



## THE STUDY OF WETLAND DOLVI IN PEN TALUKA, RAIGAD, MAHARASHTRA, INDIA WITH SPECIAL REFERENCE OF CONSERVATION

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The topic under study is great concern for researchers because it directly related to the basic thing required for living on this planet, The WATER. The area i.e. pen taluka was taken for this as a part of government in initiative to study and find the exact environment in and around the wet lands in Maharashtra in general and specific in pen taluka. So they involved various NGO and expert from different fields for this study. The Pen taluka is typically located in outskirts of Mumbai and represent a typical example of urbanisation.

The urbanisation always affects the environment first and then gives fruit of development. It deteriorates the ecosystems in that area. The first and foremost natural source which becomes vulnerable is water. We want to study this part and further to make aware the society is general for protection and conservation of the water recourses.

Definition and introduction of wetlands:-There are many different types of wetlands. These include areas of marsh, fen, peatland and shallow water bodies. Most are natural but some are human-made, and they can be permanent or seasonal<sup>1</sup>. The water in wetlands can be flowing or static, and can be fresh, brackish or saline. Marine water that does not exceed 6 meters depth at low tide is also classed as a wetland, and many river estuaries are globally significant wetlands. Wetlands should be studied as part of wider hydrological systems. The water in a wetland is influenced by activities upstream and the use of water in a wetland has an impact on the water quality and quantity downstream. So we targeted our work to collect the primary data of wetlands in Pen taluka area. Our planning can be summarised in following steps.



1. Collect primary information
2. Collect samples of water
3. Get few photos for activities going around wetland area
4. Analysis of samples
5. Botanical study
6. Study of birds

### Actual study

Period of visit to wetland under study is APRIL 2019 and MAY 2019 in the month of summer season. We will carry out study in three seasons periodically in monsoon and winter in coming days.

1. We collected and formulated a data of seven wetlands in Pen Taluka. There are seven wetlands reported as per government reports which we have received.

Namely as given in following table.

Sr. No.	Name of wetland	Approximate Area	Status
1	MOTIRAM TALAV	More than 50 Acres	Good
2	DAWARE	More than six acres	Ok
3	AMBEGOAN DAM	More than 100 acres	Good
4	SHAHAPADA DAM	More than 100 Acres	Good
5	KARAVI GADAB	More than 6 Acres	Ok
6	DOLVI	More than 6 acres	Ok
7	VASHI-ODHANGI	More than 50 acres	Good

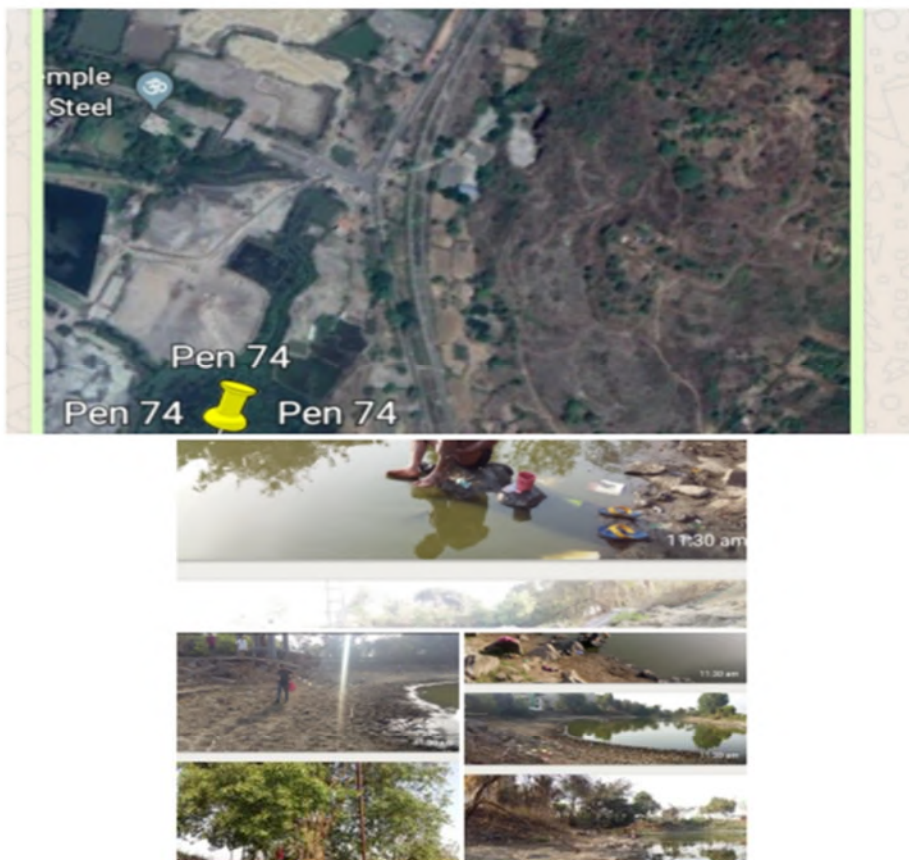
We found the condition of the wetlands in the study as described in the table above. The wetlands belonging to the dams are in very good condition maintained and protected. Their water quality is good as the water is used for drinking purpose. Other wetlands are not in so good condition.

For the purpose of this study we will consider the case ONLY ONE wetland. Oneat DOLVI. Is considered here. This the wetland is very much closed to the village. All villagers use this WL as their source of water for domestic purpose. This excludes the water for drinking purpose.

All sorts of domestic activities( **Anthropogenic activities** ) found to take place when we visited the place. It includes

- a) Fishing, local activity
- b) Washing of clothes,
- c) Bathing,
- d) Farming. Vegetables and small local domestic farming

These activities make very bad impact on quality of water. The bathing creates very bad impact on water quality. Soap and shampoo directly enter in to wetland water which affect the quality of the water. Animal use this water for drinking. Some villagers' uses this water for washing domestic animals. Some of the activities can be seen in the photos given below. These are photos of DOLVI WETLAND.



May 25  
2019  
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Table of water quality related to measurements pH of WETLAND at DOLVI TALUKA PEN RAIGAD. Water is seen turbid.

Sr. No.	PH	Normal expected
1.DOLWL1	8.28	7.00
2.DOLWL2	7.95	7.00

The water seems to be alkaline which is harmful to human consumption. This is due to the domestic activities carried out by nearby humans. Though fishing is observed but which is to very small extent in the summer season. It may be more in rainy season.

## 2. The Botanical Study Of Wetland At Dolvi Taluka Pen Raigad Maharashtra India

We studied the plant which we observed there . which are listed below in table

Sr.No.	Name	Botanical name
1	RUI	Calotropisprocera
2	JAMBHUL	Syzygiumcumini , Myrtaceae
3	KALAM	Mitragynaparvifolia Rubiaceae
4	NIRGUDI	Vitex negundo Lamiaceae
5	Coat buttons (WIDE SPREAD WEED AND PEST PLANT)	Tridoxprocumbens Asteraceae
6	VANDA	Vanda sppOrchidaceae
7	MEXICAN POPPY	Argimonemexicana Papaveraceae
8	KARANJ	Pongamiapinnata Fabaceae

**5. STUDY OF BIRDS** – We observed common birds like crows, sparrows, herons, but we have NOT observed King Fisher (Alcedines ) during our VISIT.

Conclusion: - Wet lands are very important in our ecosystem. It is observed that due to various human activities domestic as well as industrial or developmental, the original wetlands are affected badly. There is clear encroachment on wetlands seen though legal. It is the need of the hour that these wetlands must be protected from all type of disturbances and damages. For that purpose systematic study and action along with awareness in peoples mind in locality is required. In that case we need to give them responsibility and ownership of such wetlands if possible.



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