

S. SANTHANA KRISHNAN

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_+91 44 66884040

"AUROMATRIX"

No.129, Estate Main Road, Industrial Estate, Perungudi, Chennai- 600096. India

EDUCATION

- Bachelor of Science (Zoology) University of Madras, Chennai, India.
- Master of Science (Marine Biology), Annamalai University, India.

BUSINESS VENTURE

Chief Executive, Marine Technologies, Chennai: Aquaculture & Fisheries Services and Consultancy

Director, SK Marine Technologies India Pvt Ltd., Chennai: Seafood Safety Audits, Shrimp Procurement Programs, Supply of Inputs

Managing Director, Auromaritech Private Limited, Nagapattinam District: 200 Acre integrated aquaculture farm producing brackish water fish and shrimp.

PROFESSIONAL TRAINING

Certified HACCP Personnel from University of Washington, Seattle, USA. Certified HACCP Auditor, Surefish, USA

Frozen Seafood Sensory Quality Evaluation, University of California and PSB, Singapore.

Aquaculture Certification Council (ACC) & Best Aquaculture Practices (BAP), USA Certified Evaluator, Senior Auditor & Technical Reviewer.

Trained BAP (Best Aquaculture Practices) ACC Auditor in ISO22000 and SA8000 requirements.

Certified Third Party Auditor to the Global Standard for Food Safety – BRC (British Retail Consortium). Certificate No.BRC/ATP012/TPA/469.

PROFESSIONAL EXPERTISE

Aquaculture Seafood Services and Consultancy.

Seafood Safety Systems, Training and Audit.

Aquaculture Certification.

Seafood Value Chain Improvement Programs.

Corporate Aquaculture and Shrimp Processing / Business Strategy and Advisory

Certified Shrimp Procurement Program and Quality Assurance

WORK EXPERIENCE

1989 – Present: Primarily as a Consultancy & Service Provider for Aquaculture (Fish & Shrimp) & Aquaculture Value Chain Building Expertise, Market Access, Certification Program, Corporate Advisory, Aquaculture CSR, Aquaculture Biosecurity Program etc.,.

WORK SPECIALIZATION

Introduced for the first time in India:

- Commercial Black Tiger Shrimp Farming (1989)
- Introduced use of Pelleted feeds, Technology transfer for commercial Black Tiger Shrimp Farming in India (1990)
- Use of Probiotics & Immuno-stimulants in Aquaculture (1994)
- HACCP Certification for Seafood Processing Plants (1997)
- Value added Shrimp Production and Marketing of Indian Shrimps in UK (1997)
- Project conceptualization and introduction of Indian Organic Aquaculture Project (IOAP), Production of Organically Certified Black Tiger Shrimps and Freshwater Prawns through SIPPO and Blueyou, Switzerland (2006)
- Organization of HACCP training for Aquaculture Professionals.
- Marine Fish Farming (Seabass, Seabream, 2010 onwards), RAS, Cage Farming, Hatchery & Integrated Production.
- Resource Person and Consultant for first ever commercial introduction of Vannamei in India in 2002 and later for commercial introduction through Quarantine in 2007.
- First time established ISO 9001 PCR based Shrimp Health Diagnostic Laboratory in India in Private Sector in 1997 to 2007. Subsequently established and operated many PCR based Shrimp Health Diagnostic Laboratory for various clients in India and Srilanka.

In Seafood Processing Sector, following activities are being handled: -

- HACCP Training & Audit (Since 1997 Ongoing)
- In Plant training on Quality Assurance, Hygiene, Sanitation
- Implementation of Quality Management Systems, Quality Assurance Programmes
- Management training of Seafood Quality Assurance, Traceability, product Recall

Overseas Projects:

- Aquaculture Consultancy, Biosecurity Program, Technical Audits and Seafood Value Chain Projects:
 - Sri Lanka, Malaysia, Bangladesh, Maldives, Saudi Arabia, UAE, Oman, Djibouti, Tanzania, Zanzibar, Surinam, Nigeria, USA.
- Aquaculture Facility Audits for Certification Program : China, Thailand, Indonesia & Vietnam.

Current Projects:

- Taprobane Sea Foods (Pvt) Ltd, Sri Lanka India (2017 ongoing)
- E.I.D. Parry (India) Limited http://www.eidparry.com/about-us/murugappa-group/ Chennai, India (2019 ongoing)
- Alphakrust, Tanzania (2002 ongoing) Integrated Black Tiger Shrimp Farming Project.

PROFESSIONAL AFFILIATION & SERVICES

Member & Consultant in various aquaculture promotion bodies and associations and some of the professional accomplishments are:

- Member, Technical Team, Global Aquaculture Alliance (GAA) on Cluster Farming Standards. (2002)
- Member, Working Committee on Fisheries Eleventh Five Year Plan (2007-2012) constituted by Planning Commission, Government of India.
- Institute Management Committee Member, Central Marine Fisheries Research Institute (CMFRI), Government of India.
- Member-Committee on guidelines for Seabass & mud crab farming, Aquaculture Authority of India, Govt. of India.
- Research Advisory Committee Member, Central Marine Fisheries Research Institute (CMFRI), Government of India.
- Member, World Aquaculture Society
- Member, Global Aquaculture Alliance
- Committee Member "CARD" Society formed for the establishment of Marine Fin Fish Aquaculture, Department of Fisheries, Government of Tamil Nadu.
- Advisory Committee Member NAIP, (ICAR, Ministry of Agriculture, Govt. of India) Research Project on "Export oriented Marine value chain for farmed Sea Food production using Cobia (Rachycentron canadum) through rural entrepreneurship".
- Member, Board of Studies (Zoology), University of Madras, Chennai.
- UGC (University Grants Commission, Government of India), Resource person to delivery Special Lectures on Aquaculture at Annamalai University, India.
- Resource person Biotech Consortium of India, Department of Biotechnology, Government of India, for formulation of Curriculum and Syllabus for Masters Course in Marine Biotechnology with special emphasis on Aquaculture Biotechnology, Human Resources Development, Training & Job Oriented Aquaculture Curriculum.
- Life Member, International Association of Fish Inspectors (IAFI).
- Governing Member, National Fisheries Development Board (NFDB), Government of India (20102012)
- Research Advisory Member, CIBA ICAR, India (2011-2013 & 2013-2014)

- Research Advisory Member, Tamil Nadu Jayalalitha Fisheries University (TNJFU), Nagapattinam (2014 ongoing)
- Project Advisor, Seafood Exporters Association of India (SEAI), Aquaculture Committee Program on Sustainable Farmed Seafood Program.
- Advisor, Saudi Aquaculture Society (2016 2017)
- Standards Committee Member for Aquaculture Stewardship Council (ASC) standardize formulation for Marine Fin Fish Culture.
- Standards Committee Member for GAA for BAP Standards and Guidelines appraisal.
- Technical Review resource person for BAP Audits for Control Union, Peru; SGS India; NSF, USA.
- Committee Member with Coastal Aquaculture Authority (CAA), Ministry of Agriculture, Government of India for Regularization and Registration of Vannamei Farmers
- Consultative Committee Member for introduction of Vannamei Brood Stock Maturation Centers in India.
- Director & Board Member GAA (Global Aquaculture Alliance)
- Founder President, SAP (Society of Aquaculture Professional) https://www.aquaprofessional.org/
- Associated with Rubicon Resources, USA https://www.rubiconresources.com/ & High Liner Foods, USA https://www.highlinerfoods.com/en/home/default.aspx since August 2017 to End September 2019 for their Shrimp Procurement Program from India, Shrimp Inspection Services etc.,.

ADDITIONAL ACTIVITIES

- As a Coordinator of Tamil Nadu Aquaculture Federation, had taken a lead role since 1995 for bringing legal status to Shrimp Aquaculture in India right from handling all legal issues, drafting of Standards, licensing of Aqua Farmers
- As a Resource person, participated in various National Consultative Committee Meetings as well as bringing out standards for Best Aquaculture Practice. To name a few are:
- International Consultative Committee meeting for introduction of Vanammei Shrimp into India. Coastal Aquaculture Authority National Workshop on Biosecurity in Shrimp Farms and
 Hatcheries.
- FAO Manual No.446 Standards for establishment of P.monodon Shrimp Hatchery Standard Code of Practice.
- Consultative capacity for various meeting to assist Women Self Help Groups to develop models for Sustainable Aquaculture as a livelihood.
- Organized the first ever HACCP Certification for Aquaculture Professionals in the capacity as Founder President, Society of Aquaculture Professionals www.aquaprofessional.org
- Lead Speaker in various Aqua Farmer Meetings, Stakeholder and Govt. Policy related meetings on Aquaculture.
- Conducted various hands-on training for Aquaculture Technicians, Seafood Personnel. on Aquaculture Project Management, Farm Operations, Hatchery Operation, Seafood HACCP training in India, Tanzania (for local Tanzanian Technicians), Sri Lanka Shrimp Breeders Association and Private Technicians

- Systematic introduction of L.vannamei in Srilanka (2018). Following Risk Assessment,
 Biosecurity Protocols, Quarantine Procedures, SPF Broodstock Supplier Evaluation, SPF
 L.vannamei Hatchery and Biosecured Pilot Farming in Srilanka. Prepared Guidelines & Procedures for Srilankan Authorities for introduction of Exotic L.vannamei into Srilanka.
- For the Integrated Black Tiger Shrimp Farming in Tanzania assisted the Tanzania Government in "Antibiotic Residue Analysis" Sampling and Surveillance Program for EU approval for Tanzania to export for the first time Farmed Shrimps to EU countries.
- Consultative member for Coastal Aquaculture Authority (http://www.caa.gov.in/), Government of India for Registration of Aquaculture Inputs like Feed, Probiotics etc., including sampling plan for banned antibiotics, registration procedure etc.,.

UNIVERSITY OF WASHINGTON

INSTITUTE FOR FOOD SCIENCE AND TECHNOLOGY COLLEGE OF OCEAN AND FISHERY SCIENCES

Santhana Krishnan

Successfully completed a three day seafood industry training course on HACCP AND HACCP PLANS
at Seattle, Washington on February 17-19, 1997
This curriculum referenced and incorprated recommendations and concepts from the National Advisory

Cammittee on Microbiological Criteria for Foods, the U.S. Food and Drug Administration? Flat and Flabor Products Hazard and Control Golde, the U.S. Food and Drug Administration's manistury seafood UACCV regulation (I CFR 123) Flab, Fabor Products, Imports and Record-keeping Requirements, and 21 CFR Part 130 Communicable Discussor, Public Broth Restrictions, Water Supply and 21 CFR Part 110, Cornell Gold Manufacturing Protein in Manufacturing Pacifical of Hospital Restriction of their Gold Manufacturing Protein in Manufacturing Pacifical of Hospital Restriction.

course is designed to satisfy the mandatory training requirement contained in 21 CFR Part 123,10.

Barbara Rasco, Ph.D., J.D., Institute for Food Science and Technology Gleyn E. Bledsoe, Ph.D., C.P.A. Institute for Food Science and Technology



Best Aquaculture Practices Certificate

Best Aquaculture Practices

Hereby Certifies That

Santhana Krishnan

Has Successfully Completed the 1-7 June, 2014 Adelaide Australia Best Aquaculture Practices Certification Program Course and is Re-Approved to Conduct Audits (subject to maintaining competency) for the following:

- Seafood Processing Plants
- Feed Mills
- Finfish & Crustacean Farms (Land-based ponds and fresh/brackish water cage culture)
- Shrimp Hatcheries

Zi Soché
Lisa Goché

James E. Heerin

June 16, 2014

Date Approved

BRITISH RETAIL CONSORTIUM

for successful and responsible retailing



This is to certify that

S Santhana Krishnan

has successfully completed a four day BRC Training and Exam for qualification as a

THIRD PARTY AUDITOR

to the

GLOBAL STANDARD FOR FOOD SAFETY ISSUE 5

Training included:

- Attributes of a Good Auditor
- Audit Preparation & Checklists
- Non-conformance and Conformance Reporting
- Audit Aims and Objectives
- Audit Report Writing
- Management Reporting

W.D. Gesins

Bill Cossins BRC Approved Training Provider Stephen Ribertian.

Stephen Robertson Director General, British Retail Consortium

Issue Date: 19th September 2008

Certificate Number: BRC/ATP012/TPA/469



AQUACULTURE CERTIFICATION COUNCIL, INC. 706 N. Suncoast Bivd., Crystal River, FL34429 USA

P. O. Box 2530, Crystal River, FL 34423, USA

Telephone: 352-563-0565 FAX: 425-650-3001 Email: info@aquaculturecertification.org aquacert@tampabayrrcom

Date: November 5, 2008

Dear S. Santhana Krishnan,

On behalf of the ACC I would like to congratulate you on completing the recent Auditor Training Course for ISO 22000 FSMS and Social Systems 8000 that was given by Sally Ananya Surangipmol, Director of the Food School in Thailand.

ISO and SA-8000 training are important components of auditing for the BAP program and this training will help you and the ACC expand its scope and expertise.

Best Regards,

William R. More

Vice President / Director of Certification

William R Mary



This is to certify that

Ganthana Krishnan

Has successfully completed a training course in

GAA Best Aquaculture Practices Seafood Processing Standard

Training included:

- BAP Standard Requirements and Interpretation

- ISO 65 Requirements

-Non Conformance preparation

- Auditor Skills

- Report Preparation

- Auditor Responsibilities

- Certification Process

Course Date: 27 - 29 July 2009

TRUST CERTIFICATION SERVICES

William More
ACC Vice President

Bill Paterson & Dave Garforth Trainers - Global Trust Services

AQUACULTURE CERTIFICATION COUNCIL, INC.



12815 72** Avenue NE, Kirkland, WA 98034 USA Telephone: 425-825-7935 FAX: 425-650-3001 Email: Info@aquaculturecertification.org

SUBSECUTE CONTROL OF

S. Santhana Krishnan

Successfully completed

ACC Training Course

ISO 22000 and SA 8000

Spansared by

Aquaculture Certification Council, Inc.

Presented by

-final -

Sally Ananya Surangpimul

Director

William R. More

Vice President / Director of Certification

Certifying Best Practices for Responsible Aquaculture

