



Sheikha Jheel, Aligarh

Background

Sheikha Jheel is a lake situated 17 km from Aligarh (Uttar Pradesh) on Aligarh Jalali road near village Sheikha. It falls in the Koil tehsil of Aligarh district. The Upper Ganga canal flows adjacent to the lake. The lake and the village are less than a kilometer away from the Sheikha village bus-stop. The total area of the lake is 25 ha.

This Jheel came into existence after the formation of the Upper Ganga Canal in 1852. It is a fresh water perennial water body surrounded by agricultural fields on two sides. The Upper Ganga Canal divides the lake into two parts. The area receives moderate rainfall up to a maximum of 644 mm. The lake and its surrounding areas support a diversity of habitats, viz. wetland, grassland, forest etc. The wetland forms an ideal habitat for the waterfowl and other water birds especially during the winter months. Among the flora the dominant tree species that surround the lake are *Terminalia arjuna* and *Syzigium cumunii*. The other components of the vegetation include acacias, *Dalbergia sissoo*, neem, among others. The major weeds include *Lantana camara*, *Sida*, *Parthenium hysterophorus* and *Cassia tora*. The shrub species include *Ipomea aquatica* and *Muraya koenigi*. Only a few mammalian species are found in the area like the blue bull, blackbuck, five striped squirrel, Indian mongoose, black-napped hare, rhesus monkey and jackal. About 166 water bird species have been reported in and around Sheikha. Some of these include, the great crested grebe, painted stork, barheaded goose, purple heron, and so on.

Bhavavankhera and Sheikha are two villages that fall in the vicinity of the lake. The other villages are Edalpur, Changeri, Jalali, Gangary and Panaithi. The total population of Sheikha village is more than a 1000 comprising mainly of Rajputs and Jatavas. Agriculture is the sole source of income of the people with a mixed population of rich farmers who own tractors and other agricultural equipments and poorer peasants who either work in other people's fields or own small pieces of land. The major crops grown in the vicinity of the lake are paddy and wheat. Some farmers also grow sugarcane, maize and mustard. The lake is used by the people for cultivation of water chestnut and small scale fishing. The area around the lake is also used for grazing of domestic cattle.

During summers, there is less water in the lake and some ground vegetation grows. The villagers graze their cattle continuously during this time so as to prevent it from turning into a terrestrial ecosystem. Till 1952, the villagers used to depend on the lake for agriculture. Since the construction of the Ganga Canal, their dependency on the lake has become negligible.

Impacts of past and current land uses:

1. *De facto* cultivation of water chestnut in one part of the lake covers most of the water surface. This has resulted in less surface area for the birds to forage. However all care has been taken to leave a considerable part of the wetland for use by wild waterfowl.
2. The FD planted some trees of *Tamarix sp.* and *Prosopis sp.* on the canal banks under various social forestry programs which produced a good forest. Later, when this land was distributed amongst the Scheduled caste and other backward classes (disprevidged sections), under a government scheme, the *gram samaj* (village council) ordered the felling of these trees which led to the vanishing of the wildlife that had developed here. The conserving community holds a grudge against the government for this.
3. A tar road constructed along one side of the lake has rendered it an easy access for outside poachers.
4. In 1991, the District administration built mounds in the middle of the lake and a trail in the lake leading to the mound. This restricted the flow of water. Subsequently, these mounds and the mud road were left unattended, causing siltation and making the wetland shallower.
5. Water hyacinth grows here profusely causing eutrophication and hence fewer surfaces for the birds to use.



Legally, the jheel comes under the village common land and *gram samaj* has the ownership rights. The forest department's social forestry wing had carried out some plantations on the canal banks about ten years ago. These plantations come under reserved forests of the region and have been closed for hunting under the Wild Life Protection Act (1972). Also, plantations were carried out on the area on Ganga canal banks by Ganga Canal Department. Presently this area is also cultivated under the social forestry program and comes under protected forests.

Towards community conservation

The villagers are dependent on the lake and the surrounding area for their livelihood. The community uses the lake area for grazing, for fuel wood and fodder collection. During summers when water in the lake recedes, the grass and other vegetation grows on the exposed area. This is a very important source of green fodder for the villagers. The water chestnut grown also acts as an important means of subsistence.

Although the local people do not attach any religious association with the jheel, the lake is a precious matter of pride for the natives. Another important motive behind conserving the lake is to maintain the water table of the area for agriculture. Local people have also understood importance of the lake as wildlife habitat and refuge for migratory birds. They believe that their own future will be threatened if the natural resources around them perish. In 1986, Aligarh Muslim University's Wildlife Sciences Department, while conducting research and carrying out ecological monitoring of the area, also fostered scientific awareness about the importance of the lake among the villagers. This was further nurtured by a couple of local NGOs.

Due to the nature of the initiative (villagers' and FD's combined efforts) both village and forest department have decision making powers as far as conserved area is concerned. *Gram samaj* along with the two local NGOs takes the major decision and is also responsible for the protection of the wetland and the forests surrounding the wetland.

The area comes under the ownership of the *gram samaj* of Sheikha and Bhavan Khera villages. The *gram samaj* designs all the management strategies. All the sections of the local community are involved in the conservation initiative. Apart from Sheikha, the villagers of Bhavan Khera and Changeri are actively participating in the conservation efforts for preservation of the wetland.

The traditional rules for agriculture and wildlife that are observed by the community in the Sheikha are governed by the motive of preserving the habitat. Some of the rules that are observed by the community are as follows

- Only small portion of the lake is used for the cultivation of the water chestnut
- The villagers have avoided plantations on the bank of the lake, as it may prove harmful to wetland habitat.
- The villagers do not cultivate on land that gets submerged as such practice may alter the ecological succession.
- No draining of the lake water, for any purpose.
- No hunting of waterfowls or any of the birds and animals is permitted. The villagers have been known to draw swords against a particular nomadic tribe, Kanjar because these tribals visit the lake in the night and poach important wildlife such as otters, porcupine and turtles in the lake area.

Small conflicts are handled at the village level but larger conflicts are handled by the government bodies like the division of social forestry and the revenue department.

All castes within the community are involved in the conservation of the lake and its biodiversity. A few exceptions to total protection are when the youngsters help poachers for the sake of money. When the poacher is related either to some elderly or influential member of the community no action is taken on account of pressure by community members.

In 1997 when wrong restoration policies were implemented in the lake the Sheikha community stood up and united against them. A memorandum was submitted with the 'Haritima Environmental Group' to the District Magistrate to stop construction of the road around the lake because it delimits the wetland and gives easy access to poachers.

In 2001, when poaching took a massive toll of birds, a signature campaign in the village conducted by Department of Wildlife Sciences appealed to the District Magistrate to take action for putting practical moratorium on waterfowl shooting. The community has also decided to file a PIL against

those interventions of the government. that are conducive to vandalism.

Financially, the initiative is totally self sustained and does not receive any financial support from any agency. In case the lake is developed as a picnic spot there will be enhanced employment opportunities and consequently an improved economic status.

Impacts of community conservation

The local community is benefited by this conservation in many ways.

1. Assured regular supply of fodder, grass and fuel wood.
2. A portion of the wetland which is used for the cultivation of water chestnuts, is one of the sources of livelihood for some of the communities around the village earns their revenue from it.
3. Assured availability of natural resources for all villages surrounding the lake.

The habitat has balanced ecological elements like soil moisture, ground water table etc. Certain species of the ecosystem have regenerated and an increase in the biological diversity of the lake, and surrounding areas has been reported. The protection and conservation efforts by the local community have immensely benefited the wetland ecosystem and surrounding habitats such as grassy patches and forests. Hence it has become ideal wildlife refuge and supports highest diversity and numbers of waterfowls.

Costs incurred by the community for conservation

1. Plantation of trees on the banks gives a lot of revenue but the villagers have decided against such plantations since it is harmful for the health of the wetland.
2. The increasing population of blue bulls around the fields is causing damage to the crops. The community does not kill the bulls themselves due to the sense of respect that they have for these creatures but allow other hunters to kill them.

Constraints

1. One of the major constraints is relation of the villagers with FD and law enforcement agencies. At certain times the villagers have caught poachers red-handed while hunting. When the matter was taken to police they were highly disappointed due to apathy shown by them. The community has grudges against the government machinery and the way it functions.
2. Most of the population of Sheikha village is uneducated and suffer from a lack of confidence which hinders them from stopping savvy city dweller from poaching. They also lack awareness regarding the potentials of community conservation and need proper guidance and support from the official machinery.

Recommendations ¹

These recommendations are in total accordance with the community and have been formulated into a management plan submitted to the District Magistrate in 1997.

It proposes that:

1. The lake should be declared as 'Salim Ali Waterfowl Refuge' where people are allowed to exercise their traditional rights.
2. Grazing should be encouraged on the fringes so that the aquatic ecosystem does not turn into a terrestrial habitat.
3. Eradication of the water hyacinth which is the main culprit in the destruction of the wetland and *Ipomea carnea* which grows on the banks.
4. If the lake is developed into a picnic spot, the community should be given some kind of revenue for its conservation efforts and also associated employment opportunities.

5. The community should be organized into a committee such as the van suraksha samiti in order to overcome their handicap against city poachers under the guidance and support of the government. This would help bring a sense of self- confidence in them.

All the above recommendations have been lying with the district administration and no action has been taken.

Some of the NGOs involved in the initiative are Haritima Environmental Group, Aligarh, Bombay Natural History Society, Wildlife Society of India and Dept of Wildlife Sciences, Aligarh Muslim University, Aligarh.

This case study was contributed by Afiffullah Khan, Wildlife Society of India, Department of Wildlife Sciences, Aligarh Muslim University, with inputs from Layak Singh, a resident of Sheikha village in 2002.

For further information contact:

Munni Devi,
Gram Pradhan
Village Edalpur,
Gram Post Tilakhana,
Aligarh 202001, U.P.

Secretary,
Haritima Environmental
Action Group, Aligarh

Mr. Layak Singh, Retd. Rail Guard,
Gram Sheikha, Gram Post Jalali,
Aligarh 202001 U.P.

Dept. of Wildlife Sciences
Aligarh Muslim University
Aligarh 202002 U.P.

Afiffullah Khan
Wildlife Society of India
Department of wildlife Sciences,
Aligarh Muslim, University
Aligarh - 202002
Phone & fax: 09411862686 / 9897180092
Email: afifkhan@rediffmail.com, wsi@nde.vsnl.net.in

Endnotes

¹ Recommendations made by Wildlife Society of India and Haritima Environmental Group.

