

The Restoration of a Lake

Kundawada Kere

Introduction

Environment is the sum total of natural features, flora, fauna, the linkages, the contexts of time/space, ability to sustain and the capability to withstand any onslaught on it. Since times immemorial man has been the biggest end user and also the biggest destroyer. Environment is much more complex than human existence itself and the lack of capability to understand in a holistic manner adds to the problem. Though the environment looks, seems and feels static yet it is always in the dynamic mode and a dynamic leadership only can respond to the dynamic needs. Individuals, societies, business corporations and governments have acted in manner totally antithetical to our very existence itself. Al Gore, a world renowned environmentalist and former Vice-President of the USA in his book the [an inconvenient truth](#) says " We have everything we need to begin solving this crisis, with the possible exception of the will to act." He can neither be more true nor be more prophetic.

This article primarily deals with the efforts under progress for the restoration of Kundawada Lake. Over the course of this paper, after this introduction, I would discuss some snippets of environmental activism in India, how I got into it, lakes for society, the state of Kundawada Kere, how it all started, composite model, work done and to be done, the vision and road map ahead. This would be peppered with some relevant analysis here and there.

Environmental Activism in India

Environmental activism in India has a long and distinguished history starting from the Chipko movement to the Narmada Bachao Andolan to name a few. Sunderlal Bahuguna and Medha Padkar and the like have become icons of this movement and are the public faces of the movement which can be aptly termed as **Development with environment**. The projects to Save Ganga and Project Tiger have gained immense prominence because of their contribution to the cause of environment.

Varied movements of different intensity, depth and impact have taken place all across the country. Forests and its associated fauna, creations of dams have attracted the largest amount of attention of the environmental Ngo's. Suffice to say that most of the work being done in this field has been done by NGO's.

What is a lake

Wikipedia defines the lakes as follows:

A lake is a body of relatively still water of considerable size, localized in a basin, that is surrounded by land apart from a river, stream, or other form of moving water that serves to feed or drain the lake. Lakes are inland and not part of the ocean and therefore are distinct from lagoons, and are larger and deeper than ponds. Lakes can be contrasted with rivers or streams, which are usually flowing. However most lakes are fed and drained by rivers and streams.

Vision

This vision is of lake which would be robust to take care of the multidimensional needs to the city, from drinking water to walking to environmental research and city is return would be competent structurally, organizationally, by expertise and financially to scale up the Lake and maintain it at the globally acceptable level and keep its progress at the dynamic mode. Scalability is the key and comprehensive growth is the buzzword. Comprehensive growth creates concurrent circles of stakeholders and they because of their vested interest are ready to put in their might behind the movement. The slogan at the thought process level is very simple which is being expressed in the photo exhibition on the Kere on 15th and 16th Sept 2012 by the name Kere Kansere. **Bringing Kere to the City, from the city to your home, from your home to your heart and from your heart to becoming the landmark of the city.** Cities are known by water bodies and I am confident that in the day to come, Kere and Davangere would become inseparable in the citizen's thought process.

How I got into it

I have an uncanny knack to get involved into things I don't know at all, nonetheless have a gut feeling to surmount the insurmountable. It has happened with such regularity that I treat it as the done thing. I am an avid walker for over nearly three decades and I don't need any musical gadget or company to keep going. As I got posted to Davangere I started scouting for a place where I could walk and without much difficulty found this great lake, which from liking initially has become a passion today. This lake has the best walking track I have seen in my whole life. As Steve Jobs said when you find your love, you know. I found mine. And henceforth it was a great effort of falling in love over and over again with the Lake.

Civil Activists – The Catalysts

With deep-seated concern for the restoration of the Lake and lot many valuable suggestions, three members of the Civil Society, Mangala, Shubha and Prashanth met me in my office at 12 noon on 26th April 2012. Impressed by their enthusiasm, I convened a meeting of all top officials in SP's chamber at 4 p.m on the same day to discuss this issue. The panel consisted of all senior officials - IGP, Mayor, DC, SP, CEO, Corporation Commissioner and members of the civil society who were interested in this project of Lake Restoration. The Civil Activists acted as a pressure group. The officials were impressed by the Group's deep concern over the matter. After a powerpoint presentation by Mangla and free and frank discussion by most of the members and the officials, moderated by me, the group was given full assurance that the Lake would be restored in a manner that would make citizens of Davangere proud. It would be the right blend of nature and technology to satisfy the needs of clean water supply, a treat to the eye, a walkers paradise, a bird sanctuary, a lighted Queens Necklace by night and the Ultimate Natural Landmark of Davangere. The path forward was to explore all the possibilities to restore and renovate the Kere.



Basic details and its recent history

In the first meeting on this issue of the Think Tank, The Kundawada Kere Brain Storming Group on the 7th of May 2012, Dr.Aravind explained the basic details about Kundawada lake and its recent history. Kunduwada lake has an expanse of 254 acres. It was a minor irrigation tank irrigating about 75 hectares of land. About 30% of Davangere city sewage ended up in this lake. The lake was completely putrefied. Sri. S.S. Mallikarjuna, Ex Minister took keen interest in the restoration and renovation of this Lake.

Entire water was drained out in 2002, desilting done and bund was constructed all around the tank. After completion of the desilting work, Bhadra canal water 0.2 TMC was channelized to flow purely on gravity and treatment plant was constructed downstream. This was designed with a inflow of 20 million liters per day and total holding capacity of 3000 mlt ,which could cover the need of city of city's water supply for at least for 4 months . The total length of the bund is about 4.9 kms. The project was executed at an approximate cost of 6 crores.

Kundawada Lake – Important Facts

Area of lake	254 Acres,
Catchment area	1720 Hectares
Live capacity	3605 mlt
Length of Bund	1128 mtrs
Max.Height of Bund	6 mtrs



The basic details does not convey the true state of affairs of the lake. It was in a putrefied state of affairs and anybody you came along with me for the walk was amazed at the unhygienic conditions in which I walked. There was a burning desire to do something worthwhile for the lake where I spend at least one and a half hours everyday and that too the most refreshing part of the day. I could not fathom out from where to start and what to do. Environment was not my concern ever in my life, given the harsh realities of academics and bread and butter I had to struggle with most of my life.

When the civil activists met me I was in no mood to take up a cause which I had no idea of. They argued that my successful forays into lot many fields gives them the strength that I would provide dynamic leadership to this environmental project and we would be able to save the lake. Being school boyish in approach and non argumentative on critical issues I landed in this whirlpool never to come out and new a passion took over my life. I am ready to do anything for the local lake and

also in the process develop expertise in lake restoration which can be used for other lakes of Karnataka or India as the case may be.

Status

The real status of the lake when I got this offer for rendering my unknown services was that the water quality was doubtful, the same water was released to the filtration plant based on gravity, it went through the standard water filtration process and is made drinking water ready. The lake is fed by Bhandra canal besides being rain water fed. Besides being used for drinking the only other purpose this water body served the city is by being a walkers paradise, the pathway all along the embankment made it one of the best walking pathways anywhere in the globe. The value adds to the what the Lake offered was slated to be at the revolutionary level and I intended to take it to the international level.

Composite thought/Composite work

The composite thought got manifested in composite action wherein comprehensive blueprint of the Kere development was drawn up. It was a multipronged approach with an inter-departmental team to execute, though the line departments would use their regular funds, yet would end up in one single project based on the Blueprint created for this purpose. The Kundawada Kere Brainstorming Group has been created as the final intellectual and professional body to guide this project in all its dimensions. Effort is on to bring in Lake Development Authority also into the picture wherein we can use their funds and also their expertise. If we are able to clear our initial milestones on time and of the required quality we can think of approaching the Central Gov. and also the United Nations.

Work done

The work done so far is as follows:

- ✚ Partial Desilting
- ✚ Partial Deweeding
- ✚ Benches for visitors
- ✚ 1000 saplings planted

- ✚ Huge amount of bushes and low shrubs cleared, lot of space ready for use
- ✚ Four trees with circular concrete seating benches
- ✚ Dust bins throughout the Walking Path
- ✚ Lighting for one fourth of the walking track
- ✚ Statues of cows/buffaloes/men already existing in bad shape has been completely renovated by the Fine Arts College
- ✚ Repairs to all the three gates and the Pergola
- ✚ Partial creation of an island for the birds
- ✚ World Environment Day celebrated on 5th June 2012 in the most befitting style, best function in Karnataka
- ✚ Kere Kansere 2012, Photo Exhibition exclusive for the lake to bring it to the mainstream of everybody's thoughts
- ✚ Launch of website www.lakesforlife.com on 15th Sept 2012



Big Dream/ Road Map

✚ **Desilting**

Around one-third of desilting has already been completed and work is on in full swing to complete the desilting process. The desilted mud/slush cannot be transported to a long distance as it entails huge cost and effort and so the same material is being used for creation of an island, a happy habitat for the birds, with grass cover and cherry trees.

Deweeding

Based on the detailed technical discussion with the experts, deweeding was found to be a must. Deweeding is mainly required for south eastern part of about 10 acres, all along the bund up till 10 mtrs from the bund end. Deweeding has to be done manually. Partial deweeding has already been done. Once the deweeding is completed, regular chlorination is required at least once a month along the embankment.

Resetting of the Bund

It will be done using manual labour along the revetment area. The present condition of revetment area is not very good.

Walking Path

Karb stones must be laid along the Path of not more than 6" inch up and 6" inch down along the Path. After making of Karb stone walking path will be beautified on both sides by landscaping and planting of ornamental trees along the sides of the path, all along, for the complete 4 kms.

Creation of an Island

The deweeding would produce reasonable amount of silt extracted in the process which can be used to create an island in the SE part of the Lake which can become a natural habitat for birds of different types which are already available in abundance.

Tree Cover

Along with fungus free trees, small fruit bearing trees and medicinal trees, shrubs and creepers should be planted on the embankment area. Landscaping includes sustainable green cover for full lake area.

New types of gates, benches, and litterbins would be placed all over the lake depending on the requirements and these items would be a part of the general green landscape and should not be an eyesore.

Lighting

The solar lights were in a sorry state of affairs and few very are functional. It has been procured out of public money and cannot be allowed to be

squandered. The Agency concerned would contact the Vendor and get rectified at the cost of the Vendor if there is a maintenance contract or whatever is the nature of agreement between the user agency and the Vendor. It should be brought to full usage.

The Solar Lighting, the way it is being used cannot be a single mode of lighting. As an alternative regular lighting should be provided on the other side of the walking path. The light poles etc should be ornamental in nature. The final look when lighted should be that of a Queens Necklace. Besides this there should be a provision for a High Mast Beam Light at the center of the Pergola giving sufficient light to that area and be the center of attraction for the whole lake.

Currently 25% of the solar lights has been converted to run on regular power supply.

Photography

Raised platforms should be erected at two or three vantage points to be at provided the ideal locations/ setting for photographers and it should also be provided with all the amenities required for still and video shooting .

Entry Fee

As a source of revenue and to inculcate in the minds of the user, a sense of responsibility towards the lake. Biometric Access System would help in having documentation of the Users and Usage and can be used for large number of tasks and analysis.

The entrance gates should be done up and proper access control system has to be created. CCTV should be installed at the entry and exit and also in the whole park. There should be a control room for the purpose and it should be conveniently located and should be manned by professionals.

Signages

These boards announce the quality of the park much before you reach there and all throughout the park as well. Nice and beautiful hoardings of birds and the park's scenery would enliven everybody who visits the lake. Flex board can be used for advertisements which would generate revenue for the Lake. A self sustainable model can be evolved over a period to time.

✚ Maintenance

Most of our assets go into disuse because of lack of maintenance and lack of maintenance is due to lack of funds for this purpose. There is also the need for a core maintenance group which has to be located at the Lake itself. The annual maintenance expenditure on the Lake should be budgeted in the Municipal Corporation Budget and it should be discussed and scaled up depending upon the requirement, annually.

✚ Website

A website of global standards matching with the best lakes in the world has been created. It would be launched at the Inaugural Function of Kere Kansere 2012 an Exclusive Photo Exhibition on the Lake.

✚ Creation of a Bird Sanctuary

Pakshi Dhama – 40 regular and migratory birds inhabit this Kere.



A P J Abdul Kalam

Kalam loves this lake and all of us love Kalam. The story of this lake would have not been so different but for the visit of APJ Abdul Kalam to this lake when he visited the city to attend the Golden Jubilee Celebrations of Bapuji Educational Association(BEA). With his deep seated love for water bodies he asked if there was any lake around. He was pleasantly surprised to see the Lake next day and requested all of us to do the needful to bring to a level it deserves. He even

mentioned this lake at other functions he attended here and elsewhere. He has been the real catalyst. It is our cherished dream to have him here once again so that he dedicates the renovated lake to the city of Davangere.



Conclusion

Kundawaada Kere today symbolizes the people's love for nature and desire to maintain a scenic water body with which the city can associate itself. This movement is an expression of long cherished urge of this city. Starting from finding the right references both documents and human resources to listing the tasks and setting the priorities, the movement is gaining strength to strength in the right direction. With five months of civil activism behind it and having been able to tide over most of crises, the future for the Kere and Davangere citizens is bright. Kere Davangere 2012.

