# Report: Aware the local stakeholders of the health of the Saptalingi River in Sangameshwar block, Ratnagiri district, Maharashtra







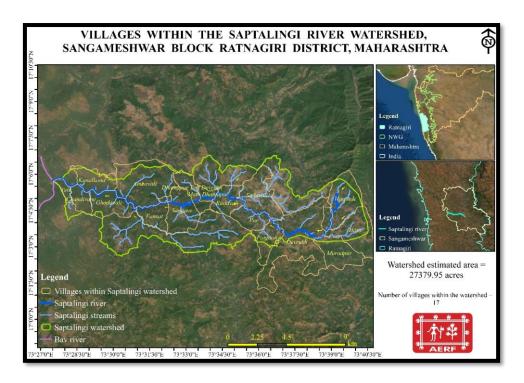
# Submitted by Gunwant Mahajan

#### I. Introduction-

The Western Ghats, also known as the Sahyadri mountains, is a UNESCO World Heritage site and a well-known biodiversity hotspot. This mountain chain is a major watershed of numerous rivers of peninsular India. As far as Maharashtra is concerned rivers like Godavari, Krishna, and Bhima originate in this Sahyadri mountain. The main development focus is on these east-flowing rivers as they are bigger in catchments and length than the west-flowing rivers in the mountain and are the lifeline of city people in all southern states in India including Maharashtra. The west-flowing rivers are small and hence mostly neglected in the development process. This has had a positive impact so far on these rivers and their ecosystem. These rivers still hold the natural flows and provide crucial ecological services to the local communities. However, the development has reached other ways to threaten these rivers. These rivers are now facing threats of change in land use, pollution, a lifestyle change from the local people, and a lack of awareness among them.

## II. Site Description-

The Saptalingi River is a small west-flowing river in the Sahyadri mountains. It is a tributary of the Bav River. It originates in Harpude village and hardly flows 33 km before it meets the Bav River near Tale village in Sangameshwar block. It has a watershed of 27693 acres and flows through 17 villages in the block (Map-1). It mainly flows on the laterite plateau of Devrukh town and surrounding villages. It faces several threats that impact the ecological health of the river. For example, there is a lot of deforestation in the catchment, it gets polluted when it passes through human settlements due to non-degradable plastic waste and loss of biodiversity due to littering, drying up or flooding seasonally. The rivers in Sangameshwar are rich in biodiversity as these rivers are home to endemic and threatened species like Cryptocoryne cognata (plant, Endangered), Smooth-coated Otters (Mammal, Vulnerable) and Asian Small-clawed Otter (Mammal, Vulnerable). These rivers provide important ecological services to the local people like recharge of groundwater and food. To date, groundwater is the main source of drinking water in the Sangameshwar block. The local fishermen (the Ghorpi community) are completely dependent on these rivers for their livelihoods. Fishing is the traditional business of this community. They have very good knowledge of freshwater fish in this area. They catch freshwater fish from these rivers throughout the year and sell it in the local markets.



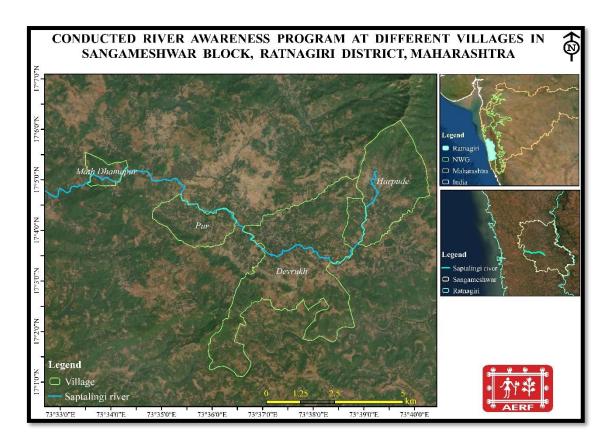
Map-1

#### III. Threats to the river-

Due to unprecedented development reaching the remote corners of the Sangamshwar block, the Saptalingi river is threatened. Regular deforestation, water pollution, and dumping of non-degradable waste aggravate the situation that results in the loss of valuable ecosystem services.

### IV. Actions to conserve the river-

After identifying problems around the river's health and discussions with the AERF field team, I came up with a plan for generating awareness about the river and its health. I understand this is the first step towards its conservation and responsible efforts by the community in AERF collaboration. With the support of M S Swaminathan Research Foundation (MSSRF) and Applied Environmental Research Foundation (AERF), we as a small team for this purpose, organized awareness programs at Harpude, Devrukh, Pur and Math Dhamapur villages in Sangameshwar block, which form the catchment of Saptalingi.



Map-2

I visited these villages and had meetings with the village representatives and local leaders for planning awareness sessions. I prepared a PowerPoint presentation and posters for this awareness program in the local language Marathi. This PPT is about the availability of fresh water, its sources, the role of rivers in the distribution of freshwater in India, and the ecological health of the Saptalingi river. The objectives of this session were

- A. To generate awareness among the stakeholders of the current status of the river concerning its watershed forest, flow, river bank, threats from pollution, and the role of stakeholders to conserve the river.
- B. To explain different parameters that define the good or bad health of the river.
- C. To understand the people's knowledge about the river.
- D. To build their capacity to involve them in river restoration.

Stakeholders like the local authorities (Gram Panchayat and Town Council), farmers, students, traders, and teachers were present for these sessions. I conducted one session in each village. Because of heavy rainfall followed by a red alert in the block, I couldn't conduct outdoor sessions. I distributed banners displaying the current status of the river and the features of a healthy river.

The details of each session are as follows.

Sr. No.	Village	Stakeholders	Total number	Date
			of participants	
1	Harpude	Sarpanch, Teachers, Gram	39	13 <sup>th</sup> July 2022
		Panchayat Members, Farmers,		
		village president, students of 6 <sup>th</sup>		
		and 7 <sup>th</sup> standard.		
2	Devrukh	Chief Executive Officer, town	25	15 <sup>th</sup> July 2022
		president, Social Workers,		
		corporators, members of local		
		organizations, staff of Devrukh		
		Nagar Panchayat, members of		
		traders' association, Principal of		
		Athale-Sapre College.		
3	Math	Sarpanch, Gram Panchayat	50	19 <sup>th</sup> July 2022
	Dhamapur	Members, villages, teachers,		
		farmers, and students.		
4	Pur	Sarpanch, Gram Panchayat	19	20 <sup>th</sup> July 2022
		Members, teachers, and		
		students of 6 <sup>th</sup> and 7 <sup>th</sup> standard.		

Table-1

# V. Conclusion & way forward-

I successfully conducted the Saptalingi river health awareness programme in four villages i.e., Harpude, Devrukh, Pur and Math Dhampaur of Sangameshwar. These villages are strategically important for conservation action in the future. Harpude is in the source region and has a highly degraded watershed. Devrukh is the headquarter of the Sangameshwar block and is a growing town. It has an impact on the river in the form of pollution both plastic litter and wastewater as the river flows through the town. Pur and Math Dhamapur face the impact of sedimentation and pollution. Ahead of Math Dhamapur, the river flows through the hilly terrain of Sangave, Fansat, Ambavali, and Tale villages.

A total of 133 stakeholders from these villages participated in this programme. The number was limited due to heavy rainfall and the season of peak paddy operations. All stakeholders appreciated these sessions and showed interest to work with AERF for river conservation. All of them agreed on the following issues during the discussions.

- 1. The river flow has been reduced.
- 2. Sediment in the river channel is affecting the flow.
- 3. Ground water level is declined.
- 4. Pollution is impacting the water quality.

The Chief Executive Officer of Devrukh Nagar Panchayat shared his experience on work done by the Panchayat in the channel of the Saptalingi river. The Panchayat has built a few bunds to store water in the channel. At that time, they came to know that it is not gazetted river like other big rivers in the area and they face technical problems whenever they try to get government funds for the river. He

has a keen interest to work in the conservation of this river and wants AERF's involvement to develop a river conservation plan. So, we had a separate meeting to discuss how to prepare the conservation plan at least for the part of the river that flows through the town. Likewise, the people in Math Damapur shared their experiences of plastic waste in the river and the impact of bunds that were built without technical knowledge of river bed and flow. They used to drink water from the river directly but not anymore.

I believe that this is an opportunity as well as a time to work for river conservation in Sangameshwar block before it gets too late. AERF presence will certainly be crucial to work on the ground. AERF is already working on forest conservation in the Sangameshwar block. AERF is protecting about 7000 acres of private forest in Sangameshwar. All of these are in the watershed of eighter of the rivers in Sangameshwar. As far as the Saptalingi river is concerned, villages like Talawade tarf Devrukh, Patgaon, and Ambavali are in the watershed of the river where AERF is protecting more than 200 acres of private forest since 2007. We need to assess the impact of this forest conservation initiative on the health of the rivers in the Sangameshwar block and set a conservation goal for these rivers. In the coming days, I will work on coordinating with the rest of the villages in the watershed of the Saptalingi river, aware them of the river's health, and prepare a comprehensive river conservation plan with help of all stakeholders.

# **Acknowledgements**

I would like to thank MSSRF for providing me with valuable training on river health and financial support to carry out the Saptalingi River awareness program. I would like to thank Dr Anilkumar for inviting me to attend this 5 days national-level training program on River Health Monitoring and Restoration at Chengannur. Likewise, I am grateful to AERF Director, Dr Archana Godbole and Jayant Sarnaik for providing me with an opportunity to attend this training program, guiding and providing logistic support to conduct awareness sessions. My thanks and appreciation also go to my colleagues Sanjay Pashte, Pranav Panavalkar, Mahadev Sawant, Shruti Savla, Ruchi Bhadke, and Ganesh Shedge. I would like to thank Shri Yuyutse Arte, journalist and environment enthusiast, who is a well-wisher of AERF and accompanied me for these sessions. I also owe special thanks to Kajal Barman and Suchitra Naidu for providing their guidance and GIS data for the awareness session and this report.

Finally, I am sincerely thankful to the Sarpanch of Harpude, Pur, and Math Dhamapur as well as the president Municipal council of Devrukh who showed interest in river conservation and allow me to conduct this awareness program at their place. Finally, I would like to thank all the participants of the awareness sessions along the river Saptlingi.

# **Photos**



Awareness session at Devrukh Nagar Panchayat



Awareness session in Math Dhamapur- Pranav explaining river fauna



Awareness session in Harpude- Mahadev explaining river flora



Awareness session in Pur- students going through posters



Awareness session- A teacher in Pur Primary School talking about the session



Awareness session in Math Dhampaur- Mr Gurav second from the left is talking about the waste litter in the river



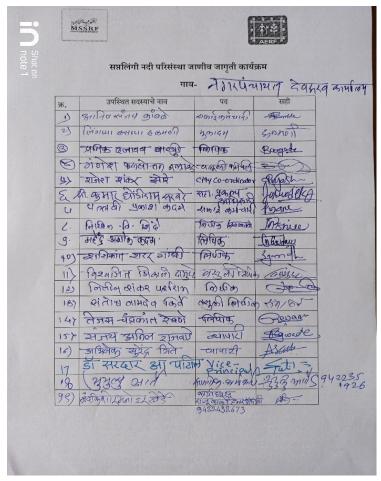




Distribution of river health awareness posters in schools

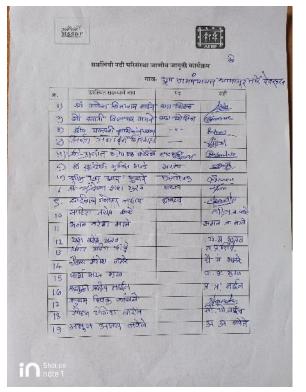
#### List of participants-

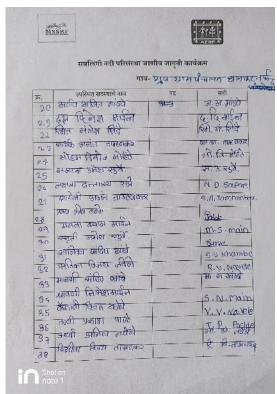
#### Devrukh

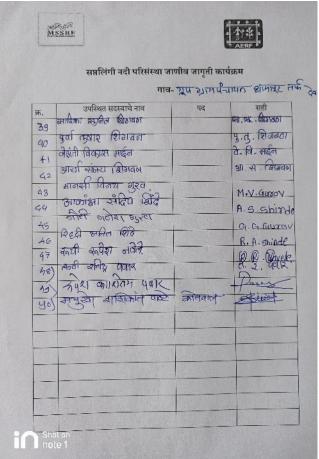




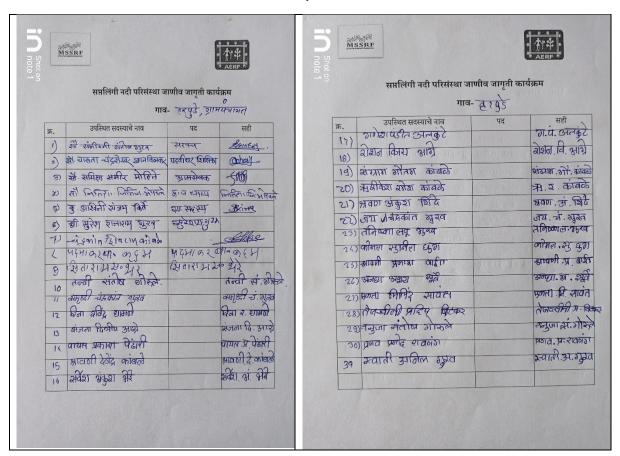
#### **Math Dhamapur**



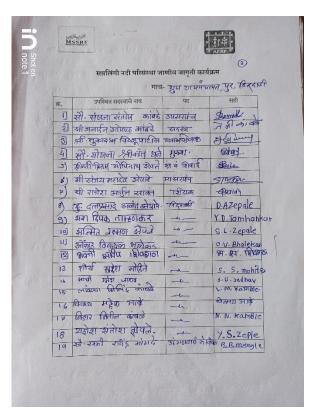




#### Harpude



#### Pur



# Posters distributed in schools

# Features of a healthy river



VS Features of a degraded river

