

Telangana Today- 23- October-2021

# Singur receives highest inflows in 23 years

Multi-purpose project has received 99 tmcft this year

STATE BUREAU  
Sangareddy

Singur Multipurpose Project has recorded the fourth-highest inflows this year since the construction of the project across the river Manjeera in 1998 at Singur village of Pulakal Mandal. The project has received 99 tmcft of water until Friday during the current rainy year. It has received over 100 TMCft of inflows three times since 1998, according to irrigation officials.

The Project, with the 29.91 TMCft storage capacity, received its highest inflows of 176.55 TMCft water in the year 1998-99, the year the project was constructed. Singur, the lifeline of Sangareddy and Medak districts, has received 106.62 TMCft of water in the year 2010-11 and 105.97 TMCft of water in the year 2016-17. It has received 92.44 TMCft of water in 2000-01, 56.06 TMCft in the year 2020-21,



*The project has sufficient water to meet the irrigation needs for 40,000 acres of ayacut in Andole constituency for next season.*

52.54 TMCft of water in the year 2008-09, 40.13 TMCft of water in 1999-00, 37-10 TMCft in the year 2005-06, 36.57 TMCft of water in the year 2011-12, and 34.92 TMCft of water in the year 2006-07. The multi-purpose project has received continuous inflows since the beginning of the rainy year on June 1. The project has received surplus water only 11 times in the past 23 years. As the project was having about 17 TMCft water before June 1 this year, the irrigation au-

thorities have released over 80 TMCft of water downstream so far. According to JE Mahipal Reddy, the project, which is brimming, was receiving little 2,000 cusecs of water on Friday evening. While all the crest gates of the project were closed down, an equal amount of water is being released downstream by operating a hydro-electric project. The project has sufficient water to meet the irrigation needs for 40,000 acres of ayacut in Andole constituency.

Telangana Today- 23- October-2021

# No more water woes in city

Over the last seven years, HMWS&SB has developed infrastructure to meet the future needs

NABINDER BOMMALA  
HYDERABAD

A view of women waiting wearily in long queues with pots for drinking water or angry protests that stretched over days over water shortage are tales of yore in Hyderabad now.

A series of proactive measures over the last seven years, with the State government providing a whopping Rs 13,129 crore to the Hyderabad Metropolitan Water Supply and Sewerage Board (HMWS&SB) has seen drinking water shortage and protests over the same have become 'once-upon-a-time' stories in the capital.

The HMWS&SB built infrastructure for drinking water supply projects and took up several works to meet the water needs of future generations as well. The government recently sanctioned another Rs 3,866.21 crore to the Board for installing Sewage Treatment Plants too.

With the money sanctioned for drinking water supply projects, reservoirs were constructed, new pipelines were laid and existing pipeline networks were improved apart from several other works were taken up by the water board. Following these developments, several localities in the Greater Hyderabad Municipal Corporation (GHMC) limits including slums and the areas outside GHMC limits within the Outer Ring Road (ORR) have come a long way, with water woes in most localities disappearing.

These changes were not possible overnight and the



Several localities in the GHMC limits, including slums and the areas outside GHMC limits within the Outer Ring Road, have come a long way on supply of potable water.



consistent efforts of the water board saw the supply of potable water improve in the Hyderabad Urban Ag-

glomeration (HUA) limits gradually from 2014 to 2020, courtesy the Godavari Phase-I & Krishna Phase-III

projects, Keshavpuram project for future requirements, Housing And Urban Development Corporation Limited (HUDCO) Project and the project taken up to strengthen water supply system in the old city.

By 2021, besides increasing supply, the State government decided to completely change the shape of the drinking supply network as well as sewerage management networks in the Hyderabad Urban Agglomeration limits. As part of the exercise, eight projects at a cost of Rs 7,528.21 crore are

being implemented. The Sunkishala intake project being executed with Rs 1,450 crore, building water supply infrastructure for extended areas of Outer Ring Road with Rs 1,200 crore, providing water supply to Singur and Kollur 2BHK housing society with Rs 285 crore and the project taken up to divert Godavari River water to Manjira River with Rs 430 crore are the major ones. With the remaining amount, the sewerage management network in the Hyderabad Urban Agglomeration limits is being strengthened.

## Consistent efforts

### SUNKISHALA INTAKE PROJECT

The much awaited Sunkishala Intake Project is being built with an estimated cost of Rs 1,450 crore to permanently draw water from the foreshore of Krishna River. Post completion, the emergency pumping arrangements that are taken up by HMWS&SB during summer to meet the water needs of Hyderabad can be avoided.

### ADMINISTRATIVE SANCTION ACCORDED RECENTLY

- Sunkishala Intake Project: ₹1,450 crore
- Diversion of Godavari water to Manjira: ₹430 crore
- Providing water to Kollur 2BHK Housing Society, Singur, Kokapet Township and vicinity: ₹285 crore

### FREE WATER

The State government also introduced the Free Drinking Water Scheme for Hyderabad. Under the scheme 2.5 lakh households with water meters and 2 lakh slum households will receive free 20,000 litres per month. Households without a water meter should install it to get free drinking water.

Water supply infrastructure to extended areas of ORR villages: ₹1,200 crore



Hindustan Times- 23- October-2021

# 'Powai lake is a protected wetland'

**Prayag Arora-Desai**

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**MUMBAI:** The state forest department's mangrove cell upheld the status of Powai Lake as a protected wetland, in line with previous orders of the Bombay High Court and the Supreme Court, in a letter to the Brihanmumbai Municipal Corporation (BMC) earlier this month. As such, the forest department voiced objections to BMC's proposal to build a cycle track within the boundary of the lake, which has come under fire from citizens and environmentalists.

India is a party to the Ramsar Convention, an international treaty which pledges the country's commitment to wetland conservation. The convention defines wetlands as "areas of marsh, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, including areas of marine water the depth of which, at low tides, does not exceed six meters". Wetlands across India are known to be extremely diverse in terms of their origins (natural or man made), water source (freshwater or brackish) and the biodiversity they sustain.

"The forest department, which is entrusted with the conservation of wetlands, has confirmed on record for the first time that Powai Lake is indeed a

wetland and needs to be protected as such. They have stressed on the importance of conserving its biodiversity and also said that work on the BMC's cycle track should not proceed further," said Stalin D, director of environment group Vanashakti, who obtained under the concerned letter (signed by Neenu Somraj, deputy conservator of forests (DCF), mangrove cell) via a Right to Information (RTI) request this week.

Somraj's letter was written to the collector, Mumbai suburbs and the BMC's assistant commissioner, S Ward, pursuant to a complaint from Vanashakti regarding the proposed cycle track, which allegedly flouts MCGM's own development control regulations, in addition to the Centre's Wetlands (Conservation and Management) Rules, 2017, and the Indian Wildlife Act (1972), seeing as it is also the habitat of the Indian marsh crocodile, a protected species.

"According to the National Wetland Atlas of the Supreme Court, Powai Lake is an important wetland in terms of biodiversity and should be protected for the purpose of conserving wetlands," Somraj's letter states, translated from Marathi. An official with BMC's S Ward office said the work has presently been halted, and that a BMC committee comprising experts has been formed to deliberate on the feasibility of the project.

Deccan Chronicle- 23- October-2021

# Water grid works on hold since Jan.

**MADDY DEEKSHITH | DC**  
HYDERABAD, OCT. 22

The ring main project taken up by the Water Board (HMWS&SB) has not moved forward an inch for over a year now.

Out of the 158-km of inter-connected water grid planned, the board has only completed 9 km along the Muthangi-Kokapet road and work on another 9 km is pending. The board is laying a 3,000-mm diameter pipeline, which is an extension of the main pipeline to bring Godavari water at a cost of ₹285 crore.

This apart, officials said that despite repeated requests, the government had not given sanction for the 140-km ring main II which would supply residents living along the Outer Ring Road (ORR).

The 'ring main II' is an arrangement of pipes forming a loop which aids in supply of water and will be constructed connecting supply lines from the Godavari and the Krishna with those from the Manjeera. Under ring main I, the Godavari and the Manjeera pipeline networks will be connected.

The proposed project creates a network for the Krishna and the Godavari water via the Siddipet, Sangareddy and Gandipet reservoirs and drinking water would be supplied to all residents living within the 158-km circumference of the ORR.

The project would also benefit citizens living in the municipalities of Boduppal, Peerzadiguda, Balapur,

Meerpet, Jalpally, Badangpet, Pedda Amberpet and in the mandals of Patancheru, RC Puram, Medchal, Quthbullapur, Shamirpet, Keesara, Ghatkesar, Hayathnagar, Ibrahimpatnam, Maheswaram, Saroornagar, Shamshabad, Rajendranagar and Jinnaram.

The project would be able to supply about 30 million gallons of water a day. Regarding the government not sanctioning any amount for the 140-km ring main, a senior board official said that delay in paying contractors, apart from various other issues, had brought the work on the Muthangi-Kokapet to a halt.

"If everything goes according to the plan, the HMWS&SB would supply Godavari water to residents living in between Muthangi and Kokapet by February which also includes two mega housing projects in Kollur. As of now, works worth about ₹120 crore have been completed and the remaining work is progressing at snail's pace," the official said. He said that the works would pick up momentum only after the release of funds from the state government.

The Hindu- 23- October-2021

# Idukki dam's two shutters closed

Following decline in inflow to reservoir and rainfall

A CORRESPONDENT  
IDUKKI

Two shutters of the Cheruthoni dam of the Idukki reservoir were closed on Friday following a decline in the inflow of water and rainfall.

The third shutter, however, was raised from 35 cm to 40 cm, releasing 40 cumecs (cubic metre per second) of water.

## Orange alert level

The water level fell to the orange alert level on Friday after the Central Water Commission (CWC) revised the rule curve level for the dam on Thursday morning. As per the data available at 6 p.m., the water level was 2,398.20 ft. The red alert level is 2,398.31 ft. There was a storage of 94.37 %.

The three shutters of the Cheruthoni dam were raised to 35 cm on October 19 after the water crossed the red alert level and 100 cumecs of



Water flowing through Gate 3 at the Cheruthoni dam of the Idukki reservoir on Friday after Gates 2 and 4 were closed.

water per second was released.

The high-power rule committee of the Kerala State Electricity Board (KSEB) decided to close shutters 2 and 4 after analysing the weather forecast and inflow into the reservoir. The upper rule curve is 2,399.31 ft. The water level on the same day last year was 2,394 ft (89.66%) .

The power generation at the Moolamattom power

house remained at a high of 14.81 million units.

## At Mullaperiyar

Meanwhile, the water level in the Mullaperiyar dam slowly rose to reach 135.5 ft at 6 p.m. on Friday. The maximum storage level is 142 ft. While Tamil Nadu was drawing water at 2,050 cfs (cubic feet per second), there was an inflow of 2,342 cfs.



The Statesman- 23- October-2021

# Law of the Sea

The ocean is vast, boundless and covers 140 million square miles, some 72 per cent of the Earth's surface. It is the responsibility of the world to keep the ocean safe, accessible and free from abuse



**H**ugo Grotius (1583-1645) was a Dutch jurist and humanist. In 1609, he wrote a defence of trading rights for the Dutch East India Company and called for free access to the oceans for all nations. That was the first maritime doctrine on record challenging the claims of a number of maritime states asserting sovereignty over large portions of the high seas. Grotius was considered the father and founder of modern international law. "The seas were free to all nations but belonged to none of them". Subsequent developments in international maritime law reflect his philosophy to a large extent.

From the 17th century, a state's rights and jurisdiction on the ocean were limited to a specific belt of water extending 3 nautical miles from the coastline. All waters beyond the limit were international waters or free seas. There was no concept of maritime zones, and no state could claim full sovereignty over seabed, subsoil, the water column and airspace. By the 19th century, the concept of free seas, open to all, was the prevalent view, reflecting the dominance of large maritime powers like Great Britain. This fostered a body of law that favoured free navigation and conduct of both commerce and naval operations across the world's oceans. No agreement came from the efforts of the League of Nations in the early 1930s to decide on extending state claims of sovereignty over adjacent waters.

The situation changed after World War II. The scarcity of land-based natural resources forced states to exploit offshore resources. With the progress of science and technology, states began to realise the growing importance of valuable hydrocarbons and other non-living resources of the high seas as vital to their economic development. These factors brought into focus a new concept, the Continental Shelf.

Using the customary international law principle of a nation's right to protect its natural resources, President Truman of the United States in 1945 declared US control over all the natural resources of its continental shelf. Many other states in Europe and some Latin American countries like Chile, Peru and Ecuador followed that example, extending their claim to 200 nautical miles to include their fishing grounds. In a short period, the Continental Shelf became a new customary international law.

During the 1960s, again because of advanced technology, fish stocks in the seas which were concentrated over the Continental Shelf were subject to intensive exploitation by distant water fishing fleets. Coastal states' efforts to acquire exclusive rights to manage and exploit these living resources were inevitable. The result was the emergence of a

new offshore zone, the exclusive economic zone (EEZ) that also became another international law. In subsequent years, various attempts were made to create a broad spectrum law of the sea regime that ultimately culminated in the creation of the United Nations Convention on the Law of Sea (UNCLOS).

The Convention convened in 1973 was signed on 10 December 1982 in Montego Bay, Jamaica. "This marked the culmination of more than 14 years of work involving participants by more than 150 countries representing all regions of the world, all legal and political systems and the spectrum of socio-economic development". The Convention will turn 40 in 2022. It came into force in 1994 after it had been ratified by the requisite 60 countries. UNCLOS is the globally recognised regime dealing with all matters relating to the law of the sea; it is a comprehensive treaty that has been signed by 168 countries.

According to the convention, each country's sovereign territorial waters extend to a maximum of 12 nautical miles (22km) beyond its coast including both marginal sea and inland waters. Within this zone, the coastal state exercises full sovereignty over the airspace, seabed and subsoil. All states have the right of innocent passage through the territorial sea of another state but there is no right of innocent air space passage. Even warships are to be accorded innocent passage even though in reality many states require prior authorisation for warships entering their territorial waters. The law is unsettled here.

Innocent passage is considered moving through the territorial waters in a way that is not prejudicial to the security of the coastal state, including any stopping and anchoring necessary for ordinary navigation. The law also grants the right of transit passage through narrow straits used for international navigation. Beyond its territorial waters, every coastal country may establish an exclusive economic zone (EEZ) extending 200 nautical miles (370 km) from shore. Within the EEZ, the coastal state has the right to exploit and regulate fisheries, generate energy from waves and conduct scientific research. Foreign vessels and aircrafts are allowed to move freely through and over the zone.

With regard to the seabed beyond territorial waters, every coastal country has exclusive right to hydrocarbons and other resources in the seabed up to 200 nautical miles from shore or to the outer edge of the continental

margin, whichever is further, subject to an overall limit of 350 nautical miles (650km). This area is known as the continental shelf. Where the territorial waters, EEZs or continental shelves of neighbouring countries overlap, a boundary line is to be drawn by agreement to achieve an equitable solution. In cases where countries are unable to reach an agreement, the matter should be decided either by the International Court of Justice or by an arbitration tribunal.

The high seas lie beyond all these zones where all states enjoy unhindered freedom of navigation. The waters and airspace of this area are open to use by all countries except for activities prohibited by international law like the testing of nuclear weapons. Permitted activities include apart from navigation and fishing, the laying of submarine cables and pipelines and overflight of aircraft. The bed of the high seas is known as the International Seabed Area. In its original form in the 1982 Convention, the detailed legal regime was not acceptable to developed countries because of excessive regulations. The provisions were modified extensively by a supplementary treaty in 1994 to meet their concerns. Under the modified regime, the minerals on the ocean floor beneath the high seas are deemed "the common heritage

of mankind" and their exploitation is administered by the International Seabed Authority.

UNCLOS is hailed as one of the most comprehensive instruments of international law. Its 320 articles and 9 annexes contain an all-encompassing legal regime for the world's oceans and seas, establishing rules governing all activities in the oceans and the use of their resources - including shipping, navigation and overflight, exploration and exploitation of minerals and hydrocarbons, fishing, conservation and protection of vulnerable marine ecosystems and prevention of pollution. It embodies in one instrument the codification of traditional rules for the use of oceans as well as the development of new rules on emerging scenarios. It is a unique instrument often referred to as the "constitution for the oceans". The authority of UNCLOS is based on its near-universal acceptance. The General Assembly performs an oversight function with respect to ocean affairs and the law of the sea.

There was a time when experts apprehended that technological advances and population pressure would create a situ-

ation of eventual demise of ambiguous oceanic sovereignty and transfer to a system of partition so that the oceans might prove 'the last frontier in the spread of the nation-state system'. They also apprehended that if every coastal state wanted to exercise its maximum possible claims, just less than 50 per cent of the world's oceans would fall under some form of national jurisdiction. Open seas would decline in area and space. Fortunately, the apprehensions did not become a reality. The maritime jurisdictional regime established and codified through UNCLOS involves innovative checks and balances of rights and responsibilities of coastal states versus international sovereignty and sovereign rights offshore. UNCLOS works on the notion that all problems of ocean space are closely inter-related and need to be addressed as a whole.

Delimitation is a process involving division of maritime areas in a situation where two or more states have competing claims. For these claimant states, delimitation implies restriction on their perceived sovereign rights. Extensive overlapping claims forestall the delimitation exercise. The maritime boundary like the land boundary is a sensitive matter and should be handled carefully and with understanding of contrary viewpoints. That is why even in the 21st century, many maritime boundaries have remained unsettled. The negotiating process is very important for achieving agreement on the basis of the 1982 Convention.

A maritime boundary to be durable must be fair and equitable and take into account the special circumstances of the area relevant to delimitation. Despite serious and meaningful negotiations, if difficulties and dispute arise, the parties should resort to the third party settlement procedure. Alleged violation of sovereign rights and maritime space between Nicaragua and Colombia in the Caribbean Sea and maritime delimitation between Somalia and Kenya in the Indian Ocean are two important cases awaiting judgement by the International Court of Justice.

UNCLOS is an important legal and management framework that contributes greatly to the maintenance of peace, justice and progress for all peoples of the world. Achievement of the goals of the Convention contribute to the realisation of a just and equitable international economic order which takes into account the interests and needs of mankind as a whole and in particular the special interests and needs of developing countries, whether coastal or landlocked. The ocean is vast, boundless and covers 140 million square miles, some 72 per cent of the Earth's surface. It is the responsibility of the world to keep the ocean safe, accessible and free from abuse.



**H KHASNOBIS**

The writer is a former central civil service officer who retired from the Ministry of Defence. He used Law of the Sea - a policy primer by the Fletcher School of Law and Diplomacy as a source document for this article



# An indispensable ecosystem

Urbanisation plans should incorporate conservation of wetlands, and treat those as natural infrastructures that have a direct bearing on the living conditions of people



RITESH KUMAR

**W**etlands play a crucial role in making the cities and towns livable by helping in groundwater recharge, buffering floods, filtering wastewater, regulating microclimate, enhancing landscapes etc. A rapid assessment by our team indicates that nearly eight per cent of the total wetland area is situated within the urban sprawls.

Wetlands have played an important role in shaping the settlement patterns across India. The water storage in Yamuna floodplains has been estimated to be equivalent to three-fourths of Delhi's water supply. In the waste recycling system of East Kolkata, Wetlands treat nearly 65 per cent of the city's wastewater, saving nearly Rs 4,600 million annually. Wetlands act as major flood defence systems for cities such as Srinagar and Guwahati. In the Deccan plains and arid regions of the country, there has been an age-old tradition of constructing tanks to store rainwater for irrigation and domestic use.

Urban wetlands are also significant cultural and recreational avenues. The backwaters of Kerala are visited by over 0.3 million tourists annually, generating an annual economy of Rs 600 crore. Urban wetlands also harbour diverse plant and animal life.

While built-up spaces within urban areas have increased, the wetland areas have undergone a drastic decline. Our analysis of data from 76 cities and towns has indicated that during 1980-2015, while the built-up area increased by 285 per cent, wetlands declined by 21 per cent; the most rapid loss was in the metros.

## Increasing vulnerability

With wetlands being lost in urban areas, and extreme climate events being the new normal, pluvial floods are on the rise. As floodwater tends to accumulate in low lying areas, infrastructure built on wetland areas and feeder channels become exposed to flooding risks. This has been evidenced in several cases, such as the



Between 1980-2015, while the built-up area increased by 285%, wetlands declined by 21%

Kashmir deluge of September 2014, Chennai floods of November-December 2015, the Kerala floods of August 2018, and floods in Gurgaon and Hyderabad in 2020.

The lack of wetland buffer was identified as a significant causative factor for the extensive damage during the floods of November-December 2015. In August 2018, when Kerala faced unprecedented floods, the lowland areas suffered maximum damage. Unfortunately, reconstruction efforts post the floods have not considered restoration of wetlands and its feeder channels as a recovery measure.

## Limited public policy response

MoEF&CC is the nodal organization in the country for issues related to wetlands. With India becoming a party to the Ramsar Convention in 1982, and MoEF&CC being established in 1985, a national programming framework for wetlands was put in place as early as in 1986. Presently, the network of wetlands supported by the Ministry under various schemes includes 250 sites. India has also designated 46 wetlands as Ramsar sites, of which as many as eight are located within urban and peri-urban spaces.

The Wetlands (Conservation and Management)

Rules, 2017, constitutes wetlands authorities within states and union territories as a nodal institution for policy, programming and regulation of wetlands. However, with human-made wetlands excluded from the category of wetlands that can be notified under these rules, most of the wetlands of the urban areas in the Deccan region are excluded.

Continued degradation of wetlands underline ineffectiveness of existing measures and highlight the need to ramp up efforts across multiple sectors.

Wetlands are often managed with singular sectoral approaches – such as for recreation and amenity values, fisheries, and water storage. This prevents the incorporation of their full range of ecosystem services and biodiversity values and connectivity within the landscape within management interventions. The complex drivers of wetlands degradation cannot be addressed by piecemeal sectoral approaches.

The dominant urban planning approaches in India thus far have been infrastructure dominated, enabling tapping upstream sources for meeting water needs and sending waste and run-off to downstream reaches in the shortest possible time. The limitations of such approaches are evident

in cities being increasingly parched, exposed to floods and droughts, and increasingly water insecure. Management of wetlands located within the boundary of urban areas is often missed out within these approaches.

## Lessons from other cities

The Sponge Cities model, adopted in several Chinese cities have replaced cemented pavements with wetlands, as an eco-friendly alternative to traditional flood defences and drainage systems. The Văcărești Nature Park, a 183-hectare urban wetland of Bucharest, Romania's largest and most densely populated city, provides a green lung to the built-up city surrounding the site. Located on the edge of Văcărești, the That Luang Marsh, spanning across 2,000 hectares, is being preserved and managed as a buffer against flooding and a provider of livelihoods.

In the Banten Bay area of Jakarta, a consortium of environmental organisations, including Wetlands International, are using wetlands as natural infrastructure solutions to prevent coastal erosion. The Room for the River Programme of the Netherlands and Germany is an ambitious river restoration programme, which includes rejuvenating floodplains and the creation

of additional wetland habitats to buffer the urban areas from flooding and risk of a dyke collapse. Several other cases from around the globe indicate how wetlands conservation could be weaved into urban planning, contributing to twin objectives of conservation as well as sustainable urbanization.

## Ways ahead

The future of urban wetlands is closely linked to the extent to which these ecosystems are integrated within the urban development scenario.

Firstly, the national wetlands inventory needs to be updated at least once every decade so that the trends in these ecosystems are known.

Secondly, recording wetlands as a separate land-use class can be instrumental in thwarting the threats of wetlands encroachment and conversion.

Thirdly, urban wetlands need to be delineated and managed in an integrated manner, with due consideration of their ecological, hydrological and socioeconomic features and factors governing these features. Periodic capacity development programmes may be conducted for central and state government officials entrusted with the integrated management of wetlands.

Fourthly, urban wetlands need to be properly delineated and notified under extant regulations. The State Wetlands Authorities need to prioritize conservation of urban wetlands, using a catchment approach and securing the full range of their ecosystem services and biodiversity values within sectoral planning.

Fifthly, urban local bodies, resident welfare committees and civil societies should be meaningfully engaged in the management and restoration of urban wetlands. This could be done through sensitization, behavioural change communication, education and awareness campaigns, and the use of citizen science for monitoring and involvement in management planning processes.

*Views expressed are personal*

The future of urban wetlands is closely linked to the extent to which these ecosystems are integrated within the urban development scenario