& Much More

LETS PROTECT & RESTORE OUR WATER SYSTEM – HILLS, WATER WAYS, LAKES & PONDS

- Dr. Anil Mehta

(I) Protect and preserve lakes and ponds(Talab) upto their Maximum Water Level i. e MWL in order to conserve the lake ecosystems.

(a) The submergence area of lake is defined by its maximum water level(MWL). It is the submergence area i.e water spread attained when water overflows from the lakeThus, MWL is Full Tank Level (FTL) plus Flood Lift (or thickness of water sheet that will flow over the overflow/pass over section locally known as" chadar ") When the dam is upto its brim, the water spread is significantly less and the spread is known as water spread at Full Tank Level. This area between FTL spread and MWL spread is an important ecological zone for any water body. It also provides nesting and breeding ground for local and migratory avifauna (birds). This area around lake shores is important biological area and is known as littoral zone. As bark is important to survival of any tree, similarly, the shore littoral area is important for survival of the lake. The character and importance of littoral shore line zone is similar to the nature and character of flood plain of any river. And hence need to be pro-

(b) It is highly unfortunate that in the year 2010 , the Urban improvement Trust, in connivance with land mafia, altered the definition of boundary and deliberately defined the lake on Full tank Level. The Mutams(pillars) on FTL were erected and a highway like road on FTL boundary has been made . This has led to exclusion of large area of lake which is being raised by dumping earthfill by many private individuals. This has led to extinction of important littoral zone necessary for ecosystem of the lakes and breeding and nesting ground for local and migratory avifauna (birds). The Picchola which was 6.96 square kilometer has been reduced to 4.5 square kilometer. Similarly the Fateshsagar is reduced from 4.5 square kilometer to 2.5 square kilometer

(c) It is also the fact that after the intervention and order of Honorable Rajasthan Highcourt, the Rajasthan government has constituted the Lake Development Authority known as Rajasthan Lakes (Protection and Development) Authority. This act defines the lake as: "lake" means an inland water body, whether it is natural or manmade, whether it contains water or not and whether it has been recorded as such in any revenue or other official record or not, which has had, at any time during fifty years preceding the commencement of this Act.. That means as per the Authority Act too, last 50 years water level shall be considered.

(d) Therefore, In order to maintain and conserve the Littoral Zone of lakes; the biological processes essential for the survival of lakes; sustaining the avifauna; and the overall Eco system of lakes, there is urgent need to direct the State Government to immediately restrict all local bodies including UIT Udaipur and Nagar Nigam Udaipur so as not to reduce the already defined submergence of the Lakes. The Picchola and Fatehsagar; and the entire lake system of Udaipur including Badi, Madar, all small lakes (like Roop Sagar, Futa, Rundela, Naila, Jogi etc) and Udaisagar lakes needs to be restored upto MWL by erecting pillars(Mutams) and enforcing the restriction on dumping earth fill and constructions . The flood plain of Ahar river shall be protected.

(II) Issue of weeds and General Cleanaliness

(a) There should be adequate budget provisions for maintenance and cleaning of lakes in the budget outlays of the local bodies with a caveat that we do not support money spent on construction work or any expensive installations but more on involvement of people, creating awareness and according priority to conservation activities.

(b) Since the lakes are in the advance stage of pollution and nutrient loading, there is need to apply biological methods to control the indiscriminate growth of weeds. For that, we need to restore the useful fisheries. Fishes like carp fishes control the growth of weeds and are also useful for healthy ecosystem of lakes.

(c) In the urban limits, we have six water bodies namely: Pichhola, Swaroop Sagar, Fateh Sagar, Badi, Udai Sagar and Ayad river. Both the local bodies should have standard protocols for cleaning, maintenance and vigil on these water bodies. There should be a categorical division of jurisdiction relating to lakes between the two local bodies- Nagar Nigam and UIT for upkeep and conservation of lakes. A notification to this effect for information to public at large will be appreciated.

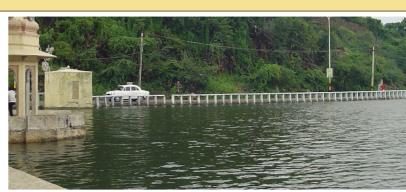
(d) Cleaning of the lakes and sanitation in general needs monitoring and improvement. Some latest technology equipments may be procured

(e) Tons of garbage from houses, hotels, guest houses composing of domestic waste, medicines, household chemicals, plastic, polythene, liquor bottles, sacks of unused meat etc are thrown every day into lakes. The most serious thing is open defecation. In order to prevent this there is need to install CCTV surveillance in of adequate capacity all along the periphery of the lakes at every 150 to 200 meter distance. There should be team of personnel to monitor the CCTV system. Further, a dedicated team of cleaning staff in particular dress and all gadgets be employed for each section of the lakes.

(III) Control on Highrise constructions along the lakes and conservation of Catchment Area: Despite restricted construction notification by the government, many commercial and highrise constructions are going on along the lakes and in the immediate catchments. People are taking permission on the name of residential house, but are raising big constructions. Therefore we demand not to grant permission of big complexes in restricted construction zones and keep all vigilance not to allow anyone to raise commercial constructions. Similarly the catchment areas of lakes be made encroachment free and construction activities in the catchment areas be strictly regulated.

(IV) Safety of dams, embankment walls: The lakes of Udaipur, any many other lakes of Rajasthan were developed prior to independence, during princely states time. There are many attempts to temper the dams and embankment walls of such lakes. Without understanding the profile and inner composition, as well as the present strength and durability of these structures, the governmental agencies shall not develop any project on these delicate structures, otherwise there may be catastrophes.

The government be directed to ascertain the profile, inner material composition and strength of these centuries old Dams, within one year, by all latest technological methods and modeling techniques. The dam safety rules of Government of India be strictly followed and any deviation may immediately be corrected. All tubewells



in the safety zones of the lakes be grouted immediately.

(V) Hill Lake Ecoregime Protection and Conservation of Small Lakes:

(a) The city of Udaipur prides itself on the large number of lakes and the surrounding ecosystem of hills and valleys which not only provide a aesthetic backdrop to the whole city but also plays a significant role in maintaining the health and hygiene of the lakes. Further, Hills-lake eco-regime is an important constituent in the sustainability of all the water based habitats of the area by way of reinforcing and synergizing the geo-hydrological balance and well as the sub-surface hydrology. The bye laws for cutting of hills have been issued by the Govt but ironically, the bye laws promotes the slicing of hills and therefore needs review.

(b) Conservation of Small Lakes: there are various small lakes which are important for eco sustenance and water security of the area. The Rajasthan High court has directed for the conservation and management of these lakes. The water ways (inlets & outlets) should be restored.

(VI) Smart City Project: Udaipur city is in the list of smart cities of the country. And water bodies, hills, sanitation, quality of water and air are very vital for its existence as a smart city. Therefore, following actions are required:

(a) Tree plantation and making the public spaces encroachment free should form part of the routine activity of the local bodies (not the campaign mode). Efforts to facilitate flow of traffic and "creating no vehicle zones" on congested roads in general and on roads around the lakes in particular.

(b) The Government lands and pasture lands situated in the urban limits be indentified and protected from land mafias and encroachments. Some precious lands are under litigation too. It needs close monitoring and updated records. On the campaign basis, Government lands near the water bodies needs to be protected.

(c)VII) Public Participation: There is a great need to involve various organizations, groups, communities in the pursuit of conservation/ cleaning/ maintenance of water bodies. Simultaneously, periodical review at the level of district collector on various issues related to lakes, sanitation and environment should be done preferably once in two months, involving all stakeholders. The present collector of Udaipur Ms. Aanandi has initiated the process to involve the citizens which should be appreciated

