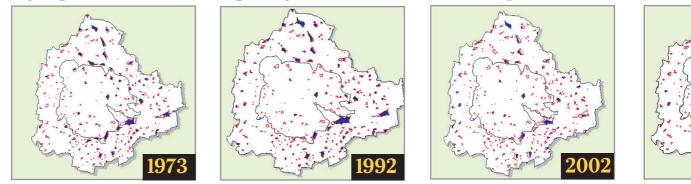
BBMP BDA Parks and Lakes BMRDA Send your suggestions and views to bangalore360@gmail.com

The widespread outcry about Bangalore's vanishing lakes is finally waking up the City's civic agencies. Plans are afoot to conserve the existing water bodies and even revive some of the old ones. The agencies better speed up, because at stake is Bangalore's very existence as a liveable City.

Dying lakes: A continuing story (Blue marks on the maps indicate the water bodies)



Vanishing lakes: Time to act now

Subhash Chandra NS

		ere are some star-	
		tling findings that	
		should explain the	
		need for urgency:	
		The 262 wetlands	
that existed in Bangalore in			

1962 had declined by a whopping 58 per cent by 2007, according to a study by the Energy and Wetland research Group, Centre for Ecological Sciences, Indian Institute of Science. While the City's built up area shot up by 466 percent between 1973-2007, the 51 active wetlands in 1973 dipped to 17 by 2007. During the same period, the number of lakes in Greater Bangalore came down from 159 to only 93

The study found that the condition of Northern part of greater Bangalore was poorer than the Southern region, where the City is growing faster. Strangely, the BBMP claims there are still 212 lakes in the City.

To protect the existing water bodies from pollution and encroachment, the Lok Adalat had issued directions recently. Following this, the BBMP has now launched a Rs. 900 crore conservation project.

It has been a losing battle for lake conservationists. Public Interest Litigations, Court direc-

tions, educational programmes works. Even the crores of ru-

and government stringent pees borrowed from internatarnorms of the State Government and appeal from Scientific that Community and environmenthe talists have repeatedly failed to icy: nds arrest the disappearance of the water bodies.

Mass migrations into Banga-Palike claims the City has, 42 lore has doubled the City's popwere reportedly lost due to development work. They were ulation in a few years. "Greenconverted to residential layouts, ery is disappearing, ground water mining is draining some playgrounds, stadiums, industries, government buildings and lakes, while the scourge of unaccounted sewage and indiscrimbus stands. Scores of private projects, apartments, indepeinate use of agro chemicals and dent houses and commercial pesticides along the wetlands has gripped many," explains Dr complexes now stand on erst-Nandini, Professor, Departwhile lakes. ment of Environment Sciences lakes on which the City was de-

(DES), Bangalore University. Ishwar Prasad, Parisara, an environmentalist involved in greening Thippagondanahalli

reservoir catchment area agrees: "Some lakes have disappeared due to development

Dr Nandini, Professor, BU Environment Dept.: 'A Citizen's enforcement culture needs to be developed. It is important. Our environ ment desperately need the Citizen's help.'

the City. "This was the genesis of lake destruction as the utility of the lakes was not found for the purpose for which it was initially used as. The lake surroundings were covered by ur-

ban set up and irrigation

According to the Palike, the

pendent on water until the

1970s were neglected following

the Cauvery water supply

scheme to pump water from a

distance of 100 kms away from

tional agencies to clean the lakes

have not been fruitful," he says.

Of the 212 lakes, which the

Forty-two lakes lost to

development:

requirement totally diminished," says the BBMP report. Indiscriminate sewerage disposal:

Indiscriminate disposal of

Storm water drain encroachments: A major lake-killer

angaloreans were once caught in the mystery over the drying up of lakes while rains flooded the low-lying areas. But now it is clear that both the issues have their origin in the encroachment of lakes, their catchment areas and storm water drains, as a study by the Indian Institute of Science (IISc) reveal.

Encroachment of lak

of drains.

Dr TV Ramachandra

The report says that the become a routine after 2000. Even a 30 mm rainfall for half an hour will lead to water log-Yelchenhalli Kere and Madiof Sankey, Ulsoor, Chalghatta, Chinanagara and Varthur, out meter of rainfall yield, only 90 million cubic meter is percolated and 150 million cubic meter of natural drainage. The story is not much differ-Municipality Council regions.

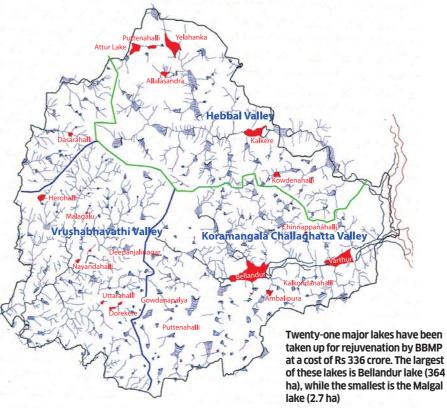
A REAL PROPERTY AND A REAL ging due to the encroachment

changes related to flooding has ging. The connectivity between vala, and between Madivala and Bellandur has been lost due to In the Bellandur- Ulsoor Catchment area, with six lakes of the total 240 Million cubic overflows, depriving the lake of most of the water. A major portion of the water cannot flow downstream due to disruption ent in Madivala-Varthur Catchment area with 14 lakes. Now, BBMP is trying to redesign the SWDs at a cost of Rs 950 crore for the core city and a whopping 6,600 crore to build new SWDs in the newly added seven City

ed by both the IISc and BBMP reports, and another study by the Bangalore University. The IISc report finds that of the 360 recognised slums in the City, only 30 percent have underground sewerage system. "In majority of the slums, waste water is discharged through storm water drains," the re-

sewerage into the lakes are cit- ports say. The BU study observes that even waste water from the apartments end up in the lakes.

With the availability of piped water supply, the importance of surfaced water in lakes lost focus. The lack of adequate underground water drainage system to intercept and divert the used water for its treatment be-



way back in 1994 by the Central fore discharge to valleys, has not kept pace with water use Ground Water Board. and draining by urban population," the BBMP report reveals.

Indiscriminate drilling of borewells is another cause cited for the disappearing lakes. With population requiring over 800 over 1,25,000 borewells in the City, the water level has plunged the BBMP has no option but to below 400 feet. The Bangalore revive and rejenuvate the North Taluk was declared grey lakes.

With no proper demarcations, the water bodies have

Interview

BHARATLAL MEENA been easy targets for land **Commissioner, BBMP** sharks. But now, with the City's

million litres of water per day,

FORTY-THREE LAKES

TO GOVERNMENT

da Bus terminus.

Research Institute

Stadium.

Workshops

wari laviut.

gar lake

Floor mills

into HBR layout.

HAVE LOST THEIR ENTIRE

CHARACTER EITHER DUE

PROJECTS OR TO PRIVATE.

Prominent among them:

Dharmambudi lake: Con-

verted into the Kempegow-

Sampige lake: Land used

for the Kanteerava stadium

Koramangala lake: Land

used for the National Dairy

Akkithimannahalli lake:

Converted into a Hockey

Sunkal Lake: The land now

houses the KSRTC regional

Hennur lake: Converted

Vijinipura lake: Now con-

verted as the Rajarajesh-

Vijayanagar Chord Road

lake: Converted to Vijayna-

Jakarayana Kere: Krishna

Tumkur Lake: Land used

for Mysore Lamps.

THE PIPELINE.

include:

44.26 ha

(ha).

BBMP'S INITIATIVE TO

REJUVENATE A TOTAL OF

144 LAKES IS ALREADY IN

The significant large lakes

Bellandur lake spread

across 364 hectare area

To rejuvenate the dying lakes of the city, what role is the BBMP playing?

Currently, we are doing a brisk revenue survey of the lakes and taking precautions to clear encroachments and fence them for protection. The survey should be completed in the next two to three months. In fact, as and when the lakes are identified, the reports are being sent to us by the department. We will then be cleaning and desilting the lakes that are perishing.

BBMP's efforts alone may not suffice to help these water bodies. Is the Palike in touch with other civic agencies?

We already have the co-ordinating agency under former chief secretary to the Chief Minister, A Ravindra's chairmanship to facilitate all the agencies in helping the dying water bodies. We have also enlisted the help of forest department officials in replenishing and preserving the lakes.

The Palike's lake report seems to show that most lakes being surveyed are around the Bangalore city. What about those which are in the centre of the city and those that have dried up?

Yes, we are mostly looking at lakes around the City. But, those which are identified and within the City have also been noted. We intend to replenish those lakes by providing water and rejuvenate those areas.

But most inlets have

upon by private resi-

dents. How do you intend to

clear those structures that

become a common thing, but the land sharks have not even spared the storm water drains and catchment areas. Over 50 percent of lakes are drying up due to this and is resulting in urban floodings, according to the study conducted by the Energy and Wetland Studies Research Centre, Centre for Ecological Sciences.IISc.

The study which analysed various lake beds have found that the natural drainage channels and the catchment areas have been encroached by land mafia in connivance with Government machinery.

'The downstream of Nagavara has been encroached. Even the drain connecting the Sankey lake is encroached, A major portion of the Begur lake

Ne have lost over 35 er cent of the lakes ince 2007. Only 33 liv anks are existing now of which only 17 have water throughout the

catchment area has disappeared. It is not one story, but all the City wetlands are facing similar problem," says Dr T V Ramchandra, Senior Scientist, Energy and Wetland Research Group, CES, IISc.

Pointing out that the water storage capacity of the lakes has decreased in recent years, the study says that even a slight rainfall now leads to water log-

Another dying city lake

Glory that was Bangalore

The lakes in the three valleys of Hebbal. Vrushbayathi and Koramangala Chellaghatta valley in the City had earned Bangalore the tag of 'The City of Lakes.' Most of these valleys were built in the 16th century AD by damming natural valley systems and created in such a manner that each of them would harvest rainwater from its catchment area and the surplus water over flows into the next lake in the downstream.

They form a hydrological chain. The monsoon runoff flow of water runs from North to South East as well as to the South West along natural gradient of the land.Most of these lakes were used for drinking water, irrigation and fishing and they have also influenced the micro climate and have rejuvenated the ground water since ages.

The BBMP plans to prevent further encroachment, enhance water quality to check ground water contamination, restore ecological system, recharge ground water, create an urban asset, restore flo ra/ fauna habitat and provide lung space and provide recreational facilities.

BBMP plans

The three-phased programme focusses on demarcation of boundaries, fencing, sewerage di version to arrest inflow into the lake in the first phase.

121.68 ha Kalkere lake, area: 75.68 Doddanekkundi lake, area: 45.29 ha.

Hulimavu Kere: area: The five smaller lakes under the project with less than 1

hectare area include: Devarakere: 0.28 ha Kariyobbanahalli kere (Yeshwanthpur), 0.31 ha Golaratti lake (BEL layout): 0.31 ha Halagadevarahalli

ha Srigandadakaval lake (Rajiv Gandhi Nagar): 0.45

That would mean setting up treatment plants near the catch-

Yes, they will be small structures dependent on the size of the lakes. It won't be hard to

Sandeep Moudgal

No blackout,

BU merit list

BANGALORE: The omnibus merit list of candidates who had applied for post graduate courses of Bangalore University, for the academic year 2009-10, will be announced on September 16 at 4 pm, on the Bangalore University website www.bub.ernet.in

The counselling for admissions to post graduate courses will start from September 19. at Jnana Jyothi Auditorium, Central College, Bangalore 560 009.

DH News Service

Cit<u>y weather</u>

Forecast: Partly cloudy. Thundershowers likely.

Temperature	
Maximum:	28.3 deg C
Minimum:	19.3 deg C
Rainfall:	50.4 mm
Humidity:	64 per cent
Sunrise: (Wed)	06:09 am
Sunset: (Tue)	06:21 pm
Moonrise: (Tue)	02.29 am
Moonset: (Tue)	03:34 pm

Movie Guide

ENGLISH Frozen: Fame Forum Value Mall: 12

Dragonball Evolution: Inox Magrath Road: 10.30 am, 2.30 am, 10 pm; Fun Cinemas: 10.45 pm; Fame Forum Val ue Mall: 8 pm.

Road: 10.35 am; PVR Cinemas; Innov ative: 12 noon; Vision Cinemas: 12.15 2 pm, 6 pm, 10 pm; Inox Magrath Road: 12.15 pm. 4.20 pm. 6.40 pm 8.15 pm; Fun Cinemas: 2.45 pm, 7.15 pm; Shankar Nag: 4 pm.

grath Road; 2.50 pm, 5 pm, 10.20 pm; Fame Lido: 2.40 pm: Fame Forum Value Mall: 2 pm, 8.15 pm, Fun Cinemas; 11 am, 10 pm, Fame Lido: 2.40 pm Quick Gun Murugan (Eng): Inox Jayanagar; 10 am; Inox Magrath

The Unforgettable: Inox Magrath pm, 3.30 pm, 9 pm, Fame Lido; 10 am,

The Final Destination 4: Inox Ma

Road: 10.25 am, 3 pm, 8.25 pm; Fame Forum Value Mall: 10 am, 4.50 pm, 10 pm; Fame Lido: 10 am, 9.45 pm; Quick Gun Murugan (Hindi): Fun Cinemas: 8.05 pm

Taking of Pelham1 2 3: Inox Magrath Road: 10.10 am, 5.55 pm. The Ugly Truth: Inox Javanagar: 10 am, 11.50 am, 7.30 pm, 10.10 pm; Inox Magrath Road: 10.20 am, 1.55 pm, 3.55 pm, 8.05 pm, 10.05 pm; Fun Cinemas: 3.50 pm, 6 pm, 9.30 pm; Rex: 11 pm, 12.55 noon, 2.45 pm, 7.30 pm: Fame Forum Value Mall: 10 am, 12 noon, 4 pm, 6 pm, 10 pm;

Shankar Nag (Ullas): 10 am. 2 pm. 6 pm, 9.55 pm KANNADA

SCNS and SDM

Bhagyada Balegara: 4 shows: Kapali, Vinayaka, Nandini, Siddeshwara, Adarsha, Ullas, Venkateshwara Avalahalli, Maruti, Rajagopalanagara, Srini vasa Saddeguntepalva, Krishna K R Puram, Rajarajeshwari Mallathalli, Vaibhavi Uttarahalli; Prasanna: MS; Pramod: 4.30 pm, 7.30 pm. Prem Kahani: 4 shows: Triveni Navrang, Uma: Chamaraipet, Sid dalingeshwara: JP Nagar, Rajeshwari Laggere, Vijayalakshmi: Garudacharpalya, PVR: Balaji Taverekere, Vijay: Byatarayanpura, Rajmurali: Kodigehalli, Prakash: Yelahanka, Eashwari: Katriguppe, Manasa: Konanakunte, Robin: Kengeri, Gopal: Yeshwantpura, Bharathi: Peenya, Narasimha: Hosur Road; Pramod: Magadi Road: 10.30 am, 1.30 pm; Vaibhav. Saniavnagar: 11.30 am. 2.30 pm: Inox: Jayanagar: 11.15 am, 1.45 noon, 7.15 pm

Vaayuputra: 4 shows; Nartaki Prasanna: 1.15 pm. 4.15 pm. 7.15 pm: Nalanda, Vaibhav-Saniavanagar: 11.30 am, 2.30 pm, 6 pm. 9.30 pm; Govardhan, Mohan - Sunkadakatte Lakshmi - Gottegere, Kamakya: Katriguppe

Cheluvina Chilipili: 4shows: Swap na, Uma, PVR, Ullas, Kamakya, Laksh mi: Taverekere Hushaar: 4 shows; Menaka



Kangna Ranaut and Bobby Deol in Vada Raha.

Raai - The Showman: 4 shows: Santosh, Veeresh, Vajreshwari-Ullal, PVR; Navrang: 1.30 pm, 4.30 pm, 7.30 pm. Housefull: 4 shows: Thribhuvan; Kailash: 11 am Iniya: Sagar: 4 shows. Love Guru: Kailash, Prithvi Nagavara Vamshi: 4 shows: Abinay. Aishwarya: Vijayalakshmi; Chikpet: 11 am and Gulama: 2 pm, 4.45 pm, 7.30 pm.

TAMIL

Eeram: PVR Cinemas: 12.30 noon, 5.40 pm, 8.50 pm; Inox Javanagar; 3.15 pm, 6.30 pm; Inox Magrath Road: 3 pm. 8.50 pm: Fame Lido: 11.30 am. 5.50 pm; Fame Forum Mall: 11 am, 5.30 pm; Fun Cinemas: 9 pm; Multiplex Innovative: 11 am, 4 pm, 7 pm 10 pm: Urvashi: Cauvery: Aianta: 10.30 am, 1.30 pm; Lavanya: 4.30 pm 7.30 pm; Mukunda; Lakshmi Taverekere; Puspanjali; B N Pura Vaibhavi: Uttarahalli: 11.30 am. 2.30 pm; Aruna: 1 pm, 4 pm, 7 pm; Sampige: 10.30 am. Ninaithale Innikkum: Inox Jayana

gar: 4.40 pm: Inox Magrath Road: 12.15 pm; Sampige: 1.30 pm, 4.30 pm, 7.30 pm; Madeshwara, Amruth Lavanya; 10.30 am, 1.30 pm, Ajanta; 4.30 pm, 7.30 pm; PVR; 3.45 pm; Fame Lido: 4.40 pm; Fame Forum Val ue Mall: 2.30 pm, 6.40 pm.

Kandaswamy: 4 shows: Nataraj, PVR Cinemas: Fame Forum Value Mall: 11.15 am Easha: 4 shows: Ravi; Ejipura, Narendra - K G Halli, Anand: noon show.

Kadal Kadai: 3 shows: Puspanjali; Sultanpalya

Nadodigal: Sharadha: 3 shows. TELUGU

Shankham: PVR Cinemas; Inox Jayanagar: 12 pm; Fame Lido: 11 am, 5.30 pm; Fame Forum Mall: 2.20 pm; 4 shows, Poornima, Chandrodava, Tulasi, Radhakrishna, Venkateshwara K R Puram, Maheshwari, Renukaprasan na J P Nagar, Murali Gokula; Anian Magadi Road: 2 shows: Raialakshmi: Arakere: 11.15 am, 2.30 pm, 6.30 pm, 9.30 pm; Veerabhadreshwara Ka malanagara: 3 shows.

Josh: Fame Forum Value Mall: 11.30 am, 5.50 pm, 9 pm; Movieland; PVR: 1 pm, 5.40 pm, 8 pm; Keshava Yeshwanthpur, Vishal - Kamakshipalya, Balaji - Hosur, Vinayaka - Marathahal li; Fame Lido: 2.15 pm, 8.45 pm. Anjaneyulu: PVR; Abhiman - Gouripalya; Pushpanjali - Shivanagar, 2.30 pm, 6 pm, 9 pm; 4 shows - Ravi - Sar iapura.

Magadheera: Pallavi, PVR, Anian Magadi Road, Fame Forum Value Mall: 2.40 pm, 8.45 pm; Vaisnavi; Uttara halli: 3 shows, 4 shows: Ganesh; Fame

Lido: 2.50 pm, 9 pm; Yelahanka, Krish na Bommanahalli; Aparna, Lakshmi Ramamurthinagara

HINDI Aam Ras: Inox Magrath Road: 12.20 pm, 6 pm.

Baabar: Inox Magrath Road: 6.15 pm Fun Cinemas: 12.30 pm. Vaada Raha: Inox Magrath Road:

12.50 pm, 4.30 pm; Inox Javanagar; 9.45 pm; Fun Cinemas: 4.45 pm; Ever est: 11.30 am, 2.30 pm, 6.30 pm, 9.30 pm, PVR: 11 am, 6.10 pm; Innovative Multiplex: 12 noon, 5 pm, 10 pm; Vision Cinemas: 10 am, 1 noon, 9 pm; Apsara; Aishwarya: Parimala, City

Market Kaminey: Rex: 4.45 pm, 9.45 pm; Innovative: 11.15 am. 1.45 pm. 4.30 pm, 7.15 pm, 9.45 pm; Inox Jayanagar; 2.10 pm, 4.50 pm, 9.30 pm; Fun Cinemas; 10.30 am, 1.15 pm, 4 pm 6.45 pm; Fame Forum Value Mall: 2.15 pm, 5.15 pm, 9.30 pm; Fame Lido: 12 pm, 7 pm.

Love Aaj Kal: Santosh: 11 am, 2 pm, 5 pm, 8 pm; Vision Cinemas, Innovative Multiplex; PVR; Fun Cinemas: 1 pm MALAYALAM

Oru Pennum Randanum: Manoranian: 2.45 pm. 6.15 pm. 9.15 pm: Innovative; Marathalli; PVR Cinemas. Ritu: PVR Cinemas: 9.20 pm; Innovative: 2.30 pm, 7.30 pm; Sangeet: 6.15 pm. 9.30 pm.

*Movie timings are subject to change

says ESPN BANGALORE, DHNS: ESPN STAR Sports has maintained that it has already signed deals with three of the four leading Multiple Service Operators, covering more than 70% of the city of Bangalore, including Incable, Den

Amogh, WWIL and Cable First. "Thus, there is no question of a blackout of the three channels from ESPN STAR Sports bouquet - ESPN, STAR Sports and STAR Cricket in the City, Makarand Palekar, Associate VP-Affiliate Sales, ESPN Soft-

ware India Pvt Ltd, said in a release. "There is a deliberate miscommunication campaign which is being led by the MSO who has not yet renewed their annual contract with ESS like In Cable, DEN Amogh, WWIL and Cable First and may be by indulging in these activities the concerned MSO is trying to extract some personal benefits,' he said. "We want to assure our consumers that we are trying our level best to ensure that al households across the City will get to watch our channels" he

said.

have already been constructed? We will try to identify those lake areas that have been encroached upon and clear them. We will also be trying to

treat water that is being discharged by houses in the vicinity and push it to the lakes.

ment areas of the lake?

kere(Govindrajnagar): 0.44 identify them and set them up at the catchment areas.