

Rohini lake to be revamped as tourist spot



An artist's impression of the redeveloped lake area

TIMES NEWS NETWORK

New Delhi: The Rohini lake project in northwest Delhi is expected to be completed in the next eight months and will be commissioned within one month after completion. The lake is one of the 23 waterbodies the Delhi government is trying to rejuvenate. The lake area will be developed as a landscaped tourist spot that can act as a source of recreation for visitors, the government stated.

Water minister and Delhi Jal Board chairman Satyendar Jain visited the lake, which is in Sector 25, Rohini, on Saturday to review the progress of various units that are being constructed. "Visited Rohini STP where huge lakes & green areas spread over 80 acres are being constructed. Total 8 lakes will receive 68 MLD treated water from STP. This will help recharge the groundwater levels. The Arvind Kejriwal government plans to develop it as an adobe of recreation," Jain tweeted later.

The government said in a statement that the project is broadly based on sewage water remediation and lake development. The Rohini lake, along with the STP, is situated in a complex of 100 acres of land where the sewage treatment plant occupies 20 acres while lakes and green areas are being developed on 80 acres, it said.

Wastewater will be treated in the STP with a capacity of 15 MGD and the treated effluent will be further polished using suitable treatment technologies, after which it will be released into the lake. The completion of the project will ensure that underground aquifers improve, benefiting the ecological growth in the region, the government stated.

After the project gets completed, the lake will also boast of a primary pedestrian, a secondary pedestrian and a jungle trail with a 4.5-metre pathway that will run through the middle of the lake. The government will plant a large number of trees as part of the project, which will also have facilities like parking spaces, cafeteria, children's park, entrance plaza, grand stepped plaza, etc.

Along with this, a stepped water garden, water alcoves, and an outdoor museum that will narrate the story of water harvesting in India will also be set up at the lake site, the government said. The Rohini lake avenues could be utilised by people for picnic gatherings, outings, morning and evening walks, physical exercises, sports, sight-seeing and leisure, it added.

"The lake project has been designated as a key project and officials concerned have been asked to complete it on time," the government stated.

{ SUPPLY CUTS IN VASANT VIHAR }

Yamuna short of water, says DJB, asks Haryana to ramp up supply

Paras Singh

letters@hindustantimes.com

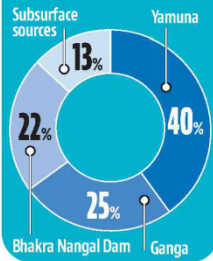
NEW DELHI: Amid extreme weather conditions and an ongoing heatwave in Delhi, the water level in the Yamuna has gone down, with the shortage resulting in supply cuts in some parts of the Capital and forcing the Delhi Jal Board (DJB) to seek release of additional water in the river from neighbouring Haryana.

A senior DJB official said the water level at Wazirabad pond on Saturday fell below the normal level of 674.5 feet, to a "critical low of 673.7 feet".

"Even the raw water flow through carrier lined canal (CLC) and Delhi sub branch (DSB) (two canals that carry water from Haryana to Delhi) is currently fluctuating... This has affected the lifting of 120 cusec of water from Wazirabad pond due to low pond level. This can affect water production adversely," said an SOS sent by DJB to the Haryana irrigation department on Saturday.

The communication, a copy of which HT has seen, asked the Haryana government to supply additional 150 cusec of raw water

Where Delhi gets its water



through the Yamuna to ensure that 120 cusec of raw water reaches Wazirabad pond, noting that the city's water requirement is higher due to the pandemic and peak summer. It asks Haryana to release additional water till monsoon, when the water level picks up in the Yamuna.

Haryana government officials did not respond to requests seeking a comment.

A water deficient state, Delhi already faces a shortfall of more

than 380 million gallons of water daily (MGD).

The Delhi government's economic survey 2021-22 said the total requirement of water was around 1,380 MGD in 2021. The state has targeted a peak water supply of 998MGD under its summer action plan for the year.

With the volume of water flowing through the Yamuna, CLC and DSB canals low, DJB officials said that maintaining the water production level at water treatment plants (WTP) at Chandrawal, Wazirabad, Nangloi, Haiderpur and Dwarka is under threat.

Additionally, the Haiderpur WTP, the largest in the city which supplies almost a quarter of Delhi's water supply, is facing operational problems. DJB, in a statement on Saturday, said the Haiderpur plant's production has been low for the past few days due to "excessive floating material" choking its filter beds.

"We have started the cleaning of filter bed without compromising on the production. Production should become normal by May 1 evening. DJB is endeavouring to rationalise the water supply but water will be available at low pres-

sure till the situation improves in parts of northwest Delhi, west Delhi, parts of south Delhi and the command area of Deer Park," the statement said.

Water woes in parts of city

Meanwhile, parts of the city have faced shortages over the last week.

The Vasant Vihar Welfare Association took to social media to flag water shortage for the last three days at the colony. Some parts of the south Delhi neighbourhood received some water on Saturday.

Suresh Goel, a resident of Vasant Vihar, said they received water for a short while on Saturday. "We have been facing supply issues for a week, but the problem got acute over the last three days," he said.

Shahbaz Singh, a resident of west Delhi's Rajouri Garden, said a similar situation prevails in the area's J-12 block where "taps have been running dry for three days".

Priyanka Aggarwal, who lives in south Delhi's Deoli, said residents in her area have been facing water shortage for the last four days.

"DJB should ensure that there is water for at least an hour a day. We are suffering due to the shortage of in this weather," she added.

Rohini lake project to be completed in 8 months

EXPRESS NEWS SERVICE
NEW DELHI, APRIL 30

A PROJECT to develop a park and recharge the lake at Rohini with treated wastewater from the nearby Rohini sewage treatment plant (STP) is set to be completed in around eight months, according to the Delhi Jal Board (DJB).

The park and the Rohini lake will together cover an area of 80 acres in Rohini's Sector 25. "Eight lakes will receive and recharge 68 MLD (million litres per day) of treated water from the STP..." Water Minister Satyendar Jain said on Saturday. The project is expected to help recharge groundwater and reuse treated wastewater.

After wastewater is treated in the STP, the treated effluent will be further polished to achieve a biochemical oxygen demand (BOD) level of 3 mg/litre. In-situ measures like natural wetlands will be used for further treatment of the effluent, which will then be released into the lake. According to an analysis report from the Delhi Pollution Control Committee for March, treated water released from the Rohini STP did not meet standards with regard to BOD, chemical oxygen demand, total suspended solids, ammoniacal nitrogen and dissolved phosphates.

The project is likely to improve the underground aquifers, according to a communication from the DJB.

The project, which is part of the Delhi government's 'City of Lakes' project, will be completed

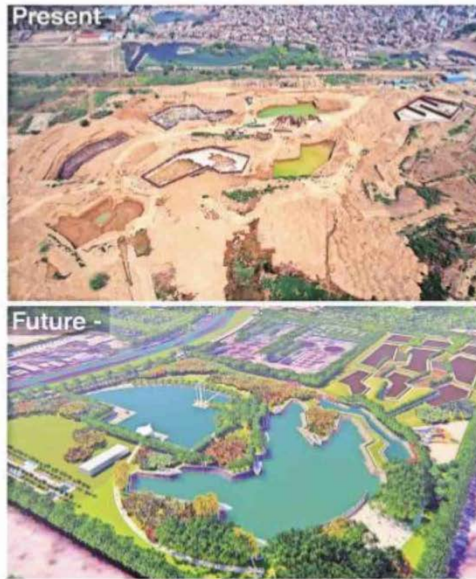


Photo tweeted by Water Minister Satyendar Jain indicates the govt's plan for the project

in eight months. Lakes and water bodies are being rejuvenated across the city as part of the project. Work is being taken up on 23 lakes and 250 water bodies under it.

The aim behind the project at Rohini is to also turn the area into a "tourist spot" which will be a source of recreation, according to the DJB. Trees will be planted in the area, and the lakes will have pedestrian pathways

and jungle trails. A children's park, parking spaces, and a cafeteria are on the anvil. A 'water garden' along with an outdoor museum on water harvesting in the country will be set up near the lakes.

The smaller lakes that will be part of the complex will include one with natural wetlands, a fish pond, an aeration lake, and another one that can remove nutrients from rainwater runoff.

Amid heatwave, IMD asks people not to venture out

CITY BUREAU

Hyderabad

With the heatwave sweeping across several districts of Telangana, the Indian Meteorological Department (IMD) – Hyderabad has issued a warning asking the public not to venture out during afternoons, especially from 12 pm to 3 pm.

Advising people to avoid exposure to heat, the IMD said the maximum temperatures were likely to range from 42 degrees Celsius to 47 degrees Celsius in most parts of the State from Saturday till Monday.

Heatwave conditions were likely to prevail in pockets of Adilabad, Kumram Bheem Asifabad, Mancheri, Nirmal, Nizamabad, Jagtial, Rajanna Sircilla, Karimnagar and Pedappally districts, according to an Impact Based Heat Wave forecast issued by the IMD on Saturday, a copy of which has been shared with the Chief Secretary, State Disaster Manage-



Heatwave conditions were likely to prevail in pockets of Adilabad, Mancheri, Nirmal and other districts. —Photo: Anand Dharmana

ment Authority Relief Commissioner and District Collectors. As for the city, the IMD's seven-day forecast has indicated that the maximum temperature could be in the range of 41 degrees Celsius to 42 degrees Celsius. Saturday saw an average maximum temperature of 41.7 degrees Celsius in the city, while Friday had recorded 41.2 degrees Celsius. This was a departure of more than two degrees from normal. On the other hand,

even as the temperatures are on the rise, IMD has also said the State was likely to receive light to moderate rain or thundershowers over the next five days. The IMD, which said the heat 'was tolerable' for the general public, added that it would be a 'moderate health concern' for vulnerable sections like infants, elderly people and those with chronic diseases. It also advised people consume liquid diets.

Hottest April in 122 years for northwest, central India

NEW DELHI:

Northwest and central India experienced their hottest April in 122 years with average maximum temperatures reaching 35.9 and 37.78 degrees Celsius respectively, the weather office said on Saturday.

Addressing a press conference, India Meteorological Department Director General Mrutyunjay Mohapatra said northwest and west central parts of the country - Gujarat, Rajasthan, Punjab and Haryana - will continue to experience above normal temperatures in May as well.

Nights would be warmer in May in most parts of the country, except some regions of south peninsular India, Mohapatra said.

The average temperatures observed pan-India for April was 35.05 degrees, which was the fourth high-

IMD to start services in 50 cities

NEW DELHI: On the lines of Urban Meteorological Services for Delhi-NCR, the India Meteorological Department (IMD) on Saturday announced to start similar services for 50 cities in a year's time. Speaking about the urban heat island effect and how advance warnings about the local area weather conditions vis-à-vis urban landscape can

help people be better prepared in their own areas, IMD director general Mrutyunjay Mohapatra said, "IMD had started Urban Meteorological Services for Delhi that gives localised readings. We plan to start similar service for 50 more stations in one year." This will help the authorities concerned and the general public to take informed decisions.

est in 122 years, he said. "The average rainfall in May 2022 over the country is most likely to be above normal," Mohapatra said.

However, parts of northwest and northeast India as well as the extreme south-east Peninsula are expected to get below normal rainfall in May, he said. The high

temperatures in March and April were attributed to "continuously scanty rainfall activity", he said.

In March, northwest India recorded a deficit in rainfall of around 89 per cent, while the deficit was nearly 83 per cent in April, mainly on account of feeble and dry disturbances. PTI

01/05/2022 Telangana Pg 09

Telangana Today

'Megadrought' takes Lake Mead to all-time low



Water levels in the US' largest reservoir, serving 40 million Americans, have dropped to a historic low.

WASHINGTON

Due to a megadrought gripping the western US, the water levels at Lake Mead, the country's largest reservoir serving 40 million Americans, have dropped to a historic low. An original intake valve of the reservoir that began supplying Nevada customers in 1971 was exposed for the first time.

"It's official — the top of Intake No 1 is now visible and the low lake level pumping station is now operational," the Southern Nevada Water Authority said

in a tweet. The low lake level pumping station is a backup system completed by the water authority in 2020 that draws water from deep lake areas to feed thirsty customers downstream. As of Friday, the water level of Lake Mead is 1,055.19 feet above sea level, which is 173.81 feet below full pool of 1,229 feet above sea level. "When the lake hit 1,060 (feet above sea level), that's when you could start to see the top of the intake number one," Bronson Mack from the Southern Nevada Water Authority told 'CNN'.

Hoover Dam, completed in 1936 during the American Great Depression, created Lake Mead by damming the Colorado River.

It is one of the largest man-made lakes in the world on the Arizona-Nevada border, 25 miles east of Las Vegas, according to Atlas.com. The dam generates electricity for parts of Arizona, California and Nevada, producing on average about 2,074 megawatts, which is enough electricity for about 8 million people, according to the Western Area Power Administration. IANS

01/05/2022 Telangana Pg 10

Govt. to develop Rohini as 'hodge of lakes'

Rohini Lake is among 23 waterbodies to be revived under government project

SPECIAL CORRESPONDENT
NEW DELHI

Water Minister and Delhi Jal Board (DJB) chairman Satyendar Jain on Saturday visited Rohini Lake to review the progress of various units being constructed in line with the Delhi government's objective of transforming the Capital into "a city of lakes".

The government plans to develop Rohini as an "abode of lakes and recreation" within eight months.

On Saturday, Mr. Jain directed the officials concerned to modify the structures so that the underground water recharge can be maximised using cost-effective methods and healthy ecological conditions can be maintained.

A total of eight lakes will receive and recharge 68 MLD of treated water from the Rohini STP, the government said.

The Rohini Lake project is

one of the 23 lakes to be revived in the Capital and has also been designated as a key project by the Delhi government.

The lake is situated in a complex of 100 acres of land where the Rohini STP occupies 20 acres, while lakes and green areas are being developed across 80 acres.

The wastewater will be treated in the STP with a capacity of 15 MGD and the treated effluent will be further

polished using suitable treatment technologies, after which it will be released into the lake.

The government's 'City of Lakes' project has two focus areas: lakes and other waterbodies. The project aims at creating multiple water reservoirs to arrest urban flooding and avoid choked drains. In the first phase of development, 250 waterbodies and 23 lakes will be taken up by the government.



At the receiving end: A house destroyed in the 2018 mega floods at Kuttanangalam in Kainakary, Alappuzha. — JITHU ALLESTY

Kuttanad's climate refugees

For the people of Kuttanad, recurring floods, torrential downpours, and intrusion of saline water are at the forefront of their minds nowadays, as they face the dire impacts of climate change

HIRAN UNDEKHEKARAN
SAN PAUL, A.

CLIMATE REFUGEE
The watermark on the shabby, cracked wall of the house of Radhama, 75, at Meenappally in Alappuzha's Kainakary grama panchayat bear testimony to the ravages of recurring floods and land breaches.

The partially flooded house, indented by water hyacinth, is situated on the muddy edge of the waterlogged Meenappally paddy polder. A country boat is always on standby in the front yard to ferry the family members and visitors between the house and the township of a canal in the front. Most importantly, it helps the family shift to safer places during flood emergencies.

Flooding during summer
"We have not seen our house premises remain dry for a single day in the past four years. The place is experiencing flooding even during the summer months," laments Jijimon, son of Radhama, referring to the heavy downpour that led to the inundation of the region a couple of weeks ago.

"My family has spent almost half the time in relief camps or in relatives' homes since the 2018 deluge. Heavy downpours coupled with land breaches have caused flooding in our home multiple times in the last four years. We want to move out, but do not have the means to relocate to a better place," says Mr. Jijimon, who takes

up odd painting jobs to earn the daily bread for his family. The Kuttanad wetland system, which is part of the Venmunda wetland system, is known for the cultivation of paddy at one metre to two metre below sea level and is created by draining delta swamps in brackish waters. The place is adorned for its idyllic backwaters, lagoons, canals and the distinctive spirit of its people

in overcoming adversities. However, for the people of Kuttanad who live across 62 grama panchayats in Alappuzha, Kottayam and Pathanamthitta, recurring floods, torrential downpours, and intrusion of saline water from the sea are at the forefront of their minds nowadays, as they face the dire impacts of climate change.

A report titled *Flood in Kuttanad: A Development Manifesto for Panchayats* prepared by the Indian Institute of Technology, Bombay (IITB) points a disconcerting picture for the region.

The study, authored by Prof. N.C. Narayanan and Rohini Joseph, attributes the recurring floods in the region to modifications to the natural water cycle in the delta region, coupled with the expansion of the second crop and also points to the countless trifling and broad-based disruptions that the encroaching climate crisis, which is primarily manifested in the form of floods, has brought to Kuttanad.

"What is not good for Kuttanad has been completely ignored in the so-called development revolution in the region over the past two decades. These developments, in which streams were encroached upon for roads, brought about major changes in the complex water flow system of Kuttanad. Uncertain, culverts and bridges have become bottlenecks between streams," it notes.

Homes abandoned
At Kuttanangalam in Kainakary, a number of tiled, roofless, and damaged houses are lying abandoned. One of the worst flood hit places in the entire Kuttanad, several families have left their hearths and homes at Kuttanangalam and nearby places for safer locations in the last couple of years.

Simon K.A., his wife, two children and his septagenarian mother were about to move to their new home being constructed on stilts. But on the night of August 5, 2020, all their dreams crumbled when the water burst from the Kuttanad. While there is nothing new, people from the region crossing over to better facilities and destroying their homes and destroying their lands, he adds.

"We began constructing the new home spending ₹15 lakh after the 2018 deluge made our house uninhabitable. No one knows exactly how many are forced to move

else. About 80% of the construction was completed when the floodwaters destroyed everything. For us, that was the last straw," says Mr. Jijimon, a shikharab boat operator.

Climate hotspot
The family soon joined an ever-growing list of climate refugees to move out of the "climate hotspot". They bought seven cents in Mahamma grama panchayat in Alappuzha and constructed a house there in 2021 with the help of friends and relatives.

"After 2018, floods and land breaches have become a recurring phenomenon. We took the decision to relocate from Kainakary with great pain, but it was the best decision considering the vagaries of climate," says Mr. Jijimon, who is yet to get the compensation promised by the government for his destroyed home.

Santhosh A., and his family from Kainakary shifted to Thruthankavala in Mahamma more than a year ago. "The deluge has upended our lives. It was heart-breaking to leave the place of my birth. But the life there has been hell," he says.

Life untenable
"The harmonious relationship between Kuttanad and humans is being lost to climate change. Life is increasingly untenable in larger parts of the region and there is no surprise that the people are leaving. If you go the interior, deep into the core of Kuttanad, you will see several vacant homes," he says.

The latest study by the Institute, which analysed the water level in Kuttanad in recent days, has predicted that the region is set to witness a 40 cm rise in water level over the next decade.

"The drastic rise in land subsidence and rising sea level are forcing people to flee their homes and destroying their lands," he adds.

Though the entire Kuttanad is flood prone, people living in Alappuzha and Kuttanad in Alappuzha district are taking the brunt

of rivers such as the Pampa, Achankovil, Mannimala and Muvattupuzha, which flow into Venmunda Lake and Kuttanad.

Farming hit
Being a predominantly agrarian belt, change in rainfall patterns is having a profound impact on agriculture, especially paddy cultivation. In 1960s, rice cultivation was undertaken in more than 60,000 ha in Kuttanad. It has declined to around 28,500 ha in the ongoing panchayat season. The recent downpours have destroyed paddy crops in around 9,000 ha in the region. The drinking water problem is also getting worse due to water pollution and high salinity.

No one knows exactly how many are forced to move from Kuttanad each year by these extreme weather events since 2018, but over 15% of its residents have already left.

From Kuttanad each year by these extreme weather events since 2018, but over 15% of its residents have already left, says E.G. Padmakumar, Director, International Research and Training Centre for Inland Sea Level Farming, Kuttanad.

Padmakumar, who has been an integral part of the region's Paddy Farming is dependent on sediments deposited by flood waters. But what we are experiencing now is unprecedented. Floods have become a round the year phenomenon. Between 2018 and 2022, the order bound of the paddy polder, had breached five times following rise in water level in the lake. Apart from the increasing number of flood events, floodwaters are draining at a slow pace, furthering our tribulations," she says.

While those who live in Kuttanad feel relieved, people staying out say they face an uncertain future. "It's not that we are eager to stay here. The fact is that we are now forced to live in Kuttanad more than ever before. Post-2018 floods, it is almost impossible to not a buyer for our land, which faces waterlogging every now and then. Besides, we make a living by cultivating rice. Relocating outside Kuttanad will make us lose here to live here. We have a bag always ready to shift to a relative's house in a relief camp in case of a land breach or heavy flooding," says Vijayamma, a resident of Kuttanad.

Meanwhile, those who can afford are building houses on stilts which help families to stay safe in their own dwellings during floods.

The effects of climate change are very much noticeable in Kuttanad but the adverse ecological degradation the place has suffered in recent decades has exacerbated the problems in the low sea-level region. The previous Left Democratic Front government had announced a ₹2,400-crore special package for post-flood Kuttanad with eco-restoration of the Venmunda wetland ecosystem, farming, development, and flood mitigation high on the agenda.

Two years later, the residents say the package is yet to make any positive impact in the region with many of the proposals remaining on paper.

To help build resilience, people such as Mr. Padmakumar are pressing for an accommodative approach to farming and land use patterns for the region.

According to them, the conventional norm for every discussion on Kuttanad starting with managing the Thattankulam and ending with the Thattankulam barrage, two major points of checking saline water intrusion and flood control, is not adequate to solve the issues. The focus should be on implementing a new crop calendar and raising the level of the paddy polder, had breached five times following rise in water level in the lake. Apart from the increasing number of flood events, floodwaters are draining at a slow pace, furthering our tribulations," she says.

While those who live in Kuttanad feel relieved, people staying out say they face an uncertain future. "It's not that we are eager to stay here. The fact is that we are now forced to live in Kuttanad more than ever before. Post-2018 floods, it is almost impossible to not a buyer for our land, which faces waterlogging every now and then. Besides, we make a living by cultivating rice. Relocating outside Kuttanad will make us lose here to live here. We have a bag always ready to shift to a relative's house in a relief camp in case of a land breach or heavy flooding," says Vijayamma, a resident of Kuttanad.

Meanwhile, those who can afford are building houses on stilts which help families to stay safe in their own dwellings during floods.

The effects of climate change are very much noticeable in Kuttanad but the adverse ecological degradation the place has suffered in recent decades has exacerbated the problems in the low sea-level region. The previous Left Democratic Front government had announced a ₹2,400-crore special package for post-flood Kuttanad with eco-restoration of the Venmunda wetland ecosystem, farming, development, and flood mitigation high on the agenda.

Two years later, the residents say the package is yet to make any positive impact in the region with many of the proposals remaining on paper.

To help build resilience, people such as Mr. Padmakumar are pressing for an accommodative approach to farming and land use patterns for the region.

According to them, the conventional norm for every discussion on Kuttanad starting with managing the Thattankulam and ending with the Thattankulam barrage, two major points of checking saline water intrusion and flood control, is not adequate to solve the issues. The focus should be on implementing a new crop calendar and raising the level of the paddy polder, had breached five times following rise in water level in the lake. Apart from the increasing number of flood events, floodwaters are draining at a slow pace, furthering our tribulations," she says.

While those who live in Kuttanad feel relieved, people staying out say they face an uncertain future. "It's not that we are eager to stay here. The fact is that we are now forced to live in Kuttanad more than ever before. Post-2018 floods, it is almost impossible to not a buyer for our land, which faces waterlogging every now and then. Besides, we make a living by cultivating rice. Relocating outside Kuttanad will make us lose here to live here. We have a bag always ready to shift to a relative's house in a relief camp in case of a land breach or heavy flooding," says Vijayamma, a resident of Kuttanad.

Meanwhile, those who can afford are building houses on stilts which help families to stay safe in their own dwellings during floods.

The effects of climate change are very much noticeable in Kuttanad but the adverse ecological degradation the place has suffered in recent decades has exacerbated the problems in the low sea-level region. The previous Left Democratic Front government had announced a ₹2,400-crore special package for post-flood Kuttanad with eco-restoration of the Venmunda wetland ecosystem, farming, development, and flood mitigation high on the agenda.

Two years later, the residents say the package is yet to make any positive impact in the region with many of the proposals remaining on paper.

To help build resilience, people such as Mr. Padmakumar are pressing for an accommodative approach to farming and land use patterns for the region.

According to them, the conventional norm for every discussion on Kuttanad starting with managing the Thattankulam and ending with the Thattankulam barrage, two major points of checking saline water intrusion and flood control, is not adequate to solve the issues. The focus should be on implementing a new crop calendar and raising the level of the paddy polder, had breached five times following rise in water level in the lake. Apart from the increasing number of flood events, floodwaters are draining at a slow pace, furthering our tribulations," she says.

While those who live in Kuttanad feel relieved, people staying out say they face an uncertain future. "It's not that we are eager to stay here. The fact is that we are now forced to live in Kuttanad more than ever before. Post-2018 floods, it is almost impossible to not a buyer for our land, which faces waterlogging every now and then. Besides, we make a living by cultivating rice. Relocating outside Kuttanad will make us lose here to live here. We have a bag always ready to shift to a relative's house in a relief camp in case of a land breach or heavy flooding," says Vijayamma, a resident of Kuttanad.

Meanwhile, those who can afford are building houses on stilts which help families to stay safe in their own dwellings during floods.

The effects of climate change are very much noticeable in Kuttanad but the adverse ecological degradation the place has suffered in recent decades has exacerbated the problems in the low sea-level region. The previous Left Democratic Front government had announced a ₹2,400-crore special package for post-flood Kuttanad with eco-restoration of the Venmunda wetland ecosystem, farming, development, and flood mitigation high on the agenda.

Two years later, the residents say the package is yet to make any positive impact in the region with many of the proposals remaining on paper.

To help build resilience, people such as Mr. Padmakumar are pressing for an accommodative approach to farming and land use patterns for the region.

According to them, the conventional norm for every discussion on Kuttanad starting with managing the Thattankulam and ending with the Thattankulam barrage, two major points of checking saline water intrusion and flood control, is not adequate to solve the issues. The focus should be on implementing a new crop calendar and raising the level of the paddy polder, had breached five times following rise in water level in the lake. Apart from the increasing number of flood events, floodwaters are draining at a slow pace, furthering our tribulations," she says.

While those who live in Kuttanad feel relieved, people staying out say they face an uncertain future. "It's not that we are eager to stay here. The fact is that we are now forced to live in Kuttanad more than ever before. Post-2018 floods, it is almost impossible to not a buyer for our land, which faces waterlogging every now and then. Besides, we make a living by cultivating rice. Relocating outside Kuttanad will make us lose here to live here. We have a bag always ready to shift to a relative's house in a relief camp in case of a land breach or heavy flooding," says Vijayamma, a resident of Kuttanad.

Meanwhile, those who can afford are building houses on stilts which help families to stay safe in their own dwellings during floods.

The effects of climate change are very much noticeable in Kuttanad but the adverse ecological degradation the place has suffered in recent decades has exacerbated the problems in the low sea-level region. The previous Left Democratic Front government had announced a ₹2,400-crore special package for post-flood Kuttanad with eco-restoration of the Venmunda wetland ecosystem, farming, development, and flood mitigation high on the agenda.

Two years later, the residents say the package is yet to make any positive impact in the region with many of the proposals remaining on paper.

To help build resilience, people such as Mr. Padmakumar are pressing for an accommodative approach to farming and land use patterns for the region.

According to them, the conventional norm for every discussion on Kuttanad starting with managing the Thattankulam and ending with the Thattankulam barrage, two major points of checking saline water intrusion and flood control, is not adequate to solve the issues. The focus should be on implementing a new crop calendar and raising the level of the paddy polder, had breached five times following rise in water level in the lake. Apart from the increasing number of flood events, floodwaters are draining at a slow pace, furthering our tribulations," she says.

While those who live in Kuttanad feel relieved, people staying out say they face an uncertain future. "It's not that we are eager to stay here. The fact is that we are now forced to live in Kuttanad more than ever before. Post-2018 floods, it is almost impossible to not a buyer for our land, which faces waterlogging every now and then. Besides, we make a living by cultivating rice. Relocating outside Kuttanad will make us lose here to live here. We have a bag always ready to shift to a relative's house in a relief camp in case of a land breach or heavy flooding," says Vijayamma, a resident of Kuttanad.

Meanwhile, those who can afford are building houses on stilts which help families to stay safe in their own dwellings during floods.

The effects of climate change are very much noticeable in Kuttanad but the adverse ecological degradation the place has suffered in recent decades has exacerbated the problems in the low sea-level region. The previous Left Democratic Front government had announced a ₹2,400-crore special package for post-flood Kuttanad with eco-restoration of the Venmunda wetland ecosystem, farming, development, and flood mitigation high on the agenda.

Two years later, the residents say the package is yet to make any positive impact in the region with many of the proposals remaining on paper.

To help build resilience, people such as Mr. Padmakumar are pressing for an accommodative approach to farming and land use patterns for the region.

According to them, the conventional norm for every discussion on Kuttanad starting with managing the Thattankulam and ending with the Thattankulam barrage, two major points of checking saline water intrusion and flood control, is not adequate to solve the issues. The focus should be on implementing a new crop calendar and raising the level of the paddy polder, had breached five times following rise in water level in the lake. Apart from the increasing number of flood events, floodwaters are draining at a slow pace, furthering our tribulations," she says.

While those who live in Kuttanad feel relieved, people staying out say they face an uncertain future. "It's not that we are eager to stay here. The fact is that we are now forced to live in Kuttanad more than ever before. Post-2018 floods, it is almost impossible to not a buyer for our land, which faces waterlogging every now and then. Besides, we make a living by cultivating rice. Relocating outside Kuttanad will make us lose here to live here. We have a bag always ready to shift to a relative's house in a relief camp in case of a land breach or heavy flooding," says Vijayamma, a resident of Kuttanad.

Meanwhile, those who can afford are building houses on stilts which help families to stay safe in their own dwellings during floods.

The effects of climate change are very much noticeable in Kuttanad but the adverse ecological degradation the place has suffered in recent decades has exacerbated the problems in the low sea-level region. The previous Left Democratic Front government had announced a ₹2,400-crore special package for post-flood Kuttanad with eco-restoration of the Venmunda wetland ecosystem, farming, development, and flood mitigation high on the agenda.

Two years later, the residents say the package is yet to make any positive impact in the region with many of the proposals remaining on paper.

To help build resilience, people such as Mr. Padmakumar are pressing for an accommodative approach to farming and land use patterns for the region.

According to them, the conventional norm for every discussion on Kuttanad starting with managing the Thattankulam and ending with the Thattankulam barrage, two major points of checking saline water intrusion and flood control, is not adequate to solve the issues. The focus should be on implementing a new crop calendar and raising the level of the paddy polder, had breached five times following rise in water level in the lake. Apart from the increasing number of flood events, floodwaters are draining at a slow pace, furthering our tribulations," she says.

While those who live in Kuttanad feel relieved, people staying out say they face an uncertain future. "It's not that we are eager to stay here. The fact is that we are now forced to live in Kuttanad more than ever before. Post-2018 floods, it is almost impossible to not a buyer for our land, which faces waterlogging every now and then. Besides, we make a living by cultivating rice. Relocating outside Kuttanad will make us lose here to live here. We have a bag always ready to shift to a relative's house in a relief camp in case of a land breach or heavy flooding," says Vijayamma, a resident of Kuttanad.

Meanwhile, those who can afford are building houses on stilts which help families to stay safe in their own dwellings during floods.

The effects of climate change are very much noticeable in Kuttanad but the adverse ecological degradation the place has suffered in recent decades has exacerbated the problems in the low sea-level region. The previous Left Democratic Front government had announced a ₹2,400-crore special package for post-flood Kuttanad with eco-restoration of the Venmunda wetland ecosystem, farming, development, and flood mitigation high on the agenda.

Two years later, the residents say the package is yet to make any positive impact in the region with many of the proposals remaining on paper.

To help build resilience, people such as Mr. Padmakumar are pressing for an accommodative approach to farming and land use patterns for the region.

According to them, the conventional norm for every discussion on Kuttanad starting with managing the Thattankulam and ending with the Thattankulam barrage, two major points of checking saline water intrusion and flood control, is not adequate to solve the issues. The focus should be on implementing a new crop calendar and raising the level of the paddy polder, had breached five times following rise in water level in the lake. Apart from the increasing number of flood events, floodwaters are draining at a slow pace, furthering our tribulations," she says.

While those who live in Kuttanad feel relieved, people staying out say they face an uncertain future. "It's not that we are eager to stay here. The fact is that we are now forced to live in Kuttanad more than ever before. Post-2018 floods, it is almost impossible to not a buyer for our land, which faces waterlogging every now and then. Besides, we make a living by cultivating rice. Relocating outside Kuttanad will make us lose here to live here. We have a bag always ready to shift to a relative's house in a relief camp in case of a land breach or heavy flooding," says Vijayamma, a resident of Kuttanad.

Meanwhile, those who can afford are building houses on stilts which help families to stay safe in their own dwellings during floods.

The effects of climate change are very much noticeable in Kuttanad but the adverse ecological degradation the place has suffered in recent decades has exacerbated the problems in the low sea-level region. The previous Left Democratic Front government had announced a ₹2,400-crore special package for post-flood Kuttanad with eco-restoration of the Venmunda wetland ecosystem, farming, development, and flood mitigation high on the agenda.

Two years later, the residents say the package is yet to make any positive impact in the region with many of the proposals remaining on paper.

To help build resilience, people such as Mr. Padmakumar are pressing for an accommodative approach to farming and land use patterns for the region.

According to them, the conventional norm for every discussion on Kuttanad starting with managing the Thattankulam and ending with the Thattankulam barrage, two major points of checking saline water intrusion and flood control, is not adequate to solve the issues. The focus should be on implementing a new crop calendar and raising the level of the paddy polder, had breached five times following rise in water level in the lake. Apart from the increasing number of flood events, floodwaters are draining at a slow pace, furthering our tribulations," she says.

While those who live in Kuttanad feel relieved, people staying out say they face an uncertain future. "It's not that we are eager to stay here. The fact is that we are now forced to live in Kuttanad more than ever before. Post-2018 floods, it is almost impossible to not a buyer for our land, which faces waterlogging every now and then. Besides, we make a living by cultivating rice. Relocating outside Kuttanad will make us lose here to live here. We have a bag always ready to shift to a relative's house in a relief camp in case of a land breach or heavy flooding," says Vijayamma, a resident of Kuttanad.

Meanwhile, those who can afford are building houses on stilts which help families to stay safe in their own dwellings during floods.

The effects of climate change are very much noticeable in Kuttanad but the adverse ecological degradation the place has suffered in recent decades has exacerbated the problems in the low sea-level region. The previous Left Democratic Front government had announced a ₹2,400-crore special package for post-flood Kuttanad with eco-restoration of the Venmunda wetland ecosystem, farming, development, and flood mitigation high on the agenda.

Two years later, the residents say the package is yet to make any positive impact in the region with many of the proposals remaining on paper.

To help build resilience, people such as Mr. Padmakumar are pressing for an accommodative approach to farming and land use patterns for the region.

According to them, the conventional norm for every discussion on Kuttanad starting with managing the Thattankulam and ending with the Thattankulam barrage, two major points of checking saline water intrusion and flood control, is not adequate to solve the issues. The focus should be on implementing a new crop calendar and raising the level of the paddy polder, had breached five times following rise in water level in the lake. Apart from the increasing number of flood events, floodwaters are draining at a slow pace, furthering our tribulations," she says.

While those who live in Kuttanad feel relieved, people staying out say they face an uncertain future. "It's not that we are eager to stay here. The fact is that we are now forced to live in Kuttanad more than ever before. Post-2018 floods, it is almost impossible to not a buyer for our land, which faces waterlogging every now and then. Besides, we make a living by cultivating rice. Relocating outside Kuttanad will make us lose here to live here. We have a bag always ready to shift to a relative's house in a relief camp in case of a land breach or heavy flooding," says Vijayamma, a resident of Kuttanad.

Meanwhile, those who can afford are building houses on stilts which help families to stay safe in their own dwellings during floods.

The effects of climate change are very much noticeable in Kuttanad but the adverse ecological degradation the place has suffered in recent decades has exacerbated the problems in the low sea-level region. The previous Left Democratic Front government had announced a ₹2,400-crore special package for post-flood Kuttanad with eco-restoration of the Venmunda wetland ecosystem, farming, development, and flood mitigation high on the agenda.

Two years later, the residents say the package is yet to make any positive impact in the region with many of the proposals remaining on paper.

To help build resilience, people such as Mr. Padmakumar are pressing for an accommodative approach to farming and land use patterns for the region.

According to them, the conventional norm for every discussion on Kuttanad starting with managing the Thattankulam and ending with the Thattankulam barrage, two major points of checking saline water intrusion and flood control, is not adequate to solve the issues. The focus should be on implementing a new crop calendar and raising the level of the paddy polder, had breached five times following rise in water level in the lake. Apart from the increasing number of flood events, floodwaters are draining at a slow pace, furthering our tribulations," she says.

While those who live in Kuttanad feel relieved, people staying out say they face an uncertain future. "It's not that we are eager to stay here. The fact is that we are now forced to live in Kuttanad more than ever before. Post-2018 floods, it is almost impossible to not a buyer for our land, which faces waterlogging every now and then. Besides, we make a living by cultivating rice. Relocating outside Kuttanad will make us lose here to live here. We have a bag always ready to shift to a relative's house in a relief camp in case of a land breach or heavy flooding," says Vijayamma, a resident of Kuttanad.

Meanwhile, those who can afford are building houses on stilts which help families to stay safe in their own dwellings during floods.

The effects of climate change are very much noticeable in Kuttanad but the adverse ecological degradation the place has suffered in recent decades has exacerbated the problems in the low sea-level region. The previous Left Democratic Front government had announced a ₹2,400-crore special package for post-flood Kuttanad with eco-restoration of the Venmunda wetland ecosystem, farming, development, and flood mitigation high on the agenda.

Two years later, the residents say the package is yet to make any positive impact in the region with many of the proposals remaining on paper.

To help build resilience, people such as Mr. Padmakumar are pressing for an accommodative approach to farming and land use patterns for the region.

According to them, the conventional norm for every discussion on Kuttanad starting with managing the Thattankulam and ending with the Thattankulam barrage, two major points of checking saline water intrusion and flood control, is not adequate to solve the issues. The focus should be on implementing a new crop calendar and raising the level of the paddy polder, had breached five times following rise in water level in the lake. Apart from the increasing number of flood events, floodwaters are draining at a slow pace, furthering our tribulations," she says.

While those who live in Kuttanad feel relieved, people staying out say they face an uncertain future. "It's not that we are eager to stay here. The fact is that we are now forced to live in Kuttanad more than ever before. Post-2018 floods, it is almost impossible to not a buyer for our land, which faces waterlogging every now and then. Besides, we make a living by cultivating rice. Relocating outside Kuttanad will make us lose here to live here. We have a bag always ready to shift to a relative's house in a relief camp in case of a land breach or heavy flooding," says Vijayamma, a resident of Kuttanad.

Meanwhile, those who can afford are building houses on stilts which help families to stay safe in their own dwellings during floods.

The effects of climate change are very much noticeable in Kuttanad but the adverse ecological degradation the place has suffered in recent decades has exacerbated the problems in the low sea-level region. The previous Left Democratic Front government had announced a ₹2,400-crore special package for post-flood Kuttanad with eco-restoration of the Venmunda wetland ecosystem, farming, development, and flood mitigation high on the agenda.

Two years later, the residents say the package is yet to make any positive impact in the region with many of the proposals remaining on paper.

To help build resilience, people such as Mr. Padmakumar are pressing for an accommodative approach to farming and land use patterns for the region.

According to them, the conventional norm for every discussion on Kuttanad starting with managing the Thattankulam and ending with the Thattankulam barrage, two major points of checking saline water intrusion and flood control, is not adequate to solve the issues. The focus should be on implementing a new crop calendar and raising the level of the paddy polder, had breached five times following rise in water level in the lake. Apart from the increasing number of flood events, floodwaters are draining at a slow pace, furthering our tribulations," she says.

While those who live in Kuttanad feel relieved, people staying out say

Govt plans to develop Rohini area as ‘abode of lakes’: Jain

OUR CORRESPONDENT

NEW DELHI: The Delhi government plans to develop Rohini area as an “abode of lakes and recreation” and the work will be completed in eight months, Water Minister Satyendar Jain said on Saturday.

Jain, also Delhi Jal Board (DJB) Chairman, on Saturday visited Rohini Lake, situated in Sector 25, Rohini, and reviewed the progress of various units that are being constructed, officials said.

“The revival of lakes and water bodies project is on the Kejriwal government’s list of priorities, and time and again, directions have been given to officials to complete them all on time,” he was quoted as saying in a statement issued by the DJB.

He directed the officials to modify the structures in order to maximise the underground water recharge with cost-effective methods as well as maintain the ecological conditions.

Later, Jain tweeted: “Visited Rohini Sewage Treatment Plant, where huge lakes and green areas spread over 80 acres are being constructed. A total of eight lakes will receive and recharge 68 MLD of treated water from STP after polishing to a biochemical oxygen demand (BOD) 3 level. The Kejriwal government plans to develop the area as an “abode of lakes and recreation.”

The work will be completed in eight months, he said.

The government is working extensively to realise the dream of making Delhi a ‘City of Lakes’. This project has two focus areas: the lakes and other water bodies. In the first phase of development, 250 water bodies and 23 lakes will be taken up by the government. The pur-



pose of the project is to create multiple water reservoirs to arrest urban flooding and avoid choked drains, the statement said.

The government is working to enhance the aesthetic value of the landscape through the natural revivalism of water bodies and by restoring the flora and fauna around them, it said.

The entire project is broadly based on sewage water remediation and lake development.

This Rohini Lake will be constructed on 80 acres of land and will be used for a variety of environment-friendly purposes. The Delhi Water Minister’s primary focus is on developing the lake area as a landscaped tourist spot that can act as a source of recreation for visitors, it added.

The Rohini Lake project is expected to be completed in an

eight-month time frame and will be commissioned within one month after completion, the statement said.

The lake project will also include a primary pedestrian, a secondary pedestrian and a jungle trail with a 4.5-m pathway that will run through the middle of the lake. Numerous trees and plants will be part of the project, not just to give it a complete aesthetic look but also to allow the visitors to get closer to nature. It will also be accompanied by world-class facilities like parking spaces, cafeteria, children’s park, entrance plaza, grand stepped plaza, etc, it added. Along with this, a stepped water garden, water alcoves, and an outdoor museum that will narrate the story of water harvesting in India will also be set up at the lake site, the DJB said.

Govt to develop Rohini area as 'abode of lakes'

STAFF REPORTER ■ NEW DELHI

The Delhi Government plans to develop Rohini area as an "abode of lakes and recreation" and the work will be completed in eight months, Delhi Water Minister Satyendar Jain said on Saturday. Jain visited Rohini Lake situated in Sector 25, Rohini, and reviewed the progress of various units that are being constructed.

Jain has directed the officials to modify the structures in order to maximise the underground water recharge with cost-effective methods as well as maintain the ecological conditions. Later, Jain tweeted: "Visited Rohini Sewage Treatment Plant, where huge lakes and green areas spread over 80 acres are being constructed. A total of eight lakes will receive

and recharge 68 MLD of treated water from STP after polishing to a biochemical oxygen demand (BOD) 3 level.

The Kejriwal Government plans to develop the area as an "abode of lakes and recreation." The work will be completed in eight months, he said.

The entire project is broadly based on sewage water remediation and lake development. According to Delhi Jal Board, this Rohini Lake will be constructed on 80 acres of land and will be used for a variety of environment-friendly purposes.

The Delhi Water Minister's primary focus is on developing the lake area as a landscaped tourist spot that can act as a source of recreation for visitors. The Rohini Lake project is expected to be completed in an

eight-month time frame and will be commissioned within one month after completion, the statement said.

The lake project will also include a primary pedestrian, a secondary pedestrian and a jungle trail with a 4.5-m pathway that will run through the middle of the lake.

Numerous trees and plants will be part of the project, not just to give it a complete aesthetic look but also to allow the visitors to get closer to nature. It will also be accompanied by world-class facilities like parking spaces, cafeteria, children's park, entrance plaza, grand stepped plaza, etc, it added.

Along with this, a stepped water garden, water alcoves, and an outdoor museum that will narrate story of water harvesting in India will also be set up at the lake site, the DJB said.

Rohini to get facelift as abode of lakes and recreation



Water Minister Satyendar Jain reviewing work progress at the Rohini Lake in Sector 25 | EXPRESS

EXPRESS NEWS SERVICE @ New Delhi

THE government plans to develop Rohini area as an "abode of lakes and recreation" and is expected to be completed in an eight-month time frame said Water Minister Satyendar Jain on Saturday.

Jain, who holds charge of Delhi Jal Board (DJB) Chairman as well, visited Rohini Lake, situated in Sector 25 and reviewed the progress of various units that are being constructed, officials said.

"The revival of lakes and water bodies' project is one of the priorities for the government, and time and again, directions have been given to officials to complete them all on time," he said.

He directed the officials to modify the structures in order to maximise the underground water recharge with cost-effective methods as well as maintain the ecology.

Jain tweeted, "Huge lakes and green areas spread over 80 acres is being constructed. A total of eight lakes will receive and recharge 68 MLD of treated water from STP after polishing to a biochemical oxygen demand (BOD) 3 levels."

The government is working extensively to realise the dream of making Delhi a 'City of Lakes'. This project has two focus areas, the lakes and other water bodies. In the first phase of development, 250 water bodies and 23 lakes will be taken up by the government. The purpose of the project is to create multiple water reservoirs to arrest urban flooding and avoid choked drains, the statement said.

The government is working to enhance the aesthetic value of the landscape through the natural revivalism of water bodies and by restoring the flora and fauna around them, it said.

योजना 80 एकड़ क्षेत्रफल में विकसित की जा रही है झील, दिल्ली सरकार में जल मंत्री सत्येंद्र जैन ने परियोजना के कार्य का किया निरीक्षण, लोगों को कई सहूलियतें भी मिलेंगी

रोहिणी झील पर्यटक स्थल के रूप में विकसित होगी



नई दिल्ली, चरिष संवाददाता। रोहिणी झील को पर्यटक स्थल के रूप में विकसित किया जा रहा है। इसे 80 एकड़ में विकसित किया जा रहा है और अगले साल तक लोगों के लिए खोल दिया जाएगा।

जल मंत्री सत्येंद्र जैन ने रविवार को परियोजना के कार्य का निरीक्षण किया। जल मंत्री ने रोहिणी सेक्टर-

25 स्थित झील में इकोलॉजिकल सिस्टम को बनाए रखने और अधिक से अधिक भूजल को रिचार्ज करने के लिए परियोजना को तैयार करने के लिए कहा है।

एसटीपी से उपचारित पानी को एकत्रित किया जाएगा : रोहिणी झील राजधानी में पुनर्जीवित होने वाली 23 झीलों में से एक है। इसे सत्येंद्र जैन ने एक प्रमुख परियोजना के रूप में भी शामिल किया है। झील के कामकाज के लिए झील का सुंदरीकरण, भू-निर्माण और उपचार संयंत्रों का निर्माण किया जा रहा है। रोहिणी झील और रोहिणी एसटीपी



ऐसी है वर्तमान में रोहिणी झील का इलाका इस प्रकार नजर आता है जिसका विकास किया जाएगा।

से 100 एकड़ जमीन पर है, जिसमें सीवेज उपचार संयंत्र 20 एकड़ पर और झील 80 एकड़ में



ऐसी बनेगी

विकसित की जा रही है। झील में 15 एमजीटी की क्षमता वाले एसटीपी से उपचारित पानी को एकत्रित किया

योजना पूरी होने के बाद झील कुछ इस प्रकार नजर आएगी।
जाएगा। साथ ही बरिस का पानी भी एकत्रित किया जा सकेगा, जिससे भूजल स्तर बढ़े।

स्वास्थ्य

- पैदल चलने के लिए दो पथ और 4.5 मीटर का एक जंगल का रास्ता होगा।
- पार्किंग, कैफेटेरिया, चिल्ड्रन पार्क, एट्रेस प्लाजा, वैंड स्टैंड प्लाजा, आउटडोर म्यूजियम
- विमानिक स्पोर्ट्स, दर्शनीय स्थल, खेलकुद के अलावा सुबह-शाम सैर और शारीरिक व्यायाम करने वालों के लिए जगह होगी

फायदा

- भूजल स्तर में सुधार
- अवैधता रोक होगी, सम्मान काम करने में मदद मिलेगी
- पक्षियों और जानवरों की कई प्रजातियों का आश्रयाना बनेगी