# **Book of abstracts**









# National Seminar on "AMR in Indian Fisheries: Measures of Mitigation"

Jointly organized by
Society of Fisheries Technologists (India)
ICAR-Central Institute of Fisheries Technology, Cochin
The Marine Products Export Development Authority, Cochin.

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### **MESSAGE**

Antimicrobial resistance development in emerging and reemerging pathogens is a menace. World over research groups have totally focused their attention on antimicrobial resistance. I am very happy to note that ICAR-CIFT is one among the research organizations in India conducting research and development in the area of antimicrobial resistance; in freshwater, marine and brackish water environments. In fisheries sector the institute has tremendous potential to deliver more in the area of antimicrobial resistance. In this context, I am very happy to note that ICAR-CIFT, SOFTI and MPEDA have joined their hands to come together in organizing a two-day national seminar on "AMR in Indian Fisheries: Mitigation Measures" from 7-8th November, 2019 at ICAR-CIFT, Cochin. In this seminar experts from human, animal, fisheries and environmental sectors representing FAO, MPEDA, Fisheries and Veterinary and Medical Research Institutes, Universities, State Health Department and Industry are coming together to assess the level of antimicrobials in the form of residues, AMR in the microbes and genes therein. Further, the aim is to find measures of mitigations to this menacing problem. I am sure when experts of AMR research join their hands, discuss and explore new ideas would emerge that will open new vistas to combat AMR not only in the clinical settings but also in the terrestrial, aquatic animals and their environments. My hearty welcome to all the delegates specially the young researchers and scholars who are being part of this prestigious national seminar coming from different parts of the country. The important aspect of the seminar is an exclusive session dedicated to academia industry interface and the speakers representing these commercial organizations possess very high academic qualifications. I wish Dr. M. M. Prasad, convener and his whole team of Microbiology, Fermentation and Biotechnology Division, that included, all scientists, technical, administrative staff of CIFT and the whole team of SOFTI in the smooth and successful conduct of seminar

Date: 03.11. 2019

Dr. C.N. Ravishankar

Place: Cochin President SOFTI and Director ICAR-CIFT



### **PREFACE**

It is well known fact that Antimicrobial resistance (AMR) is a serious threat to humanity. This perilous issue has been identified by WHO, FAO and OIE and made a tripartite agreement to work together to bring down the AMR problem globally. In commemorating the observation of World Antibiotics Awareness Week (WAAW) in November 2019, SOFTI, ICAR-CIFT and MPEDA are jointly organizing a National Seminar on "AMR in Indian Fisheries: Measures of Mitigation" during 7-8 November, 2019 at ICAR-CIFT, Cochin. The central theme of the seminar is to draw attention on AMR from all the walks of academics, researchers, traders, industries on aquaculture, animal health and human health. The focus of seminar will be on deliberation by bringing experts, keynote speakers working on AMR of global standing and also invite speakers who made outstanding contributions in the field of AMR of human, animal and aquaculture, food, and environment. What is more important is assessing the AMR burden, AMU, in all the sectors especially in aquaculture and fisheries and identifying suitable mitigations measures is equally important. This seminar stresses on the trade aspects too. One of the important sessions of this seminar is Industry-Academic-institution interface meet. The emphasis will be on the contribution from prominent companies to the country for the betterment of human health, food and environment in the form of different products and the equipment's made by them for identifying and understanding AMR. The expected outcome is companies sharing their thoughts on the future, how they can take up the challenges of food, nutrition and health security of India. The whole of two-day seminar is spread into eight technical sessions that include: 1.AMR in Fisheries, 2. AMR in Animal sector, 3. AMR in Human Health, 4. AMR in Food and environment 5.AMR: One health, 6. Recent trends in detection and molecular mechanism of AMR, 7. Prevention and Control of AMR and 8. Industry-Academia-Institutions interface meet. Deliberations in this National Seminar also center on molecular mechanisms of the genes found in human health, animal, fish and environment and focus on research that should provide a sound basis for scientific policies for the use of antimicrobials in different sectors. In many a meeting of National Level Dr. J.K. Jena, DDG (Fisheries, ICAR, Delhi) stressed on organizing this kind of seminars for ideation and dissemination of the accrued knowledge to every nook and corner of the country. His vision is pragmatized as far as possible. His support and guidance are greatly acknowledged. Dr. Rajesh Bhatia, Regional Technical Adviser on AMR for the Regional Office of FAO is the guiding spirit in all research activities on AMR in the country and this national seminar is no exception. His contributions

are gratefully acknowledged. Dr. C.N. Ravishankar, SOFTI President & Director, ICAR-CIFT, envisions that furtherance of knowledge acquired through discussions needs to be spread in a continuous manner and makes it happen by encouraging participation of the scientific fraternity including research scholar in intersectoral seminars and meetings so as to find plausible solutions to pertinent problems. The importance given to this seminar by Sri K.S. Srinivas, IAS Chairman MPEDA is evidenced by co-hosting this prestigious National Seminar and also supporting with participation of a large contingent of delegates. We are indebted for his support. I take this opportunity to place on record my sincere gratitude to all ICAR institutes, Government Organizations and Agencies and Private firms for all the technical and financial support. On behalf of President SOFTI and Director ICAR-CIFT and staff and MFB Division I extend a warm welcome to all the delegates of AMR in Indian Fisheries: Measures of Mitigation"

Date: 03.11, 2019

Place · Cochin

M. M. V. Jul

**DR. M.M. Prasad**Convener & HOD, MFB Division

ICAR-CIFT

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