

Technology & Science



SENGA BAY, Malawi: In this aerial view fishing boats are seen on the shore of the Lake Malawi at the Senga village in Senga, Malawi. — AFP photos



SENGA BAY, Malawi: A Malawian fisherman checks on fish drying up on charcoal on the shore of the Lake Malawi at the Senga village.



SENGA BAY, Malawi: Malawian fishermen fix their fishing nets as fishing boats are seen on the shore of the Lake Malawi at the Senga village.

Empty nets as overfishing and climate change sap Lake Malawi

World Bank ranks Malawi among at-risk countries to climate change

SENGA BAY, Malawi: On the shores of Lake Malawi, a crowd eagerly awaits the arrival of a white and yellow cedarwood boat carrying its haul. The crew of six deliver a single net of chambo, sardine and tiny usipa fish from the boat, just one of 72 vessels that land their catch every day on the beach at Senga Bay. But overfishing and climate change have taken their toll. Hundreds of local traders gather each morning and afternoon at Senga only to find that fish populations are falling in Lake Malawi, Africa's third largest body of freshwater.

"We were hoping to catch a half-boat full or maybe a quarter-boat... but I'm afraid the fish are dwindling in numbers," port manager Alfred Banda told AFP staring wearily at the small catch as it was dragged onto the sand. "Before, we used to catch a full boat but now we

are struggling," he said, adding that a full boat would earn a team of between six and 12 fishermen about \$300. Bordering three countries—Malawi, Tanzania and Mozambique—Lake Malawi stretches across more than 29,000 square kilometers with over 1,000 species of fish.

The 14,000 people living at Senga Bay depend on the lake for food and for their livelihood. "Seven years ago there was lots more fish than today. In 2019 it is different, there's no fish in the water," trader Katrina Male, a 40-year-old mother of six, told AFP as she stalked the nets of newly brought in fish seeking the best deal. "The fish nowadays are more expensive, because they are becoming scarce," Male said. "Some children have stopped going to school because their parents can't find the money."

No alternative to fishing

For both locals and climate experts, declining fish numbers reflect a combination of environmental change and overfishing that augurs ill for the future. The World Bank ranks Malawi among the top 10 at-risk countries in Africa to climate change, with cyclones and floods among the major threats. Senga community leader John White Said says increasing gale force winds and torrential rains have made it harder for fishermen on the lake.

"Our men can't catch fish because of wind which is much stronger than before," he said, adding that the rains are increasingly unpredictable on the lake. "The rain before would not destroy houses and nature but now it comes with full power, destroying everything and that affects the water as well." According to USAID, the num-

ber of rainfall incidents in the aid-dependant country is likely to decrease—but each rainfall will be more intense, leading to droughts and floods.

The threat was highlighted in March when Malawi was hit by torrential rains from Cyclone Idai, killing 59 people. The storm also cut a swathe through Mozambique and Zimbabwe, leaving nearly 1,000 dead. On top of the environmental impact, the number of fishermen in Senga had doubled in the last 10 years due to the lack of other jobs, Said said. "There is no alternative to fishing." One of the few to benefit is 38-year-old boat owner Salim Jackson, who rents out his two vessels. "I got into fishing 13 years ago because I had no other option, I never went to school. But it has brought me good money," he said.

Unsustainable fishing practices

By sunset, the balls of fishing net lay stretched out on the beach and both buyers and fishermen negotiate prices. Traders take their purchases in buckets to makeshift reed tables to be dried, smoked, fried or boiled in preparation for the market. "Declining fish catches are mainly due to unsustainable fishing practices," said Sosten Chiotha, a Malawian environmental science professor who works for the Leadership for Environment and Development (LEAD) action group.

"Overfishing is a challenge in Lake Malawi (but) there are efforts on co-management and closed seasons to ensure that the fishery recovers." Chiotha added that climate change was hitting Malawi with "increased frequency and intensity of extreme weather events in the major ecosystems including lakes." That leaves Malawi's agriculture-based economy sharply vulnerable to climatic events and entrenched poverty heightens pressure on the environment.

Wearing a black silk thawb robe and white kufi cap, Said stands tall on Senga beach, surveying the scene around him. "I'm worried," he said. "In Malawi most people depend on fishing financially and as a cheap food source. "The men have to cast their nets further and further away from the beach." —AFP



SENGA BAY, Malawi: Malawian fishermen work through their catch on their return ashore.



SENGA BAY, Malawi: A Malawian fisherman rest on fishing nets on the shore.

20 million children miss out on life-saving vaccines

LONDON: More than one in 10 children - or 20 million worldwide - missed out last year on vaccines against life-threatening diseases such as measles, diphtheria and tetanus, the World Health Organization and the UNICEF children's fund said yesterday. In a report on global immunization coverage, the UN agencies found that vaccination levels are stagnating, notably in poor countries or areas of conflict.

"Vaccines are one of our most important tools for preventing outbreaks and keeping the world safe," the WHO's director general, Tedros Adhanom Ghebreyesus, said in a statement. "It's often those who are most at risk - the poorest, the most marginalized, those touched by conflict or forced from their homes - who are persistently missed," he said. "Far too many are left behind."

The WHO/UNICEF report found that since 2010, vaccination coverage with three doses of diphtheria, tetanus and pertussis (whooping cough) vaccine and one dose of measles vaccine has stalled at around 86 percent. The report said this was too low, since 95% coverage is generally needed to provide "herd immunity" to those who are not vaccinated.

In 2018 for example, the number of measles cases around the world more than doubled, to almost 350,000. "Measles is a real-time indicator of where we have more work to do to fight preventable diseases," said Henrietta Fore, UNICEF's executive director. "An outbreak points to communities that are missing out on vaccines... (and) we have to exhaust every effort to immunize every child."

Almost half the world's unvaccinated children are in just 16 countries: Afghanistan, Central African Republic, Chad, the Democratic Republic of Congo, Ethiopia, Haiti, Iraq, Mali, Niger, Nigeria, Pakistan, Somalia, South Sudan, Sudan, Syria and Yemen. —Reuters

Manta ray asks divers for helping hand

SYDNEY: A giant manta ray with several fishing hooks caught below its eye appeared to ask two nearby divers for help in removing them, and

then waited patiently for them to do so. Underwater photographer Jake Wilton was diving off Australia's west coast when the three-meter wide animal moved toward him, footage showed. "I'm often guiding snorkelers in the area and it's as if she recognized me and was trusting me to help her," Wilton said in a statement yesterday. "She got closer and closer and then started unfurling to present the eye to me."

Incredible footage shows Wilton repeatedly diving down toward the animal and removing

the hooks, before the manta ray departs after the final impediment is dislodged. "She never moved. I'm sure that manta knew that Jake was trying to get the hooks out," said marine biologist and fellow diver Monty Hall. Manta rays are considered one of the most intelligent underwater creatures and are common off parts of the west coast of Australia. The ocean giants can grow up to seven meters wide and live for about 50 years. They don't have the sharp barb of a stingray and are harmless to humans. —AFP

India races for launch fix after Moon mission aborted

SRIHARIKOTA: Indian space chiefs pressed to quickly set a new date to launch a landmark moon mission after aborting one liftoff yesterday just 56 minutes ahead of schedule, media reports said. A committee of experts was looking into the causes of the technical hitch that put back the bid to become just the fourth nation after Russia, the United States and China to land a spacecraft on the Moon.

The Chandrayaan-2 — or Moon Chariot 2 — rocket, a key part of India's ambitious space program, could still blast off on July 29 or 30, media reports said. If that is not possible the launch would have to wait until September or beyond. "Right now, it is not possible to say when the launch can be scheduled. A committee is still investigating what went wrong," an official from the Indian Space Research Organization told the Hindustan Times on condition of anonymity. ISRO blamed "a technical snag" for calling off the launch with 56 minutes and 24 seconds left on the countdown.

"As a measure of abundant precaution Chandrayaan-2 launch has been called off for today," it added. The agency gave no immediate indication when it would try again, but experts said ISRO would be cautious. "If the launch does not happen in the next 48 hours, it could be postponed for a few months until we get an opportune launch window," said Ravi Gupta, a scientist formerly with the state-run Defense Research and Development Organization. Gupta said the last-minute halt to the countdown was "a truly courageous decision" after all the effort put into the preparations.

Low-cost missions

News reports quoted an unnamed ISRO official as saying a problem occurred during the last stage of powering up the rocket, and fuel would have to be taken out which could take 10 days before a new launch date is announced. India has spent about \$140 million on Chandrayaan-2, designing and building almost all of its components domestically. It has hailed the mission as one of the cheapest in the crowded space race. The launch would have been the third to the moon this year. China put its Chang'e 4 mission on the lunar surface in January, while Israel's \$100 million Beresheet crash-landed when it sought to become the first privately-funded mission in April. A soft landing on the Moon would be a huge leap forward in India's space program. National pride is at stake as Prime Minister Narendra Modi has vowed to launch a crewed space mission by 2022. It follows another high-profile but low-cost Indian mission—Mangalyaan—which put a spacecraft in orbit around Mars in 2014 at a fraction of the cost of comparable projects by established space powers like the United States, which often cost billions of dollars.

The Indian mission involved a 2.4-tonne orbiter that will circle the Moon for about a year taking images and testing the atmosphere. A lander named Vikram was to take the rover to the surface near the lunar South Pole. The rover, that was to be put on the surface on September 6, was to spend 14 days sending back data on rocks and soil. India's first lunar mission in 2008 did not land on the Moon, but orbited the Moon searching for water using radar. —AFP

DR Congo urges calm after Ebola case in key city

KINSHASA: Authorities in Democratic Republic of Congo have appealed for calm after an evangelical preacher fell ill with Ebola in the eastern city of Goma, the first recorded case of the disease in the urban hub in a nearly year-old epidemic. Goma, which has a population of around one million, is the capital of North Kivu province, the epicenter of an outbreak that has claimed more than 1,600 lives—the second highest toll in Ebola's history.

In a statement, North Kivu governor Carly Nzanu Kasivita stressed the new case "not only was detected at an early stage but also was isolated immediately, avoiding any further contamination." "I call on the population of the city of Goma and its outskirts to keep calm... (and) cooperate with response teams by observing hygiene and prevention measures and notifying any suspected case of Ebola," he added.

According to the latest health ministry figures issued on Saturday, 1,655 people have died from the hemorrhagic virus since August 1 last year, when the disease broke out in North Kivu and spread to neighboring Ituri. Nearly 700 people have been cured, and more than 160,000 been vaccinated. But efforts to roll back Ebola have been hampered by insecurity in a region plagued by militia groups, who have attacked treatment centers.

Local hostility to health workers trying to trace and isolate people in contact with Ebola patients is another hurdle. Two more Ebola workers were murdered in their homes in North Kivu after months of threats, the ministry said.

Health checkpoints

The Goma patient was described as a pastor who had been on a trip to another town, Butembo, one of the towns

hardest hit by the outbreak. There, he preached at seven churches and regularly touched worshippers, "including the sick," the health ministry said Sunday. His symptoms first surfaced last Tuesday, it said. On Friday he took a bus back to Goma from Butembo, along with 18 other passengers and the driver.

He went through several health checkpoints on the road between Butembo and Goma "but did not seem to show signs of the disease. However, at each checkpoint, he wrote down different family names and forenames on the passenger list, which probably indicates a will to hide his identity and state of health," the ministry said. When he arrived in Goma on Sunday morning, he went to a clinic because he didn't feel well and started to become feverish, the ministry said.

"Given that the patient was quickly identified, as well as all the passengers on the bus from Butembo, the risk of the disease spreading in the city of Goma is low," it said. The pastor was swiftly taken back to Butembo, the governor added. The other passengers and the driver will be vaccinated against Ebola on Monday, said the ministry, urging the population of one of Africa's largest countries to "keep calm."

The United Nations was convening a "high-level event" in Geneva on Monday to discuss response and preparedness for the Ebola outbreak. It will be attended by government ministers from the DR Congo and Britain, senior officials of the World Bank, the World Health Organization (WHO), and other UN agencies.

Global response

Last month, the WHO said the outbreak did not qualify as an international threat—a category that significantly ramps up global response to a contagious disease. Its decision took into account cases of infection that surfaced in Uganda among a family that had travelled to eastern DR Congo to see a relative stricken with Ebola. Ebola spreads when humans touch the blood, body fluids, secretions or organs of an infected person, or objects contaminated by such fluids. —AFP