

Fish-Cultural Heritage of Assam: Group fishing and Fishes of Kachua Beel of Bilasipara Subdivision : A Case Study

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ABSTRACT

Life is water and water in life. A study was carried out on fish diversity and group fishing practised in Kachua beel (wetland) of Bilasipara Subdivision of Dhubri District of Assam. Wetlands are ecosystems where the land is saturated with water either seasonally or permanently. People from neighbouring villages practice group fishing in this beel not only on the day of Magh Bihu "Uruga" but also during winter (December-March) when water level is low. A total of 37 varieties of fish species were recorded which are found in this beel. Highest number of fishers used 'Polo' (a bamboo made gear for fishing followed by "Jakoi", "Henga", "Berijal", "fasijal", "Kethajal" etc. in this beel. Here it is suggested to create awareness amongst the villagers or fishers of this region to conserve variety of indigenous fish species as fish is one of the highly nutritious main foods of Assam and also improve the economy.

Key word: Wetland, Group fishing, Cultural heritage, Habitat, Conserve, Indigenous.

Introduction:

The culture of Assam is agrarian in nature and the main livelihood is dependent on agriculture. 'Bhogali or "Magh' Bihu festival marks the end of

the winter harvesting season. Due to this, the festival assumes importance in the Assamese calendar. A tradition of group fishing is a unique feature in this



beel of Assam.

Figure: Side view of Kachua beel

The festival starts with feasting at night by the local people of neighbouring villages. They cook and eat, together to celebrate the harvest that they have reaped. It is in and around the "bhelaghars" that the group feasts are held.

Fishing is an age-old tradition and practice of the people of this locality (Mostly Nath and



Muslim community). Fishes are caught not only during the MaghBihu but also during the entire winter season (Dec-March) as water level is low. People of nearby villages, mainly female group of Nath (yogi) community, fishing with 'jakoi' "Henga", "polo" while male group of Muslim community with 'Berijal' 'fasijal', 'chitka', 'dora' and 'henga'.

There are about 1392 listed beels in Assam

of which 423 are registered and remaining 969 are un-registered beels (Chandra 2007)

This paper deals with the traditions of group fishing techniques of fishing, fishing gears, fish species catch along with conservation issues of the indigenous fish species.

Objectives:

The main object of this paper is to study about - “how to protect Kachua Beel and its different fish species for the sake of to conserve the traditional group fishing of this locality, as fish is one of the cultural heritage of Assam.” However, this paper does not include the study about diversity of avian fauna (including migratory birds), water quality etc.

Materials and Methods:

Study Area

The Kachua beel is located nearly 10 km from the heart of Bilasipara town of Dhubri district of Assam. (Latitude 26.2735020 and Longitude 90.1978710). The area of the beel is approximately 50 acres. It is an un-registered closed type of perennial beel. According to the name of the beel, the adjacent village name is Kachua gaon. The beel is surrounded by the village; Kachua gaon on east and south, Lawpara and Helagari on west and Lutapara on the North.

It gets flooded by rain water during monsoon season and the water is mostly used in the paddy fields surrounding the beel and after fishing with 'berijal' the aquatic weeds, mainly water hyacinth, are dumped and carried by truck to the nearby agriculture fields and used as biofertilizers.

Another wetland situated in nearly 3 km away from Bilasipara town is Hakama beel, which is an open, perennial and registered beel connected with the Gourang River through three channel - "Molandubir-dara", "Futkibarir-dara" and "Hakamar-dara".

Collection of Data

The study was carried out during 2022-2024 in the selected locations of the Kachua beel.

Information on the tradition of group fishing in the beel was collected through personal interview with the elderly persons and fishermen involved in this age-old practice.

The data of fishing technique, fishing gears used and fish species catch were collected at the fishing site through direct observation. Fish species were identified using the keys of Talwar and Jhingran (1991) and Jayanum (2010). Validity of the scientific names of fishes has been examined using the website www.fishbase.org. in.IUCN (2020).

Result and Discussion

Group fishing - the tradition

The tradition of group fishing has been passing generation after generation in this beel from the ancient times. Group fishing is mostly done during winter season when water level is low and harvesting has been done and financially poor villagers are in free and happy mood.

Fishing Techniques and gears used

In winter season fishing generally becomes easier because of low level of water. Female group of Nath (yogi) community from Lawpara and Helagari village come here for fishing. They use different types of homemade gears like 'polo', 'jakoi', 'henga' etc. They adopt various techniques to catch their target fish species. Some groups of male fishermen of Kachua gaon were observed cleaning the aquatic weeds like water hyacinth to catch the fishes using 'berijal' like Fali (*Notopterus notopterus*), Kawoi (*Anabas testudineus*), Goroi (*Channa punctatus*), Cheng (*Channa gachua*), Shol (*Channa striatus*), Cuchia (*Monopterus cuchia*), Bowal (*Wallago attu*) etc. for catching Bowal fish they especially use 'dorajal'.

The experienced fishers first select a particular site for cleaning. The area will be surrounded by 'berijal' (wall net) followed by cleaning the weed of the encircling area slowly using 'kachi' or by bare hand. The fishes lodged under the weed or its roots can easily be caught through this method.

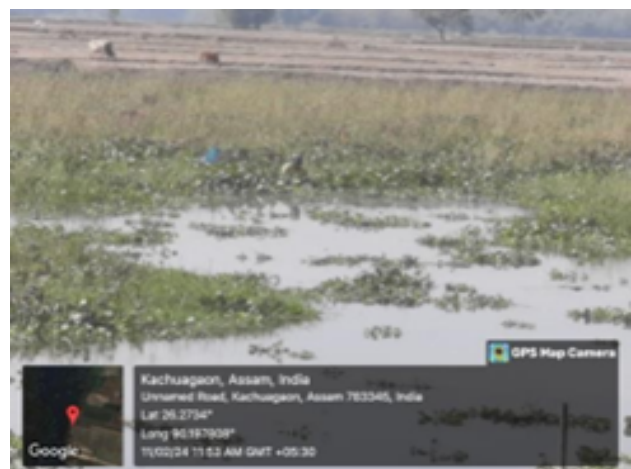
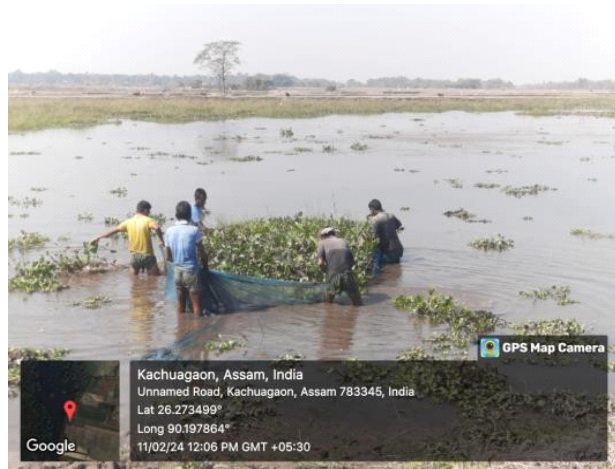


Figure: Variety of Fishes catches by Fisher men

In a different technique, a part of the beel is surrounded by a group of female fishers and practise 'polo" (falling gear) fishing moving toward the centre. The fishes inhabiting inside the area cannot escape easily in this method and are caught by the fishers. Some of the pictures of beel, gears used and fishing techniques are shown below:

Fish species catch:

In the present study, a total of 37 varieties of fish species were recorded which are caught in this beel. A list of fish species are given below with their local name and scientific name --

S.N	Local Name	Scientific Name
1	Bowal/Borali	Wallago attu
2	Cuchia	Monopterusuchia
3	Kawoi	Anabas testudineus
4	Singhi	Heteropneustes fossilis
5	Magur	Clarius batrachus
6	Cheng	Channa gachua
7	Goroi	Channa punctatus
8	Shol	Channa striatus
9	Shal	Channa marulius
10	Kolisha	Colisha fesciata

11	Chanda	Chanda nama
12	Chanda	Chanda ranga
13	Mowa	Amblypharingodon mola
14	Fali	Notopterus notopterus
15	Tingra	Mystus tingara
16	Pabda	Ompok pavo
17	Bhetki	Nandus nandus
18	Botia	Botia dario
19	Kokila	Xenantadon cancila
20	Rou	Labeo rohita
21	Katla	Catla catla
22	Kalabaus	Labeo calbasu
23	Kursha	Labeo gonius
24	Mirica	Cirrhinus mrigala
25	Common carp	Cyprinus carpio
26	Grass carp	Ctenopharyngodon idella
27	Silver crap	Hypophthalmichthyes molitrix
28	Puthi	Puntius spp.
29	Tepa	Tetradon cutcutia
30	Dorikona	Devario spp.

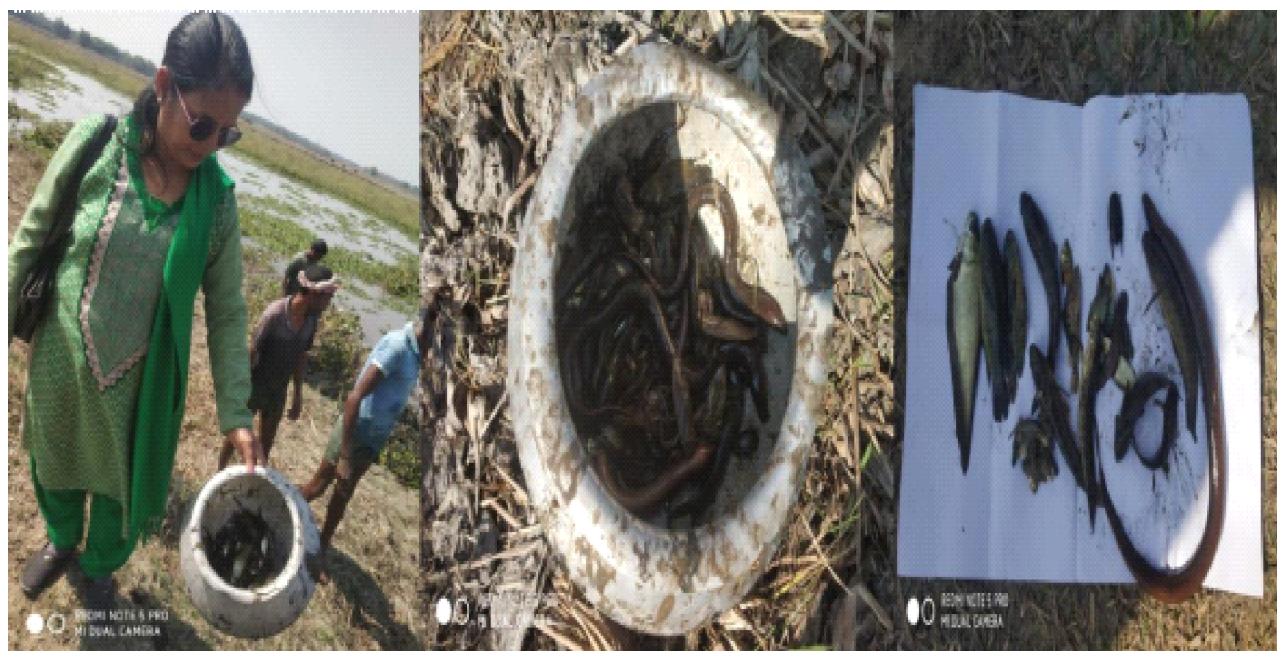


Figure: Variety of Fishes Catches by Fisher men

Conservation issues

It has been observed that the water spread area as well as depth of the beel is decreasing because of increase of population & harvested area around it. The villagers cultivate paddy ('Salidhan') in the vicinity where they use chemical fertilizers and pesticides, herbicides for the better growth of the paddy. These chemicals flow into the wetland/beel and degrade the natural water quality and thereby decrease the number and variety of fish species and other aquatic organisms in the beel. (Sharma 2016).

Conclusion:

Group fishing is not only a festival, its an entertainment of fishing; it also helps to bring unity amongst the people of different communities. This beel is connected with the feelings and emotions of the people of this region. This water submerged ground is also a centre of aquatic, terrestrial and migratory birds.

Therefore, it is suggested that

1. Group fishing should not be allowed in the peripheral areas of the beel to prevent mass killing of variety of indigenous fish species.
2. The growth of water hyacinth, aquatic weeds and vegetables in the beel should be reduced for more fish production.
3. Scientific fishing techniques and sustainable fishing gears should be allowed in the beel for fishing.

4. Use of chemical fertilizers and pesticides should be replaced by biofertilizers for the sake of aquatic organisms.
5. Awareness should be created among the local people on the sustainable use of wetland resources.

Because of their high and long term capacity to filter pollutants from the water that flows through them wetlands have often been referred to as Earth's Kidney. So we must conserve and look after the beel.

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