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## **Environmental Degradation of Urpad Beel, Goalpara**

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### **Abstract**

Wetlands are mirror of natural eco-system. But almost all beels of Assam are in dying stage, the largest beel of Goalpara district is a clear sign of environmental degradation. The habitants of the beel birds, fishes, flora and fauna are facing great danger with the increasing human menace in and around the beel. Self visited the beel several times to assess the magnitude of the problem and attempt i.e. being made to through some light on its remedial measures. Keywords: Degradation, development, ecology, habitat.

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### **Introduction**

Water, whether it is running or static plays a significant role in human society. Beels are depressions on the surface of the earth and mirror the nation's ecological health. They are an integral part of eco-system play host to several species of birds. Flora and fauna also support the livelihoods of fisher folk. But almost the all beels of Assam whether in cities or in rural areas are dying day by day. Beels are important indicators of environmental degradation in Assam. Here, in this paper an attempt has been made to through some light on the causes of environmental degradation of beels of Assam and remedial measures taking Urpad Beel of Goalpara district as a case study.

### **Methodology**

To assess the degradation of wetland, self-visited the wetland many times along with a survey schedule to collect relevant data from the villagers living in nearby areas. Data relating to encroachment, fishing, bird hunting, use of chemical manures in the agricultural field etc. were collected and analyzed.

### **Location**

The Goalpara district has a number of water bodies which are generally termed as beels. The Urpad Beel is the largest having an area of 14 sq km. It is 7 km south of Goalpara town. The Beel is located between some hillocks in the south, which are continuation of Meghalaya Plateau and elevated land mass on the north bordering, Samaguri village. The western part of the beel is also high land, the eastern part connects the plain land bordering rivulet jinari. But the river cannot change its course towards the Beel because of its natural slope towards northeast.

### **Some Problems**

#### *Overfishing:*

Overfishing is one of the major problems that Urpad Beel is facing nowadays. Though the nearby tribal villagers (Garo) of Samaguri, Kuruabhasa are not professional fisherman, they try to keep possession of the beel in different plots and sale it to the outsider professional fisherman on high price. The fisherman use thick net to catch fishes irrespective of size and also beat drum, becul etc. as a local technique of catching fish.

*Bird Hunting:*

Poaching of birds including migrating birds in Urapad Beels is a common phenomenon. The beel which was an important habitat of local and migratory birds earlier, a fewer birds visit Urapad beel now a days due to excessive fishing and bird poaching which is continuing unabated.

*Siltation of the beel:*

Another problem the beel is facing siltation. Every inflow of water into beel brings some amount of silt. Increased deforestation in the watersheds loosens the top soil and this eroded material finds its way to the beel easily due to existing topographic structure. Some of this silt gets washed out through the eastern side when the beel overflows but silt outflow is always less than the inflow and silt settles at the bottom of the beel making it progressively shallow.

*Encroachment of the beel:*

Encroachment of the beel is one of the major problems. As the beel is becoming progressively shallow, the bordering areas are now fit for sali and Bao cultivation and people of the nearby villages have already started to encroach the wet land for cultivation because of the population pressure and lack of Government control over land grabber.

*Setting up Brick industries:*

It is seen that some brick industries are coming unsystematically on the northern part of the beel. These brick industries are running unscientifically with traditional Bhati (Chulla) without obtaining any clearance from pollution Control Board, this making the eco -system of the beel polluted. From the discussion with Sri Bipin Ch. Sangma an old garo villager of Samaguri village it is ascertained that ten years ago the beel was free from pollution and had diverse flora and fauna. The water was clean and sparkling. Many migratory birds visited the beel. All types of local fishes were available in the beel. The present situation is however extremely dangerous and is the consequence of environmental degradation.

*Studies Undertaken:*

Though the Urapad Beel is inhabited by a large number of birds, local and migratory, there are infact no proper studies about Urapad's birds. Though some efforts are being made to throw some light on the Flora and Fauna of Urapad Beel by some bureaucrats and academician of this district in the banner of Nature's Club of Goalpara, no much progress is seen in this respect.

**Ecological Degradation:**

The growing menace of human civilization has disrupted the organic continuity of the beel. A large portion of the beel is encroached upon for agricultural purpose. Pesticide and fertilizer used in cultivation has contaminated the water of the beel. The water of the beel has turned blue green with maximum overflowing weeds. Availability of fish is directly related to the number of birds present in the beel. Larger the number of birds the more the birds dropping available for fishes. But due to waster pollution and other disturbances, the migratory birds stopped visiting the beel in a large number. Trapping and poaching of birds are also two major factors responsible for lesser number of birds visiting the beel. If such a trend is allowed to continue, the day is not far off, when the Beel will go without a bird visiting it. The fishery department is going to establish a farm covering an area of 100 acres on the Western part of the beel with the financial aid of World Bank. No doubt that pisciculture is commercially viable in Urapad Beel, but it will definitely adversely affect the natural ecosystem, and people will witness the dying stage of the beel in the long run.

**Remedial measures**

A master plan should be prepared and executed to protect the beel on the following points.

A) To stop encroachment of the beel.

B) To ensure the preservation of eco-system of the beel.

C) To enrich its flora and fauna.

D) Plantation to be done in the surroundings of the beel to stop further erosion to declare the beel as bird sanctuary for attraction of tourist.

The plan will be successful when Government will pay attention towards the preparation and execution of the plan. But participation of public to make it a success is vital. As the rural folk is directly benefited by practising agriculture, catching fishes and poaching birds, attention it is to be made to motivate the villagers. Proper education should be imparted to allow them to live harmoniously with the nature to maintain a balance of existing eco-system. Government, N.G.O. as well as public should come forward today to save Urapad - to save wet land eco-system, to save mankind from environmental degradation.

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