# KTSPMS HUATMA RAJGURU MAHAVIDYALAYA

## Rajgurunagar, Tal – Khed, Dist – Pune 410505 Name of Department – Geography

Name of Activity – Field Visit at Pot Holes in Bhima River Basin

On October 15, 2022, the Geography Department of Huatma Rajguru Mahavidyalaya organized a field visit to explore the Pot Holes in the Bhima River Basin. This educational excursion aimed to provide students with hands-on experience in studying river geomorphology and landforms.

## **Field Visit Activities:**

**Pot Holes Exploration**: The primary focus of the field visit was the study and exploration of pot holes in the Bhima River Basin. These natural depressions in the riverbed are created by the abrasive action of water and suspended pebbles, which, over time, erode the riverbed and form unique circular depressions. Students were able to observe and document these geological formations.

**Bhima River Study:** Dr. D. M. Markad, a faculty member of the Geography Department, provided valuable insights into the Bhima River and its significance in the region. Students learned about the river's origin, course, and its role in shaping the geographical landscape.

The Bhima River is one of the major rivers of southern India. It flows through the Indian states of Maharashtra, Karnataka, and Telangana, and it is a tributary of the Krishna River, one of the major rivers in India. Here is some information about the Bhima River:

**Origin**: The Bhima River originates in the Bhimashankar hills in the Western Ghats of Maharashtra. It starts as a small stream in the Bhimashankar Wildlife Sanctuary and gathers water as it flows through the hilly terrain.

**Course**: The river flows eastward through Maharashtra and enters the state of Karnataka. It traverses the Deccan Plateau, passing through various towns and districts, including Pune, Solapur, and Gulbarga. It eventually joins the Krishna River in the state of Telangana.

**Tributaries**: The Bhima River has several tributaries, the most significant of which is the Mula-Mutha River, which flows through Pune and is one of the major tributaries of the Bhima.

**Significance**: The Bhima River plays a crucial role in the agriculture and economy of the regions it flows through. It provides water for irrigation, supporting a variety of crops. The

river is also used for transportation, especially for the movement of goods and people in the region.

**Geographical Features**: The Bhima River basin is characterized by fertile agricultural land, and it contributes to the water supply for various towns and cities along its course. It flows through diverse landscapes, including hilly terrain and the Deccan Plateau, offering scenic beauty and contributing to the region's biodiversity.

**Cultural Significance**: The Bhima River holds cultural importance in the region, and several towns and cities along its course have historical and religious significance. The river has been mentioned in various ancient texts and scriptures.

**Environmental Concerns:** Like many rivers in India, the Bhima River faces environmental challenges such as pollution and water quality issues due to industrial and agricultural activities. Efforts are being made to address these concerns and protect the river's ecosystem.

**Hydroelectric Projects:** The Bhima River, along with its tributaries, has been harnessed for hydroelectric power generation, contributing to the region's energy needs.

**Tourism:** The Bhima River and its surrounding areas offer opportunities for tourism and outdoor activities. The scenic beauty, temples, and historical sites along its banks attract visitors and nature enthusiasts.

The Bhima River is an integral part of the Deccan region of India and plays a vital role in the lives of the people living in the areas it traverses. It combines cultural, ecological, and economic significance, making it a prominent river in the southern part of the country.

## Prof. M. L. Muluk, gave information about Pot Holes

Geomorphology Discussion: Mr. M. L. Muluk, another faculty member from the Geography Department, delivered a talk on geomorphology, with a specific focus on the formation of pot holes and their relationship with the river's flow and sediment transport. This talk deepened the students' understanding of the geological processes involved.

"Potholes" are depressions or cavities in the surface of roads, pavements, or other solid structures, typically formed due to the following factors:

### **Potholes in River Basins**

Potholes in river basins are natural geological formations that occur in riverbeds and are created by the erosive action of water and sediment. These unique features are typically circular or cylindrical depressions in the bedrock of the river channel and are formed over an extended period of time. Potholes are a fascinating aspect of geomorphology and offer valuable insights into the complex processes shaping the Earth's surface. Here are some key points about potholes in river basins:

#### Formation:

Potholes form through a combination of hydraulic action, abrasion, and corrosion by the flowing water and sediment in rivers. The process involves the following steps:

**Abrasion**: The river water carries pebbles, sand, and other abrasive materials. When these materials become trapped in a depression in the riverbed, they are swirled by the current, grinding away at the rock or sediment beneath.

**Hydraulic Action:** The force of the water, especially during periods of increased flow or turbulence, aids in the erosion of the riverbed. The water itself can act as a powerful abrasive force.

**Corrosion:** Chemical weathering may also play a role in pothole formation, particularly if the bedrock contains minerals that are susceptible to dissolution by water.

#### **Characteristics:**

Potholes exhibit several distinctive characteristics:

Circular or Cylindrical Shape: Potholes are typically round or cylindrical in shape, owing to the swirling motion of the abrasive materials in the water.

Variable Size: Potholes can vary in size, from a few centimeters to several meters in diameter, depending on the local geological conditions and the erosional processes at work.

Smooth and Polished Surface: The interior of potholes often has a smooth and polished appearance due to the constant abrasive action.

Geomorphological Study: They provide valuable insights into geomorphological processes and the dynamics of riverbed erosion.

Environmental Indicators: The presence of potholes can be indicative of the energy and erosional capacity of a river. They can also offer clues about past and present environmental conditions.

Natural Landmarks: Potholes are sometimes considered natural landmarks and are of interest to geologists, researchers, and nature enthusiasts.

Potholes in river basins are fascinating geological features that result from the dynamic interplay of water, sediment, and bedrock. Their study offers valuable insights into the natural processes that shape the Earth's surface and provides a deeper understanding of river geomorphology. These unique circular depressions are not only of scientific interest but also add to the beauty and diversity of landscapes worldwide.

The field visit saw active participation from both second-year and third-year students. They engaged in data collection, documentation, and discussions, enabling them to grasp the practical aspects of geographical study. Interaction with faculty members provided an opportunity to ask questions, seek clarification, and gain a deeper insight into the subject matter.

This field visit not only allowed students to witness and study geological features firsthand but also enhanced their ability to connect theoretical knowledge with real-world observations. It provided a unique opportunity to apply classroom learning in a natural setting, fostering a deeper appreciation for the field of geography.

The field visit to the Pot Holes in the Bhima River Basin was a valuable educational experience for the students of Huatma Rajguru Mahavidyalaya's Geography Department. It offered practical insights into the formation of pot holes, the role of the Bhima River in shaping the landscape, and the principles of geomorphology.

Such field visits serve as a bridge between classroom learning and practical application, enriching students' understanding of geography and inspiring their curiosity about the natural world. The Geography Department looks forward to organizing more such experiential learning opportunities to nurture the passion for geography among its students.

This field visit was not only an educational endeavor but also a memorable experience for all those who participated, leaving a lasting impact on their academic and personal growth.













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Dr. Shirish S. Pingale Principal Hutatma Rajguru Mahavidyalaya Rajgurunagar, Tal.Khed, Dist.Pune.

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Sr. N	Name of Student	M/F	CLASS			
1	Bhagwat Neha Anand	F	SYBA			
2	Bharmal Mayuri Dnyaneshwari	F	SYBA			
3	Chopde Vrushali Pramod	F	SYBA			
4	Dekhane Neha Kalpesh	F	SYBA			
5	Dhangar Sonali Somnath	F	SYBA			
6	Gawade Monika Gulab	F	SYBA			
7	Gore Mansi Vittal	F	SYBA			
8	Gosavi Sakshi Ganpat	F	SYBA			
9	Kambale Pragati Shivaji	F	SYBA			
10	Karle Samidha Ramesh	F	SYBA			
11	Kashid Payal Pravin	F	SYBA			
12	Kotwal Divya Maruti	F	SYBA			
13	Mode Shraddha Prakash	F	SYBA			
14	Musale Chhakuli Bajirao	F	SYBA			
15	Musale Shradhadha Sunil	F	SYBA			
16	Pawale Arti Khandu	F	SYBA			
17	Pawale Tanuja Santosh	F	SYBA			
18	Phalke Akshda Kailas	F	SYBA			
19	Rakshe Hindavi Santosh	F	SYBA			
20	Takalkar Anuja Uttam	F	SYBA			
21	Takalkar Mayuri Sunil	F	SYBA			
22	Takalkar Siddhi Shantaram	F	SYBA			
23	Takalkar Vidya Arjun	F	SYBA			
24	Talape Mohini Santosh	F	SYBA			
25	Thorat Neha Balasaheb	F	SYBA			
26	Virkar Punam Dattatray	F	SYBA			
27	Barne Abhiraj Arun	М	SYBA			
28	Dhadwad Prem Bharat	М	SYBA			
29	Gaikawad Aniket Sampat	М	SYBA			
30	Gawade Dnyaneshwar Dadabhau	М	SYBA			
31	Gode Sameer Sakharam	М	SYBA			
32	Jare Aniket Maruti	M	SYBA			
33	Khande Saurabh Dnyaneshwar	M	SYBA			
34	Khande Yuvraj Chandrakant	M	SYBA			
35	Pardhi Sagar Bhaga	M	SYRA			
36	Thorat Sanket Balasabeb	M	SVDA			
37	Bangar Sonali Robidas	E	TVDA			
51	Dangar Sonan Konidas	r	TYBA			
38	Dawara Vaibhaui Chi!!	P	TUDA			

39	Dube Sayli Kantaram	F	TYBA
40	Hingane Shivani Manik	F	TYBA
41	Karale Pratiksha Shankar	F	TYBA
42	Lavange Pranita Manik	F	TYBA
43	Lendghar Priya Gorakh	F	TYBA
44	Pardhi Shweta Dulara	F	TYBA
45	Pawar Pranjali Dnyaneshwar	F	TYBA
46	Pol Nikita Khandu	F	TYBA
47	Sanas Sakshi Nilesh	F	TYBA
48	Sandbhor Kajal Bhimrao	F	TYBA
49	Thite Dipali Bhanudas	F	TYBA
50	Wadekar Ankita Vishram	F	TYBA
51	Walunj Rutuja Anil	F	TYBA
52	Warkad Sejal Shantaram	F	TYBA
53	Argade Chetan Balasaheb	M	TYBA
54	Argade Lalit Sandip	M	TYBA
55	Bachche Vaibhav Sanjay	M	TYBA
56	Darwade Pankaj Nandu	M	TYBA
57	Daware Vishal Balasaheb	M	TYBA
58	Dhadge Khitij Balasaheb	M	TYBA
59	Dhumal Shubham Vijay	M	TYBA
60	Gade Ganesh Kailas	М	TYBA
61	Gade Vaibhav Mohan	M	TYBA
62	Gawade Dipak Goraksh	M	TYBA
63	Kambale Sidhhant Prakash	M	TYBA
64	Pawar Shubham Manik	М	TYBA
65	Sutar Omkar Ravindra	М	TYBA
66	Talekar Sumit Navnath	M	TYBA
67	Prof. Dr. Dilip Muluk	Staff	
68	Prof. Dr. D. M. Markad	Staff	
69	Prof. M. L. Muluk	Staff	
70		Staff	



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