



## Goa University

### School of Biological Sciences and Biotechnology

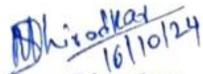
#### Report on a Field trip to Estuarine Fish Farm, Ela, Dhauji, Old Goa, and Freshwater Fish Seed Farm, Keri Sattari Goa, on 15<sup>th</sup> of October 2024

<b>1. Title of the Event/Activity/program</b>	Field trip to Estuarine Fish Farm, Ela, Dhauji, Old Goa, and Freshwater Fish Seed Farm, Keri Sattari Goa
<b>2. Date and Time</b>	15 <sup>th</sup> October 2024
<b>3. Mode of conduct (Physical/Online)</b>	Physical
<b>4. School/ Directorate/ Section</b>	School of Biological Sciences and Biotechnology, Zoology
<b>5. Collaborating Agency/School/Directorate</b>	-
<b>6. Detail of the Resource Person (Brief biodata)</b>	-
<b>7. Number of Faculty attended/participated</b>	One faculty
<b>8. Number of Student attended / participated</b>	12 students of Zoology
<b>9. No. of external students/faculty/other participants</b>	--
<b>10. The objectives of the Program/activity/event</b>	<p>The primary objectives of the field visits to estuarine and freshwater fish farms were to</p> <ul style="list-style-type: none"><li>• Provide Hands-On Training: To give students hands-on training in various aquaculture techniques and practices.</li></ul>

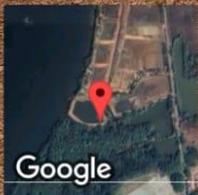
	<p>Expose Ongoing Practices: To expose students to current aquaculture practices and technologies employed in the industry.</p> <ul style="list-style-type: none"> <li>• Facilitate Practical Experience: To provide practical experience managing fish farming operations, including pond construction and species health management.</li> <li>• Highlight Scope and Opportunities: To highlight the scope and opportunities available in the aquaculture sector, including career paths and entrepreneurial ventures.</li> <li>• Encourage Sustainable Practices: To promote awareness of sustainable aquaculture practices and their significance in environmental conservation.</li> <li>• Foster Industry Connections: To facilitate connections between students and industry professionals, enhancing networking opportunities for future collaboration.</li> <li>• Enhance Problem-Solving Skills: To encourage students to analyze and address challenges faced in aquaculture, promoting critical thinking and problem-solving abilities.</li> <li>• Integrate Knowledge Across Disciplines: To integrate knowledge from various disciplines related to aquaculture, including biology, ecology, and resource management.</li> </ul>
<p><b>11. Description of the Program/activity/event</b></p>	<p>During the field visits to estuarine and freshwater fish farms, students engaged in practical demonstrations covering several key areas:</p> <p><b>Fishing Gears and Crafts:</b> Students observed and learned about various fishing gears, including gill nets and traps, focusing on their appropriate usage and maintenance. The practical demonstration of these tools gave students insights into their proper usage,</p>

	<p>durability, and maintenance in different environmental settings.</p> <p><b>Shrimp Farming:</b> They witnessed shrimp farming operations, including pond preparation, stocking, feeding regimes, and health management.</p> <p><b>Pond Construction:</b> The students were introduced to pond construction techniques, including site selection, excavation, and water management systems.</p> <p><b>Raft Method for Mussel Culture:</b> They learned about the raft method for mussel culture, including raft setup and spat collection techniques.</p> <p><b>Induced Breeding and Broodstock Management:</b> Students were introduced to the principles of induced breeding, hormone administration, and the management of healthy broodstock.</p> <p><b>Aquaponics:</b> Students learned about aquaponics, a sustainable farming method combining aquaculture and hydroponics. It allows for the cultivation of fish and plants in a symbiotic environment.</p> <p><b>Biofloc Technology:</b> They were introduced to biofloc technology, which promotes the growth of beneficial microorganisms in fish ponds, enhancing water quality and providing an additional feed source.</p>
<p><b>12. Benefit/Key outcomes of the Program/activity/event</b></p>	<p>The field visits enabled students to gain practical knowledge and skills in aquaculture techniques, which are crucial for their academic and professional development. They clearly understood the operational aspects of shrimp farming, pond construction, and mussel culture.</p> <p>Additionally, the experience strengthened their grasp of breeding strategies, with a focus on sustainability. These skills will equip them to apply aquaculture practices in real-world settings, promoting efficient and sustainable</p>

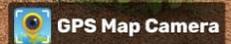
	<p>fish farming in the region.</p> <p>The field visits enhanced practical knowledge and skills in aquaculture techniques, fostering an understanding of sustainable practices essential for the student's academic and professional development in fisheries and aquaculture industries. Additionally, students gained insights into the <b>scope and opportunities</b> available in the aquaculture sector, including potential career paths, entrepreneurial ventures, and advancements in sustainable farming practices, which will help them make informed decisions about their future in the field.</p>
<p><b>13. Enclosures with report</b></p>	<p>Geo-tag photos are attached.</p>

Signature:   
 Name of coordinator MS. Gandhita Kundaikar  
 Designation:   
 Date:  Programme Director  
 SBSB, M.Sc., Zoology  
 Goa University,  
 Taleigao Plateau, Goa-403 206

Signature  17/10/24  
 Dean/Director/Head  
 Seal of the School/Directorate/University  
 Dean of School of Biological Sciences  
 & Biotechnology  
 Goa University, Goa-403206



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GW7F+7RW, dhauji, Old Goa, Goa 403402, India  
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Long 73.922811°  
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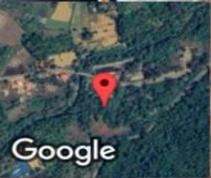
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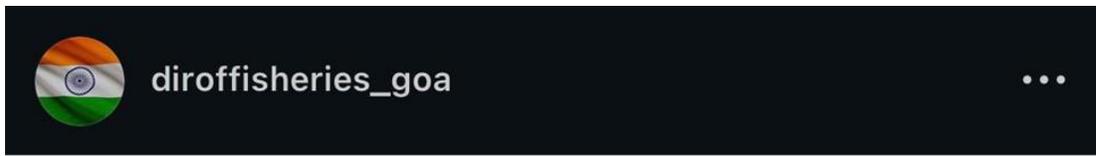
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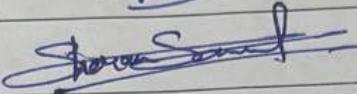
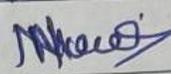
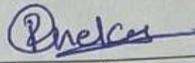
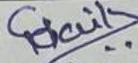
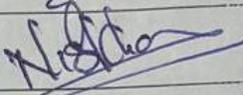
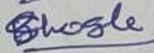
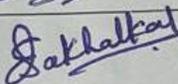


GOA UNIVERSITY  
SCHOOL OF BIOLOGICAL SCIENCES AND BIOTECHNOLOGY

Aquaculture field trip by Discipline of Zoology

Date: 15/10/2024

Attendance

Sr. No.	Name of the Participants	Signature
1	Bipana K C	
2	Sharan Sawal	
3	Ninoshia Morais	
4	Valencia Andrade	
5	Prerna Pednekar	
6	Mitali Naik	
7	Nishat khan	
8	Sweta Bhosle	
9	Sarita Naik	
10	Esha Sakhalkar	
11	Sakshi Chowdhary	
12	Akshata Malwankar	
13	Gandhita Kundaikar	