temperature outside,” he noted, adding the sale of air conditioners in Karachi increased by 17.5pc during 2016-17 and was growing as temperature was increasing.

Public spaces like parks, playgrounds and open grounds, he regretted, were shrinking and plantation had decreased across the city.

According to him, high-rise buildings along the coast obstruct the wind corridor and people in Clifton areas have started complaining of suspension of sea breeze.

Citing some studies, he said concrete structures and roads increased temperature in cities. For instance, a Motorway Police study indicated road surface temperature was seven to eight degrees higher than temperature in surrounding areas.

“In addition, concrete buildings also absorb heat during the daytime and then they start emitting that heat afterwards which is why our buildings in cities are hotter even at night,” he explained.

A study conducted in 2015 at the city’s medical facilities in low-income areas during the heatwave was also discussed.

The study showed that doctors were not motivated to treat heatstroke patients.

Shahzad Qureshi, Zahid Farooq, Zeenia Shaukat and Yasir Hussain also spoke.  
(By Faiza Ilyas Dawn, 17, 01/06/2018)

### **Plastic pollution is a grave issue, stress experts**

On occasion of World Environment Day, Sindh Environmental Protection Agency (Sepa) organised a round table conference in collaboration with the National Forum for Environment and Health (NFEH) and other stakeholders with the theme ‘Beat Plastic Pollution’.

The celebration of World Environment Day started in 1974 with the purpose of raising awareness, supporting action and driving change. Through the celebration of this day worldwide, the significance of preserving the environment is highlighted through various events, such as seminars, talks, television programmes and walks for environmental protection.

Each year, World Environment Day has a theme which major corporations, non-governmental organisations, communities, governments and celebrities worldwide adopt to promote environmental awareness. The theme for 2018 is 'Beat Plastic Pollution'.

Today, plastic poses one of the greatest threats to our natural environment all the more so because it is both cheap and easily available. Many household items are made either partly or wholly from plastic, and while this material has been around for about 50 years, it can now be found in every corner of the world.

### **Delhi slum drowning in plastic as Environment Day focuses on India**

Till the 1970s, the use of plastic in Pakistan was limited, but this trend started changing in the 1980s, according to International Union for Conservation of Nature Country Representative Mahmood Akhtar Cheema.

According to Cheema, most of these plastics eventually make their way into rivers, water channels and finally, into the oceans. Media reports about tons of plastic polluting our seas and oceans are frequent. This pollution has a severe effect on marine life; it is unfortunate that due to our irresponsible attitude, we are polluting the very food source which we and our future generations depend on, he said.

Sepa Director Waqar Hussain Phulpoto was the chief guest at the occasion. He talked about the milestones Sepa has achieved to curb the menace of plastic.

### **World Earth Day: Give up use of plastic and save the environment**

Despite having only a handful of resources, Sepa is doing its utmost to combat environmental issues, he said, elaborating that more needs to be done for the protection of the environment, which could only be achieved through a joint effort from all stakeholders and the masses.

He stressed the need to sensitise people about environmental degradation. According to him, Sepa has prosecuted dozens of governmental agencies for their violation of environmental laws.

Earlier, Phulpoto talked to the participants about the recently promulgated notification by Sepa to stop using non-biodegradable polythene bags. He said that Sepa has been relentlessly pursuing stakeholders to adopt the technology for manufacturing biodegradable plastic products.

"Twenty kilogrammes of flexible plastic has been converted into biodegradable plastic from 2015 onwards due to the efforts of Sepa," he informed.

Dr Nuzhat from the National Institute of Oceanography talked in detail about how one can use trash as a commodity. She said that we often talk about environmental issues, but there is a need to talk about solutions as well.

### **World Environment Day: Clean-up campaign held at Trail 5**

Brigadier (retd) Tariq from Engro spoke about the impacts of plastic pollution in daily life. He talked about environmental friendly steps taken by Engro in Thar and said that nature has to be preserved, which can only be done as a collaborative effort from all.

Afrasiab from Business Dynamics gave a presentation on biodegradable plastic and said that plastic pollution is a grave issue and as a nation, it is high time to adopt value added solutions like use of biodegradable bags instead of plastic bags.

Afia Salam, a senior environmental journalist, highlighted marine pollution and its dire implications for marine life. She stressed that people should be sensitised to refuse the use of plastic and promote recycling and reusing.

Imran Sabir from Sepa said that people should stop the use of one-time plastic commodities, such as straws and cups, which would create a huge positive impact.  
(By Our Correspondent The Express Tribune, 05, 06/06/2018)

### **Public urged to reduce plastic use**

Highlighting threats plastic pollution posed to human life and environment, speakers at a seminar organised in connection with World Environment Day on Tuesday at a hotel underscored the role public could play in tackling the challenge by reducing the use of plastic in daily life.

The programme titled Impacts of plastic pollution on our life was jointly organised by the Sindh Environmental Protection Agency (Sepa) and the National Forum for Environment and Health (NEFH).

Sharing her concerns, Dr Nuzhat Khan, a senior scientist representing the National Institute of Oceanography (NIO), spoke about how marine debris was adversely affecting the coast and marine life and said that the issue had recently attracted a lot of international debate and discussion and a number of research papers, exploring the different dimensions of the subject, were also available today.

*'Waste recycling is a money-making business'*

This year, she pointed out, World Oceans Day, Earth Day and World Environment Day, all had been dedicated to creating awareness of plastic pollution.

"Being cheap, light and durable, plastic was believed to be the most convenient thing. But, the world has realised now that it's the most inconvenient thing in life," she said.

Speaking about Pakistan, she said the country had a 1,000-kilometre-long coastline, much of it was part of Balochistan which, fortunately, so far had largely remained in its natural form unlike the Karachi coastline, country's lifeline and the hub of industrial activities.

"So is the case with other metropolitan cities in the world," she said, regretting that absence of a solid waste collection and management system in the province due to which much of this waste ended into the sea.

The lack of a waste disposal mechanism, she said, had led people to burn solid waste, including plastic, a major source of air pollution, containing toxic gases, including dioxin.

Her presentation included glimpses of the Karachi fish harbour, Gizri and Korangi creeks being ruined by different forms of waste, including cattle dung.

**Waste recycling**

Suggesting solutions, she said opportunities were available and there was a need to learn lessons from other countries, for instance, India where low density plastic was being added to road construction material for firmness.

"Waste recycling is a money-making business. There is a need to create awareness and people should be encouraged to take up this venture," she said, adding that people should avoid using single-use plastic bags.

Saqib Hussain, a senior environmentalist, acting as a moderator cited a survey which showed that people in Karachi were paid to dump solid waste along the coast, a strategy to reclaim land.

“Practically speaking, we don’t have landfill sites but rather waste dumping sites. There is a need to decentralise system since the cost to transport waste to far-flung areas is too high,” he said.

M. Afrasiyab of Business Dynamics gave a presentation on oxo-biodegradable plastic and explained to the audience how normal plastic was made biodegradable with the help of an additive.

Waqar Hussain Phulpoto, the Sepa director and chief guest at the event, spoke about the agency’s efforts in curbing the plastic menace.

“In limited resources, we are doing our utmost to tackle environmental issues and believe that the challenge posed by plastic pollution could only be effectively addressed through joint efforts from all stakeholders,” he said, adding that the department had prosecuted dozens of governmental agencies for violation of environmental laws.

According to him, 20 million kilograms of flexible plastic had been converted into biodegradable plastic since 2015 due to Sepa efforts.

Dr Moinuddin Ahmed, representing Geolinks (Pvt) Ltd, emphasised the need for research on how plastic was affecting public health and environment.

Imran Sabir from Sepa, senior journalist Afia Salam, retired Commodore Zafar Iqbal from Bahria Foundation, retired Brigadier Tariq from Engro (Thar coal project) also spoke.  
(By Faiza Ilyas Dawn, 17, 06/06/2018)

## **Plastic pollution**

June 5<sup>th</sup> marked World Environment Day but rather than a celebratory occasion, concerned citizens and environmentalists braced themselves for the ugly statistics that would be reiterated to reflect the grim circumstances in which the Earth and its inhabitants are currently surviving. Indeed, even the most mighty and magnificent of creatures have succumbed to the brutality that results from careless human behaviour. Only two days prior to World Environment Day, a pilot whale in Thailand was killed by 80 plastic bags found lining its stomach, due to which it was unable to feed — similar to how albatrosses are dying on a plastic-covered island off the Pacific Ocean. This is all a result of irresponsible and unaware humans who, like millions across the world, give no second thought to the degree of detriment their use of plastic causes. Bans and taxes levied on the use of plastic in 60 countries are nascent and have a long way to travel before making inroads on undoing the damage humans have caused.

According to a United Nations report on the subject, 79 per cent of plastic produced is thrown away, 12 per cent incinerated, and a scant nine per cent recycled. As Pakistanis, we cannot take these figures lightly. We are just as culpable as the rest of the world, if not more, for our infatuation with the use of plastic. According to one report, Pakistan is among the top seven countries on the long-term climate risk index. Plastic pollution contributes to climate change but there is little awareness among our citizens about environmental protection and the damage plastic causes. Many people reheat and reuse low-grade plastic bottles containing contaminants that harm human reproductive health, such as bisphenol A. Additionally they purchase plastic items regularly as plastic offers cheap alternatives. Considering we are an impoverished and uninformed nation, the corporate sector, Ministry of Environment, and the Pakistan Environmental Protection Agency need to take on a responsible role and reduce plastic production altogether.

(By Editorial The Express Tribune, 16, 07/06/2018)

## **Parks to be restored to original plan within two months: mayor**

City Mayor Wasim Akhtar on Tuesday directed officials of the Karachi Metropolitan Corporation (KMC) to complete renovation and improvement works at all city parks and playgrounds including Hill Park, Jheel Park and Malir Park within two months.

Official sources told Dawn that the mayor expressed extreme displeasure over the reported encroachments on amenity plots and said that no one would be allowed to grab the land of parks and playgrounds.

They said that the mayor directed KMC officials to restore all recreation places, including parks, to their original plan.

The mayor also visited city parks along with chairman of parks committee Khurram Farhan and other officers concerned, and gave necessary directives for improving recreation facilities while inspecting the condition of parks.

He went to Hill Park, Jheel Park and Malir Park to review their conditions and inspected the renovation.

The mayor said that development works under way in different parks and their renovation and improvement work would be completed in next two months. He said large-scale tree plantation would also be done in these parks along with addition of more greenery.

(B The Newspaper's Staff Reporter Dawn, 18, 13/06/2018)

## **World-class amusement park opens its doors in Karachi on Eid**

If you happened to drive on the Stadium Road Flyover in the last few days, you may have seen a



gigantic metallic circle lit up with colourful lights. That circle is 'Karachi's Eyes' – a Ferris Wheel installed in Karachi's first amusement park on University Road.

The 30-acre park near Karachi Central Jail, which once used to be teeming with vegetable and fruit vendors which gave it its colloquial name, Old Sabzi Mandi, is now home to the city's first international-standard "Askari Amusement Park", which opens to the public on Eid day.

"The Karachi Eye takes its name from the iconic Ferris wheel in London," said a young ride operator at the park, Komal, referring to the 135-metre tall London Eye on the south bank of the River Thames in London. The structure is a major tourist attraction, drawing thousands of sightseers from across the globe every month.

The Karachi Eye is much smaller at 61 meters and features 32 air-conditioned cabins, each of which can seat four persons at a time. "At the top of this wheel, you can see the entire city," she boasted.

### **'Government to develop theme park'**

Adjacent to the 'Karachi Eye' stands a stomach-churning Slingshot ride – the first of its kind in the country. "One has to have guts to ride this ride," laughed Komal.

The "Slingshot" is exactly what its name suggests – a catapult-like structure that stretches over 120 feet. "It works with a heavy magnet and hydraulic system," Komal explained, adding that the swing is released with a jerk and propels the thrill-seekers into the air. "You get to see the world while the swing is tied from two sides with a sling." The ride has four safety locks and can seat two people with more or less same physique at a time.

The other jaw-dropping ride is a pendulum-like structure that swings its occupants clockwise and anti-clockwise at a hair-raising pace.

"Your hands and feet get cold once the ride roars to life," smirked the ride operator, Kashaf.

### **City's first gaming arcade turns 25**

The park's managing director, Shafqat Jafri, told The Express Tribune that it features 11 international-level thriller rides that have a strict over-14-year age requirement. "We tried to fill the gap of

amusement parks in Pakistan,” he said, adding that after surveying several countries such as Thailand, Dubai and Malaysia, they had established such a park for the people of Karachi.

The machinery in the park, according to Jafri, has been imported from China. On a query regarding safety checks, he said that no officials had visited the park yet as there were no laws governing such rides in the country. The International Organization for Standardization (ISO) team, he said, will visit the park in few days.

### **SC extends stay on handing over Go Aish Adventure Park**

The old Sabzi Mandi open area was formally handed over to the Corps-V to be developed into a park in April 2001. Under the agreement signed between the then Corps-5 Commander Lt Gen Tariq Waseem Ghazi and then City Nazim Naimatullah Khan on April 3, 2001, the park was to be a state-of-the-art recreational facility, to be developed by the army from its own resources. A green space had already been developed around five years ago. Later, weddings halls were constructed on the land, which will remain functional even after the amusement park is operational.

Almost five acres of the land has been allotted for car parking, besides the space available for parking of visitors to the wedding halls, said Jafri.

(By Oonib Azam The Express Tribune, 04, 14/06/2018)

### **‘Poor urban design major cause of heatwave’**

Unwise urban design is the major cause of heatwave in Karachi, an expert has said at a seminar on Significance of Popular Science Writing held at L.E.J. National Science Information Centre at the International Centre for Chemical and Biological Sciences (ICCBS), University of Karachi, here on Wednesday.

The Pakistan Biotechnology Information Centre organised the skills development session in association with ICCBS, University of Karachi.

Speaking on the occasion, director of ICCBS Prof Dr M. Iqbal Choudhary said: “Science paves the ways of rationality in any society as it provides values to society.”

He pointed out that science could help feed the hungry as it contributed to poverty alleviation.

He observed that less than 0.1 per cent time of electronic media was dedicated to science and technology.

“Internet is also contributing to misinformation about science, and the spread of wrong information about Conocarpus tree planted in various parts of Karachi is an example of that,” he said.

Prof Jamil Kazmi talked about the use of drone technology for environment studies in Pakistan. He said there was no scientific evidence about destructive effects of Conocarpus tree in Karachi.

He claimed that unwise urban design was the major cause of heatwave in Karachi.

Timber mafia may have interest in rooting out Conocarpus tree from the environment of the metropolis.

“This is the job of scientists to decide which plant or tree is environment-friendly and which is not,” he added.

“Science enables people to work rationally. It is necessary for common people to understand science as it is of fundamental value for a knowledge-based economy and a knowledge-driven progressive society,” another speaker added.

“The promotion of science at the grass-roots level is the need of the hour in our society. Pakistan is confronting [the] devil of extremism ... while science is the best antidote to extremism,” a speaker said.

In the end, Dr Sammer Yousuf presented the vote of thanks.  
(By PPI Dawn, 18, 21/06/2018)

## **Environmental hazards**

For a country perennially short of water, desalination plants may offer a tempting solution on how to get out of the severe crunch we presently find ourselves in. Desalination as a process seems to work best in coastal cities and towns not only for resolving drinking water requirements but also for handling the water intake of thermal power plants. However, expecting desalination plants to deliver for the agriculture sector would be plain dumb. And if we look at the 130-odd countries that currently operate desalination plants none of them have ever thought of using the same for agricultural needs which is just as well.

While we go full steam ahead with desalination plants in Karachi and Gwadar, we must not forget that such plants can neither be environmentally friendly nor cheap to run. There is a constant risk of wastewater discharges that threaten to affect coastal water quality. The effluent thus drained by desalination plants produces a multi-component waste which is equally hazardous to sediment as well as marine organisms. In the long term we must ask ourselves whether the advantage of producing 5, 10 or 50 million gallons of water per day can outweigh the potential environmental damage to our coastal interests.

For Gwadar, the high cost of building and running desalination plants may not be much of a worry considering that the governments of the UAE and Switzerland will be funding the project. For Karachi, however, the burden may have to be carried mainly by the private sector in conjunction with the federal government.

A report prepared by the Planning Commission recognised that both Karachi and Gwadar need innovative financing models for the financial sustainability of a seawater treatment system. It also sees the need for harnessing a solar desalination system for Keti Bandar, Thatta and Badin in Sindh and Ormara, Pasni and Jivani in Balochistan. However, we must keep environmental concerns in mind at all times.

(By Editorial The Express Tribune, 16, 22/06/2018)

## **Cycling group plants saplings at Urban Forest**

Moving or rather 'pedalling' towards Go Green goals, Cycologists, a cycling group, arranged a tree plantation ride for their cyclists on Saturday morning.



Bright and early, the adventure began at the crack of dawn when some 40 enthusiastic cyclists started the Go Green ride from Zamzama to pass through various streets of DHA and Clifton before reaching Urban Forest, the first of its kind initiative in Pakistan where a team of environmentalists are trying to grow native, wild and maintenance-free trees to be planted in major urban areas of Pakistan.

"Our city is highly affected by environmental changes these days. It has resulted in abnormally hot weather, heatwaves and no rain. Hence, being responsible citizens, Cycologists' contribution towards the environment is to plant over 31 saplings and pledge to promote a greener and clean society by adopting a tree for three years at the Urban Forest," said Samia Asaad of Cycologists.

Besides enjoying the tranquillity of the open eco-friendly environment at Urban Forest, the cyclists also showed their support by emphasising the importance of fresh clean air to breathe.

Cycologists is a DHA Karachi-based easy cycling and social meet-up group that brings together those interested in cycling and improving their health and fitness.

The group organises rides every Saturday and a few regular days of the week with routes ranging from regular streets to the highlights of Karachi.

They usually arrange rides focusing on various environmental and social issues.  
(By The Newspaper's Staff Reporter Dawn, 18, 24/06/2018)

## Experts warn picnickers against visiting polluted Clifton beach

Experts have raised serious concern over the worsening conditions at Clifton beach and have urged the public to avoid venturing into its polluted water and letting children play on its contaminated soil until discharge of untreated sewage into the sea was stopped and sanitation at the beach improved.



They were sharing their worries with Dawn over the risks Clifton beach posed to public health.

An easily accessible and inexpensive recreational source for most Karachiites, Clifton beach is still crowded even after Eid, attracting a large number of families every afternoon.

*'I was shocked to see heaps of garbage and open discharge of untreated sewage into the sea from a drain near a restaurant'*

Ignorant of the risks heavily polluted coastal water poses to their health, families, particularly children, are seen enjoying themselves in the seawater constantly getting polluted with raw sewage discharged into the sea.

"People, especially children, getting in contact with contaminated soil and water are very vulnerable to all sorts of infections — infections of the eye, skin, respiratory tract, ear, throat etc. They can also fall ill with gastroenteritis if contaminated water goes into their stomach," said Dr Mirza Ali Azhar, an executive member of the Pakistan Medical Association.

The only precaution beach visitors could take was to avoid venturing into the seawater and having contact with its contaminated soil, he added.

"If you look around, you will realise that our entire food chain has gotten contaminated because we have miserably failed to manage our waste," he further said, regretting that the beach which should be a place for healthy recreation now posed a serious risk to public health.

Sharing her observations, Dr Nuzhat Khan, a senior scientific officer at the National Institute of Oceanography, who recently visited Clifton beach, said: "I went there this Sunday and was shocked to see heaps of garbage and open discharge of untreated sewage into the sea from a drain near a restaurant. Hordes of people were there who seemed oblivious to this situation. I couldn't see any lifeguard or ambulance that could provide emergency help."

Dr Khan, who is also engaged in a coastal areas' survey, lamented that Clifton beach, which was the only source of entertainment, especially for low-income people in the city, had not only lost its serenity but posed a great risk to public health.

"Beach conditions have deteriorated in recent years when the authorities concerned allowed the establishment of commercial projects there without caring to see whether they have a proper waste disposal system," she said, adding that the authorities should find a way to treat the waste before it was discharged into the sea.

While much of the waste of the city is being dumped into the sea, the sewage directly polluting Clifton beach is discharged through three drains. The matter has been highlighted many times in the media and is currently being pursued by the Supreme Court.

Dr Khan also referred to last year's massive flushing of sewage on the beach, which the media erroneously reported as 'oil slick', and said it was yet another indicator calling for urgent steps for proper waste disposal.

"There was no sign of an oil slick. In fact, it was sewage that seemed to be clogged in a drain and was flushed out due to rain," she said, adding that pollution seriously affected the whole coast from the Korangi Fish Harbour to Port Qasim.

A visit to the Clifton beach on Friday showed that liquid waste was being discharged from only one drain. A large section of the beach was found clean but there were many spots littered with solid waste.

CBC 'corrective' measures

"We have closed down two out of three drains. The Defence Housing Authority plans to set up a waste treatment plant by August next year, which will help close down the last functional drain," said Ghulam Mohammad Abro, the deputy chief executive officer at the Clifton Cantonment Board (CBC).

Asked about the logic behind keeping one drain operational since waste from this drain would continue to pollute the beach and coastal waters, he said: "Now the discharged waste would have no 'direct contact' with the public as this place (where the drain is located) is not accessible to the public. It's an ad-hoc arrangement and the solution obviously is a waste treatment plant."

He claimed that the beach presented a cleaner look and there was a team engaged in patrolling and ready to do emergency rescue operation. "Out of a 40-plus staff, we have 20 lifeguards. The fact that there was no incident of drowning during Eid holidays [at Clifton beach] indicates our staff's efficiency."

Disagreeing with Mr Abro's argument, Dr Asif Inam heading the NIO said that keeping one drain operational meant polluting the whole area.

"It's flowing water. You can't restrict pollution to one point. Contaminants will obviously flow along the sea currents and affect the whole area," he said, adding that visitors contracting germs from the area might have no clue to their infection as it often took time to show symptoms.

He regretted that parts of the beach where sewage discharge points were located spread foul smell, which should have never been a part of a beach experience.

Marine life destruction

Umair Shahid of the World Wide Fund for Nature said that the high level of pollution at Clifton beach had destroyed all signs of marine life there.

"It's our failure to manage land-based waste causing destruction of marine ecosystem and contaminating food chain. There is hardly any beach left in Pakistan where we don't find plastic refuse," he said, emphasising the need for creating awareness and taking community-based measures to tackle waste management issue.

He expressed serious concern over the increasing plastic pollution which, he said, had become a major environmental problem, risking human survival the world over.

"Plastic takes hundreds of years to break down. If plastic reaches the ocean, it is very difficult or impossible to recover. It decomposes into micro-plastic particles that attract other pollutants, and are easily consumed by sea creatures. It damages the ecosystem and contaminates the whole food chain," he said.

(By Faiza Ilyas Dawn, 17, 24/06/2018)