Food and Agriculture Organization of the United Nations

Centre for Environment Fisheries & Aquaculture Science

Atelier de formation sur le profilage des risques et l'assainissement des coquillages bivalves avec l'appui du Centre de Référence de la FAO

21-23 février 2023

Sénégal

Growing Area Risk Profile

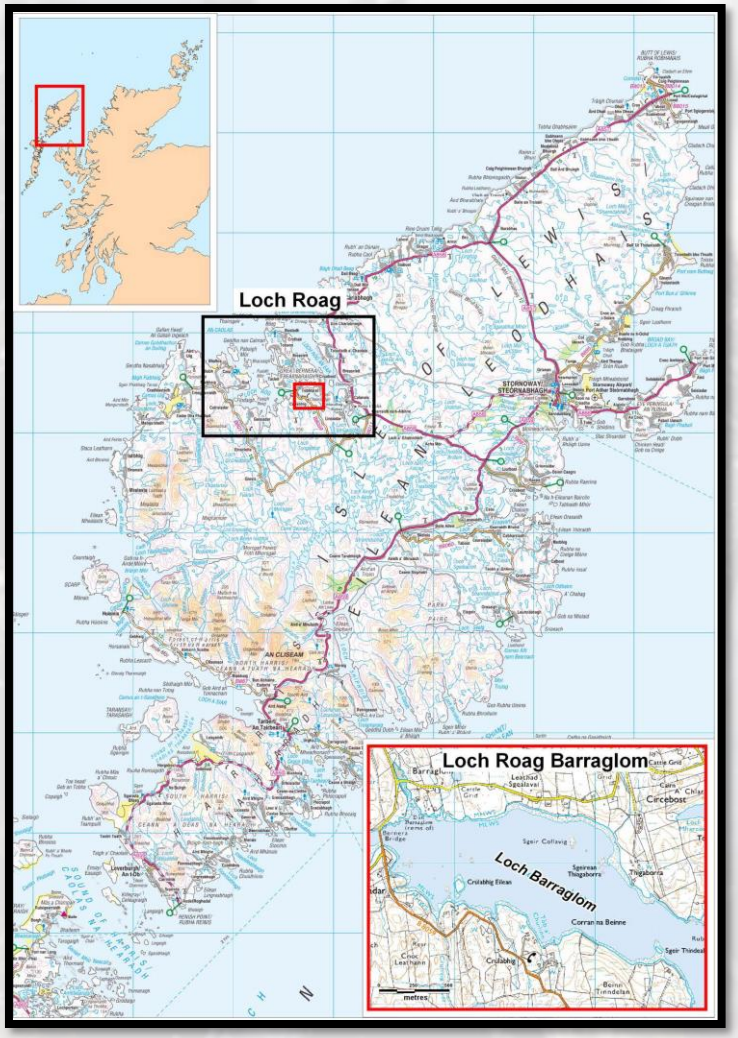
By James Lowther

Growing Area Risk Profile

- Initial assessment of a growing area proposed for monitoring
- **Desk-based** exercise to gather and assess available information
- Results in **"Go/No Go"** decision
  - Go = Commitment to proceed to full Growing Area Assessment
  - No Go = Area is not suitable for harvest
- Different elements detailed in chapter 2 of the FAO/WHO guidance

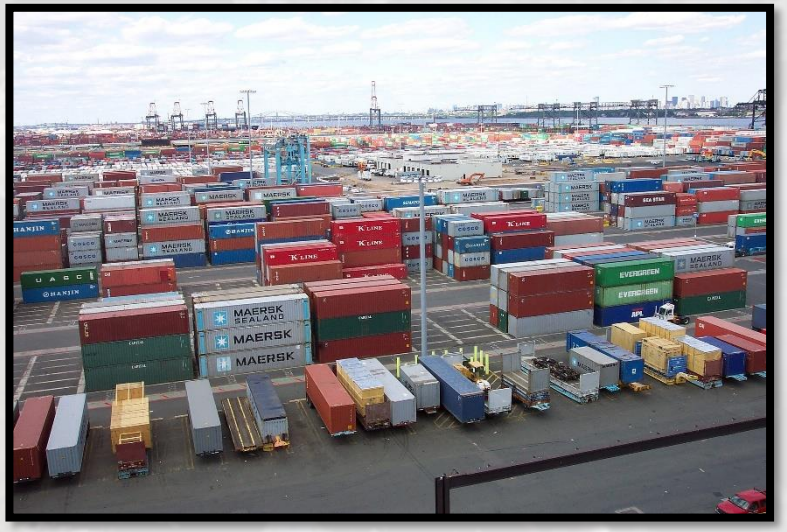
1. Area Overview

- Describe geographic location of the growing area
- Sets context for rest of document



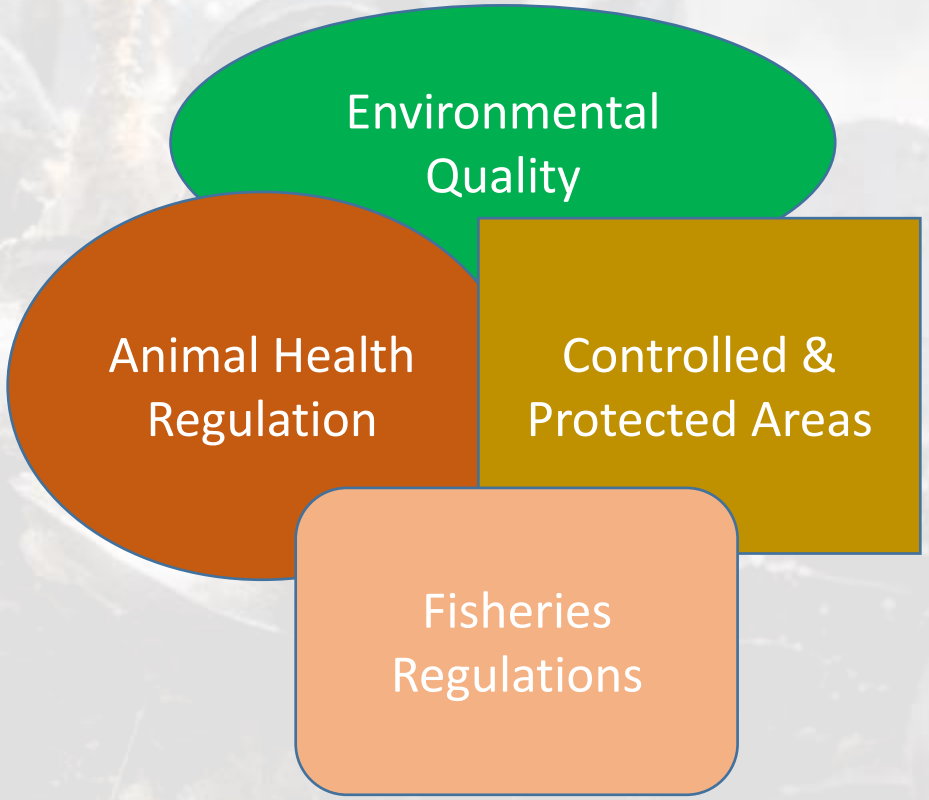
2. Scope of Risk Profile

- Summarize main purpose of proposed production
  - Recreational gathering for home consumption
  - Domestic commercial sales
  - International trade – which region?
- Will determine what regulations or requirements will be relevant



3. Existing Legal Framework

- Describe relevant food safety regulations etc.
- Identify authorities responsible for sanitation programme
- Identify other official bodies with responsibilities related to growing area

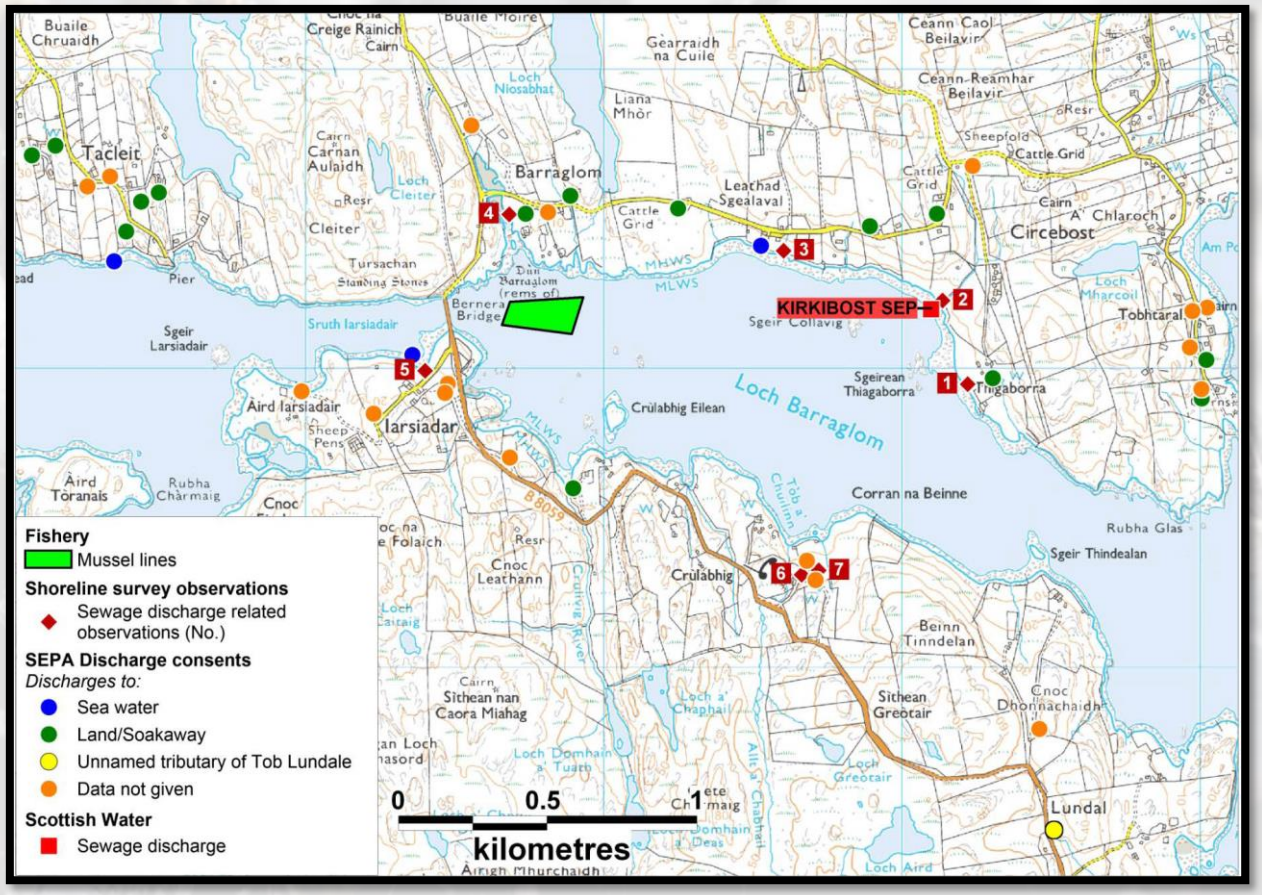


4. Current Industry Situation and Available Resources

Who?	What?	Where?	How?	When?
Aquaculture business Casual gatherers	Species harvested Biomass available	Location and extent Where in water column Distance to landing site	Cultivation method Harvesting method Relay or storage	Seasonality of harvest Seasonal variations in environment

5. Extent of Assessment Area

- Determine area for which data are needed
- This area will extend beyond area of intended harvest
- Depends on sources and transport of contamination



6. Epidemiological and Public Health Data

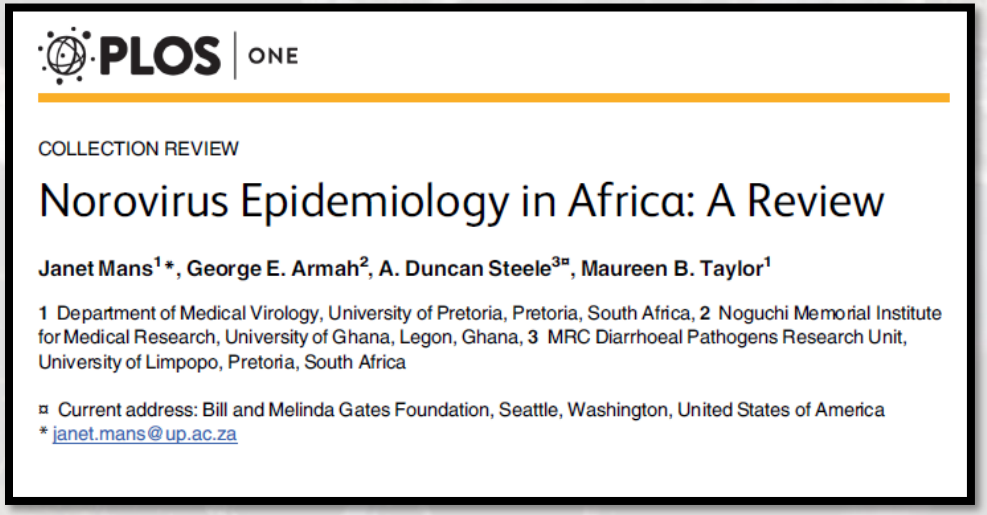
- Identify relevant data on occurrence of diseases in population
  - Local
  - Regional
  - National
  - International
- Evidence of previous bivalve-related outbreaks very important data
- <u>Absence of data does not imply hazard is not present</u>

ORIGINAL ARTICLE BACTERIOLOGY

Prevalence and characterization of extended-spectrum *β*-lactamase-producing clinical *Salmonella enterica* isolates in Dakar, Senegal, from 1999 to 2009

D. Harrois[1,2,*], S. Breurec[2,3,*], A. Seck[2], A. Delaune[1], S. Le Hello[1], M. Pardos de la Gándara[1], L. Sontag[1], J.-D. Perrier-Gros-Claude[2], J.-M. Sire[2], B. Garin[2,4] and F.-X. Weill[1]

1) *Institut Pasteur, Unité des Bactéries Pathogènes Entériques, Paris, France,* 2) *Institut Pasteur de Dakar, Unité de Bactériologie Médicale et Environnementale, Dakar, Senegal,* 3) *Institut Pasteur de Bangui, Laboratoire de Biologie Médicale, Bangui, République Centrafricaine and* 4) *Institut Pasteur de Madagascar, Laboratoire de Bactériologie Expérimentale, Antananarivo, Madagascar*



PLOS ONE

COLLECTION REVIEW

Norovirus Epidemiology in Africa: A Review

Janet Mans[1]*, George E. Armah[2], A. Duncan Steele[3¤], Maureen B. Taylor[1]

1 Department of Medical Virology, University of Pretoria, Pretoria, South Africa, 2 Noguchi Memorial Institute for Medical Research, University of Ghana, Legon, Ghana, 3 MRC Diarrhoeal Pathogens Research Unit, University of Limpopo, Pretoria, South Africa

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7. Intended Use and Consumers

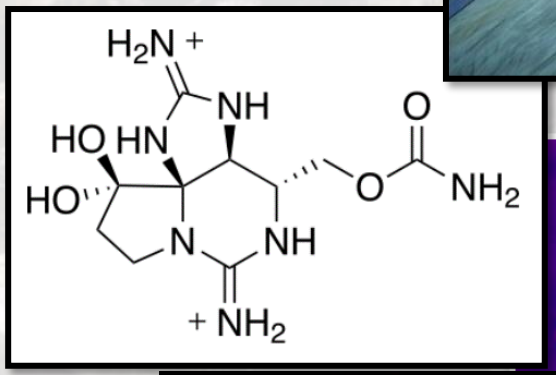
- Gather information of the frequency and quantity of consumption
- Methods of presentation, processing and preparation
- Identify potential high risk consumers

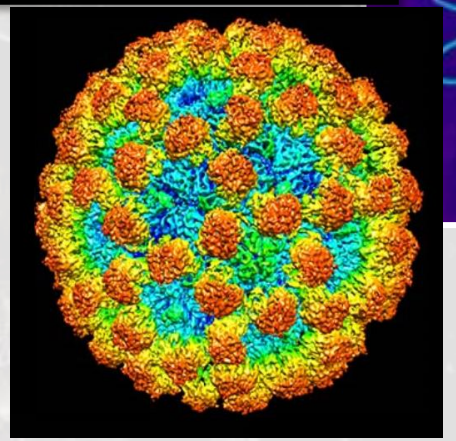
8. Other Relevant Information

- Gather information related to contamination sources
  - Human activity
    - Land-based
    - Water-based
  - Sewage disposal
  - Farm animals
  - Wildlife populations
  - Watercourses
- Information related to hazard impact
  - Topography
  - Hydrology
  - Meteorology

9. Hazards to be Considered

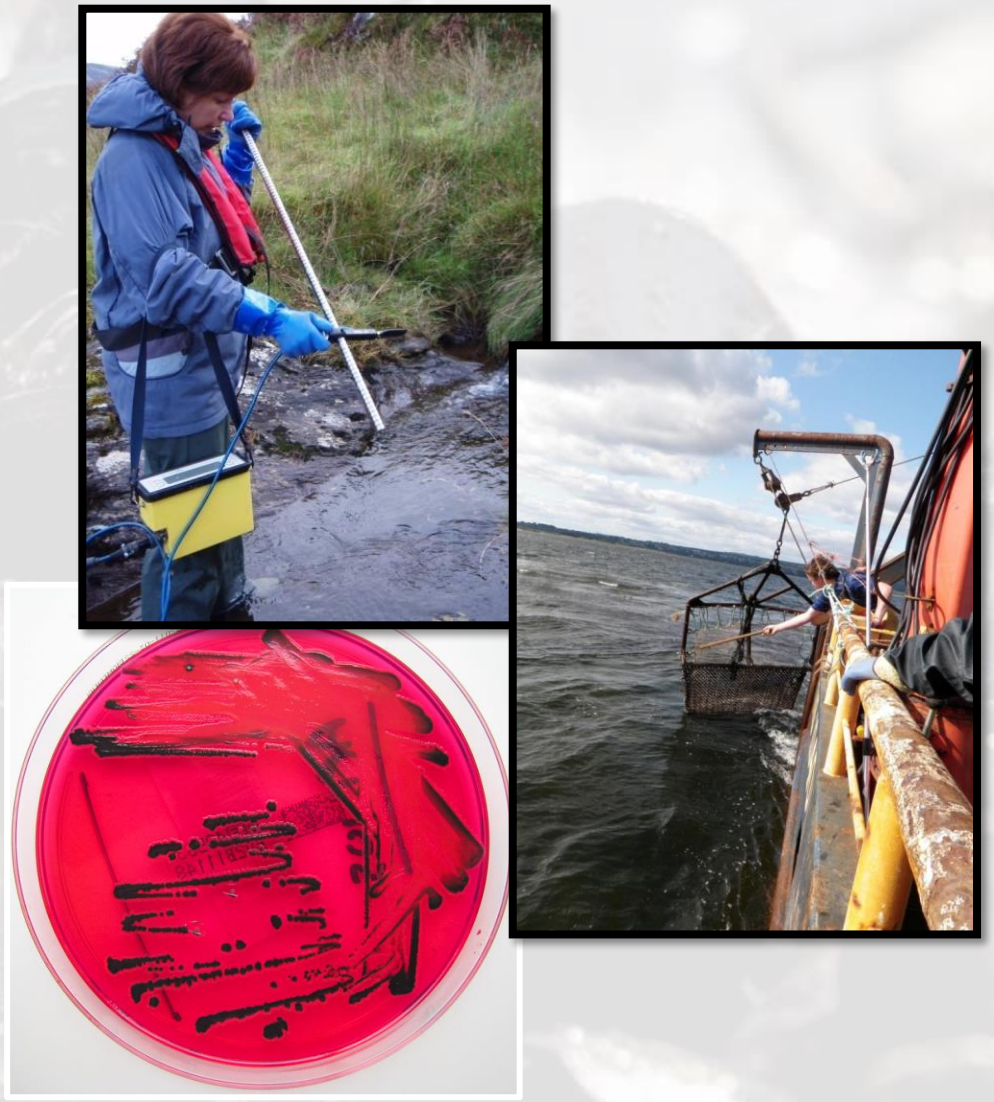
- Based on the information gathered, define the hazards that are relevant to the production area to include:-
  - Microbiological hazards
  - Chemical and radiological hazards
  - Marine biotoxins
- Varies according to:-
  - Legal requirements
  - Epidemiological, monitoring data etc.
  - Potential sources of contamination
  - Methods of processing, preparation etc.





10. Programme Capability and Capacity

- Determine whether the responsible authority and others are able to undertake all the necessary activities for a sanitation programme
  - Appropriate budget
  - Sufficient qualified staff
  - Relevant and sufficient equipment etc.
- **<u>Laboratories</u>** with relevant expertise and capacity to carry out testing, and in suitable location (delivery times)



11. Cost Benefit Analysis

- Estimate the overall medium-term **costs** for the sanitation programme for the growing area
  - Cost of growing area assessment
  - Cost of primary monitoring and initial review
  - Cost of ongoing monitoring

- Estimate the overall medium-term **benefits** of production
  - Value at first sale
  - Value to local community
  - Value of access to export markets
  - Value of public health protection

12. Conclusions and Recommendations

Outcome of Risk Profile

- Provide summary of key information
- Identify knowledge gaps
- Recommendations for further action

- **Decision: "Go" or "No Go"?**
- Potential reasons for "No Go":
  - Knowledge gaps too great
  - Contamination levels likely to be unacceptable
    - Microbiological
    - Chemical
    - Biotoxins
  - Post harvest treatment insufficient to reduce risks
  - Cost benefit analysis unfavourable

13. Documentation of the Growing Area Risk Profile

- Document conclusions and recommendations with clear link to supporting information
- This documentation should be made available to the responsible authority **and other stakeholders**
- Provides basis for subsequent reviews and **Growing Area Assessment** (if decision is “Go”)