

FEARING POLLUTION, N CHINA RESIDENTS PROTEST PLANT

BEIJING: Fearing pollution, hundreds of residents in a northeastern Chinese city yesterday protested the building of an aluminum processing plant, ignoring warnings from authorities against disturbing social order. Urban Chinese residents, angry about environmental degradation and hazardous smog, have become increasingly concerned about living near polluting factories, occasionally protesting against new projects. Tens of thousands of "mass incidents" - the usual euphemism for protests - take place each year in China, triggered by corruption, pollution, illegal land

grabs and other grievances.

In Daqing, residents took part in a protest against the planned building of an aluminum plant by a subsidiary of Zhongwang Holdings Ltd. Photos and videos of a large crowd gathering in the car park outside the city government were circulated on Weibo yesterday, along with a hashtag asking Zhongwang to "please leave Daqing". Protesters shown in the photos held signs saying "Reject pollution, resist Zhongwang" and "Protect our homes". Two eyewitnesses confirmed the protests had taken place. "There are about 800 to 1,000 people

protesting still against the aluminum plant," said one eyewitness who gave his family name as Zhang, speaking by telephone from Daqing. The protests took place despite a call by city officials for residents to "rationally" convey demands, warning that "illegal gatherings, defamation, rumors and other acts that disrupt social order" would be dealt by law. "Everyone please be assured, if Daqing Zhongwang Aluminium's project does not pass muster on environmental issues, then it absolutely will not advance further," the city government said in a post late Monday on its official microblog.

Public concern about pollution from the plant would be met with a "scientific" assessment of the plant's environmental impact, the post said. A spokeswoman for Zhongwang Holdings said the company was surprised by the protests and did not know why local residents were opposing the project now. The company bought the land five years ago but building has not yet started, with a feasibility study still underway. "We're still having internal discussions on the next step and will keep an open dialogue with the government and people there," she said, adding environmental pro-

tection was a "priority" for the company.

The protests come as the company, one of the world's top aluminum fabricators, is embroiled in a dispute over US import duties and subsidiary Zhongwang International Group Ltd pursues a \$2.3 billion takeover of US aluminum products maker Aleris Corp.

US lawmakers have called on regulators to reject the takeover. The Daqing city government in frigid Heilongjiang province did not answer calls seeking comment. An official reached by telephone at the Daqing police declined to comment. — Reuters

CHEAP SOLAR AMBULANCES TO SPEED INTO SERVICE IN RURAL BANGLADESH

DHAKA: An inexpensive, solar-powered ambulance that can fit down narrow laneways is set to hit the road in rural Bangladesh this year, its manufacturers say. The three-wheeled van, as well-equipped as ambulances used in Bangladesh's cities, runs entirely on solar power - including solar battery power at night - and can be used in rural areas with no grid electricity, according to the developers. A Bangladeshi university, a government organization and a local vehicle manufacturer who are collaborating on the vehicle say it should for the first time bring ambulance service to rural areas without it. The vehicle is in the field testing stage and there are plans to launch it by the end of 2017.

In many rural areas, emergency patients are often taken to hospital in hand-pulled rickshaw vans. But the new, small three-wheeler ambulance will fit along narrow roads in rural areas where it is difficult for larger ambulances to run. Zahidul Islam, a farmer in Satoria in Manikgonj district, said that when his first child was born his wife had a difficult delivery and was taken to the nearby clinic in a hand-pulled rickshaw - a trip that took too much time. "If I had taken her to hospital a little earlier, she would have had fewer complications," he said. But larger vehicles could not reach his house, he said. He believes that faster, smaller ambulances would be helpful for rural people.

Safe and comfortable

Kamal Hossain, a driver who has tested a prototype of the ambulance, said that it was safe and comfortable to drive on both smooth and rough surfaces, and went at a good speed. A K M Abdul Malek Azad, the project's team leader and a professor at BRAC University in Dhaka, said that most rural community health clinics cannot afford conventional ambulance services, but that the new ambulance would be cheap to buy and to run.

"I thought a low-cost ambulance service would be a good idea for these rural clinics.

And by using solar power we can reduce operational costs and save the environment," he said. The ambulance is expected to cost \$1,900 to \$2,500, a fraction of the price of conventional ambulances, which can cost at least \$30,000 in Bangladesh. BRAC University's Control and Applications Research Centre is running the project in association with vehicle manufacturer Beevatech. Financing comes from the World Bank through Bangladesh's Infrastructure Development Company Limited, with seed funding from the U.S. Institute of Electrical and Electronics Engineers.

Race car inspiration

Azad said that, as far as he is aware, there is no equivalent elsewhere in the world of the solar-powered three-wheeler ambulance his team is developing. The inspiration for it came from solar racing cars in Australia. "I thought if researchers can develop a solar racing car, there is potential to develop a solar ambulance," he said. A vehicle that would not be reliant for power on Bangladesh's overburned national power grid would be a bonus, he explained. The new ambulance can accommodate three people. It has a maximum speed of 15-20 km per hour, and a range of up to 50 km. By day it is powered by four 100-watt solar panels on the roof. At night it runs on four 12-volt batteries, which are charged from the solar panels.

"The last layer of the development includes installation of a battery charging station (at a hospital or other site close by) that is completely fuelled by a solar canopy," Azad said. "This step is taken to ensure complete independence of these electrically assisted rickshaws from the national grid." The ambulance's battery can recharge in three to four hours, he said. Azad said his team has built and tested five prototypes over the past year. The new ambulances are expected to hit the roads at the end of 2017. — Reuters



NEW DELHI: This file photo shows Indian protesters wearing protective masks taking part in a rally urging immediate action to curb air pollution in New Delhi. — AFP

DEATHS FROM INDIA AIR POLLUTION RIVALS CHINA

INDIA'S POOR AIR QUALITY CAUSES PREMATURE DEATHS

NEW DELHI: India's air now rivals China's as the world's deadliest, according to a new study published yesterday amid warnings that efforts to curb pollution from coal won't yield results any time soon. India's notoriously poor air quality causes nearly 1.1 million premature deaths every year, almost on par with China, concluded a joint report by two US-based health research institutes. But where deaths linked to air pollution in China have steadied in recent years, the rate has soared in India where smog readings in major cities routinely eclipse safe exposure levels.

India has recorded a nearly 50 percent increase in premature deaths linked to PM2.5 — fine particles that lodge deep in the lungs — between 1990 and 2015, the report found. "India

now approaches China in the number of deaths attributable to PM2.5," said the report by the Health Effects Institute and the Institute for Health Metrics and Evaluation. Anti-pollution steps in China — which jostles with India for the unenviable title of world's most polluted country — has seen the number of smog-related deaths largely stabilize since 2005.

In India that number has steadily climbed from an estimated 737,400 deaths a year in 1990 to 1.09 million in 2015. India and neighboring Bangladesh have experienced the steepest increases in pollution since 2010 "and now have the highest PM2.5 concentrations" in the world, the report said. Pollution in New Delhi in November reached crisis levels, with crop burn-

ing, car exhaust, dust and coal plants blamed for the record smog. The government shuttered schools and temporarily closed a coal-fired power plant as a stop gap, but experts say the energy-hungry nation will need to do more if it's to clean the air for India's 1.25 billion people.

"Coal isn't going to go away very fast. Coal-based pollution in the environment will always be very significant in India," Sumant Sinha, the chairman of Indian clean energy firm ReNew Power said. "Renewables are not going to be expanding fast enough for us to be able to impact that particular problem. Unless all of those (factors) are also brought under control, I don't think it's going to come anywhere close to really solving the problem." — AFP



KAILAHUN: This file photo shows an MSF medical worker checking their protective clothing in a mirror at an MSF facility in Kailahun. — AFP

SMALL PERCENTAGE OF PEOPLE SPREAD MOST EBOLA CASES

MIAMI: Most of the people infected with Ebola in the West Africa epidemic that began in 2014 got sick through contact with a small number of "superspreaders" with the disease, researchers said Monday. The study in the Proceedings of the National Academy of Sciences shows such "superspreaders" can be extremely dangerous when it comes to infectious disease outbreaks. The West African Ebola epidemic was the largest in history and killed more than 11,300 people, with many of the cases involving people infected while caring for a sick person or burying a body.

"We now see the role of superspreaders as larger than initially suspected," said co-author Benjamin Dalziel, an assistant professor of population biology in the College of Science at Oregon State University. "It was the cases you didn't see that really drove the epidemic, particularly people who died at home, without making it to a care center." At the time, researchers counted cases according to those seen in medical centers, but they later real-

ized these were a small fraction of the total.

"There wasn't a lot of transmission once people reached hospitals and care centers," said Dalziel. "In our analysis we were able to see a web of transmission that would often track back to a community-based superspreader." In fact, 61 percent of those infected with the disease caught it from people accounting for just three percent of those who got sick, the researchers said.

The study included researchers from Princeton University, Oregon State University, the London School of Hygiene and Tropical Medicine, the International Federation of Red Cross and Red Crescent Societies, the Imperial College London, and the US National Institutes of Health. If superspreading had been completely under control about two-thirds of Ebola cases could have been avoided, the report said. Superspreaders have also played a role in the epidemic of severe acute respiratory syndrome, or SARS, in 2003 and Middle East respiratory syndrome in 2012. — AFP

CLIMATE CHANGE IMPACT ON ANIMALS UNDER-APPRECIATED

PARIS: Nearly half of endangered land mammals and a quarter of birds are already harmed by climate change — a much higher segment than previously thought, researchers have found. Endangered primates and elephants are among the groups squeezed hardest by global warming, partly because they reproduce slowly and take longer to adapt to rapid environmental changes, they reported. While most studies seek to predict global warming's future impact on animal survival, the new analysis found that for "large numbers" of threatened species, the damage was already being done.

The data suggests that "the impact of climate change on mammals and birds in the recent past is currently greatly under-appreciated," according to a study in the journal Nature Climate Change this week. Researchers had amassed data from 136 previous studies looking at 120 mammal and 569 bird species. They compared documented changes in climate with growth or decline in population size, geographic range, reproductive and survival rates and body mass. The team then extrapolated the data to all land mammals and birds listed as threatened by the International Union for Conservation of Nature (IUCN).

Of the 873 listed mammal species, 414 (47 percent) have likely "responded negatively" to climate change, and 298 (just over 23 percent) of 1,272 birds, the researchers found. Climate change can affect animals by limiting food and water, spreading disease and shrinking living space. Only seven percent of mammals and four



KENYA: This file photo shows a herd of elephants walking in Amboseli National Park. — AFP

percent of birds identified by the study were coded on the IUCN Red List as threatened by "climate change and severe weather," the authors said. "We recommend that research and conservation efforts give greater attention to the 'here and now' of climate change impacts on life on Earth," the researchers said.

"Conservation managers, planners and policy makers must take this into account in efforts to safeguard the future of biodiversity." In Dec

2015, 195 nations adopted the Paris Agreement to limit average global warming to "well below" two degrees Celsius over pre-Industrial Revolution levels.

This would be achieved by curbing planet-heating greenhouse gases from burning coal, oil and gas. But scientists warn that 2C is already too high and that the world is on track for warming even beyond that, with disastrous consequences for life as we know it. — AFP

EMERGENCY UN MEETING OVER ARMYWORM OUTBREAK IN HARARE

HARARE: International experts hold emergency talks in Harare yesterday to tackle an outbreak of crop-eating "armyworm" caterpillars advancing across several African countries. The armyworm has already caused damage to staple crops in Zambia, Zimbabwe, South Africa and Ghana, with reports also suggesting Malawi, Mozambique and Namibia are affected. Experts say it appears to be the first time that the "fall armyworm" species from the Americas has caused widespread damage in Africa.

"So, farmers do not know really how to treat it," said David Phiri, the UN Food and Agriculture Organization's coordinator for southern Africa. "Nobody seems to know how

it reached Africa," he said, adding that it started in places like Nigeria and Togo, which had it last year. One theory is that the caterpillars arrived in Africa on commercial flights from South America or in plants imported from the region. The caterpillars eat maize, wheat, millet and rice-key food sources in southern and eastern Africa, where many areas are already struggling with shortages after the most severe drought in recent years.

Could be catastrophic

Experts from 13 countries will spend three days at the summit in the Zimbabwean capital forming a battle plan to defeat the pests. The

armyworm is "spreading rapidly" in Africa and could threaten farming worldwide, the Centre for Agriculture and Bioscience International (CABI) warned last week. It said maize is particularly vulnerable to the larvae, which attack the crop's growing points and burrow into the cobs. Unlike the native African armyworm, the fall armyworm does not "march" along the ground in huge numbers seeking more food, the FAO said.

"This sequence of outbreaks began in mid-December 2016 in Zambia," Kenneth Wilson, professor at Lancaster University in Britain, wrote in a briefing paper Monday. "It is now as far south as South Africa. Because armyworms feed on many of the staple food crops they

have the potential to create food shortages in the region." The fall armyworm also attacks cotton, soybean, potato and tobacco fields. Chemical pesticides can be effective, but fall armyworms have developed resistance in their native Americas.

"You use different methods. One of them is pesticides, another is to use biological control. Another is to use natural control, like digging trenches around the farm (or) natural predators, like birds, to eat those worms," said Phiri. "If it is a small level of the worms, it's easy to control, using pesticides.

Otherwise, it's very difficult to control it, so they will have to use different methods-includ-

ing sometimes burning the crops."

Zimbabwe's deputy agriculture minister Davis Marapira confirmed to AFP that the pest had been detected in all of the country's 10 provinces. "The government is helping farmers with chemicals and spraying equipment," Marapira said. The FAO, which is hosting the Harare meeting, said armyworm outbreaks combined with current locust problems "could be catastrophic" as southern Africa has yet to recover from droughts caused by the El Nino climate phenomenon. In Dec, Zambia deployed its national air force to transport pesticides across the country so that fields could be sprayed. — AFP