# January 2018

# NEWS COVERAGE PERIOD FROM JANUARY 29TH TO FEBRUARY 4TH 2017

FFC REPORTS PROFIT OF RS11.5B, DOWN 4.3%

The Express Tribune, January 31st, 2018.

Fauji Fertilizer Company (FFC) has posted a consolidated net profit of Rs11.5 billion for the year ended on December 31, 2017, down 4.3% compared with Rs12.02 billion in the previous year, according to a company notice sent to the Pakistan Stock Exchange (PSX).

Earnings per share (EPS) amounted to Rs9.04 compared with an EPS of Rs9.44 in 2016. The company announced a final cash dividend of Rs3 or 30% per share for the year, in addition to an interim dividend already paid at Rs4 or 40%.

FFC's share price closed at Rs87.69, up 2.36% on Tuesday on a day the KSE-100 index closed at 44,233, down 224 points or 0.50%.

Sources said 22% higher sales in the outgoing year was due to urea export (which clocked in at 76,000 tons compared with no export last year), higher retention prices on urea (averaged around Rs1,294 per bag) as inventory levels normalise and better diammonium phosphate (DAP) off-take which was up 12% to 176,000 tons.

Other expenses and financial charges in the fourth quarter of 2017 declined by 12% and 19% on yearon-year basis. Other income was down 44% in fourth quarter of 2017 mainly due to reduction of urea cash subsidy (Rs100 per bag compared with Rs156 per bag last year).

While pre-tax earnings were down 4% in the outgoing quarter, lower effective tax rate was down 3 percentage points to 27% which led to flat earnings.

https://tribune.com.pk/story/1622361/2-ffc-reports-profit-rs11-5b-4-3/

MONSANTO PAKISTAN LAUNCHES 'FARMER AMBASSADOR' PROGRAMME bBusiness Recorder, 2 February 2018

LAHORE: Monsanto Pakistan launched its ambassador farmer programme, named Dekalb®Numberdaar, across all major corn growing districts of Punjab. The program recognizes prominent progressive farmers from each corn growing territory and encourages them to act as change agents for the proliferation of best farming practices amongst the broader farming community. Much of the agriculture landscape in the province consists of small-hold farmers with limited access to requisite agronomic knowledge, resulting in subsistence farming.

The Dekalb®Numberdaar program aims to harness the collective experience and influence of progressive farmers in each corn growing territory and transfer knowledge to the small-hold farmers within their respective communities.

These ambassadors will utilize their positive influence amongst their peers and be instrumental in raising awareness around agriculture technology and disseminate the latest agronomic knowledge necessary to deliver a healthy and productive crop.

Sardar Javed Iqbal Wattoo, a progressive farmer from Basirpur, while speaking at the Dekalb®Numberdaar launch ceremony said, "My success is attributed to my thirst for latest agronomic knowledge and a willingness to embrace technology". He further added, "By participating in the Dekalb®Numberdaar program, I hope to be able to share some of my learning with fellow farmers and guide them towards achieving better yields and profitability."

Till date the program has been launched in 7 districts of Punjab, including Okara, Pakpattan, Sahiwal, Chiniot, Vehari, Kasur and Khanewal, nominating more than 500 progressive farmers as Dekalb®Numberdaars, with an expected outreach of 30,000 small-hold farmers across the target region.

Monsanto Pakistan's Dekalb®Numberdaar Program is part of a larger initiative to improve outreach to small-hold farmers across Pakistan, providing access to latest technology and agronomic knowledge. In a country where average farm size is estimated to be just over 6 acres, improving the productivity and yield of small-hold farmers can have a significant impact on the rural economy and drive sectoral growth.

https://epaper.brecorder.com/2018/02/02/13-page/697575-news.html

NEWS COVERAGE PERIOD FROM JANUARY 29TH TO FEBRUARY 4TH 2017 JANUARY HARDLY A WETTER AFFAIR Dawn February 02, 2018

Intikhab Hanif

LAHORE: Extremely low rainfall in the country in January may cause moderate drought like conditions over its southern part during the current month.

The plains of the country are also likely to receive near normal rainfall during the current month, leaving no major positive impact on the overall weather conditions nevertheless.

According to the Met department data, a few areas in the country did receive rain in January which too was far below their normal rainfall for the month. It remained totally dry in majority cities in the plains and even in the hilly areas.

Snowfall too was considerably deficient in January, raising doubts about the availability of sufficient water for irrigation in the dry summer months of April to mid-June.

Murree received 9.1mm of rain as against its normal 131.9mm of the month. Muzaffarabad received 2.1mm, Garhi Dupatta 1.40, Balakot 3.2, Dir 30, Saidu Sharif 5.1, Kakul 1.1, Chitral 10.61 as against their normal of 99.3, 114..6, 91.4, 112.5, 82.6, 69.8 and 47mm respectively.

In Punjab, Lahore received only 2mm, Islamabad 1mm and Jhelum 5mm. There was no rain in Mianwali, Jhang, Bahawalnagar, Bahawalpur, Bhakkar, Dera Ghazi Khan and Faisalabad. It remained dry in almost the entire Sindh and Balochistan.

Murree recorded 11.1 of snowfall, Astore 27.3, Kalam 31.5, Malamjabba 40, Parachinar 2, Skardu 4.17 and Kalat 3. The rest of the hill stations did not receive any snowfall, according to the Met department.

Meteorologists said there was a possibility of shortage of irrigation water all over the country in the beginning of summer.

The department's monthly forecast for February issued on Thursday says precipitation (rain) throughout the country is expected to be near normal. However, the hilly areas of Khyber Pakhtunkhwa and Gilgit-Baltistan may receive slightly above normal snowfall / rainfall during the month.

Three to four spells of rainfall are expected during the month and amount of precipitation would be less during the first half as compared to the second half.

Day and night time temperatures will gradually increase during the month. The average temperatures over the country are likely to be above normal during the month.

Moderate drought like conditions may prevail over the southern half of the country due to deficient rainfall, the forecast said.

https://www.dawn.com/news/1386771/january-hardly-a-wetter-affair

CLIMATE MINISTRY, WWF TO CLEAN RAWAL LAKE TODAY The Express Tribune, February 2nd, 2018.

To improve the condition of wetlands in the country, the Ministry of Climate Change along with the World Wide Fund for Nature (WWF) will be cleaning Rawal Lake on Friday (today).

The cleanup would coincide with World Wetlands Day which falls on February 2.

Since this year's international theme for World Wetlands Day: 'Wetlands for a sustainable urban future', the ministry has focused on Rawal Lake — the urban wetland of Islamabad.

The wetlands reduce flooding, replenish drinking water, filter waste, provide urban green spaces and are a source of livelihoods.

The day marks the anniversary of the signing of the Convention on Wetlands of International Importance in Ramsar, Iran, on February 2, 1971. The Ramsar convention emphasises that urban wetlands should be integrated into a city's sustainable future planning and development.

Since it was first observed in 1997, government and non-government organisations and communities have celebrated the day by undertaking actions to raise public awareness about the importance of wetlands and how to conserve it.

Federal Minister for Climate Change Senator Mushahidullah Khan said that wetlands provide magnificent landscapes which attract millions of tourists every year. Behind the beautiful vistas and scenes, wetlands also boost many services such as the availability of clean water, recycling wastes and providing protection from extreme weather events such as disaster risk reduction.

With Pakistan a signatory to the Convention on Wetlands, Mushahidullah pointed out that it provides the framework for national action and international cooperation for the conservation and wise use of wetlands and their resources.

Under this convention, the climate change minister said that so far they have designated 19 wetlands as Ramsar sites of international significance.

"Wetlands are among the most diverse and productive ecosystems supporting rich biodiversity and providing valuable products and services to human beings," Mushahidullah said.

The UN estimates that 90 per cent of all natural disasters are water-related and the worldwide frequency of disasters has more than doubled in last 35 years, driven by climate and weather-related hazards such as flooding and droughts.

It is believed that wetlands act as a natural buffer to absorb the shocks of natural disasters like devastating flooding and play its important role in risk reduction. In view of the devastating floods in In the past decade, the Ministry of Climate Change in collaboration with Ramsar Convention invited the Ramsar Advisory Mission (RAM) to suggest a remedy for disaster risk reduction.

The mission, after visiting the vulnerable stretches along the Indus River in November 2012, suggested the ecological solution of flood control as experienced in case of Yangzi River, China by using wetlands. The recommendations of RAM were then included in the National Flood Protection Plan-IV.

"There are many examples of urban areas in Pakistan which are dependent on wetlands. Today we join the world community in celebrations of world wetland day by recognizing the importance of wetlands for their role in disaster risk reduction and commit to continuing our efforts to achieve sustainability of wetlands ecosystem," Mushahidullah said.

https://tribune.com.pk/story/1624395/1-climate-ministry-wwf-clean-rawal-lake-today/

NEWS COVERAGE PERIOD FROM JANUARY 15TH TO JANUARY 21ST 2017 CLIMATE SECURITY FOR SURVIVAL The Express Tribune, January 17th, 2018.

Due to Pakistan's consistency with political turmoil for decades, we have been ignoring one of the biggest threats to humanity — climate change. In a country already victimised by political and economic instability, climate change is a phenomenon that can no longer be neglected. Located in the heart of South Asia, the region which is most vulnerable to climate change — Pakistan is ranked 7th-most vulnerable country to climate change in the world. Have we seen any ground-breaking work on climate security in Pakistan? The answer is no.

With the general elections coming up this year, the issue of climate change will be sidelined again. For the local masses asking the government to prioritise public funds for basic necessities is understandable, but at the same time it undermines the threat of climate change significantly. Pakistan's biggest problem isn't political violence or terrorism, it is climate change.

The rise in air pollution, the sign of drought throughout the whole nation, the disturbance in weather conditions, are all clear indications of climate change. The country's emissions are expected to increase from 405 metric tonnes of carbon dioxide to over 1,603 metric tonnes in the next 15 years. Moreover, 2017 broke all temperature records as Turbat experienced 54oC on May 28, 2017, which has also been listed as the hottest temperature ever recorded in Asia!

Not to forget, the famous Hanna Lake of Balochistan has completely dried up. It is disturbing that this development is not national news. This is a start of many developments to occur in the future as climate change is expected to strike hard in Pakistan. From Kashmir to Karachi, the effects of climate change will paralyse the whole country if we do not act now.

Looking at the bigger picture, a Massachusetts Institute of Technology report last year indicated that if climate change continues at its pace, deadly heatwaves beginning in the next few decades will strike parts of South Asia. Environmentalists believe that South Asia could become uninhabitable by 2100. This immediately became international headlines and an alarm bell for not only South Asia, but the rest of the world too. Unfortunately, neither did the government or the ministry of climate change in Pakistan take any sort of action. It was shocking to see how our government ignored one of the biggest security challenges in the world.

What is more shocking is that the Pakistan Environmental Protection Agency failed to publish annual environmental reports for the last decade! The agency has been unable to take action against environment violators. But how could one expect the government to take action against environment violators when it finds itself surrounded by controversy? Worst of all this, the ministry of climate change never engaged with the ministry to ask questions and take action as per standard operating procedures.

In a country where our economy is already in a shambles and on the path of further deterioration, climate change could lead to record-breaking losses for our economy. It is crucial to highlight that the floods of 2010, 2011 and 2012 cost the economy a staggering \$16 billion. This year again, threats of natural hazards with even higher intensity are likely to take place. But nowhere have we seen the federal government working to prevent horrendous implications. Our country runs on an agrarian economy. It is worthwhile to mention that our agriculture sector was responsible for 53% of the total GDP. By 1980 to 1981, this number had dropped to 31%. But alarmingly in recent years, it has fallen even further to 21.4%. The harsh climatic conditions from Sindh to K-P are already a story of despair. With the downward economic trajectory, climate change will make life more miserable for every citizen of Pakistan.

To fully address the alarming threat of climate change, we all must demand action from our leaders to support and therefore implement a comprehensive set of climate solutions. There is an urgent need to initiate real mechanisms to monitor climate change and its effects as we have limited ourselves from modern day technology. More research is necessary to better understand how climate change influences our country's ecosystem. Last year, former minister for climate change Zahid Hamid admitted that the government did not have any real-time mechanism to monitor air pollution. Every

year, more than 60,000 people die due to air pollution in Pakistan. Countless numbers of people are left with respiratory diseases for a lifetime. The Lahore/Delhi smog incident should be taken seriously to prevent any damage for the future. By protecting forests, we can significantly lower carbon emissions in our atmosphere. We need to understand the driving forces behind deforestation today and raise awareness on why reducing deforestation must be a priority.

The year 2018 will turn out to be decisive. Pakistan should expect real hardships to follow, but then again it is a global phenomenon. Several countries have moved towards green energy. Now is the time to formulate a fresh strategic policy, to promote green energy and minimise carbon emissions, which harm our environment. What we should really focus on is to unite, to fight against climate change for a better future, where coming generations would follow the same route and save Pakistan.

#### https://tribune.com.pk/story/1610442/6-climate-security-survival/

NEWS COVERAGE PERIOD FROM JANUARY 8TH TO JANUARY 14TH 2018 SPFC, NRSP SIGN MOU TO FIGHT CLIMATE CHANGE Business Recorder, 13 January 2018

### Zahid Baig

LAHORE: South Punjab Forest Company (SPFC) and National Rural Support Programme (NRSP) have signed a Memorandum of Understanding (MoU) to help Pakistan build resilience to climate change by improving the forest cover of Punjab through increasing private investments and CSR activities.

The MoU was signed by the Chief Executive Officers of both the organizations, Tahir Rasheed, SPFC and Dr Rashid Bajwa, NRSP, in presence of senior representatives of World Wide Fund for Nature-Pakistan (WWF-Pakistan) and Green Climate Fund (GCF), specially invited to witness the ceremony.

Arsalan Alfred M Ni, Senior Advisor, Private Sector Facility, Green Climate Fund (GCF) was briefed about the objectives of this partnership. Arsalan appreciated the initiative and expressed higher hopes of developing environmental sensitive projects by Pakistan.

Tahir Rasheed, CEO SPFC, while commending the work of NRSP in alleviating poverty stressed on the fact that the mandate of NRSP is in-line with the mission of SPFC, as SPFC plans to create 15,000 direct and indirect green jobs in South Punjab and lead to revenue generation of Rs 242 billion, which will help to eradicate poverty in South Punjab. He further said, 'SPFC initiative will help to achieve Sustainable Development Goal (SDG) 1 'No Poverty' as poverty will be substantially reduced through the influx of billions of rupees; SDG 13 'Climate Action' as 5.6 million tons of carbon dioxide will be sequestered; and SDG 15 'Life on Land' which calls to protect, restore and promote sustainable use of terrestrial ecosystems, sustainable manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss'.

Dr Rashid Bajwa thanked SPFC and dignitaries from GCF and WWF-Pakistan for attending the ceremony. He was of the opinion that initiative taken by the Punjab Government will help to restore the dwindling forests and also helping to create rural jobs for the community.

As NRSP's GCF accreditation is currently under process, the understanding between SPFC and NRSP will explore synergies to secure climate finance that will be utilized in the forestry sector to help reduce the vulnerability of Punjab to climate change.

The GCF is established by the United Nations Framework Convention on Climate Change (UNFCCC) to assist the developing countries to adapt and mitigate climate change. GCF will help to raise climate finance of up to \$100 billion a year by 2020.

NRSP is section 42 (not for profit) company engaged in alleviation of poverty and rural development. With presence in 65 rural districts, NRSP stands the largest rural support programme of the country.

### https://epaper.brecorder.com/2018/01/09/13-page/692838-news.html

FLOOD RISK FOR PAKISTAN WILL DOUBLE BY 2040, SAYS REPORT Dawn, January 11th, 2018

MIAMI: Global warming is expected to unleash more rain, exposing millions more people to river flooding, particularly in the United States and parts of Asia, Africa and central Europe, researchers said on Wednesday.

The study in the journal Science Advances calculates how much more flood protection will be needed to keep the risks of high-end floods constant in the next 25 years.

Unless actions are taken — such as enhancing dykes, boosting building standards, relocating settlements and managing rivers — the number of people affected by devastating floods could skyrocket, warns the report, based on models that are 10 times more precise than commonly used climate computer simulations.

Asia would get hit the hardest, with the number of people affected by flooding projected to go from 70 to 156 million by 2040, it said.

For instance, Pakistan, which is already prone to flooding, "will observe almost a doubling in highend flood risk," with 11m people at risk of floods unless protective measures are taken by 2040.

"In South America the number of people affected by flooding risks will likely increase from six to 12m, in Africa from 25 to 34m," it added.

In Germany the number of people affected is projected to rise sevenfold, from 100,000 to 700,000.

In North America, it could rise from 100,000 to one million.

"More than half of the United States must at least double their protection level within the next two decades if they want to avoid a dramatic increase in river flood risks," said lead author Sven Willner from the Potsdam Institute for Climate Impact Research.

The increase in river flood risks over the next few decades is being driven by the amount of greenhouse gases already emitted into the atmosphere by the burning of fossil fuels.

When more heat-trapping pollutants surround the Earth, more moisture is held in the air, leading to more rainfall.

Cutting these emissions is crucial to reducing flood risks for future generations.

"The findings should be a warning to decision-makers," added Levermann. "Doing nothing will be dangerous."

https://www.dawn.com/news/1382203/flood-risk-for-pakistan-will-double-by-2040-says-report

NEWS COVERAGE PERIOD FROM JANUARY 1ST TO JANUARY 7TH 2018 25PC OF EARTH WILL BE DRIER EVEN IF WARMING CUT TO 2°C: STUDY Dawn, January 2nd, 2018

PARIS: More than a quarter of Earth's land surface will become "significantly" drier even if humanity manages to limit global warming to two degrees Celsius, the goal espoused in the Paris Agreement, scientists said on Monday.

But if we contain average warming to 1.5 C (2.7 degrees Fahrenheit), this will be limited to about a tenth — sparing two-thirds of the land projected to parch under two degrees Celsius, they concluded in a study published in Nature Climate Change.

At 1.5 C, parts of southern Europe, southern Africa, central America, coastal Australia and Southeast Asia — areas home to more than a fifth of humanity — "would avoid significant aridification" predicted under two degrees Celsius, said study co-author Su-Jong Jeong of the Southern University of Science and Technology in Shenzhen, China.

"Accomplishing 1.5 C would be a meaningful action for reducing the likelihood of aridification and related impacts," he said.

Jeong and a team used projections from several climate models, under different warming scenarios, to predict land drying patterns.

Aridification is a major threat, hastening land degradation and desertification, and the loss of plants and trees crucial for absorbing Earth-warming carbon dioxide. It also boosts droughts and wildfires, and affects water quality for farming and drinking.

The team found that at two degrees Celsius, which could arrive any time between 2052 and 2070, between 24 per cent and 32 per cent of the total land surface will become drier.

This includes land in all five climate categories today — hyper-arid, arid, semi-arid, dry sub-humid, and humid.

But at 1.5 C — the lower, aspirational limit also written into the climate-rescue Paris Agreement — this is reduced to between eight and 10 per cent, said Jeong.

Under the pact, signed in the French capital in 2015, countries have filed pledges for reducing climate-altering greenhouse gas emissions from burning coal, oil and natural gas.

But these goals place the planet on track for warming of more than three degrees Celsius, which scientists warn will lead to life- and asset-threatening superstorms, sea-level rise, floods and drought.

"Because present mitigation policies do not appear to be sufficient to achieve the 1.5 C temperature goal, more efforts to mitigate global warming are therefore urgently needed to reduce the spread of aridification," the study authors said.

#### https://www.dawn.com/news/1380220

GLOBAL WARMING'S TOLL ON CORAL REEFS: AS IF THEY'RE 'RAVAGED BY WAR' International New York Times, January. 4, 2018

Kendra Pierre-Louis and Brad Plumer

Before we call rockfish, shrimp and crab "dinner," some of these species call coral reefs "home." But those reefs, home to a quarter of all marine fish species, are now increasingly threatened as rising ocean temperatures accelerate a phenomenon known as coral bleaching.

Large-scale coral bleaching events, in which reefs become extremely fragile, were virtually unheardof before the 1980s. But in the years since, according to a study published Thursday in the journal Science, the frequency of coral bleaching has increased to the point that reefs no longer have sufficient recovery time between severe episodes.

Jelle Atema, a professor of biology at the Boston University Marine Program who was not involved in the study, said the effects of more frequent bleaching events were very difficult to predict because of the complex networks of dependencies within reefs. But he said they could be devastating.

"When coral dies, it affects the shelter and food that sustain fish, lobsters, shellfish, worms, etc. The same happens in a rain forest. When the trees die, the animals and plants that have developed over millennia die with them," he said, before adding an analogy. "When a country is ravaged by war, people die and migrate."

During bleaching events, overheated seawater causes corals to part ways with symbiotic plantlike organisms called zooxanthella that live inside of them. In addition to giving coral reefs their bright colors, zooxanthella also provide corals with oxygen, waste filtration, and up to 90 percent of their energy. Absent zooxanthella, corals not only take on a ghostly pallor, hence the term bleaching, but they are also more susceptible to death.

In theory, coral reefs can recover from even a severe bleaching event. Some of the coral will die off from increased disease susceptibility, but once ocean temperatures drop again, many of the corals will start growing back.

But that's only if they're given enough time.

Typically, it takes 10 to 15 years for the fastest-growing corals to recover after a severe bleaching event. Larger corals that provide shelter for bigger fish can take even longer to grow back.

As bleaching events become more frequent, reefs are unlikely to get that needed reprieve. Earth's average temperature has increased 1 degree Celsius, or 1.8 degrees Fahrenheit, above preindustrial levels, and the median time between severe bleaching events is now just six years, the Science study found.

Case in point: The Scott Reef, 180 miles off the coast of Northwestern Australia, had over the past few years finally begun recovering from a major bleaching event in 1998, with the fastest-growing corals inhabiting much of their earlier territory. But the area was hit by bleaching again in 2016, causing widespread mortality.

Before 1982-3, mass bleaching events across wide areas were nonexistent. That year, reefs across the Tropical Eastern Pacific exposed to warm El Niño year waters bleached. Coral reefs in Costa Rica, Panama and Colombia experienced 70 to 90 percent mortality. Most reefs in the Galápagos Islands, the cradle of Darwin's theory of evolution, experienced 95 percent mortality.

While many mass bleachings were prompted by El Niño events, which tends to warm Pacific Ocean temperatures, the bleaching event that hit the Great Barrier Reef in 2017 — the reef's first back-to-back bleaching — occurred at the beginning of a La Niña event, when ocean waters should have been cooler. It's a sign that global warming is steadily pushing up ocean temperatures even in cooler years.

"La Niña periods today are actually warmer than El Niño periods were 40 years ago," said Terry Hughes, a senior researcher who specializes in coral reefs at James Cook University in Australia and the lead author of the Science study.

"Coral bleaching is caused by global warming full stop," Dr. Hughes said. "It's not due to El Niño. We've had thousands of El Niño prior to 1983, none of them caused bleaching. Bleaching is caused by the rising baseline temperatures due to anthropogenic global warming."

Scientists have long warned that the effects of climate change will not necessarily progress in a linear way as the planet warms. As Earth crosses certain key temperature thresholds, severe and far-reaching changes can unfold relatively rapidly, such as the collapse of ice sheets or the die-off of key ecosystems.

All evidence suggests that bleaching will only get more and more frequent as the Earth continues to warm. By midcentury, climate models suggest, most reefs will experience the sort of heat associated with severe bleaching every year.

corals can't adapt quickly enough, "we could be looking at the effective loss of most of the world's coral reefs," said Mark Eakin, an oceanographer who is coordinator of the Coral Reef Watch project at the United States National Oceanographic and Atmospheric Administration.

The Great Barrier Reef had two back-to-back bleaching events that killed just about half of the corals along the length of the barrier reef. This means half are still alive. Those corals are the source of larvae that spawn future generations, which means that the reef moving forward will have a distinctly different character than it had two years before the bleaching event.

"The ecological effect of more and more bleachings is that it's changing the mix of species in favor of the tougher corals that can survive bleaching events and in terms of the corals that bounce back the quickest," said Dr. Hughes. "It's changing the whole ecology of the reefs."

There are a few things that can help make reefs more resilient to bleaching. Humans can limit fertilizer and sewage runoff that damage coral. They can avoid overfishing key herbivores like the rabbitfish that nurture the reefs by clearing away excessive algae.

Some researchers are experimenting with even more radical techniques, such as trying to breed coral that can thrive in warmer temperatures, or looking at ways to pump cooler water into reefs to protect the coral from overheating, or even placing giant "shade cloths" over reefs.

Some of these ideas are admittedly wild, Dr. Eakin said, and none of them can ever be a substitute for reducing greenhouse gas emissions. "We can't act as if we can keep emitting carbon dioxide into the atmosphere and just by tinkering around with corals in a lab we're going to solve the problem," he said.

But given that frequent bleaching is already underway, and given that at least half a degree of additional global warming appears inevitable, coral researchers are desperate for new ideas.

"We've got to start taking steps that we haven't thought about before — even if they sound absolutely crazy," Dr. Eakin said. "Because the stuff we thought made sense will no longer work."

https://www.nytimes.com/2018/01/04/climate/coral-reefs-bleaching.html

# February 2018

## NEWS COVERAGE PERIOD FROM FEBRUARY 26TH TO MARCH 4TH 2018

### *GOVT URGED TO TAKE EFFECTIVE STEPS FOR CLIMATE CHANGE POLICY* Business Recorder, 28 February 2018

ISLAMABAD: The government was urged on Tuesday to take effectives steps at policy level for dealing with climate change-induced challenges.

The speakers expressed these view while addressing the participants of the 4th Climate Change Adaptation Policy and Science Conference (CCAPS), organized by Pakistan Agricultural Research Council (PARC) under the Himalayan Adaptation Water and Resilience (HI-AWARE) research project here at a local hotel.

Raheela Saad, Member National Disaster Management Authority (NDMA) speaking on the occasion said that policy level decision should be taken for dealing with climate change-induced challenges. She also said that efforts should be made to raise awareness among students at school level about climate change, besides raising awareness among general public.

Shafqat Kakakhel, former ambassador and Chairperson Sustainable Development Policy Institute (SDPI) Board of Governors, said that Pakistan is an agriculture country and agriculture depends on

irrigation water. Main sources of irrigation water are glaciers and monsoon rains, he said, adding that both sources of water are vulnerable to climate change.

Kakakhel said that political leadership needs to take tangible steps to cope with the challenges posed by climate change.

Dr Muhammad Azeem Khan, member Food Security and Climate Change, Planning Commission of Pakistan, said that present government has taken different steps for dealing with the challenges of climate change and is very conscious about climate change adaptation.

Chairman PARC, Dr Yusuf Zafar said that the conference would offer open debates and scientific deliberations on important and interconnected themes regarding adaptation to climate change.

Dr Muhammad Shafique, Deputy Secretary for Ministry of National Food Security and Research, said that climate change has emerged as one of the greatest global challenges of the 21st century. Increasing global temperatures, reduced and erratic rainfall patterns and hydro-meteorological disasters, such as floods and droughts, have increased the vulnerability of developing countries such as Pakistan.

Dr David Molden, Director General (DG) International Centre for Integrated Mountain Development (ICIMOD), highlighted that agriculture and food security in Pakistan is also highly vulnerable to climate change impacts due to higher dependence on vulnerable natural resources such as water. The Indus River is highly dependent on glacial melt water hence it is very sensitive to climate change impacts.

"Climate change is a global phenomenon with no borders and there is need to deal with its impacts collectively through innovative solutions. We need to put in efforts to inform the policymakers with scientific evidences," he said, adding that in addition to climatic changes, some socioeconomic changes such as population growth, urbanization, and social and gender inequality are also adding to the vulnerability of the HKH communities.

Romina Khurshid Alam, Parliamentary Secretary for the Ministry of Climate Change said that climate change is no more a speculation and the people who disagree are living in a world of self-denial. She expressed concern over the uncertain and manifold impacts of climate change that have engulfed the country.

She said that Pakistan is among the world's top seven countries highly vulnerable to the impacts of climate change. Nearly half of the population in Pakistan is insecure with respect to food and water. Pakistan is at number 17 in the global list of the countries facing water crisis, she said.

https://epaper.brecorder.com/2018/02/28/8-page/702315-news.html

WHAT LAND WILL BE UNDERWATER IN 20 YEARS? FIGURING IT OUT COULD BE LUCRATIVE Brad Plumer

International New York Times, March 1, 2018

In Charleston, S.C., where the ports have been expanding to accommodate larger ships sailing through the newly widened Panama Canal, a real-estate developer named Xebec Realty recently went looking for land to build new warehouses and logistics centers.

But first, Xebec had a question: What were the odds that the sites it was considering might be underwater in 10 or 20 years?

After all, Charleston has repeatedly suffered major floods that can paralyze cargo operations. And scientists warn that flooding will worsen as sea levels rise and storms strengthen with climate change.

Yet detailed information about the city's climate risks proved surprisingly hard to find. Federal flood maps are based on historical data, and won't tell you how sea-level rise could exacerbate flooding in the years ahead. Scientific reports on global warming, such as the National Climate Assessment, can tell you that heavy rainstorms are expected to increase in the Southeast, but they won't tell you whether specific roads leading to a given warehouse might be unusable during those storms.

So Xebec turned to a Silicon Valley start-up called Jupiter, which offered to analyze local weather and hydrological data and combine it with climate model projections to assess the potential climate risks Xebec might face in Charleston over the next few decades from things like heavier rainfall, sea level rise or increased storm surge.

Although Jupiter's forecasting skill remains unproven, Xebec was eager to participate in a pilot project. "If we could have reliable predictive analytics in this area, that's a huge impact for our business," said Scott Hodgkins, an executive vice president at Xebec.

As companies around the world grow concerned about the risks of climate change, they have started looking for clarity on how warming might disrupt their operations in the future. But governments in the United States and Europe have been slow to translate academic research on global warming into practical, timely advice for businesses or local city planners.

Now some private companies, like Jupiter, are trying to fill the gap.

This remains a young and untested field, and it's unclear whether Jupiter or others can succeed as profitable enterprises. Scientists caution that predicting short-term climate effects in specific locations remains rife with uncertainty. Jupiter will have to persuade potential customers that its forecasts are reliable enough to give companies a competitive edge.

"In economics, information has value if you would make a different decision based on that information," said Matthew E. Kahn, an economist who studies climate adaptation at the University of Southern California. "Is that the case here?"

Some insurance companies, such as FM Global, already study climate risks and consult with clients on how to make their buildings more resilient to hurricanes that may get stronger in the future. In 2014, a start-up called Coastal Risk Consulting opened in South Florida to offer flood assessments to homeowners nervous about rising seas.

Jupiter, founded in 2017 by Rich Sorkin, a longtime tech entrepreneur, wants to go a step further. The start-up has received \$10 million in venture capital so far and has been hiring climate scientists,

weather modelers and data experts from places like the National Oceanic and Atmospheric Administration. Its co-founders include Todd D. Stern, the lead climate envoy in the Obama administration, and Jeff Wecker, the chief data officer for Goldman Sachs.

The company is developing a variety of predictive tools, some of which look much like Google Maps, that it hopes will allow paying customers to zoom down to the city block level to get a better sense of the potential risks they face from storms, heat waves, wildfires or other climate-change effects in the coming decades.

We know the planet's getting warmer and sea levels are rising, but on a hyperlocal basis, the quality of those predictions can be much better than it is," Mr. Sorkin said.

To create its flood maps, for instance, Jupiter looks not just at public data like satellite-based observations of rainfall and ocean currents, but also how changes in the urban landscape affect how water flows through cities. It then aims to harness recent advances in cloud-based supercomputing to combine that data with the latest climate model projections. The company's scientists plan to continually test their forecasts against observations — to see, for instance, how well they predict flooding from major storms — and publish their research in scientific journals.

In theory, the United States government could cobble much of this information together and present it in a usable way. But federal agencies tend to focus their resources on shorter-term weather predictions, and Congress has generally underfunded initiatives such as those at the Federal Emergency Management Agency to incorporate climate change into its federal flood maps.

"If you want a full picture of flooding risk, you need expertise in weather, but also climate and hydrology and engineering and running complex models on the latest computer hardware," Mr. Sorkin said. "All of those specialized disciplines are usually heavily siloed within the public sector or the scientific community."

https://www.nytimes.com/2018/02/23/climate/mapping-future-climate-risk.html

# ANTARCTIC SEA ICE SHRINKS FOR SECOND STRAIGHT YEAR Dawn, March 3rd, 2018

SYDNEY: Sea ice cover in Antarctica has dropped to its second-lowest on record, Australian authorities said on Friday, adding that it was not yet clear what was driving the reduction after several years of record-highs.

The report came as scientists said earlier this week that the Arctic region was seeing record high temperatures, with sea ice covering the smallest area in winter since records began more than half-a-century ago.

The Australian Antarctic Division (AAD) said the latest satellite data showed a total 2.15 million square kilometres surrounding the icy continent during the lowest point in February during the summer season.

The minimum record was set in March last year, when a summertime reading of 2.07 million square kilometres was recorded, the AAD, which manages Australia's Antarctic programme, said.

Last year also saw near record-lows for the wintertime maximum sea ice cover, at 18.05 million square kilometres.

"Since August 2016, the sea ice coverage has been tracking well below the long-term average," Bureau of Meteorology Antarctic scientist Phil Reid said in a statement.

"In 2017, the wintertime maximum sea ice extent was the second-lowest on record at 18.05 million square kilometres following closely on the heels of successive record highs in 2012, 2013 and 2014." Reid said the variations were a "significant departure" from the overall increasing trend in Antarctic sea ice of about 1.7 per cent each decade since 1979.

#### https://www.dawn.com/news/1392875/antarctic-sea-ice-shrinks-for-second-straight-year

NEWS COVERAGE PERIOD FROM FEBRUARY 19TH TO FEBRUARY 25TH 2018 SEAS TO RISE ABOUT A METRE EVEN IF CLIMATE GOALS ARE MET: STUDY Dawn, February 21st, 2018

OSLO: Sea levels will rise between 0.7 and 1.2 metres in the next two centuries even if governments end the fossil fuel era as promised under the Paris climate agreement, scientists said on Tuesday.

Early action to cut greenhouse gas emissions would limit the long-term rise, driven by a thaw of ice from Greenland to Antarctica that will re-draw global coastlines, a German-led team wrote in the journal Nature Communications.

Sea level rise is a threat to cities from Shanghai to London, to low-lying swathes of Florida or Bangladesh, and to entire nations such as the Maldives in the Indian Ocean or Kiribati in the Pacific.

By 2300, the report projected that sea levels would gain by 0.7-1.2 metres, even if almost 200 nations fully meet goals under the 2015 Paris Agreement, which include cutting greenhouse gas emissions to net zero in the second half of this century.

Ocean levels will rise inexorably because heat-trapping industrial gases already emitted will linger in the atmosphere, melting more ice, it said. In addition, water naturally expands as it warms above four degrees Celsius (39.2F).

The report also found that every five years of delay beyond 2020 in peaking global emissions would mean an extra 20 centimetres (8 inches) of sea level rise by 2300.

"Sea level is often communicated as a really slow process that you can't do much about ... but the next 30 years really matter," lead author Matthias Mengel, of the Potsdam Institute for Climate Impact Research, said.

Governments are not on track to meet the Paris pledges. Global emissions of carbon dioxide, the main greenhouse gas emitted by burning fossil fuels, rose last year after a three-year plateau.

And US President Donald Trump, who doubts that human activities are the prime cause of warming, plans to quit the Paris deal and instead promote US coal, oil and natural gas.

https://www.dawn.com/news/1390753

### CLIMATE CHANGE SUMMIT 2018: SAVING ENVIRONMENT EVERY INDIVIDUAL'S DUTY: MINISTER Business Recorder, 24 February 2018

KARACHI: Sindh Minister for Information, Labour, Human Resources, Transport and Mass Transit Syed Nasir Hussain Shah has said that prior to climate change it is our duty as an individual to play our part at every level in saving and protecting our environment.

"It is government's responsibility to work for the clear, and pollution free environment. In this regard government will take concrete steps to ensure that our future generations live and breathe in a clean, safe and better environment," he said while addressing "Climate Change Summit 2018" held here at a local hotel.

Syed Nasir Hussain Shah further said that we are adopting alternate energy resources like renewable, solar and wind etc for the purpose to implement the plan and start consuming alternate energy resource by December 2019. In this regard the Sindh Chief Minister Syed Murad Ali Shah under the directives of Bilawal Bhutto Zardari has adopted strategy with a special focus on saving our environment where our young and future generations could live in peaceful, clean and better environment, he added.

He congratulated the organizations for holding such an important summit and appreciated the efforts taken by the Karachi Grammar School students leading to redress the issue of environment and climate change. The Government is extending all possible help to those organizations and individuals and will continue to assist all in this regard.

The Minister Transport further said that as a Minister Incharge we are working on subjects such as launching environment friendly busses and transport system throughout the Sindh including Karachi and initiating a proper mechanism for the inspection of the transport and industrial zones to secure our future and clean environment.

We had a shortage of water treatment plants due to which polluted water was being discharged into sea but we are working to ensure the installation of treatment plants in Sindh to avoid further polluting environment and help create better atmosphere with new and ongoing projects in energy and environment sectors to achieve the desired results and improvements.

Climate change introduction documentary, panel discussion and distribution of various awards to personalities and organizations were also held during the summit -2018.

https://epaper.brecorder.com/2018/02/24/19-page/701702-news.html

# March 2018

NEWS COVERAGE PERIOD FROM MARCH 19TH TO MARCH 25TH 2018

*GROWING GLACIERS PROVE COLD COMFORT FOR PAKISTAN'S SHIMSHAL VALLEY* The Express Tribune, March 16, 2018

Climate change is causing glaciers around the world to melt, raising the risk of flooding and other problems. But residents of a remote area of Pakistan face floods for the opposite reason – their glaciers are growing.

Experts say that more than 120 glaciers in Pakistan's north are stable, or even growing rapidly, in a phenomenon called the 'Karakoram Anomaly'.

A team of researchers from Britain's Newcastle University last year attributed the anomaly to a summer 'vortex' of cold air over the Karakoram mountain range.

They say this is causing the glaciers in the region to grow, in spite of a global increase in average temperatures.

One of the Karakoram glaciers provoking the greatest concern is Khurdopin, in the remote Shimshal Valley in Gilgit-Baltistan, the country's northernmost region. The glacier has been in a 'surge' phase since May last year.

Experts from FOCUS Humanitarian Assistance, part of the Aga Khan Development Network in Pakistan, are now monitoring a large lake that formed last October when the glacier blocked the Shimshal River.

There are fears that the lake, now mostly frozen, could cause an outburst flood in the coming summer months.

Salmanuddin Shah, program manager at FOCUS, said the glacier had grown by about 1 mile since the surge began last year.

"We are monitoring the glacier on a daily basis through satellite imagery. When the temperature starts rising we will visit the glacier for physical assessment," he told the Thomson Reuters Foundation.

"We will get a clearer picture of how it will behave from this April onwards."

It takes around three-and-a-half hours by jeep over a treacherous mountain road, only opened in 2004, to reach the Shimshal Valley after leaving the newly paved Karakoram Highway at the village of Passu.

The most famous local resident is Samina Baig, the first Pakistani woman to climb Mount Everest. Other than that, the four small villages in the Shimshal area stay mostly out of the news.

Even glacier-related floods last August, which destroyed bridges and damaged roads, leaving the valley inaccessible for a week, barely received coverage in the national press.

But Pakistan has reason to pay attention to Shimshal, because the Khurdopin glacier is known for causing periodic glacial outburst floods that have led to massive destruction downstream.

The Shimshal River meets up with the Hunza River, which in turn feeds the Indus, the country's most essential waterway.

When the approximately 30-mile Khurdopin glacier collides with the side wall of the rocky valley, it blocks the river, and a temporary lake forms behind it as the water piles up.

The lake expands for several months and then can burst through the blockage as the glacier retreats again.

By January of this year, the lake was already about 1 mile in length.

Experts say that in the past, millions of cubic feet of lake water have rushed into the Hunza River, destroying everything along the way.

According to local people, these lake outbursts floods have happened several times – in 1920, 1942 and in the early 1960s. There was also a smaller amount of flooding last July.

"Our elders still remember those earlier massive floods," said Karamat Ali, a documentary film-maker who lives downstream in Karimabad. He hiked up to the frozen lake in Shimshal last December.

"It has become huge and it is very dangerous indeed, both to Shimshal Valley residents who live close to the river and those living downstream," Ali said in a telephone interview.

Scientists studying the Khurdopin glacier using satellite imagery have confirmed that it is moving at a rapid pace.

A study by Utrecht University reported that during a few weeks in 2017 the glacier's velocity peaked at the equivalent of 5 km a year, among the fastest rates reported globally.

The situation has the local people, FOCUS and the province's Disaster Management Authority worried. No one knows for sure if there will be a high-intensity outburst and when it might happen. All are preparing for flooding, whether it's small-scale or much larger.

Ghulam Rasul, head of the Pakistan Meteorological Department, who viewed the glacial lake from a helicopter last December, estimates that it is at 70 percent of its capacity, with no inflows at the moment, but that it will fill up further as ice begins to melt around the end of March.

"In mid-March, inflows will start increasing. In April it will reach a high-risk position. In my opinion the lake will flow over the ice or make a channel for itself through the ice. I don't expect a sudden outburst," Rasul said.

Communities living downstream are not taking any chances. With the help of FOCUS they have set up an early warning system using satellite images and cellular phones.

A monitoring team trained by geologists regularly hikes up to the glacier to gather data.

Community response teams have also been set up to respond to disaster alerts and help evacuate people if needed. They are trained in first aid and equipped with tents, blankets and rescue tools.

"The awareness-raising sessions and emergency response drills at the community level have made us learn about hazards and the immediate steps we need to take as first responders, so women and children in our village feel much safer than they did a few years ago," said 39-year-old Zeenat, a resident of Shimshal village.

Rasul said that, contrary to appearances, climate change is in fact responsible for an increase in the frequency of the glacier surges.

Scientists say unusual warming in the Arctic may be linked to more winter storms further south.

Rasul, however, believes that the 'Karakoram Anomaly' will not last long.

"As temperatures rise further, even these glaciers' mass balance will gradually reduce as the freezing level is moving upwards," he said.

In the meantime, however, residents of the Shimshal valley are keeping a watchful eye on their glacier - and the frozen lake behind it.

https://tribune.com.pk/story/1661627/1-growing-glaciers-prove-cold-comfort-pakistans-shimshalvalley/

NEWS COVERAGE PERIOD FROM MARCH 4TH TO MARCH 11TH 2018

BALOCHISTAN BRACES FOR SEVERE HEAT SPELL The Express Tribune, March 6, 2018

#### Sehrish Wasif

"Pakistan will experience temperatures slightly higher than the normal whereas there are chances of the prevailing drought like situation in south-west Balochistan to further aggravate in the coming days due to shortage of rainfall", said Director General Pakistan Meteorological Department (PMD) Dr Ghulam Rasul.

While talking to The Express Tribune, DG PMD said that mercury is likely to increase by one or two degrees more than the usual temperature recorded in March., because of which temperature in the southern parts of the country will fluctuate between 37 to 38 degrees centigrade as compared to the standard 34 to 35 degrees range.

The PMD chief stated that the sudden rise in the temperatures this month is mainly because of the climate change. He warned that if temperatures continue soaring with the same pace then it is likely that during June and July, temperatures will also remain above the recorded heat.

Though it is a bit early to predict about temperatures in June and July this year but considering the weather conditions experienced during the last few years, it seems like the situation will further aggravate," said Ghulam Rasul.

Talking about the chances of rainfall in March he said that two to three good showers should be expected which will help in bringing down the temperature for a day or two.

Furthermore, parts of the country including upper Punjab, FATA, Khyber-Pakhtoonkhwa (K-P), Gilgit-Baltistan (GB) and Kashmir are expected to receive slightly above normal precipitation with snowfall over the hilly areas of K-P, G-B and Kashmir. However the south may receive below normal to normal rainfall during the month.

He also said parts of Balochistan will experience severely high temperatures and will receive insufficient rainfall which will further worsen the current drought like conditions in areas like Dalbandin, Nokundi, Turbat, Khuzdar, Punjgur, Kharan, and Chaghi.

#### https://tribune.com.pk/story/1652025/1-balochistan-braces-severe-heat-spell/

RAPID MELTING OF GLACIERS WORRIES GB LAWMAKERS Dawn, March 11th, 2018

Jamil Nagri

GILGIT: Members on both treasury and opposition benches in the Gilgit-Baltistan Legislative Assembly have expressed concern over rapid melting of glaciers and called upon the federal government to take measures for mitigating its impact so that environmental disasters in the region could be avoided.

Changing weather patterns are adversely affecting lives of people living along the Indus River.

Through an adjournment motion moved by Pakistan Peoples Party member Imran Nadeem Shigri on Friday, the assembly urged the prime minister to increase funding for GB so that it could be able to establish protective walls along rivers which would help in preventing land erosion from floods.

"Glaciers in the region are melting speedily," Mr Shigri said.

The lawmaker called for providing information to the assembly about measures the government had so far taken to deal with environmental degradation.

He said more floods were expected this year in the region due to the climate change, adding that they would affect people living near rivers and along canals.

Deputy Speaker Jaffarullah Khan said that because of the changing weather patterns, less amounts of snowfall and rainfall were recorded in GB this year, adding that massive deforestation was the main cause of floods.

"Millions of cubic feet of wood are being cut illegally in GB annually and no action has been taken against people involved in this illegal practice," the deputy speaker said.

Opposition member Kacho Imtiaz Haider alleged that funds allocated for plantation of trees had been embezzled by the department concerned.

Information Minister Iqbal Hassan admitted that the GB government had not done much in this regard.

PTI member Raja Jahanzeb Khan said global warming was an international problem. He held developed countries major responsible for global warming and said developing countries were the victims of it.

He said electricity and natural gas should be provided to GB residents so that cutting of trees could be stopped in the region.

https://www.dawn.com/news/1394489

# April 2018

### NEWS COVERAGE PERIOD FROM APRIL 23 RD TO APRIL 29TH 2018

FOREST FIRES BREAK OUT IN MARGALLAS

The Express Tribune, April 25th, 2018.

On a sweltering day in the capital, wild fires erupted at two separate locations on the Margalla Hills on Tuesday evening.

The Capital Development Authority (CDA) Environment Wing and Emergency and Disaster Management Directorate teams were dispatched to extinguish the blaze.

The first incident forest fire was witnessed on the Margalla Hills was in the Shahdara area behind the Quaid-i-Azam University.

The second fire took place on the Margalla Hills near the historic Saidpur Village.

"CDA teams took half hour to overcome forest fire at Shahdara," CDA Director Environment Irfan Niazi told The Express Tribune, adding that second fire incident was reported in Jungle 13 near Saidpur Village at around 7:30pm, shortly after CDA's firefighting teams returned to their stations after putting out the blaze in Shahdara.

Niazi said that two CDA firefighting teams were dispatched to Saidpur village to extinguish the fire. An additional two teams sent to help them.

Tuesday's incidents were the third incident of forest fires erupting in the Margalla Hills from March 29.

Asked about how these fires start, the CDA official explained that some locals may be causing the fire given their frequency.

He said that every year during the fire season, which usually continues from April 15 to July 15, the CDA hires around 400 locals on daily wages at to fight fires in the jungles of the Margalla Hills.

This year, he said, the CDA has yet to hire the villagers, suggesting that some of the fires may have ben deliberately started to force the civic agency into hiring the.

Niazi, however, said that authority had now approved the hiring of locals.

After hiring villagers, CDA has set up 32 temporary pickets from Bhara Kahu to Sector D-12 for the duration of the fire season.

The fire incidents on Margalla Hills have become regular events during every summer and autumn due to the presence of dry grass and flammable bushes. Generally, fire incidents at Margalla Hills occur during the driest months of the year including May, June, November and December but this year fire sparked off before peak summer season when grass and trees at Margalla Hills are verdant

Due to the rough terrain, it is nearly impossible to control the situation through conventional fire extinguishing vehicles and the CDA staff uses indigenous and manual bush beating technique to control the fire in accessible areas.

The CDA does not have aerial fire extinguishing tools or other modern technology to control forest fires in difficult and inaccessible areas. The lack of proper safety processes and equipment is causing massive damage to the vegetation and wildlife on the Hills every year.

According to a CDA report, as many as 320 fire incidents occurred in the protected Margalla Hills National Park in last seventeen years in which tree cover measuring over 500 acres were damaged. Some time fire left very devastating impacts due to limited resources, steep incline, remoteness of the area and high speed wind.

https://tribune.com.pk/story/1694470/1-forest-fires-break-margallas/

SEVERE HEATWAVE GRIPS SINDH Dawn, April 28th, 2018

LARKANA: Larkana experienced the hottest day in the province on Friday when the mercury shot up to 47.5 degrees Celsius.

The local Met office said humidity (amount of moisture in the air) was recorded at 29 per cent. The harsh weather conditions compelled most citizens to remain indoors.

The vehicular traffic on roads also remained thin during the day.

Prolonged and unscheduled power outage added to the miseries of people.

Some other towns in Sindh that experienced high temperatures on Friday were Rohri and Mithi (46 degrees Celsius), Dadu (45.8 degrees Celsius), Sukkur and Chhor (45.5 degrees Celsius), Padidan and Moenjodaro (45 degrees Celsius), Nawabshah and Jacobabad (44.5 degrees Celsius), Hyderabad and Sakrand (43.5 degrees Celsius) and Badin (42 degrees Celsius), Our Staff Reporter in Karachi adds.

https://www.dawn.com/news/1404244/severe-heatwave-grips-sindh

### NEWS COVERAGE PERIOD FROM APRIL 1ST TO APRIL 8TH 2018 HOT & DRY WEATHER TO AFFECT WHEAT CROP AND DELAY COTTON CROP Business Recorder, 2 April, 2018

Fazal Sher & Tahir Amin

ISLAMABAD: The prevailing dry and hot weather may negatively affect the yields and quality of wheat and also cause delay in cotton sowing in the country.

Senior officials of Ministry of National Food Security and Research told Business Recorder that prevailing dry weather may cut the yield of wheat and affect quality of the commodity especially in Punjab province, the largest wheat producer in the country, if it continues for a while. They said wheat crop is now at maturity stage and a high temperature would badly affect grain formation.

They said wheat harvesting has begun in Sindh therefore ongoing dry weather may not negatively affect the crop but in Punjab harvesting of wheat is expected to begin by mid of April therefore a high temperature would negatively affect the crop output in the province.

One of the officials said that government has set wheat production target at 26.46 million tons for Rabi sowing season 2017-18 from an area of 8.95 million hectares and Punjab would produce 20 million tons, Sindh 4.2 million tons, Khyber Pakhtunkhwa 1.36 million tons and Balochistan 0.9 million tons.

Cotton Commissioner Dr Khalid Abdullah said there is no cotton crop in fields at present. However, the country is facing water shortage and if dry weather continues for a longer period, it will negatively affect cotton sowing, which is going to start from April 30. Pakistan has missed the revised cotton production target by around 8 percent with production recorded at 11.5 million bales against the revised target of 12.6 million bales for 2017-18.

Pakistan Space and Upper Atmosphere Research Commission (SUPARCO) crop situation and forecast report notes that wheat crop is at maturity stage, according to its cropping season gradient from South to North. It says positive factors include rainfall during November, December and February, effective procurement policy and less lodging of crop.

The negative factors include low surface water supplies particularly from reservoirs during the main growing season, with shortages peaking in Indus-irrigated Southern Punjab followed by Sindh and Central Punjab.

The report further states that major impact of water shortages is on Sindh which has limited sweet water aquifer. In Punjab, the shortages are supplemented by tube-well water resulting in incremental cost of wheat production. However, a shortage of 60 percent water supply in February (IRSA) at flowering/ grain formation stages is highly critical in Southern Punjab, it says.

According to Weather advisory issued by Pakistan Meteorological Department (PMD) normal wind pattern may prevail in most of the agricultural plains of the country during the decade; however dust/sand storms may occur in southern Punjab and upper Sindh.

Farmers are advised to schedule the irrigation plans in accordance with the expected weather. Removing weeds from the standing crops is very important as weeds utilize moisture and food which are to be utilized by the crop. As a result considerable loss in yield occurs every year, the report maintains.

PMD Director General Dr Ghulam Rasul said that less than average rainfall is forecast during April-May 2018, which would result in 1-2 degree rise in temperature, with acute water shortage. He further said country is already facing water shortage and due to less rainfall, the situation is likely to become worse in the coming day

https://epaper.brecorder.com/2018/04/02/3-page/708315-news.html

# May 2018

### NEWS COVERAGE PERIOD FROM MAY 21st TO MAY 27TH 2018

Shifting weather patterns fade harvest prospects

Reuters Updated May 22, 2018

Adil Khan's hope for a good harvest are fading again this year as he inspects his orchard of apricot and loquat trees in the mountains of Khyber Pakhtunkhwa.

Usually, fruit in the five-acre family orchard is ready to pick only by the last week of May. But this year, and in other recent years since 2013, much of the harvest has ripened by mid-April nearly a month ahead of schedule.

With less time to grow, the fruit is half its normal size and his income is shrinking too, the 34-year-old farmer said.

"We are really at loss," he said, pulling down a branch of tiny apricots. The fruits have ripened in the middle of their growth.

Pakistan's farmers are struggling to bring in a harvest as the country's weather pattern changes as a result of climate change. Warm spring weather, now coming as early as March, has led to fruit trees flowering before bees arrive to pollinate them, for instance, or fruit and vegetables ripening at unusual times.

Muntazir Khan has seen his harvest of beets and tomatoes fall by 40 per cent this year on his threeacre family farm in Taxila, despite planting seeds on time and applying the right fertiliser.

That huge drop, due to the crops ripening in late March instead of late April, means nearly no profits, he said.

Officials say springtime has not only warmed by more than three degrees Celsius in recent years, but also shrunk from 45 days to less than 10 days

"I am scarcely able to recover the expenditures with such low yields," Khan said, clutching a handful of freshly harvested beets.

The problem, the farmers agree, is that spring is getting shorter, hotter and earlier.

"We are clearly noticing that springs are not cool anymore and are increasingly becoming warmer, which is not good for our seasonal vegetable crops," Adil Khan said.

His fruit requires cool weather from January to March to grow well, he said, but warmer days in February and March are now disrupting old patterns.

### Record heat

Weather officials say they've also noticed the shift.

"We have clearly observed through our weather monitoring stations all through Pakistan that springtime has not only warmed by more than three degrees Celsius in recent years but also shrunk from 45 days to less than 10 days over last two decades," said Ghulam Rasul, director general of the Pakistan Meteorological Department.

"This is in no way a good omen for springtime vegetable and fruit farmers," he said.

He said at least 34 meteorological stations broke temperature records for March this year in most parts of the country, with temperatures sometimes more than 10 degrees Celsius above the monthly long-term average between 1981 and 2010.

Nausherwan Nawab, a senior science officer at a vegetable research centre of the state-run National Agricultural Research Council, said lower spring temperatures of 20 to 25 degrees Celsius a decade ago resulted in slow and steady ripening of spring fruits and vegetables.

But such is not the case anymore, said Khuda Bakhsh, an agro-economy professor at the COMSATS Institute of Information Technology in Punjab.

Once spring temperatures hit 35 degrees Celsius, vegetable production declines heavily, he said.

### Growing imports

One consequence of the decline in production is soaring vegetable and fruit imports from China, India, Afghanistan, Thailand and New Zealand, said Yusuf Zafar, chairman of the National Agriculture Research Council, an arm of Pakistan's Ministry of National Food Security and Research.

Over the last five to seven years, production of citrus and other fruits and vegetables has shown a notable declining trend, with fruit harvests down an estimated 25-28 per cent and vegetables down 22pc, he said.

Aslam Pakhali, chair of the All Pakistan Fruit and Vegetable Exporter and Importers Association, said nearly 30pc of the vegetables and fruits consumed in Pakistan are now imported.

Pakistan used to export surplus vegetables and fruit prior to 2010, he said.

Imports have increased over the last five years as low production of these farm items is insufficient to meet domestic needs, he said in a telephone interview.

To adapt to the changing conditions, farmers need access to hardy new fruit and vegetable varieties that can grow over a shorter season, Bakhsh said.

The role of agricultural scientists and extension department officials in this regard is of unprecedented significance, he said, with farmers needing help to learn how to adopt and grow new heat-resistant and short-season crops.

Meanwhile, some farmers like Muntazir Khan are adjusting to changing spring weather by cutting out some of their vegetable production altogether and turning to things like raising chickens.

Lack of resources makes such shifts difficult for many, however. Khan would like to set up a commercial half-acre poultry farm, but that would happen only whenever he had enough financial resources, he said.

Published in Dawn, May 22nd, 2018

https://www.dawn.com/news/1409228/shifting-weather-patterns-fade-harvest-prospects

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

Dawn Report May 22, 2018

KARACHI: 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  $42^{\circ}$ C to  $44^{\circ}$ 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  $46.5^{\circ}$ 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.

Published in Dawn, May 22nd, 2018

https://www.dawn.com/news/1409192/heatwave-has-claimed-60-lives-says-edhi-govt-rejects-claim

No respite for citizens as temperature continues to remain high

The Newspaper's Staff Reporter May 24, 2018

KARACHI: There was no respite for citizens on Wednesday as the temperatures in most cities and towns of Sindh remained above the 40 degrees Celsius mark.

The maximum and minimum temperatures recorded in Karachi were 43.2°C and 27°C respectively.

The humidity ranged between 19 per cent and 34pc.

According to the Met department, Chhor in Tharparkar district continued to be the hottest place in Sindh for the second consecutive day with 46.5°C temperature.

The high temperatures recorded in some other towns of Sindh were: Sukkur (45.5°C); Dadu, Jacobabad, Shaheed Benazirabad (45°C); Hyderabad, Badin, Rohri, Padidan (44.5°C); Mirpurkhas, Sakrand, Moenjodaro (44°C); Larkana, Thatta and Tandojam (43.5°C).

The temperature is expected to remain hot to very hot and dry in the entire province on Thursday.

"It is expected to drop for a day or two but it will start rising from next week again," a Met department official warned.

Published in Dawn, May 24th, 2018

https://www.dawn.com/news/1409537/no-respite-for-citizens-as-temperature-continues-to-remainhigh

Heat wave to persist till 31st

The Newspaper's Staff Reporter May 25, 2018

LAHORE: Temp-eratures remained high in several Punjab and Sindh cities on Thursday also because of a change in wind direction and dry weather, while the Met department hinted at persistent hot weather in the plains till at least May 31.

The development of a cyclone over southwest Arabian Sea had led to dry and hot weather in the country, especially in the plains. It was sucking wind from the west, generating a heat wave in the country.

The Met department said the very severe syclonic storm (MEKUNU) intensified on Thursday. It was likely to further intensify during the next 24 hours, and move northwards (towards southern coast of Oman and adjoining coast of Yemen). It will cross the coast on Friday evening/night.

None of the areas of Pakistan's coast (Karachi) is under threat by this tropical cyclone. Continental air is prevailing over most plains of the country.

Lahore Met Director Ajmal Shad said though not dangerous for Pakistani coastal areas, the cyclone was sucking wind from the west, leaving the rest of the country in grip of a heat wave.

The wind direction from west to inner parts of the country will be restored by the end of this month (May) after the expected fizzling out of the cyclone, raising the chances of rain in the first week of June. Till then it would remain hot and dry in almost the entire country, he said.

The maximum temperature in Lahore, Faisalabad, Multan and Sargodha was 42 degrees Celsius. It was 47 degrees Celsius in Shaheed Benazirabad, and 46 degrees Celsius in Lasbella, Turbat, Rahim Yar Khan, Sukkur, Jaccobabad, Padidan, Moenjodaro and Chhor.

Published in Dawn, May 25th, 2018

https://www.dawn.com/news/1409781/heat-wave-to-persist-till-31st

### NEWS COVERAGE PERIOD FROM MAY 14TH TO MAY 20TH 2018 MEAGRE RESOURCES ALLOCATED TO TACKLE CLIMATE CHANGE The Express Tribune, May 14th, 2018.

Climatic variation over the past few days reinforced the unpredictability and uncertainty of climate in the age of climate change.

Climate change has two basic elements – one is related to control or mitigation and the other pertains to adapting to changes. Mitigation has limited relevance for Pakistan, but adaptation is a key area of alarm.

It does not mean Pakistan should not concentrate on mitigation, but the challenge on hand is adaptation. The changes, which have occurred in the climatic system, need to be tackled by proper planning, policy and execution of plans and policies.

Pakistan started to develop its first policy quite late, but now we have a climate change policy. Besides, it also developed an implementation framework. However, the story beyond this is not satisfactory.

The policy and framework are quite comprehensive and encompass almost all areas of concern which require urgent attention. Unfortunately, the policy and implementation plan could not get the attention of policy circles.

The budget for 2018-19 clearly spells out the priority of the government to deal with climate change. It has allocated just Rs803 million for the Ministry of Climate Change, which seems to be nothing in the context of mounting challenge.

Pakistan is among top 10 countries that are most vulnerable to climate change. Spending the allocated fund is another area of concern. A review of budget 2017-18 exhibits the government earmarked around Rs341 billion for climate-related initiatives and projects. Of that, only Rs182 billion was spent.

It is interesting to note that most of the allocation was spent by three ministries including the Ministry of Finance (49%), Ministry of Defence (20%) and Cabinet Secretariat (14%). They were followed by the Ministry of Water Resources (4%) and Ministry of Railways (3%). The Ministry of Climate Change could not find a place in this ranking.

Though the government is focusing on taking climate change-related initiatives in other ministries as well, it is weakening the status of climate change ministry as major burden to tackle climate change rests on its shoulders.

#### Challenges

Climate change-related matters face many problems, but the most important are poor decisionmaking, poor governance and victimisation. First of all, decision-making mechanisms do not reflect the importance and urgency to cope with climate change. It is considered business as usual and a matter of least concern.

Second, governance mechanisms for implementation and accountability are very weak. This is because of deficient human resources and low technological levels.

The climate change ministry is one of the least populated ministries. It has multiple tasks ranging from local to global and should be present at all important forums to present the case of Pakistan. In doing so, they are exhausted and have very limited time to focus at the national level.

Therefore, the governance structure of the ministry does not allow it to function at maximum efficiency levels. In addition to this, the staff at the ministry is very bureaucratic and leaves less room for technical and expert staff.

Recently, the government has introduced the Climate Act 2017. It has expressed the will to revitalise the spirit and structure of the ministry but it will take time. Third, the political economy does not give much importance to climate change. Business and industrial development is the top priority, but environment and climate change stands at a very low level.

Business and industrial communities are very strong and have negotiation skills for the protection of their interests. Environment and climate change community is highly educated and has the expertise but their influence is limited on policy circles.

In reality, the economic and industrial development and environment and climate change have to go hand in hand. First and foremost thing to note is that no development intervention is free of impact on environment and climate.

However, the impact can be minimised without compromising the development work. Here comes the concept of "Climate Compatible Development" to tackle climate change and its impact.

The government clears itself by criticising the West for its role in changing climate. No doubt the West is responsible for climate change, but it is also essential to realise we cannot divert the impact of climate change by just criticising the West.

We need to devise and develop plans to combat through proper mitigation and adaptation.

Lastly, the climate change ministry has been a victim of experiments. Before devolution, it was the ministry of environment. It was devolved to provinces, then brought back to the federal level, but with the name of Ministry of NDMA.

After continuous efforts by the civil society and experts, it was renamed as the Ministry of Climate Change.

Now, the introduction of Climate Act 2017 has led to confusion. There is no clarity of roles for federal and provincial ministries. The federal government has its own national Climate Change Policy whereas the provinces are developing their own such policies.

It needs to be understood climate change is not a provincial problem, it is a national issue and we need a national policy and action plan. Provinces must be independent to implement their policies but within the limits defined by the federal government.

The writer is the Head of Centre for Future Policy and Head of Research Coordination Unit, Sustainable Development Policy Institute https://tribune.com.pk/story/1709379/2-meagre-resources-allocated-tackle-climate-change/

# AS CLIMATE RISKS GROW, AJK BOOSTS EMERGENCY PLANS Dawn, May 17th, 2018

MUZAFFARABAD: When major floods hit Azad Jammu and Kashmir in 2016, Jawad Hussain, a worker at the local government disaster agency, had to wait for hours to receive updates on what kind of help was needed and where.

The delays meant families were left without aid for days, he said, as flooding forced thousands from their homes and left others injured or dead.

But Pakistan, one of the world's most vulnerable countries to climate change, is now trying to boost its ability to respond to disasters, including in AJK, which is prone to deadly floods, drought, landslides and earthquakes.

Last August, the government set up emergency response centres across the region, in part to speed the flow of information to the National Disaster Management Authority, a federal body that issues early warnings, organises rescue services, and distributes aid.

There have been no major disasters since the centres were set up, but Hussain is confident they will make a difference.

"We will be able to respond to any disaster in the state more quickly and efficiently," the 29-year-old said, sitting in the operations room of the State Disaster Management Authority.

The new emergency response centres have their own wireless radio frequencies to more easily receive direct updates on floods, earthquakes and other disasters, he said.

That will "improve the capability to handle disasters more efficiently, said Abdul Hameed Kiani, deputy commissioner of Jhelum valley district.

AJK, like some other areas of the country, is also working on the ground to cut risks from natural disasters.

Last year, the World Bank lent Pakistan \$125 million to restore flood protection infrastructure and strengthen government institutions to manage disasters and climate vulnerability across the country.

In AJK, the government has now carried out studies to determine the types of disasters each area faces, so that officials can better prepare, said Atiq-ur-Rehman Abbasi, project director of the Disaster and Climate Resilience Improvement Project in Azad Jammu and Kashmir.

"Now we have exact data about each district, what kind of risk there is and how to cope with it," he told the Thomson Reuters Foundation.

A logistics plan on how to prepare for an emergency and deliver aid during floods, landslides or manmade disasters has been drawn up for every district and state, Abbasi said.

Making hydro stations secure and stabilising slopes will benefit tens of thousands of people, he added.

The project, for instance, has assessed the vulnerability of people living by the river in Kotli district, where part of a suburb washed away in 2014 river flooding, Abbasi said.

Sajjad Hashmi, a resident there, said river embankments destroyed in the flood have not yet been replaced.

The river swept away the settlement on both its banks, so a protection embankment could be helpful. But it has not been assessed yet what kind of protection would be suitable, said Hashmi, 54. Raja Mushtaq Khan, a political activist and Kotli resident, said the city has been vulnerable to river flooding for decades, but there had been no concrete protection efforts taken by the government or non-governmental organisations, in part because of a lack of credible data on the threats.

Now, with a study in hand, work can be outlined to save thousands of residents, said Khan, 59.

Asif Hussain Shah, head of AJK's planning and development department, said establishing dedicated centres to monitor the impacts of a changing climate and develop ways for the region to adapt is a step in the right direction.

But the real test is whether other departments, such as the forestry department, charged with protecting the region's fast-disappearing trees, will be able to play their part, he said.

For now, with the risk (of drought and floods) increasing every day ... we have to equip and prepare ourselves, Shah said.

#### https://www.dawn.com/news/1408180/as-climate-risks-grow-ajk-boosts-emergency-plans

Heatwave warning issued

By APP

Published: May 20, 2018

ISLAMABAD: Medical experts on Saturday advised citizens, particularly those undertaking outdoor activities, to take heed of necessary measures to prevent heat and sun stroke under the expected very hot weather in the following days.

According to experts, the public should carry and drink plenty of water to prevent dehydration while engaging in outdoor activities. Children, elderly, sick including those with heart disease or high blood pressure and obese persons, who are more vulnerable to heat-related illnesses, should pay special attention," said Pakistan Institute of Medical Sciences (PIMS) spokesperson Dr Wasim Khawaja.

Dr Khawaja advised members of the public to limit their outdoor activities and adopt preventive measures when going outdoors under very hot weather. He said citizens should wear loose light-coloured clothing to reduce heat absorption and facilitate sweat evaporation and heat dissipation.

He said citizens shouldn't engage in prolonged activities like hiking or trekking during peak sunlight hours as heat, sweating and exhaustion place additional demands on one's physique. Instead they should perform outdoor activities in the mornings or late afternoon.

Moreover, Dr Khawaja advised citizens should reschedule their work to cooler times of the day. However, if working in a very hot environment is inevitable, introduce shading in the workplace where applicable and get into a cool area for rest at regular intervals to allow the body to recuperate, he added. He said citizens should ensure adequate ventilation when exercising indoors and any person feeling unwell should stop exercising immediately and seek medical attention as soon as possible.

He further added that heat stroke is the most serious heat-related illness. It occurs when the body becomes unable to control its temperature. As the body's temperature rises rapidly, the sweating mechanism fails, and the body is unable to cool down. He said body temperature may rise to 106°F or higher within 10 to 15 minutes and heat strokes need to be taken seriously as they can consequently lead to death or even permanent disability if emergency treatment is not provided.

He said warning signs of heat stroke vary but may include an extremely high body temperature (above 103°F), red, hot, and dry skin, strong pulse, throbbing headache, dizziness, nausea, confusion and fainting.

A public health expert, Dr Sharif Astori from Federal Government Poly Clinic said the heat exhaustion is a milder form of heat-related illness that can develop after several days of exposure to high temperatures. Those most prone to heat exhaustion are elderly people, those with high blood pressure, and those working or exercising in a hot environment, he added.

Dr Astori added that the warning signs of heat exhaustion included heavy sweating, paleness, muscle cramps, tiredness, weakness, dizziness, headache, nausea or vomiting and fainting. He said when temperatures are extremely high; people should protect their health by adopting measures like drinking plenty of fluid, replace salts and minerals, wear appropriate clothing, stay cool indoors and schedule outdoor activities carefully.

He said in case of having heat stroke symptoms, people should monitor body temperature and continue cooling efforts until the body temperature drops to 101-102°F, get the victim to a shady area, cool the victim rapidly, immerse the victim in a tub of cool water or place the person in a cool shower, sponge the person with cool water and call for immediate medical assistance.

Published in The Express Tribune, May 20th, 2018.

https://tribune.com.pk/story/1714472/1-heatwave-warning-issued/

NEWS COVERAGE PERIOD FROM APRIL 30TH TO MAY 6TH 2018 POPULATION CONTROL A WAY TO TACKLE CLIMATE CHANGE The Express Tribune, April 30th, 2018. The rise in temperature (global warming) due to anthropogenic activities is a reality. By the end of the century, the situation is likely to worsen drastically if greenhouse gas emissions are not reduced significantly.

Humans have often convinced themselves that technological advancement can reduce greenhouse gas emissions and help cope with scarcity of natural resources – The Cornucopian Theory. This is not the case as it is evident that societies have suddenly collapsed as technologies fail or their material resources run scarce; for example the collapse of Mayan civilisation.

Too much faith only in technological solutions to climate change may lead to a similar situation in future, if politically and socially rational changes are not made.

Fossil fuels – a major source of energy – are known for their key contribution to human development. According to the International Energy Agency, fossil fuels meet around 80% of the world's energy demand and are responsible for about 40 gigatons of carbon dioxide emissions per annum.

This higher concentration of carbon dioxide in atmosphere is the main cause of global warming.

Furthermore, increasing human population is also contributing to the depletion of natural resources and environmental degradation. More population requires more resources to get processed and disposed of in the environment in the form of pollution.

Currently, the world is striving to address climate change by reducing carbon footprint through less consumption and better technology. But an unsustainable growth of human population will undermine these efforts.

So, in order to cope with climate change, we not only need smaller footprints, but also lower number of feet on earth – Neo-Malthusians Theory. This controlled growth of human population will lead to a healthier and more stable post-fossil fuel society as it helps to reduce the demand for natural resources, especially fossil fuels, coupled with technological advancement.

Researchers across the world have examined the effect of various population growth scenarios on economic development and energy use. They have found that slower population growth has the potential to significantly reduce greenhouse gas emissions in future.

Pakistan, similar to many other developing countries, has a high population growth rate. It has been observed that in the last two decades, its population has increased by around 57% and is expected to double in the next 30 years.

On the other hand, material resources of the country are either stagnant or growing very slowly whereas poor economic performance and internal security condition have made the situation worse.

Although Pakistan is currently emitting low levels of greenhouse gases, it is one of the most vulnerable countries in relation to climate extremes (floods, droughts and heat waves).

According to Oxfam, for the long run, farmers' ability to produce food has been affected by continuous flooding in the past few years.

Water availability for the rapidly growing population is another major challenge as per capita water availability has decreased from 5,260 cubic metres in 1951 to 908 cubic metres in 2017.

Climate change may reduce water resources even further and this will affect lives and livelihoods of the growing population.

Energy and agriculture sectors account for 90% of Pakistan's total greenhouse gas emissions. According to the INDC (Intended Nationally Determined Contribution) in 2015, both sectors account for around 334 metric tons of carbon dioxide equivalent (mt Co2 equivalent) emissions.

In the coming decade, greenhouse gas emissions will increase more rapidly to around 1,355 (by energy and agriculture sectors) mt Co2 equivalent in 2030, just to fulfil demand of the growing population.

Increased concentration of greenhouse gases in the atmosphere will have a severe impact on future generations because the presence of carbon dioxide in atmosphere is long-lasting – even for thousands of years – and takes about a decade to have its maximum warming effect.

It means that the amount of carbon dioxide we are emitting will increase the dangers of climate change in the next decade and later.

Currently, Pakistan requires \$7 to \$14 billion per annum to tackle existing climate vulnerabilities. Furthermore, it requires around \$40 billion to reduce its projected greenhouse gas emissions by 20%.

By keeping in view the population growth, demand for food and energy, economic performance and climate change impact, it would be difficult for Pakistan to achieve its development targets until or unless it controls its population growth.

For this purpose, it is important to integrate economic policy with population and resource distribution policies. This would be helpful in enhancing people's prosperity as there will be less mouth to feed with more economic development through efficient use of scarce resources.

The writer is currently working as research assistant at the Sustainable Development Policy Institute

https://tribune.com.pk/story/1698567/2-population-control-way-tackle-climate-change/

# HEATWAVE CLAIMS THREE LIVES IN DADU DISTRICT Dawn, May 2nd, 2018

DADU: Three persons were reported dead in different parts of Dadu district on Tuesday as the heatwave currently gripping the province took its toll and paralysed life in many towns and villages.

The Met office at Karachi recorded the temperature at 49oC Celsius in the district.

Two of the heatstroke victims were identified as 70-year-old Hussain Bukhsh and 75-year-old Sher Mohammed while the third victim, a beggar aged around 60 years, remained unidentified. They were found dead in the Phatak area of Dadu city, Mohammed Khan village of Dadu taluka and Dadu bus stand, respectively.

The markets, bazaars, commercial streets, business centres, offices and small outlets in Dadu city and other towns, including Johi, Mehar, Khairpur Nathan Shah, Radhan and Thari Mohabbat, stayed closed after mid-day till dusk and most areas wore a deserted look due to unbearable weather conditions.

Power outages of up to 12 hours in several spells added to the miseries of people.

Reports gathered from various health facilities suggested that more than 50 people brought in unconscious condition were treated and many of them were admitted for further treatment.

According to the Met office, the same weather is likely to persist in the province on Wednesday.

### https://www.dawn.com/news/1405041

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Power outages of up to 12 hours in several spells added to the miseries of people.

Reports gathered from various health facilities suggested that more than 50 people brought in unconscious condition were treated and many of them were admitted for further treatment.

Our Staff Reporter at Karachi adds: The Met office said that weather across Sindh remained hot/very hot and dry as it remained in the grip of continental heatwave that pushed up the mercury on the scale. It said that the maximum temperature recorded at various places on Tuesday was as under: Dadu and Sukkur (49oC), Padidan and Larkana (48.5oC), Jacobabad (48oC), Moenjodaro (47.7oC), Nawabshah and Rohri (47.5oC), Sakrand (46.5oC), Chhor (45.8oC), Hyderabad (44oC), Mithi (43oC), Mirpurkhas (41.5oC) and Badin (41oC).

According to the Met office, the same weather is likely to persist in the province on Wednesday.

https://www.dawn.com/news/1405041

# June 2018

# NEWS COVERAGE PERIOD FROM JUN 11th TO JUN 17th 2018

Turbat temperature touches 51 degrees

### RECORDER REPORT

KARACHI: Temperature touched 51 degrees Celsius in Turbat, as the Met Office on Monday forecast a humid weather for Karachi in the next 24 hours.

Dadu and Sibbi sizzled with 47 degrees Celsius on Monday. Humidity is expected to soar to 80 percent in Karachi on Tuesday and 85 percent on Wednesday. Temperature may remain at 37 and 36 degrees Celsius on June 12 and 13, respectively. Overall cloudy weather is expected.

Mainly hot and dry weather is expected in the most parts, while very hot in Upper Sindh and South Punjab on Tuesday.

Bagrote received 25 mm of rainfall, Saidu Sharif 17 mm, Muzaffarabad 14 mm, Kohat 13 mm, Balakot 9 mm, Malamjabba 7 mm, Astore and Lower Dir 5 mm, each, in the last 24 hours.

A hot and dry weather gripped the most parts of the country on Monday. However, isolated rainthundershower with gusty winds fell in Malakand, Hazara, Kohat and Sargodha Divisions, besides Gilgit-Baltistan and Kashmir.

https://epaper.brecorder.com/2018/06/12/7-page/722082-news.html

Global warming set to exceed goal, slow growth

By Reuters

Published: June 15, 2018

OSLO: Global warming is on course to exceed the most stringent goal set in the Paris agreement by around 2040, threatening economic growth, according to a draft report that is the UN's starkest warning yet of the risks of climate change.

Global warming will make veggies harder to find: study

Governments can still cap temperatures below the strict 1.5-degree Celsius (2.7-degree Fahrenheit) ceiling agreed in 2015 only with rapid and far-reaching transitions in the world economy, according to the UN's Intergovernmental Panel on Climate Change (IPCC).

The final draft, dated June 4, is due for publication in October in South Korea after revisions and approval by governments. It will be the main scientific guide for combating climate change.

"If emissions continue at their present rate, human-induced warming will exceed 1.5-degree Celsius by around 2040," according to the report, which broadly reaffirms findings in an earlier draft in

January but is more robust, after 25,000 comments from experts and a wider pool of scientific literature.

The Paris climate agreement, adopted by almost 200 nations in 2015, set a goal of limiting warming to well below a rise of 2-degree Celsius above pre-industrial times while pursuing efforts for the tougher 1.5-degree goal.

Climate change ministry gets Rs803m under PSDP

The deal has been weakened after US President Donald Trump decided last year to pull out and promote US fossil fuels.

Temperatures are already up about 1-degree Celsius and are rising at a rate of about 0.2-degree Celsius a decade, according to the draft, requested by world leaders as part of the Paris agreement.

"Economic growth is projected to be lower at 2-degree Celsius warming than at 1.5 degrees for many developed and developing countries," it said, drained by impacts such as floods or droughts that can undermine crop growth or an increase in human deaths from heat waves.

In a plus-1.5-degree Celsius world, for instance, sea level rise would be 10 centimetres (3.94 inches) less than with 2-degree Celsius, exposing about 10 million fewer people in coastal areas to risks such as floods, storm surges or salt spray damaging crops.

Population control a way to tackle climate change

It says current government pledges in the Paris agreement are too weak to limit warming to 1.5-degree Celsius.

Published in The Express Tribune, June 15th, 2018.

https://tribune.com.pk/story/1735468/2-global-warming-set-exceed-goal-slow-growth/

NEWS COVERAGE PERIOD FROM JUN 4th TO JUN 10th 2018 Weatherman issues drought alert By Sehrish Wasif

Published: June 7, 2018

ISLAMABAD .: The Pakistan Meteorological Department (PMD) on Wednesday issued a drought alert as a result of insufficient rainfalls across the country from January to May this year.

While considering the worrisome and alarming situation, the Met office has advised all the relevant authorities/departments for an immediate water management strategy to avoid negative impacts of deficit rainfall on water and agriculture sector.

The advisory has warned that small dams situated near Islamabad are at critical level and groundwater boring wells have become dry up to the depth of 150 feet in most areas of the twin cities.

According to the National Drought Monitoring Centre of PMD, drought-like conditions have emerged over most parts of the country. Meanwhile moderate to severe drought has been prevailing in lower Khyber-Pakhtunkhwa (K-P), barani areas of Punjab, South Punjab, Southwest Balochistan and Southeast Sindh.

Weathermen predict hotter weeks ahead

"Dry condition was observed in southern parts of the country during the last five months. The dry condition has caused water stress in the agriculture areas of the country that demands availability of more supplementary irrigation water for Kharif Crops," reads the alert message.

Water availability in major reservoirs is low; however, water situation in the major dams will improve with the increase in temperature.

Met office officials said that as predicted during the five months of this year, below normal rainfall was recorded in most parts of the country.

"The winter season, which is from January to March received -62 per cent well below rainfall whereas in April and May, it was -9.9 per cent near normal and in January to May as a whole it was -44% below normal rainfall over Pakistan," reads the alert.

Giving a province-wise breakdown of rainfall recorded, the Met officials said that in winter months [January to March] -63.2 per cent below normal rainfall was recorded in Balochistan, -73.7 per cent in Sindh, -88.7 per cent in Punjab, -63.2 per cent in K-P, and -56.6 per cent in Gilgit-Baltistan/Azad Jammu Kashmir.

In April and May, -32.9 below normal rainfall were recorded in Balochistan, -29.3 per cent in Sindh, - 39.5 per cent in Punjab, -4.0 per cent in K-P and -64.6 per cent in G-B/AJK.

Weathermen predict rains during Eid holidays

However, overall from January to May, -55.3 per cent below normal rainfall has been recorded in Balochistan, -70.7 per cent in Sindh, -42.7 per cent in Punjab, -58.7 per cent in K-P and -61.5 per cent in G-B/AJK.

A senior meteorologist at PMD told The Express Tribune that "It is a seasonal drought which has occurred after five to seven years in Pakistan."

He stressed that the major reason behind this seasonal drought is low snow melting and insufficient rainfall in the country during winter season and start of summers.

"Besides that the drought is expected to come to an end as soon as Pakistan will receive good amount of rainfall," he added.

Earlier according to Indus River System Authority (IRSA) the two major dams of the country had reached a historical dead level thrice in a period of just two months.

https://tribune.com.pk/story/1729601/1-weatherman-issues-drought-alert/

Pakistan fails to meet cotton sowing target as water shortage bites By Salman Siddiqui

Published: June 7, 2018

KARACHI: Pakistan has missed cotton sowing targets, largely in Sindh, due to acute water shortage amid climate change.

The situation may lead to low cotton production compared to the target of 14 million bales in the next season (2018-19) as well.

Farmers have so far sown cotton seeds over 2.31 million hectares in the country that is around 22% short of the target of 2.95 million hectares as on June 1, according to government statistics.

Govt agrees to stop cotton imports during crop picking

"Water shortage did not let farmers plant cotton over the targeted area," Planning Commission Food Security Consultant Dr Mohammad Ali Talpur told The Express Tribune on Wednesday.

"Farmers need water at the time of sowing," said Pakistan Cotton Ginners Association (PCGA) former chairman Mukhtar Ahmad Khan.

"It did not rain in March and April, which usually happens almost every year. Resultantly, water flow remained absent from canals and did not let farmers sow seeds over the targeted area."

According to the statistics, farmers in Sindh have cultivated cotton seeds over around 50% (0.29 million hectares) of the targeted area of 0.62 million hectares. The sowing season in the province has yet to end.

"Sindh completes cotton sowing by the end of June. It is estimated to cover 80-85% of the target," Talpur said.

Pakistan's export performance is correlated to cotton prices - and this is a concern

The sowing season in Punjab had, however, been completed in mid-May, he said. The statistics suggested that the province cultivated seeds over an area of 2.01 million hectares against the target of 2.31 million hectares.

Khan, however, added that the sowing situation was as poor in Punjab as it was in Sindh.

It suggests that the county will continue to face shortfall in cotton output this year too.

The government has set the target of producing 14 million bales (of 170 kg each) in the 2018-19 cotton season.

In the current fiscal year ending June 30, 2018, the country could produce only 11.5 million bales against the target of 14 million bales.

A former office-bearer of PCGA estimated that cotton production would remain short by around 25% from the target.

For two and a half decades, Pakistan's cotton output remains virtually stagnant

In 2011-12, the country had produced a bumper crop of 14.8 million bales against the target of 14.1 million. Since then, it has continued to miss production targets with output of around 10-11 million bales every year due to spread of virus and shortage of water.

The production shortfall may force yarn manufacturers to increase imports as they make purchases from overseas markets almost every year to meet the shortfall and get high-quality cotton. Total need in the country stands at around 16 million bales.

Published in The Express Tribune, June 7th, 2018.

https://tribune.com.pk/story/1729463/2-pakistan-fails-meet-cotton-sowing-target-water-shortagebites/

NEWS COVERAGE PERIOD FROM MAY 28th TO JUN 3rd 2018 'Rising temperatures in northern areas causing formation of more glacial lakes'

Jamal Shahid May 28, 2018

ISLAMABAD: Surging temperatures in the northern areas are causing the formation of more glacial lakes in Gilgit-Baltistan and the Chitral district, which threaten to wash away downstream settlements if they burst.

"In 2010, there were about 2,400 glacial lakes in Pakistan's north.

These lakes have increased to over 3,000 glacial lakes, 52 of them on the verge of outburst anytime," Ministry of Climate Change spokesperson Mohammad Saleem said.

"More and more glacial lakes are forming in remote mountain valleys.

52 glacial lakes on verge of outburst at any time, climate change spokesperson says

These pose serious risks to the lives and livelihoods of mountain communities," he told the press on Sunday.

In the past eight to 10 years, climate change-induced disasters have become increasingly frequent and intense in the valleys with rising temperatures.

Floods are now common disasters in the rugged mountain terrain, caused by glacial lakes and cloudbursts, he said.

Mr Saleem said the northern region is home to over 5,000 glaciers, but many of them are melting at a much faster rate because of soaring average temperatures in mountain valleys.

He explained that glacial lake outburst floods occur when ice walls containing the reservoir fail, sending entire lakes down to inhabited areas below.

These emergencies lead to a severe loss of lives and physical assets.

Mr Saleem said efforts are underway to mitigate the risks.

After the successful completion of the first phase of the five-year Glacial Lake Outburst Floods (GLOF) project in 2015, the United Nation's Green Climate Fund approved \$36 million in October 2016 to fund the second phase.

Work on the second phase is likely to begin in the next few months.

Mitigating the growing risks from glacial lake outbursts, implementation of the GLOF project's second phase is planned with stakeholders including the Global Environment Facility (GEF), UNDP Pakistan, Pakistan Meteorological Department, Pakistan Flood Commission, national and provincial disaster management authorities, community-based originations, which will cover 15 districts of GB and Khyber Pakhtunkhwa and benefit 29 million people, the spokesperson said.

He highlighted that around 700,000 people will directly and about 30m people would indirectly benefit from the project in many ways.

Spelling out the expected outcomes and benefits of the project's second phase, he said 95pc of households in target communities in KP and GB would be able to receive and respond to early warnings about glacial lake outbursts and consequent flooding in their areas and take appropriate measures to protect their lives and livelihoods.

In addition, 250 small-scale engineering structures would be established to reduce the effects of GLOF events on livelihoods, such as tree plantation, controlled drainage and mini-dams, 50 weather monitoring stations will be set up in vulnerable areas to gather meteorological data in catchment areas and 408 river discharge sensors will be put in place to obtain river flood data, the spokesperson added.

He said that the measures would be also taken to enhance food security for mountain communities in the northern regions and reduce flood-related hazards caused by deforestation, landslides, land erosion and inefficient water use.

At least 65,000 women will be trained in home gardening, 240 water-efficient farming technologies will be set up and 35,000 hectares of land will be restored to alleviate the devastating impacts of GLOF.

Published in Dawn, May 28th, 2018

https://www.dawn.com/news/1410389/rising-temperatures-in-northern-areas-causing-formation-ofmore-glacial-lakes

Upper Sindh bakes at 48.5 degrees Celsius as Karachi braces for another heatwave

Dawn Report Updated May 29, 2018

KARACHI: Sukkur, Dadu, Moenjodaro and Padidan experienced the highest temperature of 48.5 degrees Celsius in Sindh on Monday, while the heatwave persisting in the province pushed up the mercury to above 40 degrees Celsius in other parts of the province after a slight relief in the past couple of days.

Cooler sea breeze sweeping Karachi restricted the city's maximum temperature to 37.4 degrees Celsius on Monday. The minimum temperature was recorded at 28.5 degrees Celsius.

A Met official said that a three-day heatwave could envelop the metropolis from Tuesday.

He said that the maximum temperatures recorded in other towns of Sindh on Monday was as follows: Larkana (48), Jacobabad (47.5), Rohri (47), Mirpurkhas (46.5), Nawabshah (46), Chhor and Hyderabad (45.5), Sakrand and Mithi (44.5) and Badin (41 degrees Celsius).

The Met department issued the three-day heatwave alert on Monday recalling that two such spells (May 3 to 4 and May 22 to 25) had pushed up the mercury to the peak of 44 degrees Celsius. Yet another spell is likely to hit Karachi and its surrounding areas from Tuesday to Thursday (May 29 to 31) during which the maximum temperature could range between 41 and 45 degrees Celsius, according to the Met department alert.

It said that the sea breeze was likely to subside/stop and hot and dry continental winds from north/northwest (Balochistan) were expected to sweep the city during the period.

SUKKUR: With most parts of upper and central Sindh including Sukkur, Rohri, Jacobabad and Larkana gripped by high temperatures of 47-48 degrees Celsius on Monday, a large number of people, mostly children, suffered various diseases relating to the heatwave.

Most of the cases reported at scores of health facilities across Sukkur district pertained to gastroenteritis, stomach disorders and dehydration.

Reports from Pannu Aqil, Salehpat, Rohri, Sangrar, Thikrato, Bachal Shah Miani, New Pind, Wazirabad, Achhi Qubion and other areas suggested that scores of women and children and a good number of men were taken to the taluka hospitals of Rohri and Pannu Aqil, Ghulam Mohammed Mahar College Hospital as well as various rural health centres with such diseases.

Major health facilities fell short of beds for the unusually high number of cases reporting there at a time. In many cases, one bed was seen shared by two or more patients.

Sukkur District Health Officer (DHO) Abdul Sattar Mahar said on Monday that 20 to 30 patients were being brought to the Sukkur Civil Hospital and 10 to 15 to each of the rural health centres since the heatwave had hit upper Sindh last week.

He observed the highest number of cases having been reported at the health facilities on Monday.

Published in Dawn, May 29th, 2018

https://www.dawn.com/news/1410560/upper-sindh-bakes-at-485-degrees-celsius-as-karachi-bracesfor-another-heatwave

At 46°C, Karachi endures hottest day of year

Faiza Ilyas Updated May 31, 2018

KARACHI: 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 Ramazan," 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.

Published in Dawn, May 31st, 2018

https://www.dawn.com/news/1411021/at-460c-karachi-endures-hottest-day-of-year

Mercury crosses 51C mark in Jacobabad as most of Sindh sears at above 45C

The Newspaper's Staff Reporter Updated June 01, 2018

KARACHI: With Jacobabad district becoming the hottest spot in the country registering 51 degrees Celsius, two more districts — Dadu and Larkana — recorded above 50 degrees Celsius and another one — Sukkur — a little below the mark as the rest of the interior of Sindh, barring a few southern districts, sizzled at above 45 degrees Celsius on Thursday.

According to the Met office, the highest temperature of 51 degrees Celsius was recorded at Jacobabad followed by Dadu (50.8) Larkana [at Moenjodaro] (50.5), Sukkur and Larkana city (49.5), Rohri (48.5), Nawabshah and Padidan (47.5), Hyderabad (46.5), Chhor (46.4), Mithi (46) and Mirpurkhas

(45.5). The areas where the temperature remained below 45 degrees Celsius were Sakrand (44), Badin (43.5), Thatta (42.5) and Karachi (38.4).

Responding to Dawn's queries, a Met official said that the mercury in Karachi slid by 7.6 degrees Celsius in a day as against Wednesday's 46 degrees Celsius. The minimum temperature in the port city was recorded at 29 degrees Celsius with the level of humidity (or amount of moisture in the atmosphere) being 39 per cent in the morning and 65 per cent in the evening.

He forecast that the maximum temperature in the metropolis was expected to remain between 36 and 38 degrees Celsius on Friday.

### ADVERTISEMENT

The official said that the entire province remained enveloped in the continental winds-propelled heatwave. Hot or very hot and dry weather was expected to persist across the interior of Sindh on Friday, he added.

Sindh remained the hottest place in the country in the entire month of May. Out of 31 days of the month, 23 recorded extremely hot weather conditions with Larkana, Moenjodaro Nawabshah, Dadu, Sukkur, Mithi and Chhor registering higher temperatures than other cities and towns.

Published in Dawn, June 1st, 2018

https://www.dawn.com/news/1411198/mercury-crosses-51c-mark-in-jacobabad-as-most-of-sindh-sears-at-above-45c

Three die in Dadu as Sindh gets no respite from extreme heat

Dawn Report Updated June 02, 2018

PEOPLE get water from a tap in a Hyderabad neighbourhood amid extreme weather conditions as power cuts have hampered water supply to households.—PPI

DADU: Persisting heatwave affecting Sindh for more than a week claimed three lives on Friday in Dadu city, where the mercury did not come down from the previous day's 51 degrees Celsius.

The maximum temperature at Nawabshah was recorded at 50.5 degrees Celsius and people of Moenjodaro, Jacobabad and Larkana cities also endured sizzling heat at 50 degrees Celsius on Friday.

There was no respite from extreme heat for people of many other cities and towns of Sindh as the maximum temperature remained above 40 degrees Celsius.

According to the Met office, the maximum temperature in Padidan was recorded at 49, Sukkur 48.5, Rohri and Sakrand 48, Mithi 43.5, Chhor 43.2, Hyderabad 43 and Badin 42 degrees Celsius.

#### ADVERTISEMENT

Karachiites, however, heaved a sigh of relief as the maximum temperature in the metropolis was recorded at 36 degrees Celsius and minimum at 27 degrees Celsius with the level of humidity being 82 per cent in the morning and 62pc in the evening, a Met official said.

Most arterial roads, streets and lanes in Dadu, Larkana, Nawabshah and Jacobabad districts wore a deserted look as people preferred to remain indoors.

The vehicular traffic remained thin from dawn to dusk.

Most offices, markets, shops, outlets and vending stalls were seen shut in the day.

Five large groups of people held separate demonstrations outside the Dadu Press Club on Friday in protest against unavailability of electricity in their respective areas amid the harsh weather conditions.

It was learnt that 40 pole-mounted transformers had burnt out over the past 48 hours and the Sukkur Electric Power Company (Sepco) could not replace them until Friday evening.

Different hospitals and healthcare facilities in Dadu district reported three deaths on account of heatstroke. They were among the more than 50 people who had fainted due to extreme heat and provided treatment at various health facilities.

One of the deceased persons was identified as Qayoom Khan, 60, a resident of Mohammad Khan Khushik village. The body of a 70-year-old man was found near the shrine of Lal Shahbaz Qalandar while a 35-year-old man was found dead near the Sim nullah of Sehwan.

Most of those who fainted during the day belonged to Dadu, Khudabad, Bhan Syedabad, Sehwan, Sann, Manjhand and several other towns.

Larkana district and its adjoining areas also remained in the grip of severe heatwave on Friday and the local Met office forecast that it would persist for few more days. Wind was blowing at 0.4 knots in southern direction while the humidity remained at 18pc.

Almost the same weather conditions prevailed in Qambar-Shahdadkot district.

Published in Dawn, June 2nd, 2018

https://www.dawn.com/news/1411372/three-die-in-dadu-as-sindh-gets-no-respite-from-extreme-heat

# **July 2018**

### NEWS COVERAGE PERIOD FROM JULY 23RD TO JULY 29TH 2018

**Record high in Japan as heatwave torments region** AP Updated July 24, 2018

TOKYO: Japan recorded its highest temperature ever on Monday as a deadly heat wave continued to grip a wide swath of the country and nearby South and North Korea.

The mercury hit 41.1 degrees Celsius (106 degrees Fahrenheit) in Kumagaya, a city in Saitama prefecture about 65kms northwest of Tokyo, the Japan Meteorological Agency said. That broke the previous record of 41.0 C in Ekawasaki on the island of Shikoku on Aug 12, 2013.

Two lingering high pressure systems have trapped warm and humid air above the region, bringing record-high temperatures for nearly two weeks. More than 40 people have died in Japan and about 10 in South Korea.

"It is so hot these days that I cannot figure out whether I am in [South Korea] or in Southeast Asia," said Kim Sung-hee, a student in downtown Seoul, where the temperature rose to 35.7 C (96 F).

Ten people have died in South Korea of heatstroke and other heat-related causes this summer, seven of them last week, the Korea Centres for Disease Control and Prevention said on Monday. About 1,040 people have fallen ill because of hot weather from May 20 to July 21, an increase of 61 per cent over the same period last year, it said. The mercury hit 39.9 C (103.8 F) in the southeastern town of Hayang, the highest temperature in the country so far this year.

In North Korea, residents fanned themselves on crowded trolleys or protected themselves from the sun with brightly coloured parasols as temperatures in Pyongyang, the capital, reached 34 C (93.2 F).

On Monday, nine people died from heat-related causes across Japan, Kyodo said. NHK national television tallied seven deaths.

The temperature reached 39 C (102 F) on Monday in central Tokyo, the highest temperature this year. The worst of the heat wave is expected to be over this week.

"The weather recently in Tokyo and across Japan is like being in a sauna," Tokyo Governor Yuriko Koike said at a news conference that highlighted the 2020 Summer Olympics, which open in Tokyo two years from Tuesday.

Koike said the city has been working to address heat concerns for both spectators and athletes. The marathon and some other outdoor Olympic events will start early in the morning. Other steps include developing road pavement that emits less surface heat, setting up mist sprays and planting tall roadside trees.

Koike also cited traditional ways of cooling in Japan, such as hanging straw screens and spraying water on road surfaces. "But our traditional wisdom is not enough to beat the heat like this," she acknowledged, "so we will be using cutting-edge technology."

Published in Dawn, July 24th, 2018

https://www.dawn.com/news/1422148/record-high-in-japan-as-heatwave-torments-region

74 die as deadliest wildfires in decades trap Greeks on beaches, roads AP July 25, 2018

RAFINA: Wildfires raged through seaside resorts near the Greek capital of Athens, torching homes, cars and forests as they killed at least 74 people, authorities said on Tuesday.

Twenty-six of the dead were found huddled together in a compound, while a few bodies were recovered from the sea where they had fled to escape the flames and smoke.

Greece endures wildfires every summer but the fires that broke out on Monday were the deadliest to hit the country in decades. Fuelled by gale-force winds, they trapped hundreds of people on beaches, roads and in homes.

Prime Minister Alexis Tsipras declared three days of national mourning. There were fears the death toll could rise even further, as there was no definitive count of how many people were missing.

Although the fires had largely abated by Tuesday afternoon, they were far from out.

Hundreds of firefighters aided by water-dropping aircraft were tackling the remaining areas in the two main blazes near the capital. One was northeast of Athens near Rafina, where most of the casualties appeared to have occurred, while the other was about 50 kilometres west of Athens, where some flare-ups were reported on Tuesday afternoon.

Four other fires were burning in other parts of the country, including near Corinth and on the island of Crete.

Coast guard boats patrolled the shores near fire-hit areas on Tuesday after more than 700 people trapped by quick-moving fires had to be rescued from beaches or the sea, where six of the dead were found. Defence Minister Panos Kammenos said 88 people had been picked up from the sea by a military vessel.

Greek authorities urged the public to contact them if they are looking for loved ones but many people took to social media, posting pictures of those they were looking for and their last known location before the fires hit.

Fire service spokeswoman Stavroula Malliri announced on Tuesday afternoon that the death toll had jumped from 50 to 74, with another 164 adults and 23 children injured by the fires. Of the adults, 71 remained hospitalised, 10 of them in serious condition, and 11 of the children were also still hospitalised.

"It happened very fast. The fire was in the distance, then sparks from the fire reached us. Then the fire was all around us," resident Nikos Stavrinidis, who had gone with his wife to fix up his summer home for a visit by his daughter, said.

Stavrinidis, his wife and four friends swam out into the sea to escape the smoke, but they quickly became disoriented, losing sight of the shore and being swept out further by the wind and currents. Two of the group didn't survive.

"It is terrible to see the person next to you drowning and not being able to help him," Stavrinidis said, his voice breaking. The remaining survivors were picked up by a fishing boat with an Egyptian crew who jumped into the water to rescue them.

"Everything happened in seconds," said Andreaas Passios, who lives next to the compound in Mati where the 26 bodies were found. "I grabbed a beach towel. It saved my life. I soaked it, grabbed my wife and we ran to the sea." Passios said he and his wife stayed by the sea for two hours.

"It was unbelievable. Gas canisters were exploding. Burning pine cones were flying everywhere," he said.

Published in Dawn, July 25th, 2018

https://www.dawn.com/news/1422409/74-die-as-deadliest-wildfires-in-decades-trap-greeks-onbeaches-roads

Record heatwave stalks Northern Hemisphere AFP July 27, 2018

PARIS: From the Arctic Circle and Scandinavia to California, Japan and North Africa, an exceptional heatwave has been sweeping across the Northern Hemisphere for several weeks, setting record high temperatures and causing drought and wildfires.

Meteorologists say the summer weather conditions are a result of climate change.

"2018 is shaping up to be one of the hottest years on record, with new temperature records in many countries," said Elena Manaenkova, deputy secretary-general of the World Meterological Organisation (WMO).

"This is no surprise," she added. "The heatwaves and extreme heat we are experiencing are consistent with what we expect as a result of climate change, caused by greenhouse gas emissions.

"This is not a future scenario. It is happening now."

30°C in Arctic Circle

The summer weather in the north of Europe has been especially unusual with the thermostat in the Arctic Circle hitting 30 degrees Celsius (86 degrees Fahrenheit).

Record temperatures were reported in northern Norway at 33°C last week, more than 15°C higher than normal, according to the Norwegian meteorological institute.

Another record in Norway was set at Makkaur on the Barents Sea where the mercury in the land of the midnight sun on July 18 never dropped lower than 25°C.

And near the Arctic Circle at Kvikkjokk in Sweden temperatures climbed to 32.5°C on July 17, while the Finnish Lapland the next day saw 33.4°C, according to Meteo France.

In Russia's Siberia, the mercury hit 37.2°C at Tompo on July 9 and 35.5°C at Vanavara on June 26, the US National Oceanic and Atmospheric Agency (NOAA).

Across Europe

In other parts of Europe, a heatwave has moved across Ireland and the British isles to France, though the temperatures have not set record highs.

Southern European countries, in contrast, have seen summer temperatures lower than normal, according to the WMO.

But the still hot, dry weather triggered wildfires in Greece, claiming at least 82 lives, making them Europe's deadliest this century.

41°C in Japan

In Japan, several dozen people have died in the scorching heat which reached a national record of 41.1°C at Kamagaya on Monday, official data showed.

The same day it reached more than 40°C for the first time in Tokyo's metropolitan region.

African record?

In the Sahara desert of Algeria on July 5, the mercury soared to 51.3°C, which was probably "the highest ever recorded in Algeria by reliable instruments", the WMO said.

It is likely a record for the African continent, since reliable records began, according to Meteo France.

But if the WMO recognises data from Africa's colonial period as reliable, the 55°C temperature reached in Tunisia in 1931 would still be considered as the African record.

Published in Dawn, July 27th, 2018

https://www.dawn.com/news/1423149/record-heatwave-stalks-northern-hemisphere

Heatwave likely to hit Karachi RECORDER REPORT | JUL 29TH, 2018 | KARACHI

The Met Office on Saturday forecast a partly cloudy weather for Karachi with a heat wave warning in the next 48 hours. Humidity level is expected to scale up to 75 percent and temperature to 35 degrees Celsius on Sunday and Monday.

In other parts of Sindh, mainly hot to very hot and dry weather is likely to prevail in the next 24 hours. Partly cloudy to a complete cloudy weather is expected in coastal belt of Sindh with chances of drizzle along during night and morning hours.

"Seasonal Low lies over Northwest Balochistan. Monsoon currents are penetrating upper and central parts of the country and likely to continue during next 24 hours," the Met said, as maximum temperature remained in Turbat up to 44 degrees Celsius, Dalbandin and Dadu 43, each.

Scattered rain-thundershower with gusty winds is expected in Hazara, Bannu, DI Khan, Kohat, Rawalpindi, Gujranwala, Lahore, Sargodha and Faisalabad Divisions, while at isolated fall in Malakand, Peshawar, Mardan, Zhob, DG Khan Divisions, besides Islamabad, Gilgit-Baltistan and Kashmir on Sunday.

### https://fp.brecorder.com/2018/07/20180729394683/

### NEWS COVERAGE PERIOD FROM JULY 2ND TO JULY 8TH 2018 Climate change sinking Arctic archeological treasures

OTTAWA: A mad rush is needed to preserve or catalogue thousands of Arctic archeological sites before they are washed away by warming hastening the thaw of permafrost and coastal erosion, a study said on Thursday.

For millennia, the cold has conserved ivory artifacts, driftwood houses and human remains in often near-perfect conditions.

But with faster and more severe climate change in the poles than the rest of the world, the situation has become desperate, with far more sites that will soon be lost than scientists have the time or resources to document.

"An increasing number of ancient sites and structures around the world are now at risk of being lost," said the study published Thursday in the research journal Antiquity.

"Once destroyed, these resources are gone forever, with irrevocable loss of human heritage and scientific data."

There are at least 180,000 sites in an area that covers more than 12 million square kilometers (4.6 million square miles) in Canada, Russia, Alaska and Greenland.

Researchers pointed to an Inuit village on the Mackenzie River delta that was the site of first European contact, as an example of lost heritage.

In 1826, a member of explorer John Franklin's famed Arctic expedition reported 17 winter houses and a communal structure there. Today, there is nothing left.

"It is often assumed that the remoteness and the climate associated with these sites provide protection enough... however, climate change means that this may no longer be the case," the study concluded, noting that Arctic temperatures have risen twice as fast as in temperate regions. Paradoxically, their remoteness also make it hard for scientists to reach these sites. Thousands of years of heritage are being lost, Matthew Betts, a curator at the Canadian Museum of History in Gatineau, Quebec, who researches coastal erosion but was not involved in the study, told AFP. Last month, he organized a panel of 30 archeologists and indigenous leaders to brainstorm an emergency response to the "crisis."

"It's the greatest heritage catastrophe in the world right now," he said. "It's happening all over but Canada has the world's largest coastline so we're at the apex of the crisis."—AFP

https://epaper.brecorder.com/2018/07/02/9-page/725453-news.html

Air pollution wrecks havoc in diabetes: study

PARIS: Air pollution caused one in seven new cases of diabetes in 2016, according to a US study, which found even low levels raised the chances of developing the chronic disease.

Diabetes has primarily been associated with lifestyle factors like diet and a sedentary lifestyle, but research by the Washington University School of Medicine in St Louis said pollution also plays a major role. The study estimated that pollution contributed to 3.2 million new diabetes cases globally in 2016 — or around 14 percent of all new diabetes cases globally that year.

"Our research shows a significant link between air pollution and diabetes globally," said Ziyad Al-Aly, the study's senior author.

Pollution is thought to reduce the body's insulin production, "preventing the body from converting blood glucose into energy that the body needs to maintain health," according to the research. Al-Aly said the research, published in the Lancet Planetary Health, found an increased risk even with levels of air pollution currently considered safe by the US Environmental Protection Agency (EPA) and the World Health Organization (WHO).

"This is important because many industry lobbying groups argue that current levels are too stringent and should be relaxed. Evidence shows that current levels are still not sufficiently safe and need to be tightened," he added.

Researchers working with scientists at the Veterans Affairs' Clinical Epidemiology Center, examined data from 1.7 million US veterans who did not have histories of diabetes and were followed for a median of 8.5 years.

Patient information from the veterans was compared to air quality information to examine the relationship between pollution and diabetes risk.

The scientists found the risk of developing diabetes "exhibited a strong link to air pollution".

They then devised a model to gauge diabetes risks over different pollution levels and used data from the annual worldwide Global Burden of Disease study, to estimate the prevalence of diabetes caused by bad air.

Diabetes affects more than 420 million people globally and is one of the world's fastest growing diseases.—AFP

https://epaper.brecorder.com/2018/07/02/9-page/725454-news.html

Sindh's economy most vulnerable amid climate change Amin Ahmed Updated July 03, 2018

ISLAMABAD: Sindh has emerged as the most vulnerable hotspot in Pakistan followed by Punjab as changes in the average weather will add another dimension to the future economic growth of the province given its high vulnerability, the World Bank said in a new report.

The report, 'South Asia's Hotspots: The Impact of Temperature and Precipitation Changes', says Sindh has the second-largest economy, with a GDP per capita of \$1,400, which is 35 per cent more than the national average. The province has a highly diversified economy ranging from heavy industry and finance centred in and around Karachi to a substantial agricultural base along the Indus River, it says.

According to the report, Hyderabad district emerged as the top hotspot followed by Mirpurkhas and Sukkur. Some of the densely populated cities in Punjab were named among the top ten hotspot districts. This highlighted the importance of addressing changes in average weather in the economically important Punjab and Sindh.

Punjab, which is the most densely populated province, is also the second-most vulnerable. The province has the largest economy in the country, contributing 53.3pc to the national GDP and overall has the lowest rate of poverty among all the provinces.

However, the prosperity is unevenly distributed throughout the province, with the northern portion being relatively well-off economically and the southern portion among the most impoverished in the country. The long-term climate vulnerability has implications for both growth and poverty reduction for Punjab, the report says. Hotspots tend to have lower living standards compared to the national average. In this respect, it seems right to conclude that changes in average weather will hurt poor households disproportionately and therefore increase poverty and inequality.

Of the six countries investigated, living standards are predicted to be adversely affected by changes in the average weather in four of them: Bangladesh, India, Pakistan, and Sri Lanka. Afghanistan and Nepal are estimated to benefit from such changes in the average weather.

The report has alarmed that changes in average weather in South Asia are projected to have overall negative impacts on living standards in Pakistan, India, Bangladesh and Sri Lanka. The region is recognised as being very vulnerable to climate change. Its varied geography combines with regional circulation patterns to create a diverse climate.

In Pakistan, analysis of the report reveals that expanding electrification by 30pc could reduce the impact of average weather on living standards from a negative 2.9pc to negative 2.5pc.

Thus, electrification alone may not completely overcome the adverse effects of changes in average weather on living standards. This indicates that additional inspection could be warranted to better understand how to prevent the emergence of hotspots within the country.

The glaciated northern parts – the Himalayas, Karakoram, and the Hindu Kush mountains – have annual average temperatures at or below freezing, whereas much of the Indian subcontinent averages 25°C to 30°C. Both the hot and cold extremes are challenging for human well-being, and climate change heightens these challenges.

Average annual temperatures in many parts of South Asia have increased significantly in recent decades, but unevenly. Western Afghanistan and southwestern Pakistan have experienced the largest increases, with annual average temperatures rising by 1°C to 3°C from 1950 to 2010.

The scientific literature suggests that such events will grow in intensity over the coming decades. Dhaka, Karachi, Kolkata, and Mumbai – metropolitan areas that are home to more than 50 million people – face a substantial risk of flood-related damage over the next century.

In India and Pakistan, water-stressed areas will be more adversely affected compared to the national average.

While negative impacts are sizable under the climate scenarios of 'climate-sensitive' and 'carbonsensitive', they are more severe under the carbon-intensive scenario. Both show rising temperatures throughout the region in the coming decades, with the carbon-intensive scenario leading to greater increases. Expected changes in rainfall patterns are more complex in both, the report says.

By 2050, under the carbon-intensive scenario, the declines are projected to be 6.7pc for Bangladesh, 2.8pc for India, 2.9pc for Pakistan, and 7pc for Sri Lanka.

Main findings of the publication cautioned that unlike sea-level rise and extreme weather events, changes in average weather will affect inland areas the most. For most countries, changes in average weather will also reduce growth of their GDP per capita, compared to what it would be under present climate conditions. The GDP losses are greater for severe hotspot regions.

Published in Dawn, July 3rd, 2018

https://www.dawn.com/news/1417594/sindhs-economy-most-vulnerable-amid-climate-change

# August 2018

### *NEWS COVERAGE PERIOD FROM AUGUST 27TH TO SEPTEMBER 2TH 2018 PAKISTAN RECEIVED 47PC LESS RAINFALL THAN USUAL THIS AUGUST* Kalbe Ali August 28, 2018

ISLAMABAD: Pakistan received 47pc less rainfall this August than usual with just two weeks remaining until the end of the monsoon, apparently due to climate change. The worst-affected areas in the country were in Sindh and Balochistan.

According to data compiled by the Pakistan Meteorological Department (PMD), overall rainfall between July 1 and Aug 27, 2018, was 28pc below normal. Rainfall was 47pc lower than the average rainfall in August, which an official attributed to the impact of climate change on the country's temperature pattern.

Met Office data has also shown that July's rainfall was 12pc below normal, but was above normal in Punjab, Khyber Pakhtunkhwa and Gilgit-Baltistan and close to normal in Azad Kashmir. Pakistan's official monsoon stretches from July 1 to Sept 15 and is extended at times.

Sindh saw a massive 87pc decline in rainfall between July 1 and Aug 27. The PMD has reported that while Sindh typically receives 111 millimetres of rain in July and August, the province received just 14.7mm this year. Balochistan saw a 54pc reduction in rainfall; its average in July and August is 51.1mm but it received 23.5mm.

Punjab saw a 9pc decline in rainfall, KP received 4pc less rainfall, AJK received 7pc less rainfall than usual and GB received 6pc less.

The Met Office has also predicted monsoon rainfall is likely to decline further in September.

Published in Dawn, August 28th, 2018

https://www.dawn.com/news/1429329/pakistan-received-47pc-less-rainfall-than-usual-this-august

MILLIONS FACE MALNUTRITION AS CO2 LEVELS CLIMB: STUDY AFP Updated August 28, 2018

PARIS: Rising levels of carbon dioxide in the air threaten to sap wheat, rice, and other staple grains of valuable nutrients, raising the spectre of mass malnutrition, researchers warned on Monday.

On current trends, higher CO2 concentrations could reduce iron, zinc and protein levels in the crops that feed the world by up to 17 per cent by mid-century, they reported in the journal Nature Climate Change.

"Hundreds of millions of people could become newly deficient in these nutrients, primarily in Africa, Southeast Asia, India and the Middle East," lead author Matthew Smith, a researcher at the Harvard T.H. Chan School of Public Health, said.

"These are in addition to the billions of people already deficient that could see their condition worsen." Protein, along with the minerals iron and zinc, are essential nutrients for normal human growth and development.

Zinc deficiency affects the immune system and makes children, particularly, more vulnerable to malaria, lung infections and deadly diarrhoeal diseases.

A lack of iron increases the likelihood of mothers dying during childbirth, can lower IQ, and causes anaemia, or a drop in red blood cells.

Wheat, rice and maize together account for roughly 40 per cent of protein, zinc and iron supply in the diet worldwide.

In general, humans get three-fifths of dietary protein, four-fifths of iron, and 70 per cent of zinc requirements from plants.

Published in Dawn, August 28th, 2018

https://www.dawn.com/news/1429423/millions-face-malnutrition-as-co2-levels-climb-study

OVER 1,200 PEOPLE KILLED IN SOUTH ASIA MONSOON By AFP Published: August 27, 2018 Kerala has reported 445 deaths with more bodies discovered each day as a massive cleanup gets underway. PHOTO:REUTERS

NEW DELHI: More than 1,200 people have been killed across South Asia in monsoon storms so far this year, according to figures collected by AFPas India counts the rising toll from floods that have devastated southern Kerala state.

The monsoon, which lasts from June to September, causes widespread death and destruction across South Asia each year, with the tourist hotspot of Kerala suffering its worst floods in nearly 100 years.

PM Imran offers humanitarian assistance to India's flood-hit Kerala

Kerala has reported 445 deaths with more bodies discovered each day as a massive cleanup gets underway. The floods forced more than a million people to seek shelter in temporary relief camps and 15 others were reported missing up to Monday.

Kerala accounted for nearly half of the more than 1,000 deaths reported across India, with over 160 killed in neighbouring Karnataka state, more than 200 fatalities in Uttar Pradesh state, and 195 in West Bengal, according to official figures.

Six dead, thousands evacuated in Taiwan floods

The monsoon also battered Nepal, with 87 people killed since June, according to the home ministry, including a woman and eight children swept away by a landslide in a remote village.

But in Sri Lanka, where authorities organised the early evacuation of 750,000 people in threatened areas this year, the death toll from monsoon floods fell to 24 from 224 killed in May and June last year, official figures showed.

Flood toll in India's Kerala rises to 445

In Bangladesh, floods and landslides killed at least 29 people, according to official figures.

In the deadliest monsoon-induced disaster in recent years in South Asia, flooding and landslides killed around 5,800 people in India's northern Uttarakhand state in June 2013.

### https://tribune.com.pk/story/1788841/3-1200-people-killed-south-asia-monsoon/

# CM TOLD DROUGHT BADLY HIT SINDH'S SEVEN DISTRICTS MUHAMMAD SHAFA

KARACHI: More than 315 dehs in seven districts of Sindh province have been stricken by drought, it was revealed at a high level meeting chaired by Sindh Chief Minister Syed Murad Ali Shah who expressed anger over poor performance of concerned departments in this connection.

On the other hand, reports had it Sindh Government has failed to implement a comprehensive relief work in said seven districts where residents have also been longing for water, fodder and vaccination to cattle, which is major source of their livelihood.

Murad Shah, however, directed the Secretary Livestock to work out a mechanism for herd management because there was no mechanism; no relevant data on herd and their feed supplies was available.

Chief Minister said he wanted a holistic approach to address drought by ensuring provision of wheat, fodder, water and medicine. He decided to distribute wheat among drought-affected residents besides fodder and vaccination for their cattle.

In the last cabinet meeting, Shah had constituted a committee under Senior Member Board of Revenue Dr Iqbal Durrani to understand the extent of drought, past relief measures and mechanism, impact and requirement of affected people. Sharing the report, he informed the meeting that there was drought in 167 dehs of Thar (excluding five dehs of barrage area), 25 of Umerkot, 88 of Dadu, six of Thatta, 22 of Kambar Shahdadkot, seven of Sanghar and in a large part of Chundko taluka of District Khairpur.

However, it was also pointed out that wheat distribution was already in process on the basis of BISP database under which families benefit from ongoing operation and they included: 87,565 families of Thar, 15442 of Umerkot, 14,000 of Sanghar, 19791 of Dadu, 47,945 of Jamshoro, 822 of Kambar Shahdadkot districts.

Chief Minister said that wheat distribution mechanism much be transparent with third party evaluation. He said wheat already available with food department must be distributed on the basis of UC-based score card holders.

Durrani also told Murad Shah that the water shortage was another major issue. At this, he said he has a report that out of 590 RO plants, 443 are functional and 147 non-functional due to the problems of electricity and other issues.

The high-level meeting was attended by Sindh Minister for Health; Dr Azra Pechuho, Minister for Agriculture Ismail Rahu, Minister for Education Sardar Shah, Chief Secretary Major Azam Suleman (retd), Chairman P&D Mohammad Waseem, Principal Secretary to the CM Sohail Rajput, senior member BOR Dr Iqbal Durrani, Secretary Fisheries & Livestock Dr Fazal Pechuho, Secretary Health Dr Usman Chachar, Secretary Agriculture Shafiq Mahesar, Secretary Local Government Khalid Hyder Shah, Secretary Food Rafiq Buriro and other concerned officers.

It is relevant to explain that the word deh is officially used to identify a devolved administrative unit of sub-division or tehsil/taluka of a district.

https://epaper.brecorder.com/2018/08/29/7-page/735781-news.html

## JAPAN TO GIVE RS2.3BN FOR WEATHER RADAR INSTALLATION IN MULTAN Amin Ahmed Updated September 01, 2018

ISLAMABAD: Pakistan's weather forecasting capability will get a boost with the installation of a new weather surveillance radar in Multan, using the Japanese grant assistance of Rs2.3 billion for which an agreement was signed here on Friday.

With the installation of this fifth weather surveillance radar, the weather coverage will go up to 80 per cent, benefiting 90pc of the population. So far, Japan has supported installation of four weather radars in Islamabad, Karachi, Dera Ismail Khan and Rahim Yar Khan, bringing total weather radars operating in Pakistan to eight.

Besides this, the Japanese government would provide Rs360 million scholarships for human resource development.

The agreements for the two projects were signed by Ambassador of Japan to Pakistan Takashi Kurai and Additional Secretary of Economic Affairs Division Ahmad Hanif Orakzai in the presence of Japanese State Minister for Foreign Affairs Kazuyuki Nakane, Finance Minister Asad Umar, Director General of Pakistan Meteorological Department Dr Ghulam Rasul and Chief Representative of JICA Pakistan Office Yasuhiro Tojo.

The installation of weather radar system in Islamabad has been completed and it has started operation, but it is yet to be handed over to the Pakistan Meteorological Department.

At a briefing held here, Dr Ghulam Rasool said the radar in Islamabad would be handed over to the PMD in October this year, while installation of a weather radar in Multan would be completed by 2021-22.

He said that after the radar system in Lahore was modernised, the PMD would be able to forecast weather 400 kilometres inside India, covering Indian Punjab and held Kashmir.

Speaking on the occasion, Japanese State Minister for Foreign Affairs Kazuyuki Nakane said that under the leadership of Prime Minister Imran Khan and Finance Minister Asad Umar, "we believe that Naya Pakistan will be definitely realised and we hope that these two projects will be of some help to strengthen the friendly relationship and cooperation between Japan and Pakistan".

"With regard to the project for human resource development scholarships, Japan has been providing its technical cooperation to Pakistan since 1954 and it has received more than 6,500 fellows in Japan so far under the programme.

"Under this project, scholarships will be offered to Pakistani officers and they will study at universities in Japan for master's and doctor's degrees, with an objective to resolve development challenges in Pakistan," he said.

The Japanese minister expressed the hope that the Pakistani officers obtaining degrees from the Japanese universities would play an important role in socio-economic development of Pakistan and strengthen the existing cordial relations between the two countries.

Published in Dawn, September 1st, 2018

https://www.dawn.com/news/1430283/japan-to-give-rs23bn-for-weather-radar-installation-in-multan

NEWS COVERAGE PERIOD FROM AUGUST 20TH TO AUGUST 26TH 2018 THOUSANDS WITHOUT FOOD, WATER IN KERALA; TOLL HITS 370 AFP Updated August 20, 2018 THRISSUR: Rescuers searched submerged villages in southwest India on Sunday in a desperate hunt for survivors after floods killed at least 370 people and drove more than 700,000 from their homes.

Entire villages in Kerala have been swept away in the state's worst floods for a century. Rescuers fear the death toll will rise as they reach areas almost entirely under water.

Thousands remain trapped — often without food or water — in towns and villages cut off by the floods, and heavy rain forecast in coming days threatens to compound the disaster.

Nearly 725,000 people have taken shelter in relief camps, state government spokesman Subhash T.V. said on Sunday.

Bedraggled survivors massing at evacuation centres have described desperate scenes after days without food or water.

"They were the scariest hours of our life," 20-year-old Inderjeet Kumar said at a church doubling as a relief shelter in the hard-hit Thrissur district. "There was no power, no food and no water — even though it was all around us."

The overall death toll in the state since the start of the monsoon on May 29 had reached 370, the spokesman said. Forty-six of them were found dead in just the last 24 hours.

Thousands of army, navy and air force personnel have fanned out across Kerala. The army said Sunday that 250 people had been evacuated from Pathanamthitta district, many of them sick after days in the pounding monsoon rain.

Food, medicine and water has been dropped from helicopters to isolated areas. A train from Pune in Maharashtra state headed south on Saturday for Kerala laden with more than one million litres of drinking water.

The state's Chief Minister Pinarayi Vijayan vowed Sunday "to save even the last person stranded". Fishermen have sailed inland from Kerala's coast to join the search, as volunteers erected soup kitchens and appeals went out worldwide for donations.

Many panic-stricken flood victims have resorted to appeals on social media, saying they cannot get through to rescue services.

In Mala, desperate villagers had to improvise as the floodwaters rose, using kitchen pots as rafts to reach their stricken neighbours.

"They used these huge cooking pots to rescue around 100 people in the first wave of flash floods, as no one was prepared (for a rescue)," one local rescuer told AFP.

There have been moments of cheer amid the tragedy. In the hilly district of Idukki, rescuers told the Press Trust of India of working through the night to save a newborn boy and his mother from the rising waters.

Prime Minister Narendra Modi conducted a brief air inspection tour of the state Saturday and announced an immediate grant of \$75 million.

Published in Dawn, August 20th, 2018

#### https://www.dawn.com/news/1428129/thousands-without-food-water-in-kerala-toll-hits-370

### AFTERMATH OF GREENHOUSE GASES: NEXT FIVE YEARS TO BE EXCEPTIONALLY HOT: STUDY RECORDER REPORT | AUG 20TH, 2018 | PARIS

Manmade global warming and a natural surge in Earth's surface temperature will join forces to make the next five years exceptionally hot, according to a study published on Tuesday. The double whammy of climate change and so-called natural variability more than doubles the likelihood of "extreme warm events" in ocean surface waters, creating a dangerous breeding ground for hurricanes and typhoons, they reported in Nature Communications.

"This warm phase is reinforcing long-term climate change," lead author Florian Sevellec, a climate scientist at the University of Brest in France, told AFP. "This particular phase is expected to continue for at least five years." Earth's average surface temperature has always fluctuated. Over the last million years, it vacillated roughly every 100,000 years between ice ages and balmy periods warmer than today.

Over the last 11,000 years, those variations have become extremely modest, allowing our species to flourish. Manmade climate change – caused by billions of tonnes of greenhouse gases injected into the atmosphere, mainly over the last century – has come on top of those small shifts, and today threatens to overwhelm them. Teasing apart the influence of carbon pollution and natural variation has long bedevilled scientists trying hey to quantify the impact of climate change on cyclones, droughts, floods and other forms of extreme weather.

Sevellec and his colleagues tackled the problem in a different way. First, they focused on the natural fluctuations that – for most climate scientists – are "noise" obscuring the climate change fingerprint. Second, they used a streamlined statistical approach rather than the comprehensive climate models that generate most long-term forecasts. "We developed a system for predicting interannual" – or short-term – "natural variations in climate," Sevellec said.

"For the period 2018-2022, we found an anomaly equivalent to the impact of anthropogenic warming." Natural warming, in other words, will have about the same impact as manmade climate change over the next five years. The likelihood of a marine heatwave or other ocean "warming events" is predicted to increase by 150 percent. The new method – dubbed PROCAST, for PRObabilistic foreCAST – was tested against past temperature records and proved at least as accurate as standard models.

It can be run in seconds on a laptop, rather than requiring weeks of computing time on a supercomputer. "This opens of the possibility of doing climate forecasts to more researchers, especially in countries that don't have easy access to super-computers," Sevellec said. The researchers intend to adapt their system to make regional predictions, and – in addition to temperature – to estimate rainfall and drought trends. The Paris climate treaty calls for capping global warming at "well below" two degrees Celsius (3.6 degrees Fahrenheit), and 1.5 C if deemed feasible. On current trends, however, Earth is on track to heat up by twice that much before the end of the century.

#### https://fp.brecorder.com/2018/08/20180820400940/

TRANSLATING POLICIES INTO PRACTICE: NUMEROUS CLIMATE CHANGE CHALLENGES AWAIT NEW GOVT By Shahzad Anwar

Published: August 20, 2018

ISLAMABAD: Global warming, rapidly growing population, asymmetrical climate conditions and rain patterns, lack of coordination between institutions, non- implementation of climate change adaptation and mitigation policies are some of the major challenges awaiting the newly elected government.

With Malik Amin Aslam nominated as the next climate change minister in the list of the 21-member incoming cabinet outlined by the Pakistan Tehreek-e-Insaf (PTI) had been recently chosen to sit at the high-level International Advisory Council for the Eco-Forum Global- a leading environmental think tank advising the government of China. Health experts termed Aslam's nomination as climate change minister a good omen for the country, because of his knowledge and understanding about climate change issues and challenges faced by the country.

They said that amid global warming, the country was facing asymmetric rain patterns, apart from long dry spells. The situation is exacerbated by a lack of coordination between concerned government departments and non-implementation of adaptation and mitigation policies at the public and private level.

They anticipated that the country will remain vulnerable to climate change impacts. Environmentalists, however, say that the current Ministry of Climate Change (MoCC) has thus far failed to take tangible steps to implement the programme efficiently.

The outgoing Pakistan Muslim League-Nawaz (PML-N) government had approved the climate change bill in November 2016 which paved the way for the Pakistan Climate Change Council responsible for implementing the Kyoto Protocol and the Paris agreements.

Despite the fact that the council is a senior climate change decision-making body — which is either to be chaired by the prime minister or a person nominated by him — it has yet to meet.

Moreover, the National Climate Change Policy Implementation Committee (NCCPIC) could not take solid steps to influence the provinces, ministries and divisions in making medium or long-term plans for adaptation measures to tackle with climate change issues under the National Climate Change Policy (NCCP).

Environmentalists say that there is a dire need for introducing proper checks on industrial and other forms of pollution. The new government would have to chalk out a clear strategy to meet these

challenges. Another climate change issue is the Glacial Lake Outburst Flood (GLOF) and depleting water resources coupled with shrinking forest cover, unregulated and rampant use of genetically modified (GMO) seeds without gauging their impacts on local environment besides of social and economic impacts.

Environmentalists believe that Aslam's predecessor Mushahiduallh Khan, despite his best efforts, could not translate policies into practical actions even though numerous environmental issues had been pushed into the limelight during his tenure.

Published in The Express Tribune, August 20th, 2018.

https://tribune.com.pk/story/1784882/1-translating-policies-practice-numerous-climate-change-challenges-await-new-govt/

RESIDENTS DEMAND SANGHAR BE DECLARED 'CALAMITY-HIT' By Z Ali

Published: August 22, 2018

HYDERABAD: While the Sindh government has declared a drought for the desert areas in Tharparkar and Umerkot districts, the people living in equally miserable conditions in Achro Thar [white desert] in Sanghar district have been neglected. Locals claim that identical drought conditions exist in Achro Thar which is spread across seven union councils in Sanghar and Khipro talukas.

However, five of the UCs are said to be the most affected owing to the lack of rainfall this monsoon season. "Due to low rainfall, the crops couldn't be grown and there is no water for humans and livestock alike," said Khuman Singh Chandarveer, a local resident.

He pointed out that according to the law, the government is supposed to declare a drought if the region does not receive the required amount of rainfall by August 15. He said under the same rule, Tharparkar and Umerkot have been given the status of calamity-hit.

After this announcement, the Sindh cabinet on Monday approved the provision of subsidised wheat to 323,435 families in Tharparkar and 43,240 families in Umerkot. Each family will receive 50 kilograms per month. The meeting also directed the deputy commissioners of Sanghar, Jamshoro and Dadu districts to submit report about the conditions in Achro Thar, Kohistan and Kachho.

Abdul Hameed Samo said the hunger and highly turbid drinking water are causing illness among humans and livestock. "The rainfall fills the ponds and lakes charge the wells. And the long dry period dries them all." According to him, livestock breeders are migrating to other places in search of water and fodder.

Pre-monsoon rains likely after mid-June

In March this year, Pakistan Peoples Party chairperson Bilawal Bhutto Zardari inaugurated a Rs3 billion water supply scheme for Achro Thar. Through the pipelines stretching to around 240 kilometers, the plant in Jalalabad supplied water to more than 100 villages in Bilawal Hongorjo and Kamil Hingorjo UCs, both of which consist of around 200 villages.

Chandarveer said the water supplied to these villages is not sufficient for livestock consumption and for growing pastures. "A majority of the villages in Achro Thar are still not connected with this scheme."

Pureji Singh, another resident of Achro Thar, urged the provincial government to start preventive vaccination of the livestock before they get sick with fatal illnesses.

Sanghar deputy commissioner Liaquat Ali Bhatti told the local media that the district administration will survey the desert and report to the provincial government about the prevailing condition. Bhatti has already written a letter to the Board of Revenue, apprising it of the prevailing conditions and recommending that the areas be declared calamity-hit.

https://tribune.com.pk/story/1786277/1-residents-demand-sanghar-declared-calamity-hit/

FIRE ERUPTS IN FORESTS ON THE HILLS OF NAGAR VALLEY By Shabbir Mir

Published: August 23, 2018

GILGIT: A fire outbreak ripped through a thick forest in the hills of Nagar valley on Tuesday, destroying hundreds of trees in the once habitat of threatened species of wildlife.

The outbreak occurred in the Pisan Forest of Nagar valley before spreading to the adjacent Gulmat forests, said Ali Shah, a local. "It can further engulf the Rakaposhi range of forests if not extinguished timely," Shah told The Express Tribune.

While the cause of the fire could not immediately be known, the locals said that the forests consisted of Juniper trees besides the endangered forest of Birch, which is said to be habitat of Ibex and endangered Snow leopard besides others species.

"The fire is under control," read a statement shared with The Express Tribune by Gilgit-Baltistan Forest Department officials.

It said that the ground vegetation of around 3sqkm area was completely destroyed by fire in addition to 400 juniper trees and 15-20 trees of Betula. Moreover, around 100 trees of Kail were damaged partially by the fire which is now under control. "Forest department staff have immediately been deployed there."

The statement added that the fire lines have been made adding that the quantum of damage will be assessed soon.

https://tribune.com.pk/story/1786182/1-fire-erupts-forests-hills-nagar-valley/

NEWS COVERAGE PERIOD FROM AUGUST 13TH TO AUGUST 19TH 2018 NEXT FIVE YEARS TO BE 'EXTREMELY HOT' AFP August 15, 2018 PARIS: Manmade global warming and a natural surge in Earth's surface temperature will join forces to make the next five years exceptionally hot, according to a study published on Tuesday.

The double whammy of climate change and so-called natural variability more than doubles the likelihood of "extreme warm events" in ocean surface waters, creating a dangerous breeding ground for hurricanes and typhoons, they reported in Nature Communications.

"This warm phase is reinforcing long-term climate change," said lead author Florian Sevellec, a climate scientist at the University of Brest in France. "This particular phase is expected to continue for at least five years."

Earth's average surface temperature has always fluctuated. Over the last million years, it vacillated roughly every 100,000 years between ice ages and balmy periods warmer than today.

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Teasing apart the influence of carbon pollution and natural variation has long bedevilled scientists trying hey to quantify the impact of climate change on cyclones, droughts, floods and other forms of extreme weather.

The likelihood of a marine heatwave or other ocean "warming events" is predicted to increase by 150 per cent.

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"This opens of the possibility of doing climate forecasts to more researchers, especially in countries that don't have easy access to super-computers," Sevellec said.

The researchers intend to adapt their system to make regional predictions, and — in addition to temperature — to estimate rainfall and drought trends.

The Paris climate treaty calls for capping global warming at "well below" two degrees Celsius (3.6 degrees Fahrenheit), and 1.5 C if deemed feasible.

On current trends, however, Earth is on track to heat up by twice that much before the end of the century.

Published in Dawn, August 15th, 2018

https://www.dawn.com/news/1427128/next-five-years-to-be-extremely-hot

'THAR TO BE DECLARED DROUGHT-HIT SOON' A Correspondent August 16, 2018

MITHI: Pakistan Peoples Party government would soon declare Thar drought-hit after receiving report about erratic rainfall in the desert region this monsoon to be furnished by the district administration, according to Qasim Siraj Soomro, newly elected MPA from Nagarparkar.

He said in a press statement and told this reporter on Wednesday that as soon as the report was sent to the new government he would pursue the matter to get maximum relief for Tharis.

He said that in case there were no more bounteous rains in the desert region the situation would get alarming and people would have to migrate to other areas for survival.

He said that top party leadership was concerned about the situation in Thar due to erratic rainfall this monsoon season. "We are planning to devise strategies to find a permanent solution to provide relief during droughts in Thar," he said.

He said that as per the party's commitment centres would be set up under the Poverty Reduction Programme at union-council level and he would take up all issues of his constituency and the rest of Thar with PPP leaders.

It has been a set practice since the British rule that the district administration writes to the provincial government for declaring the region as calamity-hit if the desert does not get sufficient rains by Aug 15.

This year, the entire desert region has so far received erratic rainfall, which has done little to avert the threat of drought.

Published in Dawn, August 16th, 2018

https://www.dawn.com/news/1427195/thar-to-be-declared-drought-hit-soon

### NEWS COVERAGE PERIOD FROM AUGUST 6TH TO AUGUST 12TH 2018 MELTING GLACIERS THREATEN VILLAGERS' EXISTENCE IN GILGIT-BALTISTAN Reuters Updated August 07, 2018

BADSWAT: When a glacial lake burst in Gilgit-Baltistan in July, Sher Baz watched helplessly as the waters swept away his family home.

Residents of Badswat village, which lies in the Ishkoman valley at the foot of the Hindu Kush mountain range's snow-capped peaks, were at the mercy of the flash flood that carried off homes, roads and bridges, as well as crops and forest.

"Thank God we are alive, but everything we owned was washed away by the floods when the glacial lake burst," said Baz, a 30-year old father of four.

See: Experts link glacier melt to climate change, call for risk assessment

Although there are several glaciers near Badswat village, residents said this was the first glacial outburst in living memory. The authorities said the timely evacuation of villagers meant nobody had died. Baz said the event had left him feeling stranded.

"Surrounded by mountains and muddy water, it seems we are living between life and death," he said.

### Glacier central

Pakistan has more glaciers than any other country outside the polar region...more than 7,200 in the Karakoram, Himalayan and Hindu Kush ranges, according to the Pakistan Meteorological Department (PMD).

Met Office chief warns disasters caused by glacier outbursts will continue in the future because there are so many glaciers at risk of bursting

They feed the Indus River system, the country's water lifeline. But data gathered over the last 50 years shows that all but about 120 of the glaciers exhibit signs of melting, due to rising temperatures, meteorological officials said.

As the glaciers retreat, they leave behind lakes supported by ice dams or accumulations of rock and soil. Inherently unstable, these dams often burst, sending huge volumes of water rushing into the villages below them.

"With glaciers melting faster than before, we feel more vulnerable and it seems like we are under constant threat of a natural disaster," said another villager Shakoor Baig.

While he is used to coping with floods, the 45-year-old farmer said he had not seen anything on this scale.

Baig, who lost his home, crops and fields, joined nearly 1,000 residents in Badswat village who were evacuated to higher ground, where some are living in temporary shelters.

Trapped between mountains, receding waters and damaged roads, providing residents with enough food and tents has been difficult, said local relief group the Aga Khan Agency for Habitat, which worked with the Army to air-drop aid.

#### Forest loss

Such events are just the start, said glacier expert and PMD head Ghulam Rasul.

"The disasters caused by glacier outbursts in these areas will not stop here. They will continue in the future because there are so many glaciers at risk of bursting," he said.

Years of deforestation, combined with climate change, have led to a spike in temperatures in the region, which has caused glaciers to melt, Ghulam Rasul said.

Over the past 80 years, he said, the average temperature in Gilgit-Baltistan has increased by 1.4 degrees Celsius compared to a rise of 0.6 degrees Celsius in the lower-lying regions of Sindh, Punjab and Khyber-Pakhtunkhwa.

Poor government management of forests and increased demand for timber have seen trees cut down, he said — even though conserving forests is essential in order to absorb carbon emissions and fight climate change.

"Global warming has direct implications on mountainous areas in northern Pakistan because of forest loss. Deforestation happened due to the negligence of authorities since people would cut trees for construction and fuel," Rasul said.

"The essential thing to do is to grow more forests to mitigate the effects of global warming on glaciers in future." Local authorities said rejuvenating the forest is a priority, but replenishing the area would take time.

"The provincial government has already launched a campaign to grow the forest, among other solutions, to offset the rapid increase in temperatures in these mountains," local government spokesman, Faizullah Faraq said.

With help from the UN International Fund for Agricultural Development (IFAD), Faraq said, the authorities were also developing infrastructure in nearby areas in case residents of vulnerable villages were forced to relocate.

"This is a big challenge and not a matter to resolve overnight, but we are moving in that direction," he said.

Rasul said the PMD had installed early warning systems in three areas to notify vulnerable communities of any glacial threats, adding that more were needed so to provide sufficient advance warning ahead of the next event.

And, he said, the PMD recommends that communities be better trained in coping with emergency situations.

Meantime all that Baz can do, he said, was pray that his family would survive another day.

"I worry about the future and how to feed my family, since I lost my land and my job ended too. I pray that God will save us from more natural disasters," he said.

Published in Dawn, August 07th, 2018

https://www.dawn.com/news/1425431/melting-glaciers-threaten-villagers-existence-in-gilgit-baltistan

### HOW RECORD HEAT WREAKED HAVOC ON FOUR CONTINENTS

We talked to people who found themselves on the front lines of climate change this year. Here are their stories.

By Somini Sengupta, Tiffany May and Zia ur-Rehman

July 30, 2018

Expect more. That's the verdict of climate scientists to the record-high temperatures this spring and summer in vastly different climate zones.

The contiguous United States had its hottest month of May and the third-hottest month of June. Japan was walloped by record triple-digit temperatures, killing at least 86 people in what its meteorological agency bluntly called a "disaster." And weather stations logged record-high temperatures on the edge of the Sahara and above the Arctic Circle.

Is it because of climate change? Scientists with the World Weather Attribution project concluded in a study released Friday that the likelihood of the heat wave currently baking Northern Europe is "more than two times higher today than if human activities had not altered climate."

While attribution studies are not yet available for other record-heat episodes this year, scientists say there's little doubt that the ratcheting up of global greenhouse gases makes heat waves more frequent and more intense.

Organization, said this year was "shaping up to be one of the hottest years on record" and that the extreme heat recorded so far was not surprising in light of climate change.

"This is not a future scenario," she said. "It is happening now."

What was it like to be in these really different places on these really hot days? We asked people. Here's what we learned.

Ouargla, Algeria: 124°F on July 5

At 3 p.m. on the first Thursday of July, on the edge of the vast Sahara, the Algerian oil town of Ouargla recorded a high of 124 degrees Fahrenheit. Even for this hot country, it was a record, according to Algeria's national meteorological service.

Abdelmalek Ibek Ag Sahli was at work in a petroleum plant on the outskirts of Ouargla that day. He and the rest of his crew had heard it would be hot. They had to be at work by 7 a.m., part of a regular 12-hour daily shift.

"We couldn't keep up," he recalled. "It was impossible to do the work. It was hell."

By 11 a.m., he and his colleagues walked off the job.

But when they got back to the workers' dorms, things weren't much better. The power had gone out. There was no air conditioning, no fans. He dunked his blue cotton scarf in water, wrung it out, and wrapped it around his head. He drank water. He bathed 5 times. "At the end of the day I had a headache," he said by phone. "I was tired."

Ouargla's older residents told him they'd never seen a day so hot.

Hong Kong: Over 91°F for 16 straight days

In this city of skyscrapers on the edge of the South China Sea, temperatures soared past 91 degrees Fahrenheit for 16 consecutive days in the second half of May.

Not since Hong Kong started keeping track in 1884 had a heat wave of that intensity lasted so long in May.

Swimming pools overflowed with people. Office air-conditioners purred. But from morning to night, some of the city's most essential laborers went about their outdoor work, hauling goods, guarding construction sites, picking up trash.

One blistering morning, a 55-year-old woman named Lin gripped the hot metal handles of her handcart. She pushed it up a busy road, glancing over her shoulder for oncoming cars. She had fresh leafy greens to deliver to neighborhood restaurants in the morning, trash to haul in the evening. Some days, she had a headache. Other days, she vomited.

"It's very hot and I sweat a lot," said Lin, who would only give her first name before rushing off on her rounds. "But there's no choice, I have to make a living."

Poon Siu-sing, a 58 year-old trash collector, tossed garbage bags into a mounting pile. Sweat plastered the shirt onto his back. "I don't feel anything," he maintained. "I'm a robot used to the heat of the sun and rain."

### Nawabshah, Pakistan: 122°F on April 30

Nawabshah is in the heart of Pakistan's cotton country. But no amount of cotton could provide comfort on the last day of April, when temperatures soared past 122 degrees Fahrenheit, or 50 degrees Celsius. Even by the standards of this blisteringly hot place, it was a record.

The streets were deserted that day, a local journalist named Zulfiqar Kaskheli said. Shops didn't bother to open. Taxi drivers kept off the streets to avoid the blazing sun.

And so, Riaz Soomro had to scour his neighborhood for a cab that could take his ailing 62-year-old father to a clinic. The government hospital was packed. In the hallways sat worn-out heatstroke victims like his father. Many of them had been working outdoors as day laborers, Mr. Soomro said.

Throughout the area, hospitals and clinics were swamped. There weren't enough beds. There weren't enough medical staff. The power failed repeatedly throughout the day, adding to the chaos.

"We tried our best to provide medical treatment," said Raees Jamali, a paramedic in Daur, a village on the outskirts of Nawabshah. "But because of severity of the heat, there was unexpected rush and it was really difficult for us to deal with all patients."

Every day that week, the high temperature in Nawabshah was no less than 113 degrees, according to AccuWeather.

Oslo: Over 86°F for 16 consecutive days

"Warning! We remind you about the total ban on fires and barbecuing near the forest and on the islands."

This was the text message that Oslo residents got from city officials on a Friday afternoon in June.
May had been the warmest in 100 years. June was hot, too. By mid-July, a village south of Oslo recorded 19 days when the temperature shot up past 86 degrees Fahrenheit, or 30 Celsius, according to MET Norway.

Spring rains were paltry, which meant that grass had turned brown dry and farmers were having trouble feeding their livestock. Forests had turned to tinder. And city officials put a stop to one of the most popular Norwegian summer pastimes: heading out to the woods with a disposable barbecue.

"People not being used to this heat, they're used to leaving a barbecue and nothing happens, Marianne Kjosnes, a spokeswoman for the Oslo Fire Department, said. "Now if a little spark catches the grass, you have a grass fire going."

Public parks are off limits to barbecuing. So are the islands in the nearby fjord. The Oslo Fire Department's Facebook page is trying to get the word out.

Per Evenson, a fire watchman posted in the tower on Linnekleppen, a rocky hill southeast of Oslo, counted 11 separate forest fires in one day in early July. Here and there, white smoke rose in the distance. By July 19, the civil protection department had tallied 1,551 forest fires, more than the numbers of fires in all of 2016 and 2017. The department said 22 helicopters were simultaneously fighting fires.

Wildfires were also erupting in Sweden. And one Swedish village just above the Arctic Circle, hit an all time record high, peaking above 90 degrees Fahrenheit.

"This is really frightening if this is the new normal," Thina Margrethe Saltvedt, an energy industry analyst who lives in Oslo, wrote in an email.

Los Angeles: 108°F on July 6 At least Marina Zurkow had air conditioning.

Ms. Zurkow, an artist, has long been grappling with climate change in her work. But she was still surprised when a day of extreme weather impacted one of her projects in a big way.

The name of that project, which was designed to make people think about the impact of climate change on how we eat, is "Making the Best of It." It is only half in jest.

"It's both trying to make the best of a bad situation," she said, "and in another way it's a commitment to making things as delicious as possible."

The latest iteration of that project was to host a dinner for a new era of dry, hot weather in California. Less Mediterranean, more Mojave Desert.

Ms. Zurkow's partners, a team of two private chefs called Hank and Bean, prepared an elaborate meal designed to make their guests chew on the impact of climate change. The menu included sage fritters, stuffed rabbit, flatbreads made of cricket and mealworm, and jellyfish. Lots of jellyfish.

There was jellyfish crudo with a Greek salad at the top of the meal. There was a jellyfish jelly, with redwood tip infusion and pine syrup at the end of the meal.

Why jellyfish? Because it's considered invasive and therefore plentiful, Ms. Zurkow reasoned. It's also zero fat and good protein. "American dream food," she added, also only half in jest.

They had planned to serve dinner al fresco in the courtyard of a downtown Los Angeles test kitchen.

But nature had other ideas.

That day, the first Friday of July, air from the Mojave blew westward and stalled, compressed and extra hot, over Los Angeles. Downtown hit a high of 108 degrees. It was too hot to eat outside.

"Even if you're talking about climate change, you can't torture invited guests," Ms. Zurkow said. "We had to move the dinner into the kitchen."

Somini Sengupta reported from New York and Los Angeles, Tiffany May from Hong Kong, and Zia ur-Rehman from Karachi, Pakistan.

Correction: July 31, 2018

An earlier version of this article referred incorrectly to an episode in which Riaz Soomro's father fell ill. While Mr. Soomro recounted the episode as taking place during Ramadan, which ran from May 16 to June 15 in Pakistan this year, his father fell ill on April 30.

Correction: July 31, 2018

An earlier version of this article referred incorrectly to a heat wave in which parts of the United States recorded the hottest month of May and the third-hottest month of June. The May record and the near-record in June were for the 48 contiguous states only, not the continental United States.

Somini Sengupta covers international climate issues and is the author of "The End of Karma: Hope and Fury Among India's Young."

A version of this article appears in print on July 31, 2018, on Page A8 of the New York edition with the headline: The Heat Is Coming in Waves and Surges.

https://www.nytimes.com/2018/07/30/climate/record-heat-waves.html

### NEWS COVERAGE PERIOD FROM JULY 30TH TO AUGUST 5TH 2018 HEATWAVES FROM THE ARCTIC TO JAPAN: A SIGN OF THINGS TO COME? RECORDER REPORT | JUL 30TH, 2018 | PARIS

Intense heatwaves like the one which fuelled Greece's deadly wildfires are set to become increasingly frequent around the world due to climate change, experts warn. Is the current heatwave exceptional?

Record high temperatures have been registered across the Northern Hemisphere in recent weeks, from Norway to Japan. Sweltering summers are the norm in Greece, where at least 82 people have been killed in the country's worst ever forest fires.

But in Northern Europe the recent heatwave is exceptional, and the World Meteorological Organization (WMO) predicts temperatures will continue to beat the seasonal average from Ireland to Scandinavia and the Baltic countries until early August. This has been the hottest July for at least 250 years in Sweden, where indigenous Sami reindeer herders have been among those worst hit by an unprecedented drought as well as devastating wildfires.

Dozens of people have died in Japan in what officials have called an "unprecedented" heatwave, while California has also notched up record temperatures of up to 48.9 C in Chino. "Generally we have heatwaves in one part of the planet," said Anders Levermann, a professor at the Postdam Institute for Climate Impact Research. "But now we have the entire northern hemisphere being hot – it's stunning."

Is climate change to blame? "Each individual event is very difficult to attribute directly to human activity," French climate expert Jean Jouzel told AFP. But the soaring temperatures of recent weeks "are consistent with what we expect as a result of climate change caused by greenhouse gas emissions", according to Elena Manaenkova, deputy secretary-general of the WMO. A study published in the Bulletin of the American Meteorological Society concluded in December that global warming was solely responsible for worldwide record temperatures recorded in 2016 as well as an extreme heatwave in Asia.

While the three last years have been the hottest ever recorded on Earth, "the most important question is, 'Will we see this more often if we don't reduce carbon emissions?" said Levermann. "And this question is the one we can say yes to." Researchers from the World Weather Attribution Project estimated on Friday that climate change had made the current heatwave in northern Europe more than twice as likely to occur.

But they cautioned that this was a preliminary analysis, published before the end of the heatwave. What can we expect in the decades to come? The Intergovernmental Panel on Climate Change, a UN panel of experts, warned in a 2012 report that its models forecast increasingly intense episodes of extreme weather in the coming decades. Even if the world manages to limit temperature increases to two degrees Celsius above pre-industrial levels as agreed in the 2015 Paris climate agreement, experts predict worse droughts, heatwaves, floods and hurricanes, and across wider stretches of territory.

A study published last year in the Nature Climate Change journal warned that even in sticking to the Paris limits, half of the world's population will be vulnerable to deadly heatwaves by 2100, compared to about 30 percent today. "Every year we are going to be setting new record temperatures from Russia to France to Japan," Jouzel said.

### https://fp.brecorder.com/2018/07/20180730394975/ WORLD'S BIGGEST KING PENGUIN COLONY SHRINKS 90PC AFP July 31, 2018

PARIS: The planet's largest colony of king penguins has declined by nearly 90pc in three decades, alarmed researchers said on Monday. The last time scientists set foot on France's remote Ile aux Cochons — roughly half way between the tip of Africa and Antarctica — the island was blanketed by two million of the flightless birds.

But recent satellite images and photos taken from helicopters show the population has collapsed, with barely 200,000 remaining, according to a study published in Antarctic Science.

Why the colony on Ile aux Cochon has been so decimated remains a mystery.

"It is completely unexpected, and particularly significant since this colony represented nearly one third of the king penguins in the world," said lead author Henri Weimerskirch, an ecologist at the Centre for Biological Studies in Chize, France, who first set eyes on the colony in 1982.

Published in Dawn, July 31st, 2018

https://www.dawn.com/news/1423993/worlds-biggest-king-penguin-colony-shrinks-90pc STUDY SEES DRAMATIC RISE IN HEATWAVE DEATHS BY 2080 Reuters August 01, 2018

LONDON: The number of people dying from heatwaves is likely to rise sharply in some regions by 2080 if policymakers fail to take mitigating steps in climate and health policies, according to the results of a study on Tuesday.

Deaths caused by heatwaves could increase dramatically in tropical and subtropical regions, the study found, followed closely by Australia, Europe and the United States.

Published in the journal PLOS Medicine, the study's results suggest stricter mitigation policies should be applied to reduce greenhouse gas emissions, because lower greenhouse gas emissions are linked with fewer deaths due to heatwaves.

Antonio Gasparrini, an expert from the London School of Hygiene & Tropical Medicine who co-led the research, noted that several countries around the world are currently being hit by deadly heatwaves and said it was "highly likely" that heatwave frequency and severity would increase under a changing climate.

"[But] the good news is that if we mitigate greenhouse gas emissions ... then the projected impact will be much reduced." The researchers said they hoped their research, which used mathematical modelling, would help decision makers in planning strategies for climate change.

The model used different scenarios characterised by levels of greenhouse gas emissions, preparedness and adaption strategies, as well as population density to estimate the number of deaths related to heatwaves in 412 communities across 20 countries from 2031 to 2080.

The results found that compared with the period 1971 to 2020 and under the extreme scenario, the Philippines would suffer 12 times more excess deaths caused by heatwaves in 2031 to 2080.

Under the same scenario, Australia and the United States could face five times more excess deaths, with Britain potentially seeing four times more excess deaths from heatwaves in the same period.

Published in Dawn, August 1st, 2018

https://www.dawn.com/news/1424193/study-sees-dramatic-rise-in-heatwave-deaths-by-2080

GREENHOUSE GASES SURGED TO NEW HIGHS WORLDWIDE LAST YEAR: REPORT AFP Updated August 02, 2018

TAMPA: Planet-warming greenhouse gases surged to new highs as abnormally hot temperatures swept the globe and ice melted at record levels in the Arctic last year due to climate change, a major US report said on Wednesday.

The annual State of the Climate Report, compiled by more than 450 scientists from over 60 countries, describes worsening climate conditions worldwide last year, the same year that US President Donald Trump pulled out of the landmark Paris climate deal.

The United States is the world's second leading polluter after China, but has rolled back environmental safeguards under Trump, who has declared climate change a "Chinese hoax" and exited the Paris deal signed by more than 190 nations as a path toward curbing harmful emissions.

World's highest temperature ever for May was recorded on 28th of the month in Turbat with a high of 53oC

Smashing heat records, temperatures reached 110.1 degrees Fahrenheit (43.4 Celsius) on Jan 27 at Puerto Madryn, Argentina, "the highest temperature ever recorded so far south anywhere in the world".

The world's highest temperature ever for May was observed on May 28 in Turbat, Pakistan, with a high of 128.3 degrees Fahrenheit (53 Celsius).

The 300-page report, issued by the American Meteorological Society and the National Oceanic and Atmospheric Administration (NOAA), mentioned the word "abnormal" a dozen times, referring to storms, droughts, scorching temperatures and record low ice cover in the Arctic.

Here are its key findings: Last year, the three most dangerous greenhouse gases released into Earth's atmosphere — carbon dioxide, methane and nitrous oxide — reached new record highs.

The annual global average carbon dioxide concentration at the Earth's surface climbed to 405 parts per million, "the highest in the modern atmospheric measurement record and in ice core records dating back as far as 800,000 years", said the report. "The global growth rate of CO2 has nearly quadrupled since the early 1960s."

The record for hottest year was set in 2016, but 2017 was not far behind, with "much-warmer-thanaverage conditions" across most of the world, it said. Annual record high temperatures were observed in Argentina, Bulgaria, Spain and Uruguay, while Mexico "broke its annual record for the fourth consecutive year".

Published in Dawn, August 2nd, 2018

https://www.dawn.com/news/1424384/greenhouse-gases-surged-to-new-highs-worldwide-last-yearreport

## RISING HEAT WILL CHILL POOR COUNTRIES' ECONOMIES, COSTING BILLIONS RECORDER REPORT | AUG 3RD, 2018 | LONDON

Rising temperatures in a warming world will cost poor countries tens of billions of dollars annually as they are less able to keep their workers cool, analysts said on Thursday. Over the next 30 years, manual labourers in the agriculture, mining, oil and gas, and manufacturing sectors – which are the most prevalent in emerging economies – will be hardest hit by higher temperatures, said risk consultancy Verisk Maplecroft.

By examining energy infrastructure with temperature data and projected urban population growth, researchers said workers in Africa and Asia would be most affected by rising heat.

"That means workers are missing days because they suffer from heat stress, or their physical capacity to undertake physical activity is diminished because of those high temperatures," said Richard Hewston, head of the environment and climate change programme at Verisk Maplecroft.

"With lower labour capacity, productivity dips off and subsequently you have ripple effects through the sectors with the highest amount of manual labour," he told the Thomson Reuters Foundation.

This drop in productivity equates to an annual loss of \$78 billion a year in South East Asia, and nearly \$10 billion in West Africa, the consultancy's report said.

Rapid urbanisation in these emerging economies will also strain energy needs, and the demand for cooling – such as air-conditioning – will soar as temperatures rise resulting in frequent power outages, it said.

About 1.1 billion people in Asia, Africa and Latin America are at risk from a lack of air conditioning and refrigeration to keep them cool and to preserve food and medicines as temperatures rise, says global group Sustainable Energy for All.

"Even modest amounts of climate change will be impactful so that forces us to do something about it," Sam Fankhauser, director of the Grantham Research Institute at the London School of Economics, said of the Verisk Maplecroft study.

"We need to start thinking about how we build our buildings, shading, airflows, air-conditioning, green roofs, how we might adjust our behaviour, and how we design our cities," said Fankhauser, who was not involved in the report.

Two-thirds of the world's population will live in cities by 2050, with that boom concentrated in three countries – India, China and Nigeria – according to United Nations estimates released in May.

The World Health Organization has said heat stress, linked to climate change, is likely to cause 38,000 extra deaths a year worldwide between 2030 and 2050.

In 2015, countries signing the Paris Agreement set a goal of limiting a rise in average world surface temperatures to "well below" 2C (3.6F) above pre-industrial times, while "pursuing efforts" to limit rising temperatures to 1.5C (2.7F).

https://fp.brecorder.com/2018/08/20180803395999/

# September 2018

### *NEWS COVERAGE PERIOD FROM SEPTEMBER 24TH TO SEPTEMBER 30TH 2018 CM ORDERS FOR TAKING FLOOD CONTROL MEASURES* RECORDER REPORT

LAHORE: Punjab Chief Minister Sardar Usman Buzdar has instructed Cabinet Sub Committee to take all necessary measures to control flood in the rivers Chenab and Jhelum in view of heavy rainfalls as predicted by the Flood Warning Centre.

He said that all rescue and relief organizations including the civil defence department should be vigilant all along the rivers beds to meat any unforeseen situation and emergencies.

Meanwhile Flood Forecasting Centre said here on Sunday that widespread Thunderstorm /Rain with Scattered Heavy Falls, Isolated Very Heavy Falls is expected over the upper catchments of Rivers Sutlej, Ravi and Chenab along with Gujranwala Division. Scattered Thunderstorm/Rain with Isolated Heavy Falls is expected over the upper catchments of Rivers Indus, Jhelum along with Lahore Division. Scattered Thunderstorm/Rain is expected over Peshawar, Kohat, DI Khan, Bannu, Rawalpindi, and Sargodha and Sahiwal Divisions.

Rainfall recorded (mm) during past 24 hrs (up-to 0800 pm):

Narowal (Shakargarh-72, Zafarwal-61, City-47 and Baddomalhi-25), Sialkot (Cantt-42 & Airport-28), Aik Nullah (Ura)-42, Kotnaina-22, Gujrat-20, Kotli-19, Mangla-08, Kasur-06, Lahore [Jail Road-05, Punjab University & Airport-04(each), Gulberg-02, Johar Town-01, Shahi Qilla, Upper Mall, Shahdara, Lakshami, Iqbal Town, Samanabad, Township & Tajpura-Trace (each)], Marala & Gujranwala-04(each), Bandi Abbaspur -03, Hajira-02, Zafarwal & Faisalabad-01 (each), Rawalakot, Jhelum, Mirpur Khas & Zhob-Trace(each).

https://epaper.brecorder.com/m/2018/09/24/7-page/740548-news.html

### MELTING PERMAFROST THREATENS CLIMATE RESCUE PLAN: STUDY RECORDER REPORT SEP 24TH, 2018 PARIS

Global targets aimed at warding off runaway planetary warming could be breached sooner than expected, experts warned Monday, as gases released by melting permafrost threaten to undermine human efforts to avert climate disaster.

Under the current rescue plan, outlined in the 2015 Paris climate treaty, countries have agreed to limit global temperature rises to "well below" two degrees Celsius, and 1.5C if deemed possible. That course of action assumes that dealing with manmade greenhouse gases whether by slowing their emissions or removing them from the atmosphere will be enough to bring global warming under control. What climate models do not allow for are scenarios in which Earth begins to contribute to the problem, new research shows.

A team of experts from the International Institute for Applied Systems Analysis in Austria said Monday they had for the first time included projected emissions from melting permafrost in global climate change models, and the results prompted concern.

"Permafrost carbon release is caused by global warming, and will certainly diminish the budget of CO2 we can emit while staying below a certain level of global warming," said IIASA research scholar and lead study author Thomas Gasser.

As reliance on fossil fuels persists, scientists have calculated that we are likely to "overshoot" the Paris temperature targets in the short to medium term. With only 1C of warming above pre-industrial levels so far, the world's permafrost is already thawing, albeit slowly. But the rate of that melting is sure to accelerate as Earth continues to heat up.

Gasser warned that the overshoot scenario would leave the planet even more vulnerable to permafrost emissions and, in a vicious feedback loop, even more warming. In fact, under some models run in the study, published in the journal Nature Geoscience, we have already missed the 1.5C target as a result of permafrost emissions. "Overshooting is a risky strategy, and getting back to lower levels after overshooting will be extremely difficult," Gasser told AFP.

"We have to prepare ourselves for the possibility that we may never get back to safer levels of warming."

Higher temperatures, higher risk Methane and CO2 trapped in the frozen wastes of Russia, Canada and northern Europe are roughly equivalent to 15 years of manmade emissions at today's level.

The problem with the Paris goals, according to Gasser, is that they set emissions targets based on the assumption that global temperature and atmospheric CO2 levels change in lock-step. They therefore allow countries to exceed the targets on the condition that enough carbon can be captured from the air to bring temperatures back down by the end of the century. But permafrost is subject to what scientists call a "tipping point", meaning that beyond a certain temperature threshold, it will continue to melt and release greenhouse gases in a self-perpetuating feedback loop independent of falling emission levels.

The models will not have accounted for these additional greenhouse gases, mainly methane and carbon dioxide. "Not even mentioning the debate on whether or not we could capture CO2 on a large enough scale, there is also this risk that the higher we go the higher the risk of triggering something we don't understand," Gasser said.

As the world struggles to curb manmade carbon pollution that amplifies the likelihood and intensity of deadly superstorms, heatwaves and droughts, Monday's study will add to fears that Earth itself could overwhelm efforts to limit climate change. Other possible climate tipping points include melting sea ice, which creates seawater that absorbs rather than reflects sunlight, and forest dieback which would see billions of tonnes of carbon released as CO2-absorbing biomass is lost.

https://fp.brecorder.com/2018/09/20180924410006/

CLIMATE-SMART FARMING URGED TO COUNTER GLOBAL WARMING The Newspaper's Staff Correspondent September 27, 2018 HYDERABAD: Speakers at a seminar on climate change adaptation have emphasised the need for collaboration between stakeholders in order to counter the environmental challenges confronting everyone.

They were speaking at the event on the 'Role of Youth in Climate Change Adaptation' organised by Sindh Agriculture University (SAU) Tandojam on Wednesday.

A Sindh Environmental Protection Agency (Sepa) officer, Munir Ahmed Abbasi, said that collaboration between stakeholders was needed to cope with such challenges at the gross-root level.

He said rise in temperature of the earth and associated climatic changes had caused global warming. There was a need that scientists, researchers and scholars might conduct their research on climatesmart agriculture for food security and livelihood of community, he added.

Prof Dr Mohammad Ismail Kumbhar, SAU's focal person and director of university advancement, presented findings of the impact of climate change on biodiversity, livelihood, food security, unemployment and agriculture sector of Sindh.

Saying that climate change was a threat to food security and it could destroy livelihoods of rural population, he called for focussing policy and programme implementation at gross-root level.

He suggested that adaptation measures through improved soil water management, restoration of climate-sensitive species, broad range of plant-tolerance species, early warning system, water conservation practices be given priority and curricula should be introduced from primary to secondary and university-level education.

Bashir Ahmed Waseem, advocacy and engagement officer, Islamic Relief Pakistan (IRP), highlighted the role of youth in climate change adaptation. The IRP was striving to minimise risk of climate change and promote sustainable management of natural resources, restore degraded ecosystems, reduce poverty and increase resilience to the change.

The Mehran University of Engineering and Technology (MUET) on Wednesday launched a fourmonth

workshop to train 23 unemployed graduates of various institutions. Each trainee would receive Rs10,000 as stipend per month.

MUET experts would make these graduates professional during the stipulated period of the programme funded by the Higher Education Commission of Pakistan (HEC). They would be trained by the MUET's Innovation Entrepreneurship Centre (IEC) as it is the first such batch of the programme.

"No youth can be unemployed if they think for a second to do something new," MUET Vice Chancellor Prof Dr Mohammad Aslam Uqaili said while speaking to the trainees during a programme held at the varsity.

He advised the trainees to make full use of any opportunity without considering that it was a small job. He said the small job would surely open new vistas for their career.

Published in Dawn, September 27th, 2018

https://www.dawn.com/news/1435148/climate-smart-farming-urged-to-counter-global-warming

IN BADIN, JAMSHORO: DROUGHT DECLARED IN 198 DEHS By Our Correspondent

Published: September 27, 2018

HYDERABAD: The Sindh government declared large parts of two more districts, Jamshoro and Badin, as calamity-hit on Wednesday. After the addition, presently the people in eight districts in the province are suffering from drought conditions.

A total of 198 dehs in the two districts have been put on the calamity-affected list. These include 110 dehs in Sehwan, Manjhan, Thana Bula Khan and Kotri talukas of Jamshoro and 88 in Tando Bago, Golarchi, Badin, Matli and Talhar talukas of Badin district. A list with the names of all 198 dehs was issued.

Earlier, on September 5, the provincial government declared drought in Tharparkar, Umerkot, Thatta, Dadu, Sanghar and Kamber Shahdadkot districts due to scant rain and water shortage.

During the three months starting with June, Tharparkar district's Mithi taluka received 58 millimetres of rain, Islamkot 24 mm, Diplo 51 mm, Dahli 120 mm and Nagarparkar 40 mm. The other five districts also received negligible rains.

The provincial government will provide food aid and waive agricultural taxes in the affected districts.

Published in The Express Tribune, September 27th, 2018.

https://tribune.com.pk/story/1812372/1-badin-jamshoro-drought-declared-198-dehs/

### MAJOR QUAKE AND TSUNAMI CAUSE DEATHS IN INDONESIAN CITY Reuters September 29, 2018

JAKARTA: A tsunami caused deaths when it hit a small city on the Indonesian island of Sulawesi on Friday after a major quake offshore, collapsing buildings and cutting off power.

The tsunami, up to two metres high, struck beaches as dusk fell in Palu, a sleepy but growing tourist resort, and a nearby fishing town of Donggala, closest to the epicentre of the quake 27 km away.

"The earthquake and tsunami caused several casualties ... while initial reports show that victims died in the rubble of a collapsing building," National Disaster Mitigation Agency spokesman Sutopo Purwo Nugroho told reporters. "The number of casualties and the full impact is still being calculated."

Sutopo said the disaster caused a power outage that cut communications in Donggala and surrounding areas. The communications ministry is working to repair 276 electricity base stations.

Officials said aftershocks, the communications breakdown and the power outage made it hard to coordinate rescue efforts.

More than 600,000 people live in Palu and Donggala.

"The 1.5-to two-metre tsunami has receded," Indonesia's meteorology agency, BMKG, said. "The situation is chaotic. People are running on the streets and buildings have collapsed. There is a ship washed ashore."

The BMKG had earlier issued a tsunami warning, but lifted it within an hour.

Amateur footage shown by TV stations showed waters crashing into houses along Palu's shoreline, scattering shipping containers and flooding into a mosque in the city.

The national search and rescue agency said it would deploy a large ship and helicopters to aid the operation.

The armed forces and police will also provide troops and equipment to support the emergency response.

Oil company Pertamina said its fuel depot in Donggala had been damaged in the incident, although there was no oil spill. Fuel tanks had shifted in the quake and ship loading facilities were disabled among other damage.

Palu, hit by a 6.2 magnitude quake in 2005 which killed one person, is a tourist resort at the end of a narrow bay famous for its beaches and water sports.

In 2004, an earthquake off the northern Indonesian island of Sumatra triggered a tsunami across the Indian Ocean, killing 226,000 people in 13 countries, including more than 120,000 in Indonesia.

Published in Dawn, September 29th, 2018

https://www.dawn.com/news/1435717/major-quake-and-tsunami-cause-deaths-in-indonesian-city

NEWS COVERAGE PERIOD FROM SEPTEMBER 17TH TO SEPTEMBER 23TH 2018 MELTING PERMAFROST THREATENS CLIMATE RESCUE PLAN The News, September 18, 2018

PARIS: Global targets aimed at warding off runaway planetary warming could be breached sooner than expected, experts warned Monday, as gases released by melting permafrost threaten to undermine human efforts to avert climate disaster.

Under the current rescue plan, outlined in the 2015 Paris climate treaty, countries have agreed to limit global temperature rises to "well below" two degrees Celsius, and 1.5C if deemed possible.

That course of action assumes that dealing with manmade greenhouse gases — whether by slowing their emissions or removing them from the atmosphere — will be enough to bring global warming

under control. What climate models do not allow for are scenarios in which Earth begins to contribute to the problem, new research shows.

A team of experts from the International Institute for Applied Systems Analysis in Austria said Monday they had for the first time included projected emissions from melting permafrost in global climate change models, and the results prompted concern.

"Permafrost carbon release is caused by global warming, and will certainly diminish the budget of CO2 we can emit while staying below a certain level of global warming," said IIASA research scholar and lead study author Thomas Gasser.

As reliance on fossil fuels persists, scientists have calculated that we are likely to "overshoot" the Paris temperature targets in the short to medium term. With only 1C of warming above pre-industrial levels so far, the world's permafrost is already thawing, albeit slowly.

But the rate of that melting is sure to accelerate as Earth continues to heat up.Gasser warned that the overshoot scenario would leave the planet even more vulnerable to permafrost emissions and, in a vicious feedback loop, even more warming.

In fact, under some models run in the study, published in the journal Nature Geoscience, we have already missed the 1.5C target as a result of permafrost emissions. "Overshooting is a risky strategy, and getting back to lower levels after overshooting will be extremely difficult," Gasser told AFP. "We have to prepare ourselves for the possibility that we may never get back to safer levels of warming."

### https://www.thenews.com.pk/print/370111-melting-permafrost-threatens-climate-rescue-plan

# DROUGHT-HIT THAR AWAITS EMERGENCY AID FOR A MONTH Hanif Samoon September 20, 2018

MITHI: A month on since the Sindh government declared Thar drought-hit, the functionaries concerned are only paying lip service to the plans for providing direly-needed relief to the starving population with no practical measures in sight to put the words into action.

The officers concerned are nowhere to be seen in the desert region to start relief operation for over 1.6 million souls living in abject conditions for months because of shortage of food, water and essentially required healthcare facility.

Women, children and animals are the worst-affected though entire population of the region is fighting for its very survival. "Our crops have already withered, most of the wells have either dried up or their water has turned brackish and we have nothing to eat and feed our goats and cows," said Kanji Bheel from Katho Bheel village in Kaloi taluka of Tharparkar.

He said that most of his co-villagers had already migrated to barrage areas to save lives of their livestock and families but he preferred to stay put and wait for the start of relief operation by the government.

The residents of Kaposar, Bhunrai, Fangario, Railo Rind and Malsrio villages had similar stories to tell and deplored that Thar was braving the worst drought of decade but the government was only

issuing rosy statements while doing nothing on ground to mitigate their misery. "Life without water is getting tougher and harder by each passing day," they added.

According to sources privy to health department in Mithi, viral infections, waterborne diseases, malnutrition and complications arising out of these diseases have so far claimed lives of 460 infants this year alone.

The health officials did not have record of over 800 children who were referred to hospitals in Hyderabad and Karachi for better treatment and could not say whether they survived or not.

Mohammad Siddique Rahimoon, chief of Rural Development Association working on environment and other issues in Thar, told this reporter that Diplo, Mithi, Kaloi, Islamot, Nagarparkar and Chhachhro talukas did not receive any or very scant rainfall this monsoon.

Some areas in Islamkot and Dahli talukas did have but erratic rain and that too less than 100mm, which failed to bring any relief to Tharis and rather inflicted unforeseen losses on them since many had spread costly seeds on land after first spell of light rain in hope of more rainfall but it did not continue, inflicting losses on poor peasants.

He believed that long-term policies were the only viable solution to the chronic problems of the desert and demanded that the draft of Thar Development Authority which was envisaged and formulate by experts five year back should be presented in Sindh Assembly.

He warned that issues of health and malnutrition would continue to haunt Tharis if sustainable and concerted efforts to resolve them were not taken at provincial level. Only distribution of wheat bags among starving Tharis would not resolve all their problems, the government should immediately provide safe drinking water to remote villages and towns, he said.

Dr Allah Nawaz Samoon, CEO of Thardeep Rural Development Programme, said that there were portentous indications that the situation might turn out to be more serious and alarming than Thar had witnessed in 1985-87 and again in 1999-2000 when thousands of people had to migrate to barrage areas after outbreak of diseases and serious shortages of water and food for humans and fodder for livestock.

"Drought is a recurring phenomenon in the arid region, which requires long-term solution along with short-term measures for the affected communities," said Dr Samoon.

He stressed the need for involving village volunteers in relief activities. "In addition, activities such as promoting water conservation and setting up fodder and foliage banks for local communities can also contribute to saving livestock which is a major source of poor people's livelihood," he added.

He said that it was a matter of serious concern that over 374 suicides were reported in the desert region over the past six years mainly due to abject poverty and other social issues. Most wells, often the only source of drinking water both for both humans and livestock in the desert villages, had already dried up and Tharis had to travel miles and miles in search of drinkable water, he said.

Noted writer Prof Noor Ahmed Jhanjhi said that the situation in Thar called for formulation of a comprehensive plan to address the recurring drought and resultant poverty. The plan should have a

disaster mitigation preparedness and rehabilitation strategy and alternative livelihood sources for the poor people entrapped in poverty, he said.

"Proper care of pastures, livestock rearing on scientific lines and discouraging unnecessary cultivation are some of the measures that can help combat the disaster. The development strategy should be linked to coal and other mineral resources, he said.

Published in Dawn, September 20th, 2018

https://www.dawn.com/news/1433897/drought-hit-thar-awaits-emergency-aid-for-a-month

### NEWS COVERAGE PERIOD FROM SEPTEMBER 10TH TO SEPTEMBER 16TH 2018 THIRD WORLD ROUNDS ON US, ALLIES AS UN CLIMATE TALKS WRAP UP AFP Updated September 10, 2018

BANGKOK: Developing countries rounded on the United States and its allies at emergency climate talks on Sunday, accusing the world's richest nations of stalling a deal aimed at preventing runaway global warming.

Experts from around the world wrapped up discussions in Bangkok geared towards creating a comprehensive rulebook for countries to implement the landmark Paris Accord on climate change.

But talks foundered over the key issue of how efforts to limit climate change are funded and how contributions are reported.

Delegates representing some of Earth's poorest and smallest nations said on the final day of the summit that the US and other Western economies had failed to live up to their green spending commitments.

"Developed countries are responsible for the vast majority of historic emissions, and many became remarkably wealthy burning fossil fuels," said Amjad Abdulla, the head of a negotiating bloc of small island states.

"Yet, we face devastating climate impacts and some of us could be lost forever to rising seas" without progress on the Paris deal by the end of the year, he added.

The Paris deal, struck in 2015, aims to limit global temperature rises to less than two degrees Celsius and to below 1.5 degrees if possible by the end of the century.

To do this, countries agreed to a set of promises, including to establish an annual \$100-billion fund to help developing nations react to our heating planet.

But the details of the final rulebook are subject to intense debate.

The US and other developed economies want less oversight on how their funding is gathered and more flexibility over how future finance is structured.

But developing nations insist they need predictable and open funding in order to effectively plan their fight against the fallout from climate change.

A senior climate negotiator, who spoke on condition of anonymity, told AFP on Sunday that the US and rich nations were asking poorer ones to trust them to self-regulate climate financing.

"We want to do our bit, but how can we trust them? Show us the money," the negotiator said.

Delegates ended talks Sunday with an agreement to hand over technical discussions to a panel of experts, who will continue to meet before the COP 24 kicks off in Katowice, Poland, at the start of December.

Patricia Espinosa, the UN's climate change secretary, told reporters progress had been made in Bangkok "on most issues" but that "no issues have been fully resolved yet".

The issue of climate finance was "very difficult and politically sensitive," she added.

"For Katowice to be successful, work needs to speed up and political will needs to be intensified."

Paris deal 'on brink'

The Bangkok talks were organised as an emergency negotiating session after little progress was made at previous rounds towards a final rulebook.

Under the timeframe set in Paris, the guidelines for nations must be finalised by the end of 2018.

While delegates made some headway on areas such as new technology and carbon markets, activists said the US — with Western acquiescence — had stonewalled any momentum on the key funding issue.

Harjeet Singh, global lead on climate change for NGO ActionAid, said Sunday the Paris deal was "on the brink".

"Developed countries are going back on their word and refusing to agree clear rules governing climate finance," he told reporters.

"If they remain stuck in their positions and fail to loosen their purses, this treaty may collapse."

'Unimpressed by politicians'

The US under President Donald Trump will leave the Paris process in 2020, but multiple delegates in Bangkok said that it was still actively hindering progress in talks.

One senior negotiator said the US was "poisoning" the atmosphere of trust that led to the Paris accord.

Activists also called out the European Union, Britain and Australia for falling into line with Washington's position.

Alden Meyer, director of strategy and policy at the Union of Concerned Scientists, said the rate of climate change was rapidly outstripping the political effort to curb it.

"As this summer's devastating wave of heat waves, wildfires, floods, and other extreme weather events across the world makes abundantly clear, the Earth's climate system is unimpressed by politicians' rhetoric."

Published in Dawn, September 10th, 2018

https://www.dawn.com/news/1432039/third-world-rounds-on-us-allies-as-un-climate-talks-wrap-up

# PAKISTAN TO GET \$37M FROM GREEN CLIMATE FUND AAMIR SAEED

ISLAMABAD: Pakistan will get \$37 million from Green Climate Fund of over US \$1 billion to monitor its glaciers and install at least 50 observatories and automated weather stations to track the pace of glacial melt in the northern region.

This was informed to the Senate Standing Committee on Climate Change which met here in the Parliament Lodges with Senator Sitara Ayaz in the chair. The committee has sought details on it from the Ministry of Climate Change.

About the recent tree plantation drive across the country, Adviser to Prime Minister on Climate Change Malik Amin Aslam informed the committee members that 2.5 million saplings were planted against the original target of one million saplings.

He informed the committee members that plantation drive can be initiated twice a year, and the government has planted 24 different types of saplings across the country in a daylong drive that was inaugurated by Prime Minister Imran Khan on September 2.

Aslam said that his ministry has adopted the Khyber Pakhtunkhwa model of tree plantation where survival rate of the saplings has been noted above 80 percent against 30 percent survival rate in a normal tree plantation drive.

He said that a total of 58,000 saplings were planted in the federal capital with help of students of different schools and activists.

About juniper forests in Balochistan, he said that local community has been involved to protect the historic forests and a block of around 2,529 hectares of land each has been created for effective surveillance and monitoring.

Secretary Ministry of Climate Change Khizar Hayat Khan informed the committee members that Climate Change Council, Climate Change Fund and Climate Change Authority would be set up under the Climate Change Act, 2017.

He said that the ministry has obtained approval of all these things from Ministry of Law and Establishment Division; and 124 new vacancies have also been sanctioned.

The committee chairperson said that for a green revolution in the country, the federal government must take provincial governments on board before starting any environment friendly drive.

The director general Pakistan Environmental Protection Agency (EPA) informed the committee members that Capital Development Authority (CDA) is granting no-objection certificate to construct commercial buildings in the federal capital without taking the EPA on board.

The committee was informed that no building in Islamabad except Islamabad High Court building had obtained a no-objection certificate from the EPA. The committee has sought details from the CDA of all the buildings built without the EPA's NOC, and directed the authority not to allow any construction in Islamabad without prior approval of the Environmental Protection Agency.

### https://epaper.brecorder.com/2018/09/11/8-page/738263-news.html

### MORE AFGHANS DISPLACED BY DROUGHT THAN CONFLICT UN

GENEVA: A total of 275,000 people have been displaced by drought in western Afghanistan – 52,000 more than the number uprooted by conflict this year – with over two million threatened by the effects of water shortages, the United Nations said.

Reports from the U.N. and aid charities described farmers lacking seeds to sow following crop failures in some areas and livestock dying for the want of anything to eat.

Afghanistan, a country where nearly 20 million people rely on farming, has suffered a 45 per cent fall in agricultural output this year as the drought has bitten, officials at the ministry of agriculture have said.

In a regular update, the U.N. humanitarian office reported that 120,000 people fleeing the drought arrived in Qala-e-Naw city in Badghis province in the week to Sept. 9. A second U.N. report, with data covering August, said more than 100,000 people may have moved to Herat city for the same reason by the end of last month. It estimated 2.2 million Afghans would be affected by the drought this year.

In Qala-e-Naw, where there are an estimated 66,500 drought-displaced people, supplies and humanitarian aid are already insufficient to meet the needs of newly arrived families.

The U.N. cited an assessment by aid charity World Vision International that 99 percent of people in Badghis said their food situation was worse or a lot worse than a year ago. "The assessment also indicates that most farmers lost last season's harvest and nearly all of them lack seeds for new planting season," the U.N. report said, noting reports that about 40 per cent of livestock has been lost in Badghis due to a lack of pasture and fodder.

https://www.thenews.com.pk/print/367426-more-afghans-displaced-by-drought-than-conflict-un

CLIMATE CHANGE A 'THREAT MULTIPLIER' FOR PAKISTAN, SAYS RESEARCHER The Newspaper's Staff Reporter Updated September 13, 2018

KARACHI: Research shows that multiple security risks emerge in places where there is a combination of weak governance unequal development, identity politics and climate change. For

Pakistan, climate change is a 'threat multiplier', remarks a researcher during her presentation at a programme held here on Tuesday.

Titled 'Land Acquisitions and Media Reporting in Pakistan', the programme was organised at the Centre for Excellence in Journalism, Institute of Business Administration (IBA).

It largely focused on the findings of a research project carried out by Dr Nausheen H. Anwar, the director of the Karachi Urban Lab and an associate professor, city and regional planning at the IBA's department of social sciences & liberal arts, and Dr Amiera Sawas, a researcher associated with the Climate Change and Risk Programme at the Stockholm International Peace Research Institute.

The project investigated mega energy projects — Thar Coal (Sindh) and Quaid-i-Azam Solar Park (Bhawalpur-Punjab) from Dec 2016 to July 2018 with an objective to see how these projects were implemented and assess the impact on land access and livelihoods of ordinary citizens.

The research showed that even in the construction of 'green climate-friendly mega projects' such as Quaid-i-Azam Solar Park in Bhawalpur, there was no transparency in environmental assessment and land acquisition. The project led to the violent displacement of poor pastoral communities and deprived them of their livelihoods.

According to Dr Nausheen, the land for these mega projects was acquired through the Land Acquisition Act of 1894, which gives no recognition to communal rights and there was a legal ambiguity concerning acquisition of land for 'public purpose', which enables military, government, private/corporate actors to buy/annex land for profit from ordinary citizens.

"There is an urgent need to reform land acquisition laws, something that's already happening in other parts of South Asia. Why is Pakistan slow in taking up this critical issue?" she asked.

Referring to grievances of Tharis over the coal mining project, she said it had triggered intense anxieties and disagreements about how land was to be measured and valued. These disagreements were between locals, the Sindh government and Engro and were relevant to Thar.

Dr Anwar also spoke about gaps in grievance mechanism and legal recourse and said that no one was willing to take responsibility and address public concerns while the legal system was frustrating and not working for ordinary citizens.

Published in Dawn, September 13th, 201

https://www.dawn.com/news/1432563/climate-change-a-threat-multiplier-for-pakistan-saysresearcher

NEWS COVERAGE PERIOD FROM SEPTEMBER 3TH TO SEPTEMBER 9TH 2018 'SOFT ENGINEERING' MEASURES : GOVT MULLING ALTERNATIVE FLOOD MANAGEMENT PLANS By Shahzad Anwar Published: September 5, 2018 ISLAMABAD: While lower than usual monsoon rains mean that the country has not had to deal with a flood situation so far this year, the incoming government is considering flood management measures but is hoping to steer clear of expensive, hard engineering or structural approaches.

Instead, the Pakistan Tehreek-e-Insaf (PTI) government is considering alternative means for flood management, encouraging an integrated approach through soft engineering or non-structural approaches.

In this regard, the Adviser to the Prime Minister on Climate Change Amin Aslam has directed the concerned authorities to conduct a comparative study on the matter, keeping in view the experiences of China and other countries in controlling floods and to submit recommendations for revisions in the incumbent flood control strategy.

"We should focus on the ecological storage of the flood waters, which entails tremendous opportunities and potential like groundwater recharge, flushing of polluted lakes and ponds and for creation of better habitats for migratory birds, with minimal social cost," he said while chairing a meeting in this regard with officials of the World Wide Fund (WWF) at the Climate Change Ministry on Tuesday.

"We need an integrated and comprehensive approach towards floodplain management to gain maximum benefits and minimise the risk factors with lesser social cost and to use it as a tool for ecosystem-based adaptation of climate change effects," Aslam said.

Earlier, WWF officials gave a detailed presentation regarding workable and cost-effective strategy for rational use of floods and to plug the wastage of precious resources.

It was detailed that Pakistan is a signatory to the Ramsar Convention, a global platform for conservation and use of wetlands resources. Ramsar

In 2012, the Ramsar Advisory Mission (RAM) visited Pakistan and came up with key recommendations to mitigate damages caused by floods, use floodwater for ground-level recharge, restoration of floodplains and riverine ecosystem through 225 wetlands which cover 780, 000 hectares — or around 10 per cent of the country's total land mass.

Of these, 19 wetlands were designated as Ramsar sites for having international significance in view of criteria of the Ramsar Convention.

The mission had recommended that extra flood water could be stored in large and medium wetlands along the Indus River. In the of the mission's recommendations, Rs300 million were allocated under the fourth National Flood Protection Restoration Plain (NFPP) programme of the Rs167 billion required overall.

Unlike China, Pakistan lacks an agency which can deal with wetlands. The draft national forest policy 2015 had recommended that a wetlands management authority be set up.

Published in The Express Tribune, September 5th, 2018. <u>https://tribune.com.pk/story/1795390/1-soft-engineering-measures-govt-mulling-alternative-flood-management-plans/</u>

## CLIMATE ACTION COULD ADD \$26 TRILLION TO WORLD ECONOMY: STUDY RECORDER REPORT SEP 6TH, 2018, PARIS

Ambitious action on climate change could contribute an extra \$26 trillion to the world economy by 2030, international experts said on Wednesday, urging nations and businesses to step up their engagement. The economic benefits offered by a shift to a low-carbon economy have been "grossly" underestimated, according to the Global Commission on the Economy and Climate, a think tank grouping former heads of government and top economic and business leaders.

"Bold action could yield a direct economic gain of \$26 trillion through to 2030 compared with business-as-usual. And this is likely to be a conservative estimate," the commission"s annual report found.

Dynamic action on climate could also generate "over 65 million new low-carbon jobs" by 2030 and avoid over 700,000 premature deaths due to air pollution, it said.

But policymakers were "not taking sufficiently bold action to escape the legacy economic systems," the study found, warning that the window for change was narrow.

"We are at a unique "use it or lose it" moment. Policymakers should take their foot off the brakes and send a clear signal that the new growth is here," said the commission"s co-chair Ngozi Okonjo-Iweala, Nigeria"s former finance minister.

"There are real benefits to be seen in terms of new jobs, economic savings, competitiveness and market opportunities, and improved wellbeing for people worldwide."

Such growth would be driven by the interaction between rapid technological innovation, increased resource productivity and investment in sustainable infrastructure, which is expected to reach \$90 trillion by 2030, it said.

The shift would involve change in five key areas: the development of clean energy systems, improved urban planning, a shift towards more sustainable agriculture, smart water management and decarbonising industry.

"Seizing the economic benefits of low-carbon and resilient growth will only be possible if we act boldly over the next two to three years," it said, flagging it as a "critical window" when many of policy and investment decisions will be taken which will shape the coming decade and beyond.

Urging economic decision-makers to move beyond generic proposals or statements, it called on governments to put a price on carbon of at least \$40-80 by 2020, and to move towards mandatory climate risk disclosure for major investors and companies.

It also pushed for a much greater emphasis on investment in sustainable infrastructure, with betterdesigned cities, buildings, transport, energy and water systems as well as investment in forests and wetlands that purify water and offer valuable flood control.

To this end, development bodies and banks should double their collective investment in infrastructure, aiming to invest at least \$100 billion per year by 2020, it said.

https://fp.brecorder.com/2018/09/20180906404981/

### SINDH GOVT DECLARES DROUGHT IN SIX DISTRICTS

By Our Correspondent. Published: September 6, 2018

HYDERABAD: The Sindh government has notified on Wednesday large parts of six districts, including Tharparkar, as 'calamity-affected areas' due to low rainfall in the outgoing monsoon season. The other districts include Umerkot, Thatta, Dadu, Sanghar and Kambar Shahdadkot.

The drought-hit areas in three of the six districts, Tharparkar, Umerkot and Sanghar, largely consist of desert regions while the other three have mountainous parts. During the three months starting with June, Tharparkar district's Mithi taluka received 58 millimetres of rain, Islamkot 24 mm, Diplo 51 mm, Dahli 120 mm and Nagarparkar 40 mm. The other five districts also received negligible rains.

"The cultivated crops have dried and abnormal conditions have deteriorated the social conditions and the inhabitants of the district have started migration," the notification, issued by the Sindh relief commissioner on Wednesday, observed for Tharparkar. The district's 167 out of 172 revenue dehs have been declared drought-hit.

"The situation in opinion of the government warrants action under the provisions of Sindh Natural Calamities (Prevention and Relief) Act, 1958," the notification reads.

A meeting of the Sindh cabinet on August 21 decided to provide 50 kilogrammes of wheat per month to each family in the calamity-hit areas. Some 323,435 families in Tharparkar and 43,240 families in Umerkot will receive the aid.

The relief commissioner has declared 88 dehs in Johi, K N Shah and Mehar talukas of Dadu, 25 dehs in Umerkot, 22 in Kambar and Warah talukas of Kambar Shahdadkot, seven dehs in Sanghar and Khipro talukas of Sanghar and six dehs in Thatta as calamity affected.

The farmers in Umerkot and Tharparkar require three to four spells of rain after every 15 to 20 days, starting from June and lasting throughout August, to cultivate the rain-fed crops. The locally grown crops include bajar [millet], moong [green gram] and guar [cluster beans] besides some other crops. The rains also turn the desert region green and create grazing grounds for the livestock animals.

In the mountainous regions, which are locally called Kohistan and Kaccho, the farmers grow the aridzone crops like sorghum, guar and apple gourd when it rains. Pastures also develop on the plains for livestock. The rain also charges the underground water which the people use during the dry season.

The Sindh livestock department claims that it has set up 235 relief camps for livestock in the affected districts where nearly 3 million animals have been administered preventive vaccination. Another 40,000 sick animals have been provided free treatment and medicines in the camps.

https://tribune.com.pk/story/1796438/1-sindh-govt-declares-drought-six-districts/

DROUGHT ALERT ISSUED FOR SINDH AND BALOCHISTAN

Kalbe Ali Updated September 08, 2018

ISLAMABAD: Though water position has significantly improved in Islamabad and Rawalpindi and surrounding places because of an ample rainfall, the Met Office on Friday issued a drought alert mainly for Sindh and Balochistan due to the low monsoon rainfall, and advised all stakeholders to be ready to handle the situation.

The Pakistan Meteorological Department (PMD) had predicted that the rainfall in July and August would be below normal over most of the southern parts of the country, and up to 70pc deficit rainfall has been recorded in Sindh.

"Moderate to severe drought is prevailing in most parts of Sindh, including Tharparkar, Mityari, Hyderabad, Jacobabad, Dadu, Karachi, Shahdadkot, Umerkot, Sanghar, Sajawal, Shaheed Benezirabad, Jamshoro and Khairpur." The water deficit districts of Balochistan are: Dalbandin, Gwadar, Jiwani, Panjgur, Nokkundi, Ormara, Quetta and Turbat, it said.

Mild to moderate drought like conditions recorded in a few places of southern Punjab are in the districts of Multan and Mianwali. Similar conditions in Gilgit-Baltistan are in the districts of Bunji, Chilas, Gilgit and Gupis.

"The drought like conditions may get severe in coming days, especially in southern parts of the country, causing water stress not only for the agriculture sector but also for other usage," said the Met Office.

Due to the poor monsoon rain, the Mangla Dam could not be filled to its full capacity.

"Water shortages are most likely to occur during Rabi sowing season, therefore, a judicious use of available water has to be assured." Due to the gradual fall in temperature, snow and glacier melt contribution to the Indus River will also reduce from September onwards.

The Met Office also said the monsoon air-mass was retreating from Pakistan and western disturbances would gradually extend to southern latitude leaving the next 2-3 months as a transition period.

The prediction for the fag end of monsoon is that the weather system will gradually diminish by the middle of September. The amount of rainfall is expected to remain slightly below normal in KP, Balochistan, central and lower Punjab and Sindh.

The mountainous regions of Gilgit-Baltistan and upper KP may receive normal precipitation during the period.

However, the snowfall season is likely to start at the higher elevation by the end of October.

Published in Dawn, September 8th, 2018

https://www.dawn.com/news/1431589/drought-alert-issued-for-sindh-and-balochistan

GLOBAL PROTESTS AS KEY UN CLIMATE TALKS STUMBLE

BANGKOK: Thai fishermen and labourers whose livelihoods are threatened by rising sea levels kicked off an international day of protests in Bangkok Saturday, where key UN talks are attempting to breathe life into the Paris Agreement on climate change.

As global warming races ahead of efforts to contain it, the discussions are deadlocked over a number of contentious issues, with activists demanding immediate action to prevent irreparable damage to the planet.

The "Rise for Climate" protest movement — which has organised events in dozens of countries on Saturday — wants governments to end their reliance on fossil fuels and transition fully into renewable energy.

Beginning in Australia, a tall ship moved through Sydney Harbour in front of the Opera House as activists on board held up protest signs.

Its billowing sails featured banners that read "Rise for Climate; Action with 350" — referring to environment advocacy group 350 which spearheaded the global protest. $\land$ 

Blair Palese, CEO of 350 Australia, said that the country — heavily reliant on coal mining for its economy — has long suffered the effects of climate change. "We are fighting bushfires in winter, suffering a crippling drought, and scientists fear back-to-back bleaching of the Great Barrier Reef this summer," he said.

In the Thai capital, some 200 protesters assembled in front of the UN regional headquarters, where delegates were discussing how to implement measures agreed by world powers under the 2015 Paris Accord on climate change.

The talks aim to create a draft legal framework for limiting global temperature rises that can be presented to ministers and heads of state at a final round of discussions in Poland in December.

The delegates have been meeting since Tuesday, but have made little progress, according to multiple sources close to the negotiations. "The negotiators are not taking any action," Ruchi Tripathi, head of climate justice at charity ActionAid, told AFP. Dozens of labourers and fishermen from the Gulf of Thailand, whose livelihoods are threatened by rising sea levels and coastal erosion caused by climate change, joined Saturday's protest.

Many brought examples of their produce, including crabs and shrimp, and held banners demanding that delegates take action.

"I came here today to ask the government to put coastal erosion on the national agenda," 58-year-old fisherwoman Aree Kongklad told AFP.

She said that the mangrove forests near her coastal home had been destroyed, jeopardising the supply of crabs which are her livelihood. In Manila, more than 800 people, including one dressed as a T-Rex holding a "Go Fossil Free" sign, marched through the streets protesting the country's heavy reliance on coal.—AFP

https://epaper.brecorder.com/2018/09/09/18-page/738034-news.html

### THOUSANDS MARCH IN FRENCH CITIES TO DEMAND ACTION AGAINST CLIMATE CHANGE The News September 9, 2018

PARIS: Tens of thousands of people demonstrated in France's main cities on Saturday to demand action against climate change and to show support for former environment minister Nicolas Hulot who quit in frustration over the government's approach.

Police said as many as 18,500 protesters took the streets in Paris joining a global campaign dubbed "Rise for climate" and a French one launched in support to Hulot who quit on Aug 28. Non-governmental organisations estimated turnout at as many as 50,000. Hulot said he felt lonely at the ministry.

"Who would be efficient on his own? Where are my troops? Who is behind me?," he said in a radio interview in which he announced his resignation.

Thousands also marched in cities including Marseilles, Strasbourg and Toulouse.

The departure of Hulot, who was one of the most popular ministers, was a blow to President Emmanuel Macron, whose popularity has slid in recent weeks after a post-election honeymoon period.

Hulot's inclusion in the cabinet in mid-2017 was seen as a way to sustain the green image France had earned 18 months earlier by brokering the Paris Agreement to combat greenhouse gas emissions.

Macron, however, has watered down Hulot's initiatives on issues such as reducing reliance on nuclear energy and the banning of the weed killer glyphosate.

https://www.thenews.com.pk/print/365789-thousands-march-in-french-cities-to-demand-actionagainst-climate-change

### October 2018

### NEWS COVERAGE PERIOD FROM OCTOBER 22TH TO OCTOBER 28TH 2018 PM APPROVES FORMATION OF CLIMATE CHANGE COMMITTEE

Jamal Shahid October 22, 2018

ISLAMABAD: The prime minister has approved the formation of the Committee on Climate Change, which will act as a forum to discuss environmental concerns and raise awareness.

Led by the prime minister, the committee will include the planning and development, finance, power, national food security and water resources ministers and provincial chief ministers.

"Climate change has been a rather neglected subject in the past. The committee has been formed to give the issue of global warming more importance and to have more stakeholders participate actively in the present government's initiatives, such as Clean Green Pakistan, and the building up of climate change as a concept," Climate Change Additional Secretary Khurram Ali Agha told Dawn. He added that it pointed to the government's intentions and its endeavours to promote a clean environment, clean air, clean schools, and the promotion of green buildings and appliances. The director general of the Ministry of Climate Change, Irfan Tariq, said the committee has the specific role to oversee the status of implementation of the National Climate Change Policy across the

federating units, and to spearhead the mainstreaming of global warming concerns into the decisionmaking of federal and provincial governments.

It will also ensure the creation of an enabling environment for integrated climate compatible and climate resilient development, he said.

Mr Tariq added that the committee would provide the highest level of strategic guidance and a platform to coordinate efforts across the country. The focus in this regard will be on streamlining and facilitating the implementation of national and international obligations.

According to a notification available with Dawn, the committee will periodically monitor the implementation of comprehensive adaptation and mitigation policies and other measures, including the National Adaptation Plan and Nationally Appropriate Mitigation Actions.

It will also provide policy guidance on any other international, regional or national issues that have climate change implications.

The committee is expected to convene twice a year. A similar committee and a council existed until 2008-2009 to assess the overall deterioration of the environment. It was also expected to meet at least twice a year or when required, but went two and sometimes three years without convening, ignoring the degradation of forests, the quality of drinking water and the rise of emissions polluting the air in the country.

Published in Dawn, October 22nd, 2018

https://www.dawn.com/news/1440456/pm-approves-formation-of-climate-change-committee

COUNTRY IN GRIP OF DRY SPELL

Kalbe Ali Updated October 27, 2018

ISLAMABAD: The country including Rawalpindi, Islamabad and the surrounding region is in the grip of dry spell.

The total rainfall in Rawalpindi and Islamabad during October had been less than 1mm whereas the average normal rainfall in this month is 31.7mm.

The Met Office had predicted 10pc rain across the country in October with two or three spells of light to moderate rains.

However, the weather pattern remained unpredictable and there was no sign of any downpour in the remaining days of the month in the region.

Normally, the twin cities received up to four days of rainfall but this year there was only one day of precipitation in Rawalpindi and Islamabad.

The situation was no different in Murree either where the total rainfall up to Oct 26 had been more than 80pc below normal rain, with only 13mm rainfall against the normal pattern of 63.1mm.

The hill station received only one day of rainfall during the month compared to the traditional rainfall pattern of four-and-a-half days.

The rainfall had been below normal in the previous month too, leading to water shortage in many parts of the country.

The Met Office has already issued a warning of a drought-like condition.

Some cities including Bahawalnagar, Mianwali, Sargodha, Dir, Ghari Dupatta, Chitral, Kohat, Karachi and Sibbi received higher than normal precipitation this month.

Meanwhile, in an effort to mitigate the impact of climate change, the National Highways Authority (NHA) has responded to the efforts of the government to plant trees.

A forestation programme has been finalised to plant trees along more than 1,200 kilometres of motorways and highways network under the jurisdiction of NHA.

The programme was inaugurated by Minister of State for Communications Murad Saeed on Friday. Plantation along the highways and motorways would help reduce issues being faced by country due to climatic change.

Published in Dawn, October 27th, 2018

### https://www.dawn.com/news/1441621/country-in-grip-of-dry-spell

### NEWS COVERAGE PERIOD FROM OCTOBER 8TH TO OCTOBER 14TH 2018

### UNWILLING TRANSPORTERS AFFECT WHEAT SUPPLY, CLAIM GOVT OWES RS38RN

As the drought-stricken Tharis continue to migrate, while malnuuition and a lack of Health facilities claims the lives of even more cl1ildren, the provincial ministers claim That an expeditious re lief distribution is under way. On the directives of Pakistan Peoples Party Chairperson Bilawal Bhutto Zardari, provincial minister Imtiaz Shaikh and Adviser to the CM on Law and Information Munaza Wahab visited Tharparkar on Sunday. Talking to the media, Wahab said that so far, 50,000 families, out of 208,000 in the district en listed

To receive food aid, have been given subsidised wheat bags of so kilogrammes. According to him, while the remaining families are being regularly supplied with wheat bags, some 67,905 more will be included in the list of recipients of food aid. Similarly, he added, 32,000 tami. Lies in the neighbouring Umerkot district have been given wheat bags.

Responding to complaints against the wheat distribution mechanism, the adviser asserted that the process is progressing in a transparent manner. "An impression is being given as if the provincial government is doing nothing for the relief of the people," he deplored.

In an oblique reference to Pakistan Tehreek-e-Insaf fed eral government'sw11eat aid to Afghanistan, Wahab said that theimponant thing was ply is the transporters. The provincial government has floated a tender under which the transportation to far off villages and rural towns will start from October 18. However, the transporters claim that the government has not yet paid them around Rs38million for their services during the last drought.

Meanwhile, Wahab said that for a long term solution of the drought situation,

The Thar Development Policy has been formed, adding that a bill in this regard will be passed by the Sindh Assembly. He said that 18 small darns will be built in Tharparkar for water Storage. Earlier, the ministers vis ited the district's civil hospital in Mithi taluka and heard the corn plaints of the patients and their attendants. They directed the deputy commissioner, Asif Jameel, to assign an assistant com missioner to visit the hospital daily and submit a report of his assess ment. The assistant commissioner will also have to ensure that the hospital's administration maintained cleanliness and provided Medicines to the people.

According to Jameel, 269 health centres are operating in the district and 26 special ist doctors are working as well. He claimed that the causes of infant mortality were pre-term births, low birth weight, breathing complications and pneumonia. According to unconfirmed repons, 54children and newborns have died in Tharparkar since September 1.

Published in Dawn, October 14th, 2018

https://www.dawn.com/news/1438890/imran-launches-drive-to-combat-pollution-global-warming NEWS COVERAGE PERIOD FROM OCTOBER 1TH TO OCTOBER 7TH 2018 UN REPORT CONFRONTS NATIONS WITH TOUGH CHOICES ON CLIMATE By AFPhttps://epaper.tribune.com.pk/DisplayDetails.aspx?ENI\_ID=11201810080171&EN\_ID=1120 1810080067&EMID=11201810080034

TRANSFORMATION OF SOCIETY NEEDED TO AVOID CLIMATE CHAOS, WARNS UN AP October 09, 2018

WASHINGTON: Preventing an extra single degree of heat could make a life-or-death difference in the next few decades for multitudes of people and ecosystems on this fast-warming planet, an international panel of scientists reported on Monday. But they provide little hope the world will rise to the challenge.

The Nobel Prize-winning Intergovernmental Panel on Climate Change (IPCC) issued its gloomy report at a meeting in Incheon, South Korea.

In the 728-page document, the UN organisation detailed how earth's weather, health and ecosystems would be in better shape if the world's leaders could somehow limit future human-caused warming to just 0.9 degrees Fahrenheit (a half degree Celsius) from now, instead of the globally agreed-upon goal of 1.8 degrees F (1 degree C).

Among other things: Half as many people would suffer from lack of water.

There would be fewer deaths and illnesses from heat, smog and infectious diseases.

Seas would rise nearly 4 inches (0.1 metres) less.

Half as many animals with back bones and plants would lose the majority of their habitats.

There would be substantially fewer heat waves, downpours and droughts.

The West Antarctic ice sheet might not kick into irreversible melting.

And it just may be enough to save most of the world's coral reefs from dying.

"For some people this is a life-or-death situation without a doubt," said Cornell University climate scientist Natalie Mahowald, a lead author on the report.

Limiting warming to 0.9 degrees from now means the world can keep "a semblance" of the ecosystems we have. Adding another 0.9 degrees on top of that the looser global goal essentially means a different and more challenging earth for people and species, said another of the report's lead authors, Ove Hoegh-Guldberg, director of the Global Change Institute at the University of Queensland, Australia.

But meeting the more ambitious goal of slightly less warming would require immediate, draconian cuts in emissions of heat-trapping gases and dramatic changes in the energy field. While the UN panel says technically that's possible, it saw little chance of the needed adjustments happening.

In 2010, international negotiators adopted a goal of limiting warming to 2 degrees C (3.6 degrees F) since pre-industrial times. It's called the 2-degree goal. In 2015, when the nations of the world agreed to the historic Paris climate agreement, they set dual goals: 2 degrees C and a more demanding target of 1.5 degrees C from pre-industrial times. The 1.5 was at the urging of vulnerable countries that called 2 degrees a death sentence.

The world has already warmed 1 degree C since pre-industrial times, so the talk is really about the difference of another half-degree C or 0.9 degrees F from now.

"There is no definitive way to limit global temperature rise to 1.5 above pre-industrial levels," the UN-requested report said.

More than 90 scientists wrote the report, which is based on more than 6,000 peer reviews.

"Global warming is likely to reach 1.5 degrees C between 2030 and 2052 if it continues to increase at the current rate," the report states.

The pledges nations made in the Paris agreement in 2015 are "clearly insufficient to limit warming to 1.5 in any way," one of the study's lead authors, Joerj Roeglj of the Imperial College in London, said. Meeting the tougher-to-reach goal "could result in around 420 million fewer people being frequently exposed to extreme heat waves, and about 65 million fewer people being exposed to exceptional heat waves," the report said. The deadly heat waves that hit India and Pakistan in 2015 will become practically yearly events if the world reaches the hotter of the two goals, the report said. Yet report authors said they remain optimistic.

Limiting warming to the lower goal is "not impossible but will require unprecedented changes", UN panel chief Hoesung Lee said in a news conference in which scientists repeatedly declined to spell out just how feasible that goal is. They said it is up to governments to decide whether those unprecedented changes are acted upon.

Published in Dawn, October 9th, 2018

https://www.dawn.com/news/1437802/transformation-of-society-needed-to-avoid-climate-chaoswarns-un

IMRAN LAUNCHES DRIVE TO COMBAT POLLUTION, GLOBAL WARMING

### APP October 14, 2018

ISLAMABAD: Prime Minister Imran Khan on Saturday kicked off a countrywide 'Clean and Green Pakistan' drive to tackle the challenges of increasing pollution and global warming.

The prime minister launched the drive at the Islamabad College for Girls by planting a sapling and sweeping the lawns of the college.

Holding a broom and wearing a white shalwar kameez, the prime minister picked garbage and disposed it of before washing hands to teach youngsters proper cleanliness methods.

PM hopes that after plantation of 10 billion trees, Pakistan's weather pattern would change altogether On the first day of the nationwide drive, ceremonies were held across the country to invite the public as well as government officials to clean localities and plant trees.

The prime minister was accompanied by his Adviser on Climate Change Malik Amin Aslam, Special Assistants Iftikhar Durrani and Naeemul Haq and Senator Faisal Javed besides representatives of international organisations.

Later, while addressing the ceremony, he congratulated the students and teachers of the college for holding a successful ceremony to launch the five-year-long drive.

The prime minister recalled the remarkable role played by the students for raising funds for the Shaukat Khanum Hospital across the country and urged them to replicate the same dedication for this drive.

The prime minister said that his government would inherit a Pakistan which would be cleaner than Europe. He expressed concerns over polluted rivers in the country and swelling pollution to an alarming level in Lahore, particularly in winters.

He said according to a study, excessive pollution shortened the life expectancy by average 11 years. "The swelling pollution will mar the future of our upcoming generations," said the premier. He said besides cleanliness, enhancement of the green cover was equally essential as Pakistan was the seventh most affected country by global warming.

He said after successful completion of billion tree tsunami in Khyber Pakhtunkhwa, the government had launched a five-year 10 billion tree tsunami across the country. Mr Khan hoped that after plantation of 10 billion trees, the weather pattern of the country would change altogether.

The prime minister said the cleanliness drive would not remain confined to posh areas but it would also cover the slums and reiterated his government's plan to regularise and provide housing to the slum dwellers.

The drive also comprises construction of landfill sites in all areas to ensure proper disposal of garbage.

Mr Khan also interacted with the representatives of international organisations and shared with them the government's plans to cope with climate change and global warming.

Later, talking to APP, Malik Aslam said the government would change the people's mindset and behaviour to make the initiative a success. He said the drive would be funded by the government as well as the donors. Regarding waste disposal, he said the government was mulling over various models in this regard and would finalise one soon.

He said the waste-to-energy projects were also under considerations and the government would execute the same through public-private partnership as discussion was already in process with a German ambassador.

### Published: September 30, 2018

PARIS, FRANCE: The world's nations will gather at a UN conference in South Korea on Monday to review and approve a 20-page bombshell – distilled from more than 6,000 scientific studies – laying out narrowing options for staving off climate catastrophe.

When the 195 countries who signed off on the Paris Agreement in 2015 requested a report from UNled scientists on the feasibility of capping global warming at 1.5 degrees Celsius, the gesture seemed to many unnecessary.

The treaty, after all, enjoined the world to block the rise in Earth's surface temperature at "well below" 2C compared to preindustrial levels, adding a safety buffer to the two degree threshold long seen as the guardrail for a climate-safe world.

Since then, however, a crescendo of deadly heatwaves, floods, wildfires and superstorms engorged by rising seas – with less than 1C warming so far – has convinced scientists that the danger cursor needed to be reset.

"There is increasing and very robust evidence of truly severe and catastrophic risks even at the lower bounds of these temperature targets," said Peter Frumhoff, director of science and policy at the Union of Concerned Scientists, a Washington-based research and advocacy group.

The promise of "pursuing efforts" to limit warming to 1.5C – added to the Paris treaty at the last minute, in part to assuage poor nations who felt short-changed on other fronts – caught scientists off-guard.

"There wasn't very much literature on 1.5C warming three years ago," said Jim Skea, a professor of at Imperial College London's Centre for Environmental Policy, and a co-chair of the Intergovernmental Panel for Climate Change (IPCC), the UN science body charged with writing the "Special Report" on 1.5C.

Of hundreds of climate models in 2015 projecting a low-carbon future, only two or three aimed for a 1.5C global warming cap.

The 20-page Summary Policy Makers – which will be collectively scrutinised, line-by-line, by hundreds of diplomats through Friday – contains several benchmark findings, according to a draft obtained by AFP.

At current levels of greenhouse gas emissions, for example, the Earth's surface will heat up beyond the 1.5C threshold by 2040, the report concludes with "high confidence".

To have a fighting chance of staying under the 1.5C cap, the global economy must, by 2050, become "carbon neutral", meaning no additional CO2 can be allowed to leach into the atmosphere.

In addition, the report suggests that carbon dioxide emissions from human activity will need to peak in 2020 and curve sharply downward from there.

So far, we are still moving in the wrong direction: after remaining stable for three years – raising hopes the peak had come – emissions rose in 2017 to historic levels.

For many scientists, these targets are technically feasible but politically or socially unrealistic, along with the broader 1.5C goal.

"The feasibility is probably going to remain an open question, even after the report comes out," said Michael Oppenheimer, a professor of geosciences and international affairs at Princeton University. A main focus of the underlying, 400-page report – written by a team of 86 authors, supported by another 150 scientists – is the difference a half-degree Celsius can make in terms of impacts.

"When we're talking about 1.5C it's not just to protect a few dozen small island nations," said Henri Waisman, a senior researcher at the Institute for Sustainable Development and International Relations, and a coordinating author of the report.

"It's to avoid dramatic impacts that become exponentially more dramatic when we go from 1.5C to 2C."

What used to be once-a-century heatwaves in southern and central Europe, for example, are projected to occur four out of 10 summers in a 1.5C world, and six out of ten in a 2C world.

Many tropical fisheries are likely to collapse somewhere between the 1.5C and 2C benchmark, as fish seek cooler waters; staple food crops will decline in yield and nutrition an extra 10 to 15 percent;

coral reefs that may have a chance of surviving if air temperatures remain below 1.5C will very likely perish with an additional half-degree of warming.

Most worrying of all, perhaps, are temperature "tipping points" that could push methane-laden permafrost and the icesheets of Greenland and West Antarctica – which hold enough frozen water to lift global oceans by nearly 40 feet – beyond the point of no return.

Some experts, however, worry that focusing on the contrast between a 1.5C and 2C world obscures the fact we are currently on a trajectory that will crash through both these thresholds.

"I don't think 2C is safe, and I would never want to argue it," said Frumhoff. "By many measures, 1.5C is not enough."

"But while we might call 2C an upper bound, let's not pretend that we're on a 2C path – we are way above that," he told AFP.

Even taking into account voluntary national pledges to cut greenhouse gas emissions, submitted in annex to the Paris treaty, the Earth is on track to heat up by an unliveable 3.5C or more by century's end.

"If we want to save ourselves from the disasters that are looming, we only have unrealistic options left," said Kaisa Kosonen, Greenpeace IPPC campaign lead. "We have to try to make the impossible possible."

https://tribune.com.pk/story/1814976/3-un-report-confronts-nations-tough-choices-climate/

SAUDI ARABIA BACKS DOWN FROM BLOCKING UN CLIMATE REPORT

The News October 7, 2018

INCHEON, South Korea: Oil giant Saudi Arabia backed down at the last minute on Saturday from obstructing the adoption of a major report by the UN's climate science panel, sources told AFP. With the threat removed, the meeting of the 195-nation panel in Incheon, South Korea — deep into overtime — swiftly approved the report on how to cap global warming at 1.5 degrees Celsius, and what a 1.5C world might look like.

The Saudis had objected to the inclusion of a passage emphasising the need for sharp reductions in the use of fossil fuels — Saudi Arabia's main export.

"Saudi Arabia withdrew its blockage of the passage when their objection was about to be formally recorded in a footnote," said a participant in the meeting.

"It was a game of chicken, and the Saudi's blinked first."

The 500-page report — based on 6,000 peer reviewed studies — under review at the meeting of the Intergovernmental Panel on Climate Change IPCC is a collaborative effort of the world's top climate scientists. Under the IPCC's consensus rules, all countries must sign off on the language of a 20-page Summary for Policymakers, designed to provide leaders with objective, science-based information. After six hours of fruitless negotiations on Saturday morning, the chair of the IPPC meeting adjourned the plenary around midday, warning: "The report hangs in the balance." A break-out group — or "huddle", in UN jargon — made no progress in resolving the deadlock.

https://www.thenews.com.pk/print/377574-saudi-arabia-backs-down-from-blocking-un-climate-report

## November 2018

### NEWS COVERAGE PERIOD FROM NOVEMBER 19TH TO NOVEMBER 25TH 2018 CLIMATE CHANGE AND THE SAVAGE HUMAN FUTURE

### BY NATHANIEL RICH

Homo Sapiens was the first species to alter the environment that sustained us — to the point that it might not sustain us anymore.

LONG AFTER THE last print copy of the King James Bible has disintegrated and the Venus de Milo has gone to powder, the glory of our civilization will survive in misshapen, neon-flecked rocks called plastiglomerate: compounds of sand, shells and molten plastic, forged when discarded wrappers and bottle caps burn in beach campfires. Additional clues about the way we lived will be found in the ubiquity of cesium-137, the synthetic isotope produced by every nuclear detonation, and in the glacial ice (should any glaciers remain) that will register a spike of atmospheric carbon dioxide beginning in the Industrial Revolution. Future anthropologists might not be able to learn everything there is to know about our culture from these geological markers, but they will be a good start.

In the beginning, human beings tended to view nature as a mortal enemy — with wariness, dread and aggression. The closer we were to the other animals, the more threatened we were by their proximity — geographical and behavioral. "Wilderness": from the Old English -ness + wild + deor, "the place of wild beasts." In the Old and New Testaments, "the wilderness" is a godless, hostile domain, the anti-Eden; Samuel Johnson defined it as "a tract of solitude and savageness"; William Bradford, a founder of Plymouth Colony, reacted to the untrammeled New World with horror, calling it "hideous & desolate … full of wild beasts & wild men."

These examples come from Roderick Nash's totemic history, "Wilderness and the American Mind" (1967). Nash describes how, in the 19th century, the terms of humanity's relationship with nature flipped. It was no longer possible to take seriously the premise that nature was a threat to civilization; civilization, it was understood, was a threat to nature. This observation, developed by Alexander von Humboldt and successors like George Perkins Marsh (who worried that "climatic excess" might lead to the extinction of the human species) and John Muir (who sought to protect America's natural cathedrals from human defilement), helped inspire the birth of the American environmental movement. It took decades for a new conception of wilderness — sacred, virginal, innocent of human influence — to take hold, and it may take decades more before it is widely understood to be a myth.

What we still, in a flourish of misplaced nostalgia, call "the natural world" is gone, if ever it existed. As the environmental historian William Cronon noted, "People have been manipulating the natural world on various scales for as long as we have a record of their passing." Almost no rock, leaf or cubic foot of air on Earth has escaped our clumsy signature. In the future we will reconfigure, with ever-greater force and precision, our fauna, flora and genome in ways that today would seem uncanny. But the results will be no more uncanny than our carpeting of the American Southwest with lush lawns transplanted from the shores of the Mediterranean, our breast-augmented chickens or the mass consumption of the engineered strain of a wild Mexican grass, teosinte, that we call corn. If our inventions seem eerie, it is only because we see in them a reflection of our own desires.

Each new superstorm and superfire forces a reconsideration of the unfashionable, long-discredited view that human beings are, in Descartes' phrase, "the lords and possessors of nature." But it is now undeniable that, for better or worse, that is what we have become. Neglect is no less a strategy than cultivation. When we speak about the conservation of nature, we are really talking about a desire to conserve our own human identity: the parts of us that are beautiful and free and holy, those that we want to carry with us into the future. If we don't, all we'll have left are holograms of our worst instincts, automatons acting out our nightmares and a slow drift into an inhuman hellscape of biblical dimensions — a tract of solitude and savageness. In the 12th century, it was believed that Stonehenge had been erected by a lost race of giants, using the powers of wizardry; perhaps future generations, discovering our bright plastic rocks, will reach the same conclusion.

https://www.nytimes.com/interactive/2018/11/16/magazine/tech-design-nature.html

## GREENHOUSE GAS LEVELS IN ATMOSPHERE HIT NEW HIGH: UNITED NATIONS AFP Updated November 22, 2018

The levels of greenhouse gases in the atmosphere, the main driver of climate change, have hit a new record high, the United Nations said on Thursday, warning that the time to act was running out.

Ahead of the COP 24 climate summit in Poland next month, top UN officials are again trying to raise the pressure on governments to meet the pledge of limiting warming to the less than two degrees Celsius, enshrined in the 2015 Paris accord.

"Without rapid cuts in CO2 and other greenhouse gases, climate change will have increasingly destructive and irreversible impacts on life on Earth," the head of the World Meteorological Organization (WMO) Petteri Taalas said in a statement. "The window of opportunity for action is almost closed."

The Greenhouse Gas Bulletin, the UN weather agency's annual flagship report, tracks the content of dangerous gases in the atmosphere since 1750.

This year's report, which covers data for 2017, puts the concentration of CO2 in the atmosphere at 405.5 parts per million (ppm). That is up from 403.3 ppm in 2016 and 400.1 ppm in 2015.

"The last time the Earth experienced a comparable concentration of CO2 was 3-5 million years ago, when the temperature was 2-3C warmer," Taalas said.

Researchers have reliable estimates of C02 concentrations rates going back 800,000 years using air bubbles preserved in ice in Greenland and Antarctica.

But by studying fossilised material the WMO also has rough CO2 estimates going back up to five million years.

In addition to CO2, the UN agency also highlighted rising levels of methane, nitrous oxide and another powerful ozone depleting gas known as CFC-11.

'No magic wand'

Emissions are the main factor that determines the amount of greenhouse gas levels, but concentration rates are a measure of what remains after a series of complex interactions between atmosphere, biosphere, lithosphere, cryosphere and the oceans.

Roughly 25 per cent of all emissions are currently absorbed by the oceans and biosphere — a term that accounts for all ecosystems on Earth.

The UN's Intergovernmental Panel on Climate Change (IPCC) has said that in order to keep warming below 1.5 degrees Celsius, net CO2 emissions must be at net zero, meaning the amount being pumped into the atmosphere must equal the amount being removed, either though natural absorbtion or technological innovation.

WMO's deputy chief, Elena Manaenkova, noted that CO2 remains in the atmosphere and oceans for hundreds of years.

"There is currently no magic wand to remove all the excess CO2 from the atmosphere," she said.

"Every fraction of a degree of global warming matters, and so does every part per million of greenhouse gases," she said.

According to the UN, 17 of the 18 hottest years on record have occurred since 2001, while the cost of climate-related disasters in 2017 topped \$500 billion.

https://www.dawn.com/news/1447018/greenhouse-gas-levels-in-atmosphere-hit-new-high-united-nations

### CLIMATE CHANGE COULD COST US 'HUNDREDS OF BILLIONS' A YEAR: STUDY RECORDER REPORT | NOV 25TH, 2018 | TAMPA

Climate change is already hurting the global economy and will cost the US hundreds of billions of dollars annually by century's end unless drastic action is taken to cut carbon emissions, a major US government report warned on Friday.

"With continued growth in emissions at historic rates, annual losses in some economic sectors are projected to reach hundreds of billions of dollars by the end of the century – more than the current gross domestic product (GDP) of many US states," the latest edition of the National Climate Assessment said.

"Without substantial and sustained global mitigation and regional adaptation efforts, climate change is expected to cause growing losses to American infrastructure and property and impede the rate of economic growth over this century," it added.

The effects will spill over into global trade, affecting import and export prices and US businesses with overseas operations and supply chains, it added.

Some of these impacts are already being felt in the United States, the report said, and recent extreme weather and climate-related events can now be attributed "with increasingly higher confidence to human-caused warming."

Compiled by more than 300 scientists, the Fourth National Climate Assessment Volume II is a congressionally mandated report that spans more than 1,000 pages.

US President Donald Trump dismissed last year's report, and just this week appeared to confuse weather with climate when he tweeted: "Brutal and Extended Cold Blast could shatter ALL RECORDS – Whatever happened to Global Warming?"

Trump also yanked the United States out of the landmark 2015 Paris climate accord, signed by more than 190 nations to limit carbon emissions.

David Easterling, director of the technical support unit at the National Oceanic and Atmospheric Administration's National Centers for Environmental Information, said there had been "no external interference" in the report.

Scientists found "clear and compelling evidence that global average temperature is much higher and is rising more rapidly than anything modern civilization has experienced," he told reporters.

"And this warming trend can only be explained by human activities, especially emissions of greenhouse gases into the atmosphere."

Reporters questioned the timing of this year's release, which came on the Friday after Thanksgiving, a national holiday when many people are traveling and shopping.

A NOAA spokeswoman said the report was "out earlier than expected" and was released ahead of two major scientific meetings on climate change in the coming weeks.

Meanwhile, the report warned that even if major cuts are made to harmful greenhouse gases (GHGs) like carbon dioxide and methane, the damage will linger for years.

"Because several GHGs, in particular carbon dioxide, reside in the atmosphere for decades or longer, many climate-influenced effects are projected to continue changing through 2050, even if GHG emissions were to stop immediately," said the report.

Sea levels are continuing to rise, and extreme events like heavy rain and floods continue to increase worldwide, which will "cascade across economic sectors," Easterling said, warning of "substantial net damage to the US economy."

The report said it was "very likely that some physical and ecological impacts will be irreversible for thousands of years, while others will be permanent."

The publication is designed to inform policy makers but does not make any specific recommendations on actions to take.

"In light of the report's findings, it's critical that federal, state and local governments take aggressive action to protect US residents by both reigning in emissions and helping communities adapt to the climate impacts that are now inevitable," said Brenda Ekwurzel, the director of climate science at the Union of Concerned Scientists and one of the study's authors. Rush Holt, chief executive officer of the American Association for the Advancement of Science, said the economic warning shows that "policymakers can no longer afford to dismiss or ignore the overwhelming scientific evidence of climate change."

https://fp.brecorder.com/2018/11/20181125426257/

NEWS COVERAGE PERIOD FROM NOVEMBER 5TH TO NOVEMBER 11TH 2018 BALOCHISTAN PA ASKS CENTRE TO DECLARE DROUGHT-HIT AREAS AS CALAMITY AFFECTED Saleem Shahid Updated November 06, 2018 QUETTA: The Balochistan Assembly through a unanimously adopted resolution on Monday demanded of the federal government to declare all drought-stricken areas in the province as calamity affected. It also urged the central government to immediately announce a relief package for farmers in the province who were badly affected by the worsening situation.

The resolution was moved by Sanaullah Baloch of Balochistan National Party-Mengal soon after the provincial assembly's session, which was presided over by Deputy Speaker Sardar Babar Khan Musakhel, began.

Speaking on the resolution, Mr Baloch said that according to international institutions Balochistan had been facing drought-like situation for long. In view of the worsening situation the province should be declare calamity affected and the federal government should announce a relief package for farmers of the province.

Urges federal government to announce relief package for farmers

He said because of the devastating state of the Balochistan's economy the federal government should also announce other relief packages for the province, such as relaxation in the payment of electricity dues and agriculture loans for farmers.

He also called for reduction in the loadshedding hours, saying that at least 18-hour a day power should be provided to the province's agriculture sector.

The resolution wanted the federal government to appeal international donor agencies to provide financial assistance and 300 solar tube wells to Balochistan

Provincial Minister for Information and High Education Mir Zahoor Buledi said that the water crisis in the country, particularly in Balochistan, was now at an alarming level. He said the provincial government was taking some measures on an emergency basis to improve the situation.

Nasrullah Khan Zerey of the Pakhtunkhwa Milli Awami Party said that environmental experts had urged the provincial government to build small dams in Quetta. The previous government had proposed 200 small dams in hills in adjacent areas of the city, he added.

Published in Dawn, November 6th, 2018

https://www.dawn.com/news/1443858/balochistan-pa-asks-centre-to-declare-drought-hit-areas-ascalamity-affected

'CPEC, CLIMATE CHANGE THREATEN GB'S NATURAL RESOURCES' The Newspaper's Correspondent Updated November 06, 2018

GILGIT: Speakers at a consultative workshop here on Monday cautioned that owing to climate change and mega projects being launched under the CPEC the natural resources of Gilgit-Baltistan were under threat.

They urged the local community to support the institutions for better management of natural resources.

The event titled 'customary laws and right use of natural resources in GB' was organised by World Wide Fund for Natural Pakistan (WWF) in collaboration with Heinrich Boll Stiftung (HBS), a German entity working on managing natural resources.

GB forest conservator Khadim Abbas, wildlife and parks conservator Yaqub Ali Khan, a representative of GB Environmental Protection Agency, experts and conservation community members were in attendance.

The speakers said customary laws and signatory rules needed to incorporate conservation of endangered species and forests in the area.

They said that WWF and HBS had conducted a research to understand status of protection of national parks under GB Wildlife Act, 1975 and to highlight natural resource management customary laws practiced by local communities.

The findings of the research suggested that communities faithfully adhered to centuries-old practices, which had resulted in a staggering preservation of flora and fauna, maintaining biodiversity as well as saving endangered species found in the region, they explained.

The speakers said campaigns needed to be launched to create awareness among locals about importance of management of natural resources.

On the occasion, Danyor conservation committee chairman Haji Shifa said trees were being cut in the name of fallen trees without any check. Due to massive deforestation in GB, glaciers are shrinking and habitat of wildlife is decreasing, he warned.

Akhtar Riaz, a member of conservation committee Hainzal, said GB police officials were involved in illegal hunting of rare species.

Dr Mahjabeen, an adviser of HBS, expressed fear that if local communities did not play role in sustainable management of their natural resources, private sector would penetrate in the area and start plunder their rights.

She said medicinal, herbal and mineral resources needed to be protected from exploiters. WWF GB head Saeed Abbas called for putting in place a mechanism to integrate customary laws with signatory rules.

Published in Dawn, November 6th, 2018

### https://www.dawn.com/news/1443944/cpec-climate-change-threaten-gbs-natural-resources

## OZONE LAYER RECOVERING, BUT CLIMATE CHANGE IS FOR REAL: UN Masood Haider Updated November 06, 2018

NEW YORK: The International Panel on Climate Change (IPCC) has said that more powerful hurricanes, worsening drought, melting glaciers and rising sea levels are affecting populations around the world at an ever faster pace. While nations have now stepped up to reduce greenhouse gas
emissions under the Paris Accord, the new UN requested report makes it abundantly clear that we must do more, the IPCC said on Monday.

The UN report also said that ozone in parts of the stratosphere has recovered at a rate of 1-3 per cent since 2000 and, at projected rates, Northern Hemisphere and mid-latitude ozone is scheduled to heal completely by the 2030s, followed by the Southern Hemisphere in the 2050s and polar regions by 2060.

This is due to internationally agreed actions carried out under the historic Montreal Protocol, which came into being over 30 years ago in response to the revelation that chlorofluorocarbons (CFCs) and other ozone-depleting substances — used in aerosols, cooling and refrigeration systems, and many other items — were tearing a hole in the ozone layer and allowing dangerous ultraviolet radiation to flood through.

The IPCC report, drafted in response to a request by the United Nations Framework Convention on Climate Change (UNFCCC), evaluates the differences between a 1.5°C and a 2°C future and whether different emissions trajectories can achieve a future with less warming. It makes clear that we need a global commitment to move away from fossil fuels and also focus on the removal of carbon dioxide that is already in the atmosphere (not just reduction of future emissions) to prevent irreversible effects that would have devastating consequences across the globe. Such an approach is especially vital to the ocean, where achieving a 2°C future (the official goal of the Paris Accord) would still result in destructive changes to the ocean and coastal areas around the world. We can and must do better.

Next year, the protocol is set to be strengthened with the ratification of the Kigali Agreement which calls for the future use of powerful climate-warming gases in refrigerators, air conditioners and related products to be slashed.

"The Montreal Protocol is one of the most successful multilateral agreements in history for a reason," said Erik Solheim, head of UN Environment. "The careful mix of authoritative science and collaborative action that has defined the protocol for more than 30 years and was set to heal our ozone layer is precisely why the Kigali Amendment holds such promise for climate action in future."

The findings provide a ray of hope, less than a month after the IPCC, or Intergovernmental Panel on Climate Change (IPCC), released a watershed repor which described the devastating effects of a 2°C temperature rise compared to pre-industrial levels, described by UN chief António Guterres as an "ear-splitting wake-up call."

The writers of the report found that, if the Kigali Amendment is fully implemented, the world can avoid up to 0.4 per cent of global warming this century, meaning that it will play a major role in keeping the global temperature rise below 2°C.

The IPCC said to date, human activities have caused approximately 1°C of global warming since the Industrial Revolution; this warming will likely reach 1.5°C between 2030 and 2052 if current activities continue. While these differences seem small, the consequences are not.

Scientists now predict large differences between current conditions and those likely to occur between 1.5°C and 2°C. By 2100, average global sea level rise would be around 0.1 metre lower with global warming of 1.5°C compared to 2°C.

Published in Dawn, November 6th, 2018

#### https://www.dawn.com/news/1443829/ozone-layer-recovering-but-climate-change-is-for-real-un

## DROUGHT MAY INTENSIFY IN SINDH, B'STAN RECORDER REPORT

KARACHI: Drought is expected to intensify in Sindh and southwestern Balochistan and up to three moderate spells of rain in northern Pakistan is also forecast for current month by the Met Office.

In an outlook for November 2018, the Met said that the Sindh and Southwestern Balochistan are unlikely to receive any rainy spells in the forecast month, but up to three spells of a light to moderate scale with snowfall may strike over the hills in the half northern parts of the country.

There is a probability between 60 percent and 70 percent of an above normal rainfall over northern parts and nearly normal over southern parts of the country. It is also expected that temperature to continue above normal over central and southern parts of Pakistan.

Similarly, fog and smog are likely to prevail over the plains of Punjab, Khyber Pakhtunkhwa and Upper Sindh. "The global and regional meteorological indicators such as Indian Ocean Dipole (IOD) and North Atlantic Oscillation (NAO) are likely to oscillate around its neutral position. El Nino Southern Oscillation (ENSO) is predicted to remain in positive phase," the Met said.

In the next 24 hours: Mainly cold and dry weather is expected in the most parts of the country with partly cloudy conditions. Isolated light rain-thunderstorm and light snowfall over the hills is expected in Malakand Division and Gilgit-Baltistan.

Weather in the past 24 hours remained cold and dry in the most parts of the country. Temperature remained below minus-2 degree Celsius in Skardu and Ziarat and minus-1 in Gupis. "Continental air is prevailing over the most parts of the country. A fresh westerly wave is present over upper parts of the country and likely to persist till Wednesday," it said.

#### https://epaper.brecorder.com/m/2018/11/11/3-page/748922-news.html

### NEWS COVERAGE PERIOD FROM OCTOBER 29TH TO NOVEMBER 4TH 2018 CHINA, FRANCE LAUNCH SATELLITE TO STUDY CLIMATE CHANGE AFP October 29, 2018

A Long March-2C rocket lifts off from the Jiuquan Satellite Launch Centre in Jiuquan in northwest China's Gansu province on October 29. — AFP

China sent its first ever satellite built in partnership with another country into space on Monday, a device tasked with helping scientists better predict dangerous cyclones and climate change by monitoring ocean surface winds and waves.

A Long March-2C carrier rocket blasted off from the Jiuquan Satellite Launch Centre in northwest China's Gobi Desert at 0043 GMT, according to China's State Administration of Science, Technology and Industry for National Defence.

The 650-kilogram (1,430 pound) China-France Oceanography Satellite (CFOSAT) is the first satellite jointly built by China and France and will allow climate scientists to better understand interactions between oceans and the atmosphere.

It's fitted with two radars: the French-made SWIM spectrometer, which will measure the direction and the wavelength of waves, and China's SCAT, a scatterometer that will analyse the force and direction of winds.

The data will be collected and analysed in both countries.

The instruments will allow scientists to collect information about winds and waves of the same location simultaneously for the first time, Wang Lili, chief designer of the satellite with the China Academy of Space Technology, said, according to the official Xinhua news agency.

"It will help increase the observation and prediction of catastrophic sea states, such as huge waves and tropical storms, and provide security support for offshore operations and engineering, ship navigation, fisheries, and coastal management," said Zhao Jian, a senior official at the China National Space Administration.

The rocket successfully put the satellite into orbit 520 kilometres (323 miles) above the Earth.

'Historic'

Chinese leader Xi Jinping and French President Emmanuel Macron exchanged congratulations in a phone call, according to Xinhua.

"It's historic. It's the first satellite China has made through international cooperation," Jean-Yves Le Gall, president of France's National Centre for Space Studies, told AFP.

"This satellite will help make considerable progress in understanding climate change."

The project began in 2007.

The two countries are also working together on the Space Variable Objects Monitor (SVOM) mission, which will launch a satellite in 2021 to detect and study gamma-ray bursts.

China and France already cooperate in space, with a French cardiovascular device aboard China's Tiangong-2 space lab to monitor a crew's hearts.

The lab is expected to de-orbit after July 2019.

Le Gall said France is also working with China on cooperating in exploration missions to the moon and Mars.

China plans to have a crewed space station by 2022 and send a manned mission to the moon in the future.

"The (CFOSAT) launch shows that the international community is more and more willing to consider China as a full partner," said Jacqueline Myrrhe, a space expert at GoTaikonauts.com, which specialises in China's space programme.

"It will also allow (France) to have launch opportunities and privileged access to space cooperation with China. And who knows, maybe to put a French astronaut in the future Chinese space station," Myrrhe said.

Some three hours after the joint Chinese French launch, Japan's space agency sent a rocket carrying a satellite that will monitor greenhouse gases.

The satellite is officially named GOSAT-2, short for "greenhouse gases observing satellite-2", and is intended to provide data that will help Japan create and publish "emission inventories" of the CO2 output of various countries, as outlined in the Paris climate accord.

https://www.dawn.com/news/1442155/china-france-launch-satellite-to-study-climate-change

## 'CLIMATE CHANGES EMERGE BIGGEST CHALLENGE THAN TERRORISM' RECORDER REPORT

FAISALABAD: State Minister for Climate Change Zartaj Gul Wazir on Monday said climate changes had emerged the biggest challenge than terrorism as it is playing havoc with the lives of billions innocent people.

She was chairing a one-day symposium on battling climate change and water crisis arranged by the Institute of Soil and Environmental Sciences, University of Agriculture Faisalabad at new Senate Hall.

She said at the time of country's inception, per capita water availability was more than 5000 cubic meter which has now declined to less than 1000 cubic meter. She warned of the worst water crisis by 2025 if tangible steps were not taken. She lamented that last major water reservoir was built in 60s. As per international standards, a country must have the water storage of 1000 days whereas in Pakistan, it was presenting a grim picture of only 30 days storage. She said now, new dams were being set up that will help addressing the issue of water storage.

She said the new government was taking all possible measures to address the issue at the national level. Cleanliness is the half iman. She said the government had initiated Clean Green Pakistan project under which ten billion trees will be planted for making environment clean and beautified. She quoted the example of Greek which had produced many intellectuals, and philosophers, the country was full of greenery that sharpened their views and mental health also.

She told the participants that the government banned brick kiln for a specific time to fight the challenges of smog which hit worst last year. A strict action was being taken against the factories emitting pollution. She said that they had launched crackdown on the wastage of the hospital as the wastage causes serious health hazard.

She viewed that on the other hand, Pakistan was among the list of the most water wastage courtiers. She also grilled India over the violation of the Indus Water Treaty, playing havoc with the lives of Pakistanis. She added that the past governments could not plead the issue at the international level.

She said that the heavy populous countries were facing the worst climate change effects. Every person has to plant a tree to save the world from the devastation of climate changes. She viewed that mafias involved in deforestation would be dealt with iron hands.

She said that in Dera Ghazi Khan, normally in the summer temperature goes to over to 47 centigrade whereas she felt that it was result of inefficient attitude of men of power in the previous regimes as no intention was put on forestation whereas mafias cut down countless trees in the name of development projects.

She lauded the role of UAF for scientifically working on the issue with the help of dynamic scientists and hoped that they will help addressing the issues of climate change and water scarcity at national and international level.

She said Pakistan China Economic Corridor will work as a road towards development and prosperity.

Earlier, she called on UAF vice chancellor Dr Zafar Iqbal Randhawa at his chamber. Dr Zafar Iqbal said trees are essential part of healthy environment for a better life. He also lauded the vision and initiatives of the government of the green country with massive plantation. He said that we have to turn the areas especially at the bank of canal lush green.

He said that one of the major socioeconomic challenges was the mismanagement of water resources. He said there is no life without water and it's a key for irrigation, food security, economic growth, energy production, industries and human health. He said heavy water was being pumped out from tube-wells that are the responsible for lowering down the groundwater level and worsen water health. Perveen Sarwer, wife of Punjab Governor also attended the meeting.

Director Institute of Soil and Environmental Sciences Dr Javed Akhtar said the quality of groundwater was deteriorating with each passing month due to heavy pumping, and industrial effluent, causing outbreak of various diseases in the country.

Chairperson Climate Change Centre for Advanced Studies in Agriculture and Food Security Dr Ashfaq Chatha said the climate changes were also responsible for new diseases and reduction in agriculture sector. He said that we have to take the tangible measures and praised the government for a valuable contribution in this regard. Dr Irshad Bibi gave the briefing about the water and climate changes to the audience.

https://epaper.brecorder.com/2018/10/30/5-page/746735-news.html

### CHINA, FRANCE LAUNCH SATELLITE TO STUDY CLIMATE CHANGE

BEIJING: China sent its first ever satellite built in partnership with another country into space on Monday, a device tasked with helping scientists better predict dangerous cyclones and climate change by monitoring ocean surface winds and waves.

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https://www.dawn.com/news/1442333/china-france-launch-satellite-to-study-climate-change

### OCEANS/FISHERMEN LIVING: 'JELLYFISH BLOOM DYNAMICS CAN HELP UNDERSTAND IMPACT OF CLIMATE CHANGE' RECORDER REPORT NOV 3RD, 2018 KARACHI

On the eve of International Jellyfish Day, experts said that the scientific dynamics of jellyfish bloom can help understand the impacts of climate change on the marine environment and livelihoods of coastal communities. Nations across the world mark International Jellyfish Day on Nov 3 every year, signifying the spectacular marine species. The WWF-Pakistan believes the scientific dynamics of jellyfish bloom can be helpful in finding the impacts of global weather change on oceans and resultantly on fishermen living.

An important component of the pelagic ecosystem, jellyfish blooms have been reported to indicate the introduction of species in marine waters, over-fishing, eutrophication and most importantly, climate change. It is unclear whether the increase in biomass of gelatinous jellyfishes is caused by anthropogenic changes or is a manifestation of natural ecosystem variability.

Jellyfish are mainly free-swimming marine animals with umbrella-shaped bells and trailing tentacles which may have stings. When conditions are favourable, jellyfish can form vast swarms or blooms. The name jellyfish is given to the certain gelatinous members of the phylum Cnidaria.

According to Muhammad Moazzam Khan, Technical Adviser (Marine Fisheries), WWF-Pakistan, eutrophication, overfishing, habitat modification and climate change are all possible contributory factors that facilitate proliferation of jellyfish blooms. To determine the causes of bloom formation, WWF-Pakistan is closely observing their dynamics. He said jellyfish fisheries play an important role in the livelihood of fisher communities along Pakistan's coast.

By considering its bloom status, location and production, the coastal communities in Miani Hor manage this fishery in an organized way and WWF-Pakistan works closely with these communities to ensure sustainable management of jellyfish and improve livelihood options. "We are also trying to develop a similar management regime for jellyfish fisheries in Sindh,' he added.

It is believed that jellyfish blooms affect commercial fisheries by choking and damaging fishing gear, and sometimes clog the cooling systems of power and desalination plants, which draw water from the sea. A major bloom of jellyfish Crambionella orsini was observed in the Arabian Sea, including

Yemen, Oman, Iran and Pakistan in May 2002 and August 2003. In addition, a massive jellyfish bloom occurred along the coast of Pakistan in December 2002.

The WWF-Pakistan reported a major mushroom jellyfish (Rhopilema hispidium) bloom from the offshore waters near Swatch Area in December 2016. It is reported that a large number of Crambionella orsini have resulted in reduction of catch of commercial fishing operations along the Pakistan coast. It also caused massive clogging of nets and interrupted the operation of seawater cooling systems of power plants and ships. A number of smaller blooms of jellyfish frequently occur in Pakistan but these do not pose any threat to fishing and other such operations.

Jellyfish are eaten as a delicacy in some Asian countries. These are also commercially harvested from Pakistani waters for export. It is reported that about 2,500 m. tons of dried jellyfish, mainly Rhopilema hispidum and Catostylus perezi is exported annually. The highest jellyfish export took place during 2005 to 2007 when about 4,000m tons of jellyfish products were annually sent to China and Vietnam. Jellyfish fisheries in Pakistan provide an extra source of income to small scale fisheries. It is estimated that more than 10,000 people are engaged in jellyfish fisheries in the country.

https://fp.brecorder.com/2018/11/20181103420919/

# December 2018

### NEWS COVERAGE PERIOD FROM DECEMBER 24TH TO DECEMBER 30TH 2018 CLIMATE CHANGE RECORDER REPORT | DEC 25TH, 2018 | EDITORIAL

Climate change talks in Poland ended in an agreement to implement the commitments on cutting emissions made in the 2015 Paris agreement; but, unfortunately, failed to deal with the need to scale up those commitments in line with scientific advice, based on actual verifiable data as well as how to generate the finances required to deal with the looming crisis given the developing countries' lack of finances to meet their commitments.

At present carbon credit, a concept that originated with the Kyoto Agreement (Protocol) 1997 is being used as a market mechanism awarded to countries/companies to incentivize industrial or commercial processes designed to reduce emissions or growth in concentrations of greenhouse gases. More specifically credits are defined as a tradable certificates/permits representing the right to emit one tonne of carbon dioxide or the mass of another greenhouse gas with a carbon dioxide equivalent to one tonne of carbon dioxide. By the same token, carbon penalties are imposed on those countries/companies that fail to meet the targets set. Needless to add, carbon credits awarded are funded by carbon penalties.

Three countries did not sign the Kyoto Protocol notably the United States, Afghanistan and Sudan while 192 countries signed and ratified the Protocol. Canada later repudiated the Kyoto Protocol with her the then Environment Minister Kent arguing that "to meet the targets under Kyoto for 2012 would be the equivalent of either removing every car, truck, ATV, tractor, ambulance, police car and vehicle of every kind from Canadian roads or closing down the entire farming and agriculture sector and cutting heat to every home, office, hospital, factory and building in Canada." And by withdrawing from the agreement, he maintained that Canada would save 14 billion dollars in penalties.

The Paris agreement in December 2015 amongst other clauses envisaged: (i) limiting global temperature rise to below 2 degrees centigrade; (ii) reach global peaking of green house gas emissions as soon as possible while recognising it would take longer for developing countries; (iii) binding commitments by all signatories (with each nationally determined contribution higher than the one before) to pursue domestic measures to achieve them; and (iv) reaffirmed the obligations of developed countries to support the efforts of developing country parties to build clean, climate-resilient futures, while for the first time encouraging voluntary contributions. On 1 June 2017, Donald Trump announced US repudiation of the Paris agreement maintaining that to reduce global temperature rise by 2 degrees was 'draconian' and would lead to a "very diminished quality of life" for Americans. He added, "I was elected to represent the citizens of Pittsburgh, not Paris."

The recent agreement in Poland was held up due to the economics behind carbon credits/penalties and a contentious debate on carbon credits awarded to countries for their emission-curbing efforts and carbon sinks such as forests which absorb carbon dioxide erupted. Brazil, for example, argued in favour of an amendment that would have enabled it to benefit from its large rainforest cover, opposed on the grounds that it could allow for double counting of credits, while Turkey proposed that it should be treated as a developing as opposed to a developed country. The decisions on both these proposals were deferred, implying that they would continue to fuel contentions in future.

The Pakistan Tehreek-e-Insaf government is certainly more focused on environment protection than its predecessors and its proactive drive to plant 10 billion trees is an example of this commitment. However, public policy group Germanwatch released 2018 Global Climate Risk Index in which it acknowledged that Pakistan is among 10 countries affected most by climate change and while Pakistan contributes less than 1 percent of the world's greenhouse gases blamed for causing global warming, yet our 200 million people are among the world's most vulnerable victims of the growing consequences of climate change. In short, Pakistan would benefit from these multilateral climate change agreements more than any efforts we may take.

#### https://fp.brecorder.com/2018/12/20181225434129/

### NEWS COVERAGE PERIOD FROM DECEMBER 17TH TO DECEMBER 23RD 2018 \$14BN P.A. NEEDED TO FIGHT ADVERSE IMPACT OF GLOBAL WARMING: ADVISER RECORDER REPORT

ISLAMABAD: Adviser to Prime Minister on Climate Change Malik Amin Aslam said on Thursday that Pakistan required \$7 to \$14 billion per annum to fight adverse impacts of the global warming.

Addressing a press conference here, he highlighted the country's vulnerability to the climate change effectively at 24th Conference of the Parties to the United Nations Framework Convention on Climate Change (COP24), which is a global agreement to deal with climate change under umbrella of the United Nations Framework Convention on Climate Change (UNFCCC).

It was held between 2nd and 15th December, 2018 in Katowice, Poland.

The adviser outlined the range of actions that the new government is taking steps to address the adverse impacts of climate change. He highlighted the extreme impacts that climate change is posing

to Pakistan, including recurring super floods, unpredicted droughts, chaotic heat waves, melting glaciers and resultant outbursts floods as well as rapidly shifting weather patterns.

Pakistan has itself chosen to responsibly support the global efforts to deal with climate change and mention about the high political will to deal with the impacts of climate change on the country.

He mentioned about the several initiatives that Pakistan has undertaken to play its effective role to reduce carbon emission and manage the climatically induced disasters.

Aslam mentioned about the success of the "Billion Tree Tsunami" initiative and shared the launching of the nationwide "10 Billion Tree Tsunami" project. He reiterated the government's intention to capitalize on the indigenous resources of wind, solar and hydro energy potential as well as the utilization of the nuclear energy. "More than 365 small run-of-the- river hydro projects have been set up in the north providing access to off-grid and affordable zero carbon electricity".

He also highlighted that Pakistan has finalized a multi-million dollar "zero emission" bus metro system for the city of Karachi operating on cattle waste generated biogas, with the catalytic financing from the Green Climate Fund. He also shared the details of "Clean and Green Pakistan" and "Recharge Pakistan" initiatives, which also have strong components to address the impacts of climate change.

Due to very strong diplomatic efforts, the governments have adopted a robust set of guidelines for implementing the Paris Climate Change Agreement at the COP24 in Poland. The implementation of the agreement will benefit people, especially the most vulnerable. The agreed 'Katowice Climate Package' is designed to operationalize the climate change regime contained in the Paris Agreement.

The conference was aimed on agreement on rules to implement the Paris Agreement, which was adopted by global community in December 2015 under UNFCCC. About 20 thousand delegates from 190 countries took part in the event, including; World's leaders and politicians, representatives of non-governmental organizations, scientific community and business sector.

The adviser said that as a result of its effective participation and high level political leadership, Pakistan has been elected as the "Vice President/ Rapporteur" of the Conference of Parties (COP) to the United Nations Framework Convention on Climate Change (UNFCCC), which is second highest position at the UN Climate Convention.

The other bodies in which Pakistan secured seats include the Executive Board of Clean Development Mechanism (CDM), Standing Committee on Finance (SCF), Adaptation Committee (AC), Consultative Group of Experts (CGE), and Technology Executive Committee (TEC).

As the Vice-President of COP and a member of these key bodies under the UN umbrella, Pakistan will continue to remain actively engaged with the work of the United Nations Framework Convention on Climate Change, especially on the implementation of the Paris Agreement. We would also, in collaboration with member states, endeavor to make global response to climate change stronger, equitable and more responsive to the collective climate related challenges.

Besides negotiations, Aslam also held meetings with profiled experts and institutional representatives including; Chair of the Intergovernmental Panel on Climate Change, dignitaries from Government of

United Arab Emirates, Asian Development Bank, IUCN, International Union for Conservation of Nature, World Wide Fund, NDC Partnership and many others to enhance cooperation and decide on join actions to deal with climate change and issues related to environmental improvement.

### https://epaper.brecorder.com/2018/12/21/15-page/754988-news.html

# EXPERTS FIND LINK BETWEEN CLIMATE CHANGE AND RESPIRATORY DISEASES By APP

### Published: December 23, 2018

ISLAMABAD: A medical expert on Saturday emphasised on the need to hammer out a national climate change awareness plan to boost Pakistan's response to climate risks and build up climate resilience through adaptation measures in various socio-economic sectors, particularly water, energy and food. Senior Physician Dr Qayumm Raza said climatic change is greatly associated with respiratory and allergic disorders.

He added that the higher occurrence of poisonous substances and the increasing quantity of urban population are resulting in major environmental hazards that are toxic to human life.

"Increasing the youth's awareness on climate change must be considered in climate change adaptation in the country," he added. He said scientists and medical professionals have been working hard to rule out the accurate cause behind idiopathic seasonal respiratory diseases and skin allergies as their specific root cause has never been highlighted by anyone due to a lack of knowledge and resources. Media should also play its role by organising seminars and conducting special programmes in this regard.

He suggested that if we are willing to reduce the burden of allergic and respiratory symptoms, we must control environmental factors that worsen these conditions.

Dr Raza mentioned that over the past three decades global temperature has been rising markedly.

This temperature increase has resulted in warming ocean temperatures, rising sea levels, melting glaciers, retreating sea ice and diminished snow cover in the northern hemisphere.

"This aggressive climatic change is associated with respiratory and allergic disorders.

The increased length and severity of the pollen season, the higher occurrence of heavy precipitation events and the increasing frequency of urban population are resulting in major environmental hazards that are lethal to human life," he maintained.

Air pollution consisting of particulate matter (i.e. dust mites, organic dust substances, diesel exhaust and organic salts) and atmospheric pollens can blunt an individual's immune system that eventually results in enhancement of allergic and respiratory diseases for instance particulate matter resulting from the burning of fuel or organic matter increases allergen specific levels that cause airway inflammation and hypersensitivity," Dr Raza said. Global warming, he said has a tremendous economic and health care impact in the form of loss of working hours and increased need for care among privileged populations. He further highlighted that air-pollution related asthma exacerbation is due to climactic factors that favor the accumulation of air pollutants at soil level.

The ongoing increase in air pollution encourages growth of poison ivy which secretes urishiol, a compound that causes contact dermatitis. Dr Raza went on to add that these skin allergies such as hives, urticaria, contact dermatitis, hay fever, and eczema is completely curable provided that we opt for reasonable and self-assuring treatment options similarly respiratory diseases as in asthma are curable as well.

Moreover he stated that the present government is making all-out efforts to deal with climate risks, though much of these efforts go unnoticed due to lack of awareness about the efforts.

He also stressed upon the need for adequate budgetary allocations for tackling environmental degradation.

Published in The Express Tribune, December 23rd, 2018.

https://tribune.com.pk/story/1872825/1-experts-find-link-climate-change-respiratory-diseases/

NEWS COVERAGE PERIOD FROM DECEMBER 10TH TO DECEMBER 16TH 2018 CLIMATE TALKS PAUSE AS BATTLE OVER KEY SCIENCE REPORT LOOMS AP Updated December 10, 2018

KATOWICE: A DIPLOMATIC STANDOFF OVER A SINGLE WORD COULD SET THE STAGE FOR A BIGGER SHOWDOWN DURING THE SECOND HALF OF THIS YEAR'S UN CLIMATE SUMMIT.

Negotiators took time out on Sunday to rest after the first week of talks ended on a sour note the previous night, when the United States sided with Russia, Saudi Arabia and Kuwait in blocking endorsement of a landmark study on global warming.

"I think it was a key moment," said Alden Meyer of the Union of Concerned Scientists. "The fact that a group of four countries were trying to diminish the value and importance of a scientific report they themselves, with all other countries, requested three years ago in Paris is pretty remarkable."

The Intergovernmental Panel on Climate Change's special report on what would happen if average global temperatures rise by 1.5 Celsius, and how to ensure they don't go higher, was widely regarded as a wake-up call for policy-makers when it was released in October .

As diplomats wrapped up a week of technical talks on Saturday, almost all 200 countries present in Katowice, Poland, had wanted to "welcome" the IPCC report, making it the benchmark for future action. But the US and three other delegations objected.

"The United States was willing to note the report and express appreciation to the scientists who developed it, but not to welcome it, as that would denote endorsement of the report," the US State Department said in a statement. "As we have made clear in the IPCC and other bodies, the United States has not endorsed the findings of the report." Russia, Saudi Arabia and Kuwait also called for the study to be "noted" but not "welcomed." While none of the four-oil exporting countries spelled it

out, their objection to the report likely included its suggestion that fossil-fuel use needs to be phased out by 2050. Oil, gas and coal are major sources of carbon dioxide, which traps heat in the atmosphere.

The 2015 Paris agreement set a target of keeping global warming well below 2 degrees Celsius, ideally 1.5 C by the end of the century.

"A 1.5 C and a 2 C worlds are very different in terms of mean climate, extremes, sea level rise, and climate-related risks," said one of the report's leading contributors, Valerie Masson-Delmotte.

The higher threshold increases the likelihood of "climate change hot spots challenging basic water, food, economic security and the risk of irreversible loss of wildlife," she said.

Observers at the talks said the two Gulf countries' objection to the IPCC report came as no surprise.

"The Saudis with their sidekicks the Kuwaitis have long been troublemakers in this in this process," said Meyer, who has followed international climate negotiations for many years.

Russia's intentions were unclear, he said, while the US position appeared to be driven by what he called President Donald Trump 's "cavalier attitude toward science in general and climate science in particular." "It's really an embarrassment for the world's leading scientific superpower to be in this position of having to disbelieve a report that was written by the world's scientific community including a large number of pre-eminent US scientists," Meyer said.

Saturday's floor fight casts doubt on whether countries will be able to reach consensus on important issues by Friday, including the need to step up national targets to curb carbon emissions.

While many countries are sending ministers or even national leaders to the talks, the US and Britain are among the countries that will be represented only by bureaucrats.

Published in Dawn, December 10th, 2018

#### https://www.dawn.com/news/1450572/climate-talks-pause-as-battle-over-key-science-report-looms

ARCTIC'S RECORD WARMING DRIVING 'BROAD CHANGE' IN ENVIRONMENT: STUDY AFP December 12, 2018

WASHINGTON: Global warming is heating the Arctic at a record pace, driving broad environmental changes across the planet, including extreme storms in the mid-latitudes, a major US scientific report said on Tuesday.

Persistent heat records have rattled the fragile Arctic for each of the past five years, a record-long warming streak, said the 2018 Arctic Report Card, released by the National Oceanic and Atmospheric Administration.

The mounting heat in the north is upsetting typical weather patterns, a trend that "coincides" with severe winter storms in the eastern United States and an extreme cold snap in Europe in March, it said.

"Continued warming of the Arctic atmosphere and ocean are driving broad change in the environmental system in predicted and, also, unexpected ways," warned the report.

"New and rapidly emerging threats are taking form and highlighting the level of uncertainty in the breadth of environmental change that is to come."

Arctic air temperatures for the past five years, from 2014 to 2018, "have exceeded all previous records since 1900," when record-keeping began, it said.

This warming trend "is unlike any other period on record," said the peer-reviewed report compiled by 81 scientists working for governments and academia in 12 nations. During the latest period studied, October 2017 through September 2018, annual average temperature in the Arctic was 3.1 Fahrenheit (1.7 Celsius) higher than the 1981-2010 average.

Published in Dawn, December 12th, 2018

https://www.dawn.com/news/1450951/arctics-record-warming-driving-broad-change-in-environmentstudy

KARACHI BRTS TO CUT 2.76M TONNES OF CARBON EMISSIONS By Rina Saeed Khan

Published: December 12, 2018

KATOWICE, POLAND: The Karachi Breeze or Bus Rapid Transport System (BRTS) is one of the major green projects coming up in the megacity, announced the adviser to the Prime Minister on Climate Change, Malik Amin Aslam, during a side event at COP24 in Katowice, Poland. The climate-proofed BRT was discussed at the Asian Development Bank (ADB) pavilion on a panel focusing on 'Financing Nationally Determined Contributions (NDC) in Asia and the Pacific'.

Pakistan has agreed to cut 20% of its carbon emissions below 'business as usual levels' by 2030 in its NDC, submitted under the Paris Agreement, conditional to climate financing of \$40 billion. According to Aslam, "In the climate finance debate here at the COP, some countries are saying there is not enough money while others are saying they don't have enough capacity to use the money. Pakistan is in the middle — we have a defined vision and clear targets and with that partners can come on board."

Referring to the \$12 million funding from the Green Climate Fund, secured by ADB for the Karachi BRT, Aslam said that the grant would supplement \$442 million in loans from ADB, the Asian Infrastructure Investment Bank, and Agence Française de Développement to build a 30-kilometer fully segregated state-of-the-art 'third generation' bus rapid transit system including bicycle lanes, a bike-sharing system, last-mile connectivity with e-pedicabs, and improved pedestrian facilities directly benefiting 1.5 million residents of the city. The project includes the construction of a plant to produce biogas from cattle waste for use with zero greenhouse gas emission biomethane-hybrid buses.

"One line is already developed and the second line is in the works. This project actually shows how you can change your infrastructure towards green and low carbon development with the second line.

It will save about 2.76 million tonnes of carbon because it will use cattle waste, turn it into methane and run around 200 buses on it," explained Aslam.

Pakistan also has its own project, Aslam pointed out to the panel. It was driven by the need to plant more trees and it was completely self-financed. "It's not in our NDC but we have a billion trees on the ground now. In the next phase, we have announced a 10 Billion Tree Project".

Published in The Express Tribune, December 12th, 2018.

https://tribune.com.pk/story/1864813/1-karachi-brts-cut-2-76m-tonnes-carbon-emissions/

## CLIMATE TALKS MUST BE RESCUED FROM FAILURE, WARNS UN CHIEF AFP December 13, 2018

KATOWICE: "Key political issues" deadlocking UN climate talks "remain unresolved", UN Secretary-General Antonio Guterres warned on Wednesday after an unscheduled stop at the troubled negotiations in Poland.

The fight against climate change is a "matter of life and death today", he told ministers and delegates at the 195-nation UN forum tasked with beating back the threat of global warming, barely 48 hours before the meeting in the coal town of Katowice was set to adjourn.

The two-week talks are tasked with breathing life into the 2015 Paris Agreement, which vows to cap global warming at "well under" two degrees Celsius (3.6 degrees Fahrenheit).

It is also meant to funnel hundreds of billions of dollars to poor countries already feeling the sting of deadly storms, heatwaves and droughts made worse by climate change.

Scientists have concluded that such impacts are already unmistakable with only 1C of warming so far.

But efforts to elaborate a "rule book" for the Paris pact and to boost the carbon-cutting pledges of all nations have run aground, even as a barrage of scientific reports have warned that only immediate and radical measures can avert catastrophic climate impacts.

"The eyes of the world are upon us," said Guterres, who had not planned to return to the talks after addressing the opening plenary 10 days ago.

"To waste this opportunity would compromise our last best chance to stop runaway climate change," he said.

"It would not only be immoral, it would be suicidal."

A major scientific report called for by the UN climate body concluded in October that Earth's rise in temperature must be capped even lower — at 1.5C — to avoid the danger of runaway warming.

But a handful of countries at the talks, led by the United States and Saudi Arabia, have blocked efforts to endorse the report, which many developing countries see as essential.

"The IPCC report on 1.5C is the basis for all future action, on what we need to do," Vanuatu Foreign Minister Ralph Regenvanu said.

Endorsing the report's findings at the conclusion of the UN forum "is a red line issue for us". Issues bedevilling discussions include "transparency" — which means different things to different countries, depending on what's at stake.

'Ice melts at zero'

Rich nations, for example, are pushing hard for high standards of accounting to keep track of emissions reductions. Poorer nations say they need more time — and lots of money — to comply.

On finance, however, the tables are turned. It is developing countries who decry the opaqueness of financial aid from wealthy countries.

But the most contentious issue on the table is the reluctance of many nations — including the Polish government, which as host presides over the complex negotiations — to underscore the need for countries to enhance voluntary carbon-cutting pledges annexed to the Paris pact.

Even if current promises are fulfilled, Earth would heat up by well over 3C, enough to tug at the fabric of civilisation, say scientists.

"Nobody — not even so-called superpowers — can negotiate with the laws of physics," said Jean-Pascal van Ypersele, a Belgian climatologist and a former vice-chair of the UN Intergovernmental Pannel on Climate Change (IPCC), which produced the report on 1.5C.

A recent study mentioned by Guterres showed that parts of the Antarctic ice sheet — which holds enough frozen water to bury every major coastal city in the world — are melting far more quickly than thought only a few years ago.

"Ice melts at zero degrees Celsius — that's 32 degrees Fahrenheit," quipped van Ypersele, converting into the temperature scale used in the United States.

Diplomatic energy at the talks will now focus on hammering out a final text, composed of "decisions," including one adopting the rule book.

In an attempt to get around the stalemate, the Polish government took control of the process to find compromise language on key sticking points.

But a draft text released on Wednesday did not inspire enthusiasm among negotiators.

"From what we have seen so far, they have not made any bold moves," said Miguel Arias Canete, European Commissioner for Climate Action and Energy.

"The issues with the most political interest to most parties remain unresolved and practically unchanged."

Published in Dawn, December 13th, 2018

https://www.dawn.com/news/1451182/climate-talks-must-be-rescued-from-failure-warns-un-chief

TRUMP IS UNWILLING TO TACKLE CLIMATE CHANGE. CHINA MUST STEP UP. China can do more. The planet depends on it.

By Daniel K. Gardner

Professor Gardner is the author of "Environmental Pollution in China: What Everyone Needs to Know."

10 Dec, 2018

Every year, China burns as much coal as the rest of world combined, and every year since 2009, more cars have been sold there than in any other country. This has left its cities choking on poisoned air and has been responsible for an estimated one million premature deaths a year. But since 2014, China has been waging a "war on pollution," and this campaign has begun to show results. Last year, levels of particulate pollution in Beijing dropped by more than 20 percent over the previous year.

The politics of this was obvious. The country's leadership was worried that its citizens simply wouldn't tolerate air so polluted that it can be difficult on some days in some cities to see through the soupy, acrid haze to the buildings across the street. But China has shown less determination to corral its runaway emissions of carbon dioxide, the colorless, odorless gas that is principally responsible for the warming of the planet. A warming planet, after all, doesn't present the same palpable and immediate threat to people's daily lives that toxic air does.

Last year, China produced 27 percent of the global emissions of this greenhouse gas, and its emissions are expected to rise by nearly 5 percent by the end of this year, according to new research released this week by scientists with the Global Carbon Project. The United States is second on that list, accounting for 15 percent of the world's emissions — though China is quick to point out that its emissions per capita remain less than half of those of the United States.

With the Trump administration unwilling to confront climate change, the world needs a more deeply committed China. A recent report by the Intergovernmental Panel on Climate Change warned that if greenhouse gas emissions continue at the present rate, by 2040, coastlines will be inundated, droughts and floods will intensify and food shortages will be widespread. So the world is facing an immense challenge, made much more difficult by an American president who believes coal, oil and gas are the fuels that will drive America's return to greatness.

Fortunately, there is no climate change denier movement in China. Political leaders and scientific experts there agree that the planet is warming, that the warming is owing to human activity, that China is responsible for much of it, and that the country is already experiencing its effects, including glacier retreat in the Qinghai-Tibet region and drought in the Hai, Yellow and Huai river areas.

Despite Trump, carbon emissions in the US are declining. China and India are STILL building coalburning power plants. The US is decommissioning them. The EU and Japan are turning down nuclear plants before their projected end-of-life. Looks like to me the US is leading, despite all the naysaying. That's why, in recent years, China has appeared to be taking the global warming crisis more seriously. It helped shape the Paris climate agreement in 2015, and it helped gather support for it from reluctant countries. It has pledged that by 2030 it will begin decreasing its use of coal, cut carbon emissions per unit of gross domestic product by 15 percent over 2005 levels, increase non-fossil fuel sources of energy to 20 percent of the country's total primary energy mix, and increase forest cover by up to 247 million acres, roughly four times the size of the United Kingdom.

These measures will help bring down greenhouse gas emissions. So too will some of the measures that Beijing has already taken in its "war on pollution": shuttering coal power plants, investing hundreds of billions of dollars in renewable energy development, especially wind and solar, introducing a nationwide carbon emissions trading program, and heavily subsidizing the production and purchase of electric vehicles.

But China can do more. The planet depends on it.

For one, it must stop financing and building coal-fired power plants around the world. China has made reducing coal production and consumption a high priority at home, but Chinese energy companies are behind more than 200 new coal-fired power plants around the world that are either planned or under construction. Fighting a "war on pollution" and calling for "building an ecological civilization" at home while promoting the use of dirty coal in less developed countries makes China look hypocritical, even colonial. Instead, Beijing can and should be exporting the renewable energy technology that it has been so aggressively developing. With this clean energy, underdeveloped countries could leapfrog the outworn development model that sacrifices environmental well-being for economic growth.

It also must quickly expand its nationwide carbon emissions trading system. China introduced the largest carbon market in the world in 2017-18, using a market-driven approach to push down emissions. But Beijing is moving cautiously. Thus far, its application of the trading system has been largely limited to the power sector, which covers about 30 percent of China's total carbon emissions. This market should be extended to other heavy industries, especially chemical, iron, steel and aviation, no later than 2020.

The country must also figure out how to maximize its wind and solar capacity, the largest in the world. A good deal of it now goes unused — a situation known as curtailment. In 2016, for instance, 17 percent of China's total wind capacity was curtailed, and in some provinces, that figure was much higher. Solar curtailment nationwide was nearly 20 percent. That's a lot of waste. Much of this has to do with an inadequate power grid that can't transmit the additional power. But the government needs as well to enforce its policy of giving renewable sources priority access to the grid (so called green dispatch) ahead of coal and other fossil fuels.

And, finally, Beijing should set 2030 as the year for ending the production and sale of all gas and diesel powered cars and trucks, and replacing them with electric vehicles powered by renewable energy

All of these measures are within Beijing's reach and are achievable within just a few years.

We live in a world in which global mistrust of China is widespread, and with ample reason: the military buildup in the South China Sea, the mass internment of Uighurs, human rights abuses, the

disregard for intellectual property rights and more. But that mistrust shouldn't blind us to the reality that in fighting climate change, the nations of the world are on the same side. We should cheer China on whenever it takes steps to reduce carbon emissions — especially as the Trump administration sits by idly.

Daniel K. Gardner is a history professor at Smith College, where he specializes in Chinese intellectual history and the environment in China.

https://www.nytimes.com/2018/12/10/opinion/china-trump-climate-change.html

JOHN KERRY: FORGET TRUMP. WE ALL MUST ACT ON CLIMATE CHANGE. If we fail, it won't be just the president's fault.

By John Kerry

Mr. Kerry was the secretary of state from 2013 to 2017.

#### 13 Dec, 2018

This week is the third anniversary of the Paris climate agreement. The Trump administration marked it by working with Russia and Gulf oil nations to sideline science and undermine the accord at climate talks underway in Katowice, Poland.

While I was in New Delhi this week, where I met with solar energy advocates, a comment made thousands of miles away by the journalist Bob Woodward almost jumped off my iPad: The president, he said, "makes decisions often without a factual basis." This isn't a mere personality quirk of the leader of the free world. It is profoundly dangerous for the entire planet.

Scientists tell us we must act now to avoid the ravages of climate change. The collision of facts and alternative facts has hurt America's efforts to confront this existential crisis. Ever since Mr. Trump announced that he would pull America out of the Paris accord, those of us in the fight have worked to demonstrate that the American people are still in.

But the test is not whether the nation's cities and states can make up for Mr. Trump's rejection of reality. They can. The test is whether the nations of the world will pull out of the mutual suicide pact that we've all passively joined through an inadequate response to this crisis.

Talk to leaders who are gathered in Poland. They acknowledge that we aren't close to getting the job done in reducing the greenhouse gas emissions that warm the planet. People are dying today because of climate change, and many more will die and trillions of dollars of damage to property will occur unless America gets back in the fight.

The evidence is hard to miss. Fifteen of the biggest fires in California history have occurred in the past 18 years. We roll our eyes when the president suggests "raking" the forest is the answer. But clever internet memes don't help when the stakes are this high.

Hurricanes Maria, Harvey and Irma cost the United States some \$265 billion in damages. Historic droughts are matched by historic floods. Heat waves stole 153 billion hours of labor globally last year.

Infectious diseases are moving into new areas and higher altitudes. Crop yields are down in more than two dozen countries, and by 2050 the Midwestern United States could see agricultural productivity drop to its lowest level in decades. But this is a mere preview of what's to come.

The latest report by the Intergovernmental Panel on Climate Change warned that the changes required to hold global warming to 2.7 degrees Fahrenheit (1.5 degrees Celsius), as called for in the Paris agreement, would require changes on a scale with "no documented historic precedent."

Every day we lose ground debating alternative facts. It's not a "he said/she said" — there's truth, and then there's Mr. Trump. Even the recent congressionally mandated climate assessment warns that "with continued growth in emissions at historic rates, annual losses in some economic sectors are projected to reach hundreds of billions of dollars by the end of the century — more than the current gross domestic product of many U.S. states."

Emissions are forecast to go up by 2.7 percent worldwide this year. Instead of reining them in, the Trump administration would unleash more by replacing the Clean Power Plan with a rule that could allow power plants to unload 12 times more carbon dioxide in the atmosphere. Instead of controlling fuel emissions, the administration is rolling back fuel economy standards that the auto industry had embraced. Instead of keeping a lid on methane, it's making it more likely that this potent greenhouse gas will leak into the atmosphere.

Future generations will measure us by whether we acted on facts, not just debated or denied them. The verdict will hang on whether we put in place policies that will drive the development and deployment of clean technologies, re-energize our economies, and tackle global climate change. Every day that goes by that we're paralyzed by the Luddite in the White House is a day in the future that our grandchildren will suffer. That's not hyperbole — that's science.

Instead of tacitly accepting that inaction is preordained for the remaining two years of the Trump presidency, Congress should send Mr. Trump legislation addressing this crisis. It will force him to make choices the American people will long remember: Will he say no to deploying solar technology that would turn the American West into the Saudi Arabia of solar? No to turning the Midwest into the Middle East of wind power? No to a manufacturing revolution that could put West Virginia back to work in ways that his beloved coal never will?

Make him choose — and let's find out.

Senator Chuck Schumer, the Democrat from New York and Senate minority leader, is right to demand that infrastructure legislation actually hasten the transition to a clean energy economy and increase climate resilience. In soon-to-be Speaker Nancy Pelosi, he has a partner who wrangled the votes in the House in 2009 to pass a landmark cap-and-trade program to limit emissions of heat-trapping gases (though it never made it out of the Senate), and can join him in seeking investments in low carbon infrastructure. And if Mr. Trump says no, make climate change the galvanizing issue for 2020 for millennials who will vote as if their lives depend on it — because they do.

If we fail, future generations will judge us all as failures, not just this president. They will have no time for excuses. Facts matter. Act on them.

John Kerry was a Democratic senator from Massachusetts before becoming secretary of state in the Obama administration.

https://www.nytimes.com/2018/12/13/opinion/kerry-climate-change-trump.html

NATIONS INCH TOWARDS CLIMATE DEAL AT UN SUMMIT AFP December 16, 2018

KATOWICE (Poland): Nations on Saturday inched towards a deal to implement the Paris climate goals, after all-night negotiations over a plan to limit global temperature rises exposed a range of conflicts.

Speaking to AFP at the COP24 summit in Poland, a senior negotiator said delegates from nearly 200 nations had reached a "landing zone" of agreement.

But sources close to the talks said differences remained stark on the issues of ambition, how the climate fight is funded and how best to measure and ensure the fairness of each nation's efforts to reduce emissions.

Delegates at the UN summit, held this year in the Polish mining city of Katowice, must agree on a common rule book to put the pledges made at the landmark 2015 Paris talks into practice.

This means all countries, rich and poor alike, must agree to action that will cap global temperature rises to "well below" two degrees Celsius (3.6 degrees Fahrenheit) and stave off the worst effects of planetary warming, and to a safer cap of 1.5C if possible.

The final draft decision text was repeatedly delayed as negotiators sought to form guidelines that are effective in slashing emissions while protecting the economies of rich and poor nations alike.

"Without a clear rulebook, we won't see how countries are tracking, whether they are actually doing what they say they are doing," said Canada's Environment Minister Catherine McKenna.

Earlier in the day, Gebru Jember Endalew, chair of the Least Developed Countries negotiating group, said delegates had reached a "landing zone" of compromise after negotiations sailed past their Friday deadline and deep into the weekend.

"It is a bit difficult to compromise when there are 190-plus countries," he said.

At the heart of the matter is how each nation funds action to mitigate and adapt to climate change, as well as how those actions are reported.

Developing nations want more clarity from richer ones over how the future climate fight will be funded and have been pushing for so-called "loss and damage" measures.

This would see richer countries giving money now to help deal with the effects of climate change many vulnerable states are already experiencing.

Another contentious issue concerns the integrity of carbon markets, looking ahead to the day when the patchwork of distinct exchanges — in China, the Europe Union, parts of the United States — may be joined up in a global system.

The Paris Agreement calls for setting up a mechanism to guard against practices that could undermine such a market, but finding a solution has proved so problematic that the debate has been kicked down the road to next year.

Another stumbling block could be how ambitious countries are in their renewed emissions-cutting pledges ahead of a 2020 stock-take of the Paris deal's progress.

Most nations wanted the findings of the Intergovernmental Panel on Climate Change (IPCC) to form a key part of future planning.

It highlighted the need for greenhouse gas emissions to be slashed to nearly half by 2030 in order to hit the 1.5C target.

But the US, Saudi Arabia, Russia and Kuwait objected, leading to watered-down wording.

The draft decision statement from the Polish COP24 presidency welcomed "the timely conclusion" of the report and invited "parties to make use of it" — far from the ringing endorsement many nations had called for.

"We need to be ambitious, we need to do more, we need to reflect the goals of 1.5 degrees of global warming," said McKenna.

Published in Dawn, December 16th, 2018

https://www.dawn.com/news/1451699/nations-inch-towards-climate-deal-at-un-summit

NEWS COVERAGE PERIOD FROM DECEMBER 3RD TO DECEMBER 9TH 2018 MET OFFICE FORECASTS FOGGY DECEMBER The Newspaper's Staff Reporter Updated December 03, 2018

LAHORE: Fog in the plains of Punjab and upper Sindh and worsening of drought conditions in some parts of Sindh and Balochistan have been forecast for December by the Pakistan Meteorological Department.

It expects normal to slightly above normal rain during December which actually is a low-rain month.

One spell of rainfall over upper half of the coungtry is expected during first half of the month. Whereas two to three spells of rainfall with light to moderate intensity are likely to occur all over the country during the second half of December. However, periodical episode of snowfall may occur on higher altitudes of Gilgit-Baltistan, Chitral and AJK.

The fall in temperatures and intrusion of cold waves may cause foggy conditions in the plain areas of Punjab and upper Sindh.

The prevailing drought conditions in southern Balochistan and Sindh may transform into drought of moderate to severe intensity. The disaster risk management authorities are required to take necessary measure for mitigation, the Met department says.

Published in Dawn, December 3rd, 2018

https://www.dawn.com/news/1449071/met-office-forecasts-foggy-december

NATIONS PRESSED TO TACKLE 'URGENT THREATS' AT UN CLIMATE TALKS AFP December 03, 2018

KATOWICE: With the direst environmental warnings yet still ringing in their ears, nations gathered in Poland on Sunday for a UN summit aimed at heading off the "urgent threat" of runaway climate change.

The UN talks come at a crucial juncture in mankind's response to planetary warming. The smaller, poorer nations that will bare its devastating brunt are pushing for richer states to make good on the promises they made in the 2015 Paris agreement.

In Paris three years ago, countries committed to limit global temperature rises to well below two degrees Celsius (3.6 degrees Fahrenheit), and to the safer cap of 1.5C if at all possible.

But with only a single degree Celsius of warming so far, the world has already seen a crescendo of deadly wildfires, heatwaves and hurricanes made more destructive by rising seas.

"Climate change impacts have never been worse," Patricia Espinosa told journalists after Sunday's first negotiating session.

"This reality is telling us that we need to do much more." In a rare intervention, presidents of previous UN climate summits issued a joint statement as the talks got underway, calling on states to take "decisive action... to tackle these urgent threats".

"The impacts of climate change are increasingly hard to ignore," said the statement, a copy of which was obtained by AFP. "We require deep transformations of our economies and societies."

At the COP24 climate talks, nations must agree to a rulebook palatable to all 183 states who have ratified the Paris deal.

This is far from a given: the dust is still settling from US President Donald Trump's decision to ditch the Paris accord.

G20 leaders on Saturday agreed a final communique after their summit in Buenos Aires, declaring that the Paris Agreement was "irreversible".

But it said the US "reiterates its decision to withdraw" from the landmark accord.

The UN negotiations got off to a chaotic start in the Polish mining city of Katowice Sunday, with the opening session delayed nearly three hours by a series out last-ditch submissions from countries.

Even solid progress on the Paris goals may not be enough to prevent runaway global warming, as a series of major climate reports have outlined.

'Failure to act will be catastrophic'

Just this week, the UN's environment programme said the voluntary national contributions agreed in Paris would have to triple if the world was to cap global warming below 2C.

For 1.5C, they must increase fivefold.

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Even the most strident climate warnings — spiralling temperatures, global sea-level rises, mass crop failures — are something that many developed nations will only have to tackle in future.

But many other countries are already dealing with the droughts, higher seas and catastrophic storms climate change is exacerbating.

"A failure to act now risks pushing us beyond a point of no return with catastrophic consequences for life as we know it," said Amjad Abdulla, chief negotiator for the Alliance of Small Island States, of the UN talks.

A key issue up for debate is how the fight against climate change is funded, with developed and developing nations still world's apart in their demands.

Poorer nations argue that rich countries, which are responsible for the vast majority of historic carbon emissions, must help others to fund climate action.

"Developed nations led by the US will want to ignore their historic responsibilities and will say the world has changed," said Meena Ramam, from the Third World Network advocacy group.

"The question really is: how do you ensure that ambitious actions are done in an equitable way?"

Published in Dawn, December 3rd, 2018

https://www.dawn.com/news/1449115/nations-pressed-to-tackle-urgent-threats-at-un-climate-talks

NATIONS URGED TO TACKLE 'URGENT THREATS' AT UN CLIMATE TALKS By AFP

Published: December 2, 2018

PARIS: With the direst warnings yet of impending environmental disaster still ringing in their ears, representatives from nearly 200 nations gathered Sunday in Poland to firm up their plan to prevent catastrophic climate change.

The UN climate summit comes at a crucial juncture in mankind's response to planetary warming. The smaller, poorer nations that will bare its devastating brunt are pushing for richer states to make good on the promises they made in the 2015 Paris agreement.

In Paris three years ago, countries committed to limit global temperature rises to well below two degrees Celsius (3.6 degrees Fahrenheit), and to the safer cap of 1.5C if at all possible.

But with only a single degree Celsius of warming so far, the world has already seen a crescendo of deadly wildfires, heatwaves and hurricanes made more destructive by rising seas.

In a rare intervention, presidents of previous UN climate summits issued a joint statement as the talks got underway in the Polish mining city of Katowice, calling on states to take "decisive action... to tackle these urgent threats".

"The impacts of climate change are increasingly hard to ignore," said the statement, a copy of which was obtained by AFP. "We require deep transformations of our economies and societies."

In Katowice, nations must agree to a rulebook palatable to all 183 states who have ratified the Paris deal.

This is far from a given: the dust is still settling from US President Donald Trump's decision to ditch the Paris accord.

G20 leaders on Saturday agreed a final communique after their summit in Buenos Aires, declaring that the Paris Agreement was "irreversible".

But it said the US "reiterates its decision to withdraw" from the landmark accord.

Even solid progress in Katowice on the Paris goals may not be enough to prevent runaway global warming, as a series of major climate reports have outlined.

Just this week, the UN's environment programme said the voluntary national contributions agreed in Paris would have to triple if the world was to cap global warming below 2C.

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While the data are clear, a global political consensus over how to tackle climate change remains elusive.

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A key issue up for debate is how the fight against climate change is funded, with developed and developing nations still world's apart in their demands.

Poorer nations argue that rich countries, which are responsible for the vast majority of historic carbon emissions, must help others to fund climate action.

But wealthy states, led by the US, have so far resisted calls to be more transparent in how their contributions are reported — something developing nations say is vital to form ambitious green energy plans.

"Developed nations led by the US will want to ignore their historic responsibilities and will say the world has changed," said Meena Ramam, from the Third World Network advocacy group.

"The question really is: how do you ensure that ambitious actions are done in an equitable way?

https://tribune.com.pk/story/1858741/3-nations-urged-tackle-urgent-threats-un-climate-talks/

## CATASTROPHIC CLIMATE CHANGE IF USE OF FOSSIL FUEL NOT CUT: UN AFP December 04, 2018

KATOWICE: The world is "way off course" in its plan to prevent catastrophic climate change, warns the United Nations as nations gather in Poland to chart a way for mankind to avert runaway global warming.

After a string of damning scientific reports showing humanity must drastically slash its greenhouse gas emissions within the next decade, UN secretary general Antonio Guterres told delegates on Monday at the opening of a UN climate summit: "We are still not doing enough, nor moving fast enough".

Monday will see leaders from at-risk nations such as Fiji, Nigeria and Nepal plead their case at the COP24 climate talks, which aim to flesh out the promises agreed in the 2015 Paris climate accord.

But host Poland — heavily reliant on energy from coal — will push its own agenda: a "just transition" from fossil fuels that critics say could allow it to continue polluting for decades.

Nor are any of the world's largest emitters represented at the highest level in Poland.

The Paris deal saw nations agree to limit global temperature rises to below two degrees Celsius (3.6 Fahrenheit) and under 1.5C if possible.

Officials from nearly 200 countries now have two weeks to finalise how those goals work in practice, even as science suggests the pace of climate change is rapidly outstripping mankind's response.

One of the key disputes is finance.

Under Paris, richer nations — responsible for the majority of historic greenhouse gas emissions — are expected to contribute funding that developing nations can access to make their economies greener.

But US President Donald Trump's decision to withdraw from the Paris accord has dented trust among vulnerable nations, who fear there is not enough cash available to help them adapt to our heating planet.

\$200 billion pledged: The World Bank on Monday announced \$200 billion (175bn euros) in climate action investment for 2021-25 — a major shot in the arm for green initiatives but one which needs bolstering by state funding.

The background to Monday's summit could hardly be bleaker: with just one degree Celsius of warming so far, Earth is bombarded with raging wildfires, widespread crop failures and super-storms exacerbated by rising sea levels.

"Even as we witness devastating climate impacts causing havoc across the world, we are still not doing enough, nor moving fast enough, to prevent irreversible and catastrophic climate disruption," Guterres said.

The UN's own expert climate panel in October issued its starkest warning to date.

To have any hope of reaching the 1.5C goal by the end of the century, it said emissions from fossil fuel use must be halved by 2030.

Poland is one of many nations heavily reliant on coal and wants this round of talks to reflect the role fossil fuels play in its economy.

On Monday, it will unveil a declaration calling on states to "recognise the challenges faced by sectors, cities and regions in transition from fossil fuels... and the importance to ensure a decent future for workers impacted by the transition". Generation that betrayed humanity: As Poland pushed the continued use of coal it fell to the president of Nauru, a Pacific island nation that is critically threatened by rising sea-levels, to point out the most obvious barrier to climate action: fossil fuel use.

Baron Divavesi Waqa said the Paris agreement "doesn't radically disrupt the fossil fuel industry... these powerful interests emerged from Paris unscathed and we ignore that reality at our peril". Frank Bainimarama, prime minister of Fiji and president of last year's COP, said developed nations must act now to save the planet. "Or, God forbid, (we) ignore the irrefutable evidence and become the generation that betrayed humanity," he said.

Published in Dawn, December 4th, 2018

#### https://www.dawn.com/news/1449283/catastrophic-climate-change-if-use-of-fossil-fuel-not-cut-un

CLIMATE WARNING Editorial December 05, 2018

IT may sound alarmist, but coming from David Attenborough it might actually get the international community to take the warnings seriously. In a dramatic moment at the UN Climate Summit in Katowice, Poland, the nature expert and documentary filmmaker famous for series like Planet Earth and Blue Planet, told the delegates that civilisation now faces its "greatest threat in thousands of years: climate change". The cost of inaction, he continued, will be "the collapse of our civilisations and the extinction of much of the natural world". This may sound like hyperbole, and in earlier times talk of this sort could be dismissed as just that — but not any longer.

Concentrations of all main greenhouse gases have now reached record levels, and there is no reversal in sight, with "the window of opportunity now almost closed", according to a recent World Meteorological Organisation report. The gases in question include carbon dioxide, methane and nitrous oxide, and all stand at record levels today, far higher than what they were in the pre-industrial era. The last time carbon dioxide concentrations in the atmosphere were as high as they are today was almost three million years ago, the report says, when temperatures were two to three degrees warmer and sea levels 10 to 20 metres higher. These temperatures and sea levels would wipe out many cities and much life around the world today. Luckily, as the UN conference was also told, action is under way, although it needs to be ramped up significantly. Green technologies like solar and wind power are proliferating and replacing unclean power. Almost 9,000 cities around the world are "taking action", along with 240 states and regions in 40 countries, and over 6,000 businesses in 120 countries are also waking up to greater climate responsibility. These numbers may sound large, but they are, in fact, very small compared to the scale of the task that the planet faces. Given the stakes, and the rapidly growing threat, greater concerted action is urgently required. Here in Pakistan, too, the government, and especially the provincial administrations, need to wake up to their obligations to be part of the global shift towards greener technologies and greener cities. Unfortunately, our policy universe is at present far more focused on greener pastures instead of the climate threat. Provincial governments and city administrations have a big role to play in promoting green technology and lifestyles, and David Attenborough's warning applies to them as well.

Published in Dawn, December 5th, 2018

https://www.dawn.com/news/1449568/climate-warning

## GLOBAL CO2 POLLUTION SET TO MAKE SHARP RISE THIS YEAR AFP Updated December 06, 2018

PARIS: Global emissions of carbon dioxide mainly from fossil fuel burning will rise 2.7pc in 2018, scientists said on Wednesday, signalling a world "completely off course" in the fight against climate change.

Last year, CO2 pollution increased by 1.6pc after a three-year hiatus that raised hopes manmade greenhouse gas emissions had finally peaked despite an expanding world economy.

"This growth in global CO2 emissions puts the goals set out in the Paris Agreement in jeopardy," lead author Corinne Le Quere, director of the Tyndall Centre of Climate Change Research at the University of East Anglia, said in a statement.

The findings, co-authored by a team of nearly 80 scientists, were published in the journal Open Access Earth System Science Data.

Rapid deployment of solar and wind power, along with gains in energy efficiency, have been outpaced by growth in demand for freight, personal transport, shipping, and aviation, the research showed.

The 2015 Paris climate treaty calls for capping global warming at "well below" two degrees Celsius, a goal that scientists say could soon slip out of our grasp if planet-warming continues to climb.

Even a 2C ceiling above pre-industrial levels may not be enough to avoid catastrophic impacts, the UN's climate science panel concluded in a landmark report in October. A single degree of warming to date has seen a rise in deadly heatwaves, droughts, floods, and superstorms made worse by rising seas.

"Emissions will continue to rise, rhetoric is increasing but ambition is not — we are completely off course," said co-author Glen Peters.

Fluctuations in global emissions over the last five or six years have tracked changes in coal consumption, the study revealed.

In particular, "the trends have a lot to do with the ups and downs of coal use in China," Le Quere told journalists in Paris.

Globally, coal-fired power accounts for 40pc of CO2 emissions, and more than two-fifths of the world's electricity.

Oil and gas use have grown almost unabated over the last decade.

China's emissions accounted for 27pc of the global total, and will likely show growth of 4.7pc in 2018.

The United States will account for 15pc of CO2 pollution in 2018, an increase of about 2.5pc.

Most of that growth can be traced to an exceptionally hot summer and cold winter.

India's emissions, seven per cent of the total, continued their upward spiral, increasing more than six per cent, with growth across all three major fossil fuels.

The European Union is set to see a small decline in 2018, and will account for about a tenth of the total.

Published in Dawn, December 6th, 2018

https://www.dawn.com/news/1449797/global-co2-pollution-set-to-make-sharp-rise-this-year

COST OF CLIMATE CHANGE By Editorial

Published: December 9, 2018

Maximising profits and minimising costs has been the topmost priority of any business industry. Resultantly, one of the major phenomena of this driving force has been introducing inexpensive materials to create cheap plastic alternatives. While corporations sought to minimise their costs, the damage consequently brought upon the environment has been expensive. Pakistan has suffered significantly. According to a new report, the Global Climate Risk India 2019, Pakistan lost out on \$384 million last year due to catastrophic climate events. As our politicians struggle to rescue the country from the constant economic downturn, a reconfiguration in strategy and reassigning priorities might be in order.

Focusing on climate change, if not out of concern for the environment and the wellbeing of future generations, for economic reasons is logical. Environmentally-friendly practices will have far-reaching positive impacts and reduce the need for appendages such as dams in the long run. The requirement of providing clean water to the growing population is not to be undermined here but scientific findings should be consulted in the quest to provide households with water.

In order to win over the population to support the mitigation of damage to our environment, two changes need to be adopted. First, a general awareness needs to reach the masses, like on the benefits of planting trees, reducing the sale and use of plastics, and encouraging consumers to rely less on industries that cause heavy detrimental impact to the environment, such as meat farming. The second change is through policy. As the government works on economic policies to encourage international trade and increase investor confidence, local regulations on the use of plastic bags, straws and industrial practices would facilitate the battle against climate change to reduce financial damage.

Published in The Express Tribune, December 9th, 2018.

https://tribune.com.pk/story/1862928/6-cost-climate-change/

THE RISK OF CLIMATE CHANGE Dr Noman Ahmed December 9, 2018

In the UN Conference on Climate Change which began in Katowice, Poland on December 2, Secretary General Antonio Guterres cautioned the world about the obvious risks. "Climate change is running faster than we are......for many, people, regions, even countries, this is absolutely a matter of life and death!" he warned. Among other recommendations, he strongly emphasised on cutting the use of fossil fuels and operationalising the Paris Agreement amongst the nations. During the present decade, climate change has evolved as a matter of global concern with a sizable intensity. Pakistan is also affected by the various outfalls of climate changes caused by global and local actions. The common global factors comprise carbon emissions, global warming, depletion of ozone layer, melting ice caps, rising ocean levels, reduction in forest cover, adverse impacts on biodiversity, reduction in fresh water reserves and anomalies caused in weather patterns.

Issues prominent in the national scenario include droughts, unpredictable rates of precipitation, depletion of water aquifers, spread of water logging/salinity, melting of glaciers, flash floods, unpredicted monsoons, acid rains, drastic reduction in forest cover, marine pollution and sea level rise. Apart from the global factors, a sizable damage has been caused as a consequence of nascent development process and local factors.

Pakistan is suffering from these impacts which are a visible cause for losses in productivity, livelihoods and redundancy of precious ecological assets. While it is wise to take a proactive stance at the global level in the climate change initiatives, it is extremely important to mitigate the local causes without any further delay.

Coastal marine environment of Pakistan is facing a crisis, ironically at the hands of its very users. This has been complicated by periodic reduction in mangrove forests affecting traditional habitats, such as Gizri, Korangi, Phitti, Gharo and adjoining creeks.

Initiation of large-scale real estate developments along the south of Karachi is one reason for the removal of mangrove cover. The other factor that has led to this catastrophe is the reckless cutting of mangrove branches and trunks by coastal communities for use as fire wood. Field studies by researchers have shown that local people uproot and plunder the budding habitat of mangrove plants and continue to do so for mundane utilisation.

An uneven pattern of land reclamation by some ambitious developers has cut away marine water flow, thus causing a natural death of mangroves. Marine ecology is also impacted by raw sewage inflow. At present, 450 million gallons of sewage is pushed into the Arabian Sea from Karachi on a daily basis. Human waste, sludge, acids, bases, bio-degradables and toxic substances are few of the ingredients that pass untreated into the sea. Micro environment of the coastline is thus constantly degraded.

The oil spills from ships is also a source of pollution. About 0.09 million tones of used oil is discharged along the Karachi coast annually. All of these factors contribute to the various climate factors which need to be scientifically analysed for proper prevention, mitigation and adaptation plans.

Precious ecosystem of the Indus delta is another case in point. It is spread on an area of 0.6 million hectares between Korangi and Sir Creek. This habitat primarily owes its lifeline to the fresh water discharges from Indus. Research studies have shown environmental flows, which are needed to keep the delta alive, happens only three months in a year. Despite the inter-provincial conflicts and claims, it is found that the estuaries run dry for most part of the year.

Ingress of sea and threat of destruction of soil quality are two principal hazards faced by local communities in these locations. It may be noted that high salinity adversely impacts the aquatic life and fishing population. Over harvesting of marine resources (and also their reckless destruction),

naturally occurring meandering of creeks, grazing of marine greenery by cattle and camels are some of the concerns.

Mangrove reduction in this region is also extensive. A study informs that about two third of mangrove population has died since 1979. Needless to say that tsunami, cyclones and tidal waves are naturally intercepted by mangroves, saving lives and assets. They do the work which is worth a multi-million dollar construction of artificial dykes.

The war on terror and deforestation in the north of the country had negative climate impacts. Dislocation of population and re-location to places unprepared for settlement destroy flora and fauna. Bombings and explosions all along the lengths and breadths of Swat and other parts of Malakand region have generated immense harm to plant life. Scientists had estimated a forest depletion process on an average of 800 sq. km. per annum.

Common sense informs that loss of forests cause soil erosion and compound effects of land sliding. The conservation of forests acts as the natural regulator of climate and topographical conditions. In the prevailing anarchy and lawlessness, the forest cover is conveniently removed by the vested interests for their private advantage. The existing institutional arrangements for the management of forest lands fall grossly short of this vital national duty.

Mass scale corruption and involvement of high stakes render the monitoring process ineffective. While the tree plantation campaigns launched by the federal government and various civil society organisations are entirely welcome, the pace must be accelerated to scale up to the challenge.

In Pakistan, the realisation towards climate change agenda is slow and not promising. Water resources conservation, protection of life and assets of people, combating vulnerabilities caused to lesser income groups and eventually curtailing social dislocations are imperative. Meteorologists and other professionals have predictions about impending droughts and reduction in water availability.

For food production and conservation of settlements, it is most vital to prepare a mitigation and adaptation strategy. If food prices soar, it can lead to social and political upheavals. It is also likely that the country may suffer from the climate migration syndrome. That is to say people would be forced to relocate due to hazards generated by climatic factors. For a country which is already grappling with security and conflict-based dislocations, a further wave of natural displacement of population will not be desirable.

There are many ways of approaching this scenario. Several organisations are working towards addressing the issue of climate change. Asian Development Bank has a spread out agenda of supporting climate change mitigation and adaptation process. Some of its institutional arms looking into this avenue include Climate Change Fund (CCF), Clean Energy Financing Partnership Facility (CEFPF), Asia Pacific Carbon Fund (APCF), Future Carbon Fund (FCF), Water Financing Partnership Facility (WFPF) and Poverty and Environment Fund (PEF).

Several research groups are busy analysing the trends and developing plans and strategies to combat the issue. The knowledge base is now being developed to address this menace which is common to all of us. By intelligent use of resources, timely actions and implementation, the constraint can be turned into an opportunity. It is hoped that our decision makers will rise to the occasion.

http://tns.thenews.com.pk/risk-climate-change/#.XA4dM9szbcs

NEWS COVERAGE PERIOD FROM NOVEMBER 26TH TO DECEMBER 2ND 2018 CLIMATE CLOCK IS TICKING... By Rina Saeed Khan

Published: November 26, 2018

As the annual UN Climate Change Conference (COP24) nears in December this year, two important reports have come out to lend it an urgency never seen before. These global negotiations tend to be convoluted and tiresome, dragging on for days as parties quibble over the text that has to be agreed by more than 190 UN member countries to become implementable. But this year the scientists have hit the panic button: the science is clear and alarming — the latest special report by the UN's Intergovernmental Panel on Climate Change states that the world has less than 12 years to get its act together in terms of drastic carbon emissions cuts to remain below the safeguard of 1.5 degrees Celsius. Or else we head towards "catastrophic" 3 or even 4 degrees of warming.

We are currently at 1 degree C of warming and look at the havoc wreaked by wildfires, floods and hurricanes this year. The world has little time left to take action and now the World Wide Fund for Nature's Living Planet Report 2018 has just informed us that there has been an overall decline of 60% in population sizes of wildlife species between 1970 and 2014. As our new Climate Change Minister Malik Amin Aslam put it: "We are at the precipice." Pakistan has, in fact, been identified as one of the "hotspot regions" that will suffer immensely. We are already facing a climate reality as one of the top 10 countries in the long-term index to suffer from climate-related disasters. Pakistan has signed the Paris Agreement, but it will only become operational in 2020. This year, its work plan will be finalised in Katowice in Poland at the climate conference that will take place Dec 2-15.

Pakistan will be sending a delegation headed by the Climate Change Minister to Katowice. Although we are not a big player at these negotiations given our negligible carbon emissions, Pakistan has produced a Nationally Determined Contributions document (the voluntary commitments at the heart of the Paris Agreement) and the current government is planning to shift to renewable energy like hydro and solar in addition to growing trees and protecting natural forests under the 10 Billion Tree Tsunami campaign. There is also a plan to introduce a large floodwaters management project to revive wetlands in addition to implementing a multi-million dollars Glacier Lake Outburst Flood project funded by the global Green Climate Fund.

The negotiations leading up to this year's climate change conference have not been positive. Developed countries are not showing much concern yet for developing countries — the solidarity of the 1990s when the world came together for the Earth Summit is dissipating. The pressure, in fact, is now on fast-developing countries like India, China and Brazil to cut their emissions and the principle of 'Common But Differentiated Responsibilities' enshrined in the UN Framework Convention on Climate Change is fast disappearing. The Loss and Damage mechanism (whereby rich countries compensate developing countries for damages) has been sidelined and the promised 100 billion dollars in climate finance to help developing countries adapt to climate change is nowhere in sight. In fact, there is very little new money — just around six billion.

According to long-time climate expert Shafqat Kakakhel, "Pakistan has not been a significant player at these negotiations since 2012; our delegations have become smaller with less expertise. But we are

a member of the Like Minded Group of developing countries whose interests are in harmony with ours and they will do the negotiating at the conference." What Pakistan can do, however, is to make its presence felt by explaining its climate change challenge and showcasing what it is doing to address it. The most important task at hand is to ensure that the rulebook for the Paris Agreement becomes operational soon with fair and robust rules given that the clock is ticking.

Published in The Express Tribune, November 26th, 2018.

https://tribune.com.pk/story/1854294/6-climate-clock-ticking/

WORLD MUST TRIPLE ITS EFFORTS TO CAP GLOBAL WARMING: UN Agencies November 28, 2018

PARIS: Humanity is falling further behind in the race against climate change, with the gap between greenhouse gas emissions and levels needed to achieve the Paris climate treaty temperature goals continuing to widen, the UN said on Tuesday.

With only a single degree Celsius of warming so far, the world has seen a crescendo of deadly wildfires, heatwaves and hurricanes.

On current trends, temperatures are on track to rise roughly 4°C by the century's end, a scenario that would tear at the fabric of civilisation, scientists say.

To cap global warming at two degrees Celsius, national carbon-cutting pledges annexed to the 2015 Paris Agreement must collectively triple by 2030, according to the UN Environment Programme's (UNEP) Emissions Gap report.

To hold the rise in Earth's temperature to 1.5°C above the pre-industrial benchmark, such efforts would have to increase fivefold.

"The emissions gap is much bigger than last year," said UNEP's Philip Drost, one of several coordinators for the annual report's ninth edition.

One obvious reason was a spike last year in the quantity of carbon dioxide, methane and other planetwarming gases escaping into the atmosphere.

This trend is set to continue in 2018, which saw a jump in CO2 emissions from the energy sector, according to the International Energy Agency, as well as an increase in the atmospheric concentration of CO2.

But the gap between where we are and where we need to be also grew on paper: new calculations by the UN's top science panel sharply reduce the real-world potential for drawing CO2 out of the air, whether by planting more trees or capturing and storing CO2 emitted by power plants.

More broadly, the Intergovernmental Panel on Climate Change (IPCC) special report released last month concluded that 2°C of warming — once seen as a safety guardrail — would in fact usher in a maelstrom of deadly extreme weather.

Taken together, rising emissions and revised projections on CO2 removal have widened the emissions gap by 15 per cent for a 2°C world, and by nearly 70 per cent for the 1.5°C target, according to the new report.

The news comes despite breakneck growth in solar and wind power, gains in energy efficiency, and climate action by business and local governments, said Andrew Steer, president and CEO of the Washington DC-based World Resources Institute.

"We are chasing a bus" — climate change — "and we are going faster and faster, setting new world records," he said by phone.

"But the bus is accelerating even faster, and the gap is increasing."

Written and reviewed by 100 climate scientists and experts, the annual, 100-page analysis tracks progress towards achieving the Paris treaty goals.

Trump rejects key conclusion of US govt climate report

US President Donald Trump has rejected a central conclusion of a dire report on the economic costs of climate change released by his own administration, but economists said the warning of hundreds of billions of dollars a year in global warming costs is pretty much on the money.

Just look at last year with Hurricanes Harvey, Maria and Irma, they said. Those three 2017 storms caused at least \$265 billion in damage, according to the National Oceanic and Atmospheric Administration.

The National Climate Assessment report, quietly unveiled on Friday, warned that natural disasters are worsening in the United States because of global warming.

It said warming-charged extremes "have already become more frequent, intense, widespread or of long duration".

The report noted the last few years have smashed US records for damaging weather, costing nearly \$400 billion since 2015.

The president said he read some of the report "and it's fine" but not the part about the devastating economic impact.

"I don't believe it," Trump said, adding that if "every other place on Earth is dirty, that's not so good."

Earlier, the White House had played down the report.

Spokeswoman Lindsay Walters said in an emailed statement that the report "is largely based on the most extreme scenario, which contradicts long-established trends by assuming that, despite strong economic growth that would increase greenhouse gas emissions, there would be limited technology and innovation, and a rapidly expanding population".

Published in Dawn, November 28th, 2018

https://www.dawn.com/news/1448100/world-must-triple-its-efforts-to-cap-global-warming-un

FRAGILE CLIMATE PUTS FOOD SECURITY AT RISK, WARNS UN AP Updated November 29, 2018

BANGKOK: Feeding a hungry planet is growing increasingly difficult as climate change and depletion of land and other resources undermine food systems, the UN Food and Agricultural Organisation said Wednesday as it renewed appeals for better policies and technologies to reach "zero hunger."

Population growth requires supplies of more nutritious food at affordable prices, but increasing farm output is hard given the "fragility of the natural resource base" since humans have outstripped Earth's carrying capacity in terms of land, water and climate change, the report said.

About 820 million people are malnourished. The FAO and International Food Policy Research Institute released the report at the outset of a global conference aimed at speeding up efforts to achieve zero hunger around the world.

"The call for action is very clear. It is possible in our lifetime and it is also realistic to end hunger and malnutrition," Inonge Wina, vice president of Zambia, told the gathering. Food security remains tenuous for many millions of people who lack access to affordable, adequately nourishing diets for a variety of reasons, the most common being poverty.

But it's also endangered by civil strife and other conflicts. In Yemen, where thousands of civilians have died in airstrikes by a Saudi-led coalition, the aid group Save the Children says 85,000 children under 5 may have died of hunger or disease in the civil war.

In Afghanistan, severe drought and conflict have displaced more than 250,000 people, according to UNHCR, the UN refugee agency.

FAO Director-General Jose Graziano da Silva noted that the number of hungry and malnourished people in the world has risen to levels last seen a decade ago.

"After decades of gains in fighting hunger, this is a serious setback and FAO and the UN sister agencies, together with member governments and other partners, are all very concerned," Graziano da Silva said in a videotaped address to the conference.

Hunger is still most severe in Africa, but the largest number of undernourished people live in the Asia-Pacific region, the report said. It said good public policies and technology are the keys to improving the situation.

The FAO estimates that global demand for food will jump by half from 2013 to 2050.

Published in Dawn, November 29th, 2018

https://www.dawn.com/news/1448335/fragile-climate-puts-food-security-at-risk-warns-un

### 'KARACHI UNDER THREAT FROM CLIMATE CHANGE' The Newspaper's Staff Correspondent November 30, 2018

HYDERABAD: Scholars warned at a seminar on Thursday that Karachi also faced threat from global climate change and described melting glaciers as a grave danger to the world.

They were speaking at the seminar on 'Change and its impact on Pakistan' organised by the Centre for Pure and Applied Geology, University of Sindh, at the centre's auditorium, according to a press release.

American scholar Dr Robert Reynolds, who delivered lecture on impact of global warming, said that there were many reasons which had added fuel to the fire such as growth in population, rise in sea level, increase in carbon dioxide levels. "The risk of melting glaciers has also increased. Karachi is also under threat," he said.

SU Vice Chancellor Prof Dr Fateh Mohammad Burfat said that global warming had become a serious problem. "We must take some serious steps to protect ourselves from climate change. We should have brought changes to keep our region safe. The situation is getting worse and worse by each day. There are many reasons for this climate change, such as an increase in population, noise and pollution and lack of plantation," he said.

US-based scholar Dr Ghulam Sarwar dilated on Indus River while Prof Dr Abdul Rasool Abbasi, dean Faculty of Natural Sciences and Prof Dr Mohammad Hassan Agheem, director of Centre for Pure and Applied Geology, shared their views on climate change.

Published in Dawn, November 30th, 2018

https://www.dawn.com/news/1448423/karachi-under-threat-from-climate-change

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