Fish Catch Composition from Gobind Sagar Reservoir during 2006-2012

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Abstract: Gobind Sagar Reservoir has been created in Himachal Pradesh, India (31° 25´ N and 76 ° 25´ E) by damming River Sutlej at village Bhakra in 1963. The average water spread area of this reservoir is 10,000 hectares. Fishermen have organized themselves in the form of co-operative societies. 26 fisheries co-operative societies were working in Gobind Sagar Reservoir up till 2012. June and July months were observed as closed season, no fishing was done during this period. Proper record maintaining of fish catch was done at different levels by the state fisheries department. Different measures like minimum harvestable size, mesh size regulation and prohibition of illegal fishing etc. were taken for fish conservation. Fishermen were actively involved in the management. Gill nets were used for catching fishes from this reservoir. State fisheries department is realizing 15% royalty of the sold fish. Data used in this paper is about the fish catch during 2006-2012 and were obtained from the state fisheries department, Himachal Pradesh. Catla catla, Labeo rohita, Cirrhinus mrigala, Sperata seenghala, Cyprinus carpio, Tor putitora, Hypophthalmichthys molitrix, Labeo calbasu, Labeo dero and Ctenopharyngodon idella etc., were the fish species exploited for commercial purposes. Total number of individuals of all species caught was 3141236 weighing 5637108.9 kg during 2006-2012. H. molitrix was introduced accidently in this reservoir and was making a good share of fish catch in this reservoir. The annual catch of this species was varying between 161279.6 kg, caught in 2011 and 788030.8 kg caught in 2009. Total numbers of individuals of C. idella caught were 8966 weighing 64320.2 kg. The catch of Cyprinus carpio was varying between 144826.1 kg caught in 2006 and 214480.1 kg caught in 2010. Total catch of Tor putitora was 180263.2 kg during 2006-2012. Total catch of L. dero, S. seenghala and Catla catla remained 100637.4 kg, 75297.8 kg and 561802.9 kg, respectively, during 2006-2012. Maximum fish catch was observed during the months of August (after observing Closed Season). Maximum catch of exotic carps was from Bhakra area of the reservoir which has fewer fluctuations in water levels. The reservoir has been divided into eight beats for administrative purpose, to avoid conflicts between operating fisheries co-operative societies for area of operation. Fish catch was more by co-operative societies operating in the area of reservoir having fewer fluctuations in water level and catch was less by co-operative societies operating in the area of more fluctuations in water level. Species-wise fish catch by different co-operative societies from their allotted area was studied. This reservoir is one of most scientifically managed reservoirs.

Keywords: co-operative societies, fish catch, fish species, reservoir

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