



Food and Agriculture
Organization of the
United Nations



Virtual Regional Workshop on bivalve molluscs sanitation

November 2, 3 and 4 2021

**Website, sources of information
and opportunities to work with FAO
and FAO Reference Centre**

Rachel Hartnell

Cefas – FAO Reference Centre
for Bivalve Mollusc Sanitation

What are FAO reference centres?

- One of **FAO's global missions** is to provide field and technical support to member countries
- **Reference Centres** designated by FAO are regarded as **centres of excellence** in providing,
 - Scientific and technical expertise,
 - Diagnostic and reference services,
 - Laboratory and field training,
 - Coordinating research and developmental studies
- All contributing to the FAO/WHO mission and to UN SDG goals

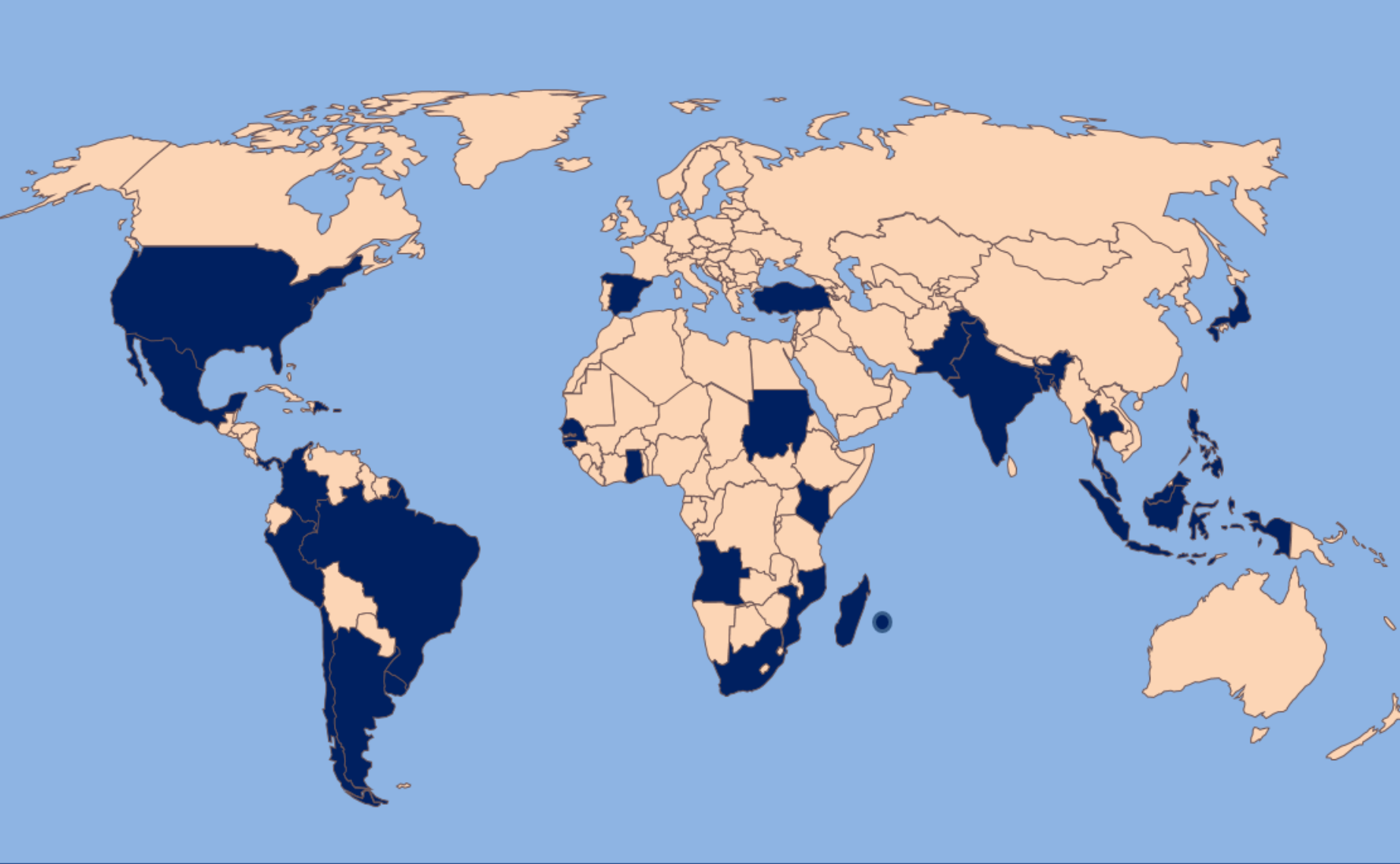


Process of designation



Outreach, Collaboration and R&D Activities—FAO Reference Centre for Bivalve Mollusc Sanitation 2019-2021

- 1 NO POVERTY
- 2 ZERO HUNGER
- 5 GENDER EQUALITY
- 8 DECENT WORK AND ECONOMIC GROWTH
- 12 RESPONSIBLE CONSUMPTION AND PRODUCTION
- 13 CLIMATE ACTION
- 6 CLEAN WATER AND SANITATION
- 14 LIFE BELOW WATER
- 17 PARTNERSHIPS FOR THE GOALS



FAO Africa Region –
Angola, Gambia, Ghana, Kenya, Madagascar, Mauritius, Mozambique, Senegal, South Africa

FAO Asia and Pacific Region -
Bangladesh, India, Indonesia, Malaysia, Pakistan, The Philippines, Thailand, Turkey

FAO Latin America and The Caribbean
Antigua & Barbuda, Argentina, Brazil, Chile, Columbia, Dominican Rep. , Grenada, Mexico, Panama, Peru, St. Vincent's & Grenadines, Suriname, Trinidad & Tobago and Uruguay

FAO collaborations and R&D, Spain, United States and Japan

- Access to eLearning , website sign posting
- Participation in training workshops
- Proficiency testing
- Provision of protocols, reference materials and guidance
- In country support to Responsible Authorities
- Research collaborations

FAORC website landing page

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Cefas INTERNATIONAL CENTRES OF EXCELLENCE **SEAFOOD SAFETY**

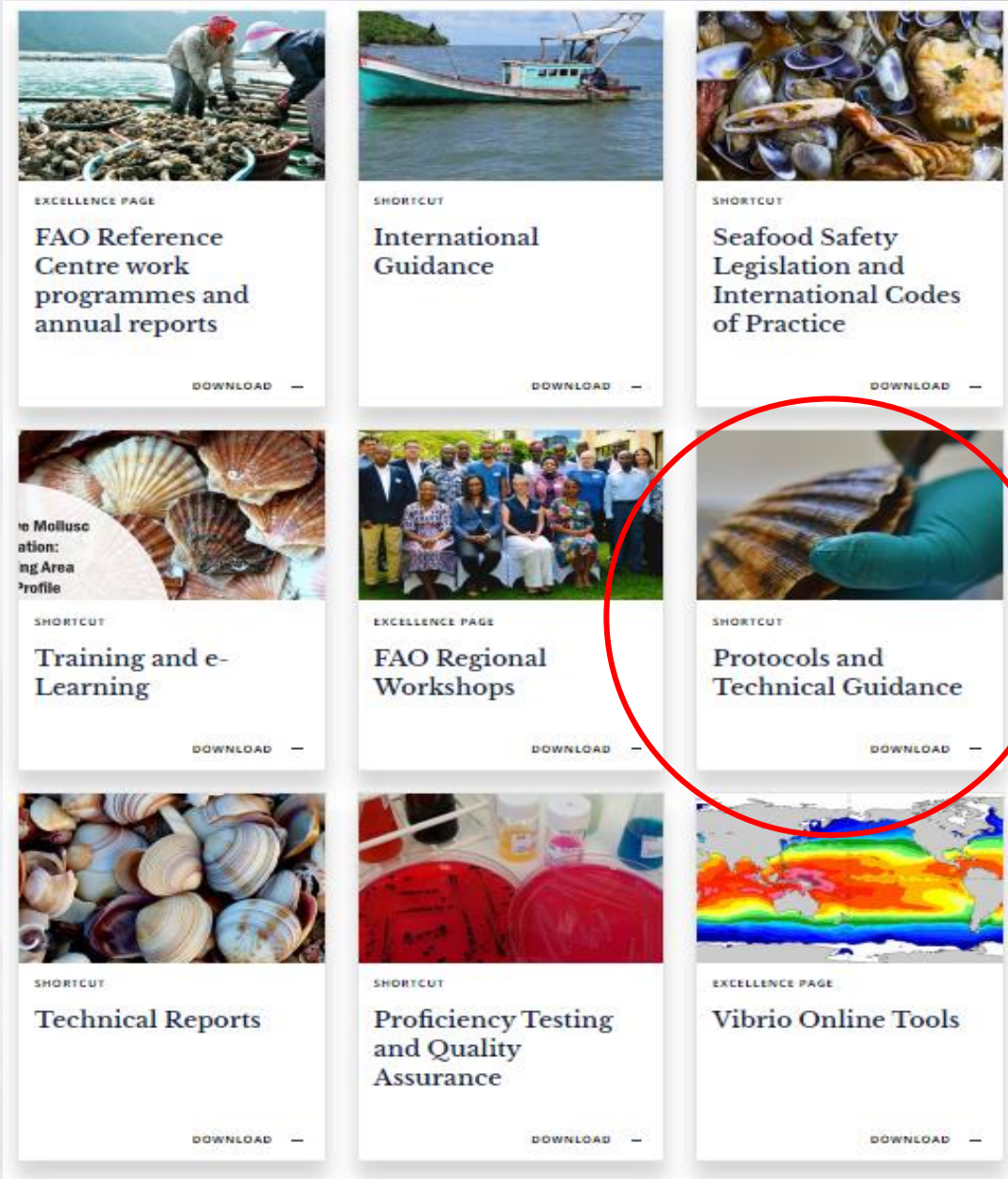
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FOR BIVALVE MOLLUSC
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PROTOCOLS AND TECHNICAL GUIDANCE

Test method protocols for determination of faecal indicator organisms and selected pathogens with relevance to bivalve molluscan shellfish programmes can be downloaded from this section.

These protocols are based upon internationally recognised standard methods such as those published by the International Standards Organisation (ISO), the European Committee for Standardization (CEN) or the American Public Health Association (APHA).

In addition, technical guidance notes and calculation spreadsheets to assist laboratories using the methods are included.

Please [contact us](#) for further information or assistance.



GENERIC PROTOCOLS

[FIND OUT MORE](#)



TECHNICAL GUIDANCE AND CALCULATION SPREADSHEETS

[FIND OUT MORE](#)



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International Centre for

GENERIC PROTOCOL

- Generic Protocol for the enumeration of Escherichia coli in bivalve molluscan shellfish by the most probable number (MPN) technique (based on ISO 16649-3)
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Generic protocol

***Enumeration of Escherichia Coli in bivalve molluscan shellfish
by the most probable number (MPN) technique (based on ISO
16649-3)***

Author(s): Louise Stockley

Issue Date: 29.06.20

(based on ISO 16649-3)

(following ISO 15216-1)



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Louise Stockley

MICHELLE PRICE- HAYWARD

PRINCIPAL SCIENTIST - SEAFOOD SAFETY

Michelle Price-Hayward is an environmental microbiologist with more than 20 years' experience in environmental assessment, water quality and food safety microbiology. Whilst completing her MSc at Texas A&M University, she worked on bathing waters monitoring and undertook a pilot project on antimicrobial resistance profiling as a means of bacterial source tracking. She expanded her microbiological knowledge and skills at the Royal Veterinary College, working in pathology & infectious diseases on a range of teaching and research projects including implementation of Good Research Practice principals in a Biosafety Level 2/3 molecular genetics laboratory working with human and bovine TB. She joined Cefas in 2006 to coordinate and deliver a large programme of environmental risk assessments for sanitary surveys of both aquaculture and wild-harvest shellfisheries for the Food Standards Agency Scotland, now Food Standards Scotland. In addition to delivery she provided training at the EU and national level on the planning and conduct of field surveys and sanitary assessments. Michelle took up the role of group manager for food safety in 2015 and has provided consultancy and advice to government and commercial clients in relation to risks arising in primary production of bivalve molluscs.

Contact Details:

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DR ANDREW TURNER

PRINCIPAL SCIENTIST - CHEMISTRY

Dr Andrew Turner is the Principal Chemist in the Cefas Food Safety Group based at Cefas' Weymouth laboratory. In his current position he is responsible for the biotoxin analytical chemistry testing in shellfish performed on behalf of the UK competent authorities. His role includes the provision of scientific advice to external and internal customers in relation to toxin-testing methods. He also oversees the development and implementation of new methods for food safety surveillance. Andrew is also responsible for the development of the research activities of the chemistry team, conducting much of the work in collaboration with other organisations. He has over 17 years postgraduate experience of delivering analytical chemistry in a commercial environment. Current research areas of interest include the development of new instrumental methods for marine biotoxins, assessment of rapid testing methods, validation and implementation of toxin assays and the impact of cyanobacteria on food safety. They also include the development and production of stable reference materials, potential impacts of Tetrodotoxin in Europe, risks from new and emerging toxins and chemical contaminants within UK waters.

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Online learning e-module



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TRAINING AND E-LEARNING

Training to support the safe and sanitary production of seafood, including the operation and approval of depuration systems, can be arranged on request for food safety, environmental and public health professionals.

In collaboration with the FAO e-learning Academy we are developing open access e-learning modules to help support the development of microbiological monitoring programmes. These are based on the World Health Organisation (WHO) / FAO technical guidance for the development of the growing area aspects of bivalve mollusc sanitation programmes.

The first two of these e-learning modules are now live; the first module covering the Growing Area Risk Profile, and the second module covering the Growing Area Assessment and Review.

Please contact us for further information or to discuss your training needs.



Bivalve Mollusc Sanitation: Growing Area Risk Profile

Food and Agriculture Organization of the United Nations Cefas

E-learning modules to cover all sections of the FAO/WHO Technical Guidance in 3 modules



FAO Food and Agriculture Organization of the United Nations

FAO elearning Academy

Home About the Academy What we do **Courses** Webinars Partners Help and Support

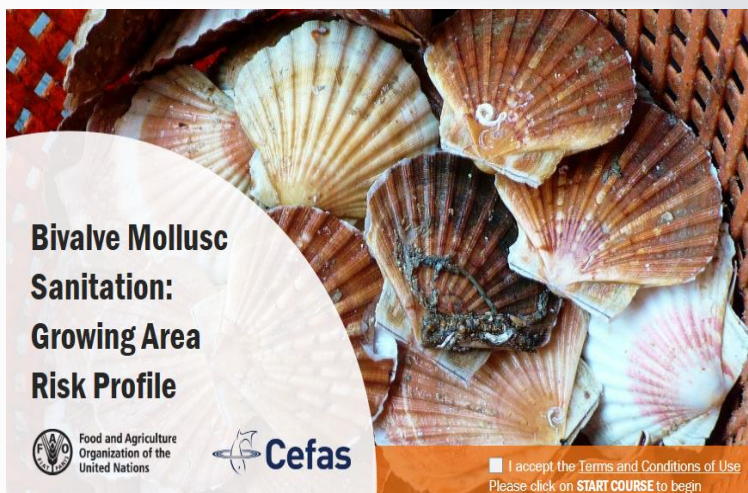
Explore our wide variety of free, multilingual courses in the areas of food safety, nutrition, and economic development and sustainable management of natural resources. These courses align with the Sustainable Development Goals (SDGs).

bivalve shellfish

Series Year New Certification

<https://elearning.fao.org/courses>

Module 1



Bivalve Mollusc
Sanitation: Growing Area
Risk Profile

AUGUST 2019

2 h 30 m

COMPLETE

Module 2



Bivalve Mollusc
Sanitation: Growing Area
Assessment & Review

OCTOBER 2020

5 h

COMPLETE

Module 3



Classification, and
Growing Area Monitoring
and Growing Area
Management



Under development



Thank you