

Assesment of water quality of Sarani sangavi dam of Beed district (M.S.) India.

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Abstract

Sarani Sangvi is a large minor irrigation dam. Constructed on the river Gobati and located at Kaij. The kaij, Majalgaon, Dharur and allied villages are benefited for irrigation and pisciculture. The dam is located 75^o-55' latitude and 18^o-48' longitudinal on Beed –Latur highway, covers 177 sq.km.ha.area,11Km away from Kaij Taluka .The river originates from Balaghat mountains and acts as best source of water for irrigation. The details of water quality assessment has discussed in text.

Keywords: Sarani Sangavi, dam

INTRODUCTION

According to different surveys 70 to 80% of the Indian water sources are polluted and different enteric diseases affect millions of the people in every year. United Nations Organization report has indicated that mortality of world population lack reliable source of drinking water. Hence now a day's raw water body is being analyzed for its utility like drinking, aquaculture and industry and for irrigation purpose.

River Gobati originates from Balaghat Mountains and runs from Kaij. The Sarani Sangavi and allied villages are depend on this dam for agriculture, irrigation, drinking and also for Pisciculture activities. The dam was constructed in the year 2000.Total 15 to 18 villages are benefited.

MATERIAL AND METHODS

Water sample were collected for the study during Sept. 2006 to Aug. 2007 during morning hours at regular intervals of every month. Sample was analyzed in the laboratory by using standard methods described by Trivedi and Goel [2].

RESULTS AND DISCUSSION

All animals depend on each other in order to maintain the metabolic process. They need energy for growth and respiration.

Table no.1 showing water analysis of water Samples from June 2005 to May 2006

Month	Temperature		PH	DO ₂ mg/L	CO ₂ mg/L	Alkalinity
	Air	Water				
Sept 2006	27	26.5	8.5	5.3	1.80	175
Oct 2006	26.5	25	8.4	5.84	1.50	104
Nov 2006	26	24	8.1	6.5	1.53	160
Dec 2006	25	24.5	8.0	7.1	1.20	155
Jan 2006	23.5	23	8.1	8.3	1.36	99
Feb 2006	23	22	8.2	8.4	1.50	85
Mar 2006	22	18	8.2	8.6	3.50	84
Apr 2006	24	23	8.3	8.8	2.90	95
May 2006	25	23	8.1	7.5	1.50	201
June 2006	30.50	26	8.4	7.2	1.60	209
July 2006	34	30	8.5	6.2	1.70	207
Aug 2006	35.5	32	8.6	5.2	1.50	214
Mean	32.22	24.75	8.28	7.07	1.79	149
S D	6.8	1.62	0.22	1.22	0.64	50.25
O V %	21.1	6.5	2.65	17.25	35.75	33.72

Air temperature ranged between 22^oc -35.5^oc and water temperature ranged between 18^oc – 32^oc. Sagunan [1].

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Temperature is one of the important physical character which directly influences some chemical reactions of water current findings are in agreement with earlier reports of Wadia [4].

PH was ranged between 8 to 8.6. PH may vary due to high temperature it may also increase due to absence of low pollution, low co2 content, very high photosynthetic activities and rich algal diversity [5].

Dissolved oxygen play an important role in accelerating the biological activities of aquatic animals. Dissolved oxygen was ranged between 5.2 mg/L to 8.8 mg/L. [3]. Carbon dioxide is playing an important role in aquatic medium. It indicates the pollution status of

water during present study. Free carbon dioxide was ranged between 1.50mg/L to 3.50.mg/L. alkalinity was ranged between 84 mg/L to 214 mg/L.

CONCLUSION

Water quality testing results shows that water can be used for fish culture activities.

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