



**Training cum workshop on scaling up preventive approaches in the Indian freshwater fisheries sector
to reduce disease and minimise antibiotic use**

Anil Agarwal Environment Training Institute (AAETI), Nimli, Rajasthan

January 20-22, 2026

Agenda

Day 1, Tuesday, January 20	
9:00-9:15 am	Registration
9:15-9:30 am	Welcome and participant introduction
9:30-11:00 am	Session 1: Opening session
	Setting the context Amit Khurana , Director, Sustainable Food Systems Programme, Centre for Science and Environment (CSE) The crisis of antimicrobial resistance: global and national response Rajeshwari Sinha , Sr Programme Manager, Sustainable Food Systems Programme, CSE Structuring the preventive approaches in the Indian freshwater fisheries sector Neeraj Kumar , Dy Programme Manager, Sustainable Food Systems Programme, CSE Q&A
11:00-11:30 am	Tea/coffee
11:30 am-1:00 pm	Session 2: Role of nutrition/alternatives in preventing diseases
11:30 am-12:15 pm	Feed management in freshwater fisheries (30 mins) Narottam Prasad Sahu , Joint Director and Director (Acting), ICAR-CIF, Mumbai [online] Q&A (15 mins)
12:15-12:45 pm	Feed alternatives for sustainable farming: practitioner's perspective (20 mins) Rohit Verma , Founder & CEO, Unifly Insect Technology, Delhi Q&A (10 mins)
12:45-1:00 pm	Group photograph
1:00-2:00 pm	Lunch
2:00-4:45 pm	Session 3: Role of management practices in preventing diseases
2:00-2:45 pm	Management practices in freshwater fish farms and hatcheries (30 mins) Priyabrat Swain , Pr. Scientist, Fish Health & Management Div., ICAR-CIFA, Odisha



	Q&A (15 mins)
2:45-3:30 pm	Disease management in freshwater fisheries: West Bengal perspective (30 mins) Gadadhar Dash , Prof. & Head, Dept. of Aquatic Animal Health, WBUAFS, West Bengal Q&A (15 mins)
3:30-4:00 pm	Tea/coffee
4:00-4:45 pm	Prevention in freshwater fisheries: challenges and possibilities (30 mins) Iddya Karunasagar , Advisor (Research and Patents), Nitte University, Mangalore [online] Q&A (15 mins)
4:45-5:30 pm	Session 4: State perspectives on antibiotic use and how it can be reduced – part 1 Co-Chairs: Priyabrat Swain , ICAR-CIFA and Gadadhar Dash , WBUAFS
	Panel discussion (30 mins) <ul style="list-style-type: none">• Beena Gadpale, Dy Director of Fisheries, Training Centre, Raipur, Chhattisgarh• Anoop Kumar, Sr. Scientist & Head, KVK Hanumangarh-I, Rajasthan• Rahul Kumar, Senior Fisheries Officer, Sri Muktsar Sahib, Punjab• Anjana Singh, Incharge- ADF, Assistant Director of Fisheries, Rewa, Madhya Pradesh Q&A (15 mins)
Day 2, Wednesday, January 21	
7:30-8:15 am	Getting to know AAETI and campus tour Sarabjeet Randhawa , Director, AAETI
9:15-9:30 am	Reflections from day 1
9:30 am-12:15 pm	Session 5: Role of technology and vaccines in preventing diseases
9:30-10:15 am	Biofloc Technology and Recirculatory Aquaculture Systems (30 mins) Babitha Rani , Pr. Scientist, Aquaculture Div., ICAR-CIFE, Mumbai [online] Q&A (15 mins)
10:15-11:00 am	Scaling up Recirculatory Aquaculture Systems: perspective from Uttar Pradesh (30 mins) Mukta Singh , Asst. Professor, Dept. of Aquatic Animal Health Management, DUVASU, UP Q&A (15 mins)
11:00-11:30 am	Tea/coffee
11:30 am-12:15 pm	Open discussion with participants Vaccines: science, status, challenges and possibilities for scaling up adoption Moderated by Amit Khurana , Director, Sustainable Food Systems Programme, CSE



12:15-1:00 pm	Session 6: State perspectives on antibiotic use and how it can be reduced – part 2 <i>Chair: K Pani Prasad, Professor, Andhra Pradesh Fisheries University, Andhra Pradesh</i>
	Panel discussion (30 mins) <ul style="list-style-type: none">• <i>Ranjay Prakash Paswan, Jr Fisheries Research Officer, Fisheries Research Centre, Bihar</i>• <i>Priyanshi Soni, Incharge, Directorate of Fisheries, Bhopal, Madhya Pradesh</i>• <i>Rajan Mishra, SMS (Ani.Sci.), KVK Ambala, Haryana</i> Q&A (15 mins)
1:00-2:00 pm	Lunch
2:00-3:30 pm	Session 7: Role of breeds and seeds in preventing diseases
2:00-2:45 pm	Hatchery farming and seed management practices: Maharashtra perspective (30 mins) <i>Hukam Singh Dhaker, Former Dean, College of Fisheries, Ratnagiri, Maharashtra</i> Q&A (15 mins)
2:45-3:30 pm	Quality seed in freshwater fisheries: challenges and possibilities (30 mins) <i>Smiti Rekha Pati, Sr Executive (Technical), NFDB-Eastern Regional Centre, Bhubaneswar, Odisha</i> [online] Q&A (15 mins)
3:30-4:00 pm	Tea/coffee
4:00-5:45 pm	Session 8: Role of biosecurity and sustainable approaches in preventing diseases
4:00-4:45 pm	Biosecurity in freshwater farms and hatcheries (30 mins) <i>K Pani Prasad, Professor, Andhra Pradesh Fisheries University, Andhra Pradesh</i> Q&A (15 mins)
4:45-5:15 pm	Sustainable fish farming: practitioner's perspective (20 mins) <i>Rajnish Kumar, Founder, PVRAqua, Uttar Pradesh</i> Q&A (10 mins)
5:15-5:45 pm	Freshwater fish farming in circular integrated model: practitioner's perspective (20 mins) <i>Arnab Pratim Dutta, Integrated Farmer, Co-owner Bahbari Farm, Tezpur, Assam</i> [online] Q&A (10 mins)
6:30 pm onwards	Evening get together over chaat (local street food) party
Day 3, Thursday, January 22	



7:00-8:00 am	Trek to Aravalli Range
	Session 9: Class exercise
9:30-11:00 am	Class exercise on: Recommendations/Steps needed/Measures/Suggestions to scale up preventive approaches in freshwater fisheries sector to reduce antibiotic use <i>Moderated by Amit Khurana, Director, Sustainable Food Systems Programme, CSE</i>
11:00-11:30 am	Tea/coffee
11:30 am-12:15 pm	Feedback session and Certificate distribution
12:15-12:30 pm	Closing and wrap up CSE
12:30-1:30 pm	Lunch
1:30 pm onwards	Departures



List of attendees

Resource persons and practitioners

1. Amit Khurana, Director, Sustainable Food Systems Programme, Centre for Science and Environment (CSE)
2. Arnab Pratim Dutta, Integrated Farmer, Co-owner Bahbari Farm, Tezpur, Assam*
3. Babitha Rani, Principal Scientist, Aquaculture Division, ICAR-Central Institute of Fisheries Education (CIFE), Mumbai*
4. Gadadhar Dash, Professor and Head, Department of Aquatic Animal Health, West Bengal University of Animal and Fishery Sciences, West Bengal
5. Hukam Singh Dhaker, Former Dean, College of Fisheries, Ratnagiri, Maharashtra
6. Iddya Karunasagar, Advisor (Research and Patents), Nitte University, Mangalore*
7. K Pani Prasad, Professor, Andhra Pradesh Fisheries University, Andhra Pradesh
8. Mukta Singh, Assistant Professor, Department of Aquatic Animal Health Management, College of Fisheries Science, DUVASU, Uttar Pradesh
9. Narottam Prasad Sahu, Joint Director and Director (Acting), ICAR- CIFE, Mumbai*
10. Neeraj Kumar, Deputy Programme Manager, Sustainable Food Systems Programme, CSE
11. P. Swain, Principal Scientist, Fish Health & Management Division, ICAR-Central Institute of Freshwater Aquaculture (CIFA), Odisha
12. Rajeshwari Sinha, Senior Programme Manager, Sustainable Food Systems Programme, CSE
13. Rajnish Kumar, Founder, PVRAqua, Uttar Pradesh
14. Rohit Verma, Founder & CEO, Unifly Insect Technology, Delhi
15. Smiti Rekha Pati, Senior Executive (Technical), NFDB-Eastern Regional Centre, Bhubaneswar, Odisha*

Participants

1. Anand Prakash Singh, Farm Manager, KVK Hanumangarh-I, Rajasthan
2. Anjana Singh, Incharge-Assistant Director of Fisheries, Assistant Director of Fisheries Rewa, Madhya Pradesh
3. Anoop Kumar, Sr. Scientist & Head. KVK Hanumangarh-I, Rajasthan
4. Beena Gadpale, Deputy Director of Fisheries, Training Centre, Raipur, Chhattisgarh
5. Bhanu Chandra, Assistant Director of Fisheries, Karvi, Chitrakoot, Uttar Pradesh
6. Chetan Bhavsar, Fisheries Inspector, Assistant Director of Fisheries, Betul, Madhya Pradesh
7. Deepak Shukla, Incharge- ADF, Assistant Director of Fisheries Sidhi, Madhya Pradesh
8. Lovepreet Kaur, Lab Technician, Govt. Fish Seed Farm, Ludhiana, Department of Fisheries, Punjab
9. Manpreet Kaur, Lab Technician, Govt. Fish Seed Farm, Rai-ke-kalan, Bathinda, Department of Fisheries, Punjab
10. Md. Niyazuddin, District Fisheries Officer, Samastipur, Bihar
11. Mohammad Ali, Assistant Fisheries Development Officer, Boondi, Department of Fisheries, Rajasthan
12. Priyanshi Soni, Fisheries Inspector, Assistant Director of Fisheries, Bhopal, Madhya Pradesh
13. Rahul Kumar, Senior Fisheries Officer, Sri Muktsar Sahib, Department of Fisheries, Punjab
14. Rajan Mishra, Subject Matter Specialist (Animal Science), KVK Ambala, Haryana
15. Ranjay Prakash Paswan, Jr Fisheries Research Officer, Fisheries Research Centre, Mithapur, Bihar
16. Richa Chaudhary, Assistant Director of Fisheries, Ghaziabad, Fisheries Department, Uttar Pradesh
17. Sahid Khan, Fish Farmer, Sultanpur Village, Kota, Rajasthan
18. Sarita Sondhiya, Fisheries Inspector, Directorate of Fisheries Bhopal, Madhya Pradesh
19. Shweta Singh, Chief Executive Officer, Fisheries, Ambedkar Nagar, Uttar Pradesh
20. Sunil Kumar, Lab Technician, Govt. Fish Seed Farm, Fatehgarh Sahib, Department of Fisheries, Punjab
21. Thakur Satyam Singh, Fisheries Officer, Hoshiarpur, Department of Fisheries, Punjab
22. Vikas Chahar, Assistant Fisheries Development Officer, Ajmer, Department of Fisheries, Rajasthan

*online