

## Fishing Gears used in River Jhelum – A Case Study of District Baramulla

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**Abstract:** River Jhelum, also known as “life line of Kashmir” is the mightiest lotic water body of Kashmir valley. River Jhelum originating from the Verinag spring in the foot hills of Pir Panjal travels a distance of 724 km before merging in river Chanab at Bunji Pakistan. River Jhelum flows through the major cities and towns of Kashmir including Baramulla. In Baramulla river Jhelum travels a distance of 90 km. The river Jhelum in habitats the diverse fish fauna ranging from indigenous *Schizothorax* and *Mahseer* to exotic *Cyprinus carpio* (Common carp). The river Jhelum has been a source of livelihood for many fishermen living in the vicinity of river Jhelum. Various types of fishing gears are employed to harvest the fish wealth of River Jhelum. The present paper gives an account of major fishing gears used in the section of River Jhelum flowing through district Baramulla.

**Key words:** Jhelum; fish fauna; gears; Kashmir.

### 1. Introduction

The valley of Kashmir, also known as “Paradise of Earth” is surrounded by high mountains of Himalayas, which vary in their heights between 1000 feet to 1800 feet above mean sea level, extending from 33° 22' N to 34° 43' N and 73° 52' E to 75° 42' E covering an area of about 15948 Sq. Km. The Kashmir is blessed with enormous and rich aquatic resources in the shape of rivers, lakes, streams, high altitude lakes, springs and low lying areas covering a total water spread area of about 32765.3 hectares which is nearly 2% of total area of the Kashmir Valley.

The major water bodies of Kashmir include the giant river Jhelum, India's largest fresh water lake Wular, world famous Dal lake, Manasbal lake, Anchar lake, Nageen lake, Springs like Achabal, Kokernag and Verinag, Streams like Erin, Sind, Madhumati and Bringi and high altitude lakes like Gangabal, Kishansar, Vishansar etc. The river Jhelum is the major water body of the Kashmir. River Jhelum was known as “**Vatista**” in ancient India and “**Vyth**” in Kashmiri language. It is considered as the life line of the Kashmir as it flows through the entire Kashmir valley from South to North and catering the requirements of the 25% of the population of the Valley. Its water is used for drinking, domestic activities, irrigation and generation of electricity. The river starting its journey from Verinag spring, travels first 241 kms in Kashmir, next 162 km in POK (Pakistan Occupied Kashmir) and remaining 321 km in Pakistan, travelling a total distance of about 724 km before merging into river Chenab at Bunji in Pakistan. The river Jhelum flows at a moderate speed from Khanabal (Anantnag) to Khadnayar (Baramulla) making it ideal for fishing activities. The Jhelum beyond Khadnayar flows through a gorge with rapid current makes the process of fishing impossible with the routine gears, but fishing is done only through angling. The river Jhelum has a catchment area of about 12,75,696 hectares and is joined by many tributaries. At Khanabal in Anantnag the river, Jhelum is joined by two snow-fed streams

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namely Bringi and Arapath. The Jhelum receives Lidder and Veshav tributaries at Sangam (Anantnag). On its way in Srinagar near Dal Gate, the Jhelum is linked with Dal Lake through “Tsont Kol” which receives the surplus water of Dal Lake. At the lower end of the Srinagar city, Jhelum is joined by another stream Dudganga. The river is also connected with Manasbal Lake through a small channel near Sumbal town of Bandipora. The Jhelum merges into Wular Lake at Banyari Bandipora. The river takes a pass out of Wular Lake at Sopore Baramulla. The Wular Lake plays a vital role in maintaining the fish stock in the river Jhelum. The river receives the Pohru stream at Doobgah Sopore. In Baramulla two major hydro electric power projects are constructed on the river Jhelum. At Uri the Jhelum is joined by a Bandi Nala stream. After completing its journey in the valley, the Jhelum crosses the LOC (line of control) at Lalpul, the last village on the bank of river Jhelum.

## 2. Materials and Method

During the research work, the survey was conducted along the course of river Jhelum to gather first hand information from the locals particularly from fishermen community about the fish and fisheries of the river Jhelum. The design, structure and working of gears used for harvesting fish wealth for river Jhelum in district Baramulla was thoroughly investigated. The area covered under study is the stretch of river Jhelum flowing from Sopore to Baramulla town.

## 3. Observations and discussion

The river Jhelum travels a distance of about 90 km in district Baramulla flows through Sopore town, Baramulla town and Uri region. From Sopore to Khadnayar Baramulla river Jhelum flows at a moderate speed making it ideal for fishing activities. The Jhelum beyond Khadnayar flows through a gorge with rapid current making the harvest of fish possible only through angling. Besides the speed of flow, this stretch of River Jhelum had large boulders in it.

**Fish Fauna:** The river Jhelum provides habitat to wide variety of fish including both indigenous and exotic varieties. In Baramulla, the river Jhelum is inhabited by both indigenous and exotic fish fauna. At present the fish catch of river Jhelum is dominated by Common carp. The stretch of river Jhelum

beyond Khadnayar Baramulla used been enriched with Golden Mahseer (*Tor putitora*) few decades back, but the species has now almost disappeared because of construction of Mangla dam in Mirpur in POK (Pakistan Occupied Kashmir), which prevented the annual breeding migration of the fish.

**Table- 1:** Fish Fauna of River Jhelum

Fish Species	Local Name
<i>Schizothorax ecocinus</i>	Schuru gad
<i>Schizothorax plagiostomous</i>	Ale gad
<i>Schizothorax niger</i>	Ale gad
<i>Schizothorax curvifrons</i>	Satter gad
<i>Schizothorax labiatus</i>	Chush
<i>Labeo dero</i>	Ropet
<i>Bangana diplostomous</i>	Ropet
<i>Crossochielus diplochilus</i>	Tethar
<i>Trypophysa mermerata</i>	-
<i>Glyptothorax</i>	Annur
<i>Nemachielus</i>	Ara guran
<i>Tor putitora</i>	Mahseer
<i>Cyprinus carpio Specularis</i>	Parim gad
<i>Cyprinus carpio communis</i>	Punjaib gad

### Fishing gears used:

Different fishing gears are used to harvest fish from river Jhelum. Cast nets (locally known as Khul jal, Danshoh jal, Pouhkal jal) are the most common and widely used fishing gears for commercial fishing. Drag net (locally known as Khur jal / Khuk jar), hand net (Locally Known as Ath Jal or Thap jal) and long lines (locally known as Walraz) are the other gears used in the harvest of fish wealth from river Jhelum. Usually two fishermen are involved in the fishing operation with cast net, one person ores the boat while other casts the net. The hand nets used in river Jhelum are conical basket shaped nets attached to a wooden frame and having a wooden handle.

#### (i) Cast net

Cast nets are locally known as Khul jal, Danshoh jal, Pouhkal jal and Gilvan jal. It is most commonly used net. It is made up of nylon and cotton thread, generally the fishermen use nylon made cast net. It is circular having the shape of an umbrella. The size range used is between 1.0 to 2.0 m in diameter. The

size varies between 1.2 to 3.0 cms bar to bar. The net is provided with iron or lead sinkers of about 5.0 kgs. weight around the peripheral cord. The fishermen operate this gear throughout the year.



**(ii) Lift net/Dip net**

This is a type of dip net is having circular or triangular mouth. The diameter of mouth as well as the pouch depth and the length of bamboo handle are 1 meter each. This type of lift net is locally as “Kochibi jal or Khur jal”. Any other type with larger diameter and deeper bag is called “sagean”. These nets are used to catch fish near the water falls.



**(iii) Drag Net**

Drag net is locally known as Khur jal / Khuk jal. It also an Important fishing gear used in River Jhelum. It is a long net piece dragged in the water column from running boat. The net is automatically stretched in water column with the help of sinkers fixed along the foot rope.

**(iv) Long line**

Locally known as walrus, long line is a primitive gear used to harvest fish. According to the Department of Fisheries Govt. of Jammu and Kashmir the length of the long line permitted is 500 mt. The distance from one

hook to other hook is 1 mt. The line rope is nylon made. Hook is either made up of stainless steel or iron. In order to sink the rope in water stone having weight 50-60 grams are used, the distance between one stone to other stone is 1 mt. Hooks of a standard numbers containing earthworms are attached to the line to lure the fish. Sometimes maize flour mixed with candy (Gur) is also used as baits. The period of fishing with long line ranges from 4-6 hours. This method usually used to catch *Schizothorax* and *Cyprinus carpio*. In River Jhelum the line fishing is mainly done during April to October months.

**(v) Gill net**

These are the most suitable nets for fishing in deeper regions. The gill nets locally called Thani are 15 to 40m long and 1.5 to 3m wide with mesh size ranging between 45 mm and 75 mm. The use of these nets has seriously affected the regenerative capacity of the fish fauna. The Department of Fisheries have imposed ban on gill net, according to the Clause 7F of Fisheries Act.

**Miscellaneous gears**

Apart from the above mentioned gears, some other gears used in the sector under study are:

**(i) Panzri (Multiple head spears)**

*Panzri* are divided into parts one part is called *manther* having multiple spears 9-15, each having length 13 inch. The spears are made up iron. Other part is called *Shum*, which is made up of wood mainly *boudhal*, it is used to handle the net to catch the fish; its length is 10-12 ft.



This type of fishing catch method is mainly operated in Nov. - January, when water will be less. This type of fish catching method is prohibited by the authorities. This gear is

operated mainly in Wular Lake. In river Jhelum its use is confined to the stretch close to the Wular Lake.

#### (ii) Narsoo

The gear containing 3-5 spear headed fixed on a solid pole or deodar or bamboo about 3.5-5.0 meters long. The iron spear is made up of iron. It is used to catch mainly the big sized endemic or exotic fishes.



#### (iii) Guran Thap Jal

Guran thap jal is a type of hand nets used in river Jhelum. It is conical basket shaped nets attached to a wooden frame and having a wooden handle. It is a small net used for capture of fish fry. It is fixed installed at the shallow areas where fish fry are abundant. It has a total length of 3 feet and a diameter of 4 feet.



#### (iv) Naushut Jal

It is a basket net, oval in shape, used to harvest the fish from shallow water. It has a height of 1.5 – 2 feet, with a diameter of 2 feet.

#### (v) Naskhul Jal

It is a square shaped basket net relatively larger than Naushat Jal.

**Catch composition:** During the survey it is found that Common Carp (*Cyprinus carpio Specularis*) dominates the overall catch, contributing about 60% of total fish landings. The *Schizothorax* contributes about 35% and others only 5% of the total fish landings.

During the survey it was further observed that the production of Indigenous *Schizothorax spp.* is maximum during winter months from nov. to feb., while the production of exotic *Schizothorax* is same throughout the year with a slight increase in the production during the summer months.

During the research work it was also observed that there are three major fishing spots in the investigated stretch – Pohru, Dalina Ghat and Gantamulla

#### Conclusions

River Jhelum is an ideal habitat of variety of fish fauna. In the stretch of river Jhelum from Sopore to Baramulla Common Carp (*Cyprinus carpio*) and Snow Trout (*Schizothorax spp.*) are most dominating fish species. Cast net is the most used gear followed by lift net and drag net. Apart from these gears trap net, long line are other miscellaneous gears are used. The gill net which is prohibited by the State Govt. is also used by pouchers.

#### References

1. Ajmair Singh Sodhi, J.D.Saroch and Jyoti Verma – “*Fisheries Resources of Kashmir: A case study of River Jhelum*” (February 2013 - April 2013, Vol. 3) “*Journal of Chemical, Biological and Physical Sciences*”, pp 1194-1197.
2. Shabir Ahmad Dar, A.Y Desai and A.S. sodhi – “*Fish Diversity of River Jhelum*” (November 2014), “*Indian Farmers*” pp 420-423
3. Nyman lennart (1999), “*River Jehlum, Kashmir Valley*”,pp 1-198.
4. Arjamand, S. “*Journey of river Jehlum of Kashmir (J& K, India) and fishing activities in the River*” (December 2011/ Vol.31). “*Fishing chimes*”; pp 29-35.