



EXPLORATION OF FISH DIVERSITY IN RIVER LUNI AT KANKANI VILLAGE NEAR JODHPUR, RAJASTHAN

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Present communication deals with studies on the fish diversity of river Luni at Kankani village near Jodhpur during 2012. Three genera of fishes were reported from this river. Fish diversity was present only in small water holes present in river bed. *Aphanius dispar* (Ruppell) and *Gambusia affinis* (Baird & Girard) were reported in good numbers.

The Luni is a river of western Rajasthan. It originates in the Pushkar valley of the Aravalli Range, near Ajmer and ends in the marshy lands of Rann of Kutch in Gujarat, after travelling a distance of 530 kms. The Luni flows for 37,363 km², which includes all or part of Ajmer, Barmer, Jalor, Jodhpur, Nagaur, Pali, and Sirohi districts Mithavirana, Jordiyali, Mavsari Vav, Radhanpur region of Banaskantha North Gujarat. Its major tributaries are the Sukri, Mithri, Bandi, Khari, Jawai, Guhiya and Sagi from the left, and the Jojari River from the right. In spite of the high salinity, it is a major river in the region and serves as a primary source of irrigation. It is not saline up to Balotara district but when it meets the saline land in this area it's water gets saline. The river then flows in the southwest direction through the hills and plains of the Marwar region in Rajasthan. So the direction in which it flows is from North-East to South-West. This river is a seasonal river and flows only during the rainy season. Present research paper deals with fish diversity of Luni River at Kankani village (2602.993' N and 7304.473'E) near Jodhpur.

MATERIALS AND METHODS

Fishes were collected mainly by using cast nets. Hand net, scoop net, drag net were also used. The fishes were preserved in 10% formalin for further studies. The Fishes were identified following standard references¹⁻³.

RESULTS AND DISCUSSIONS

Luni is a seasonal river and it flows only during rainy seasons. There are 2 Major (Sardar Samand and Jawai dam), 9 Medium and 344 Minor irrigation projects in the Luni River Basin, as well as some small irrigation systems (covering less than 20 ha) constructed and operated by Panchayat Samities (PS). Due

to these dams and projects Luni hardly flows. The role of waterholes as physical refugia is very important because, they support populations not able to live elsewhere in the arid landscape Nekola⁴. During adverse conditions, organisms in refugia have a higher probability of survival. Organisms that survive play a very important role in re-establishing populations when conditions become more favorable. Aforementioned observations are in conformity with the present observations made during the course of present studies. Waterholes were reported in the bed and around the banks of Luni. Water level was less in the water holes. Hence, only minnows were reported from the study site. *Puntius ticto ticto* (Hamilton), *Aphanius dispar* (Ruppell) and *Gambusia affinis* (Baird & Girard) were reported from study site. List of the fishes with classification is given below:

Class: Actinopterygii

Order: Cypriniformes

Family: Cyprinidae

Puntius ticto ticto (Hamilton)

Family Cyprinodontidae

Aphanius dispar (Ruppell)

Family Poeciliidae

Gambusia affinis (Baird & Girard)

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