



Food and Agriculture
Organization of the
United Nations



Virtual Regional Workshop on bivalve molluscs sanitation

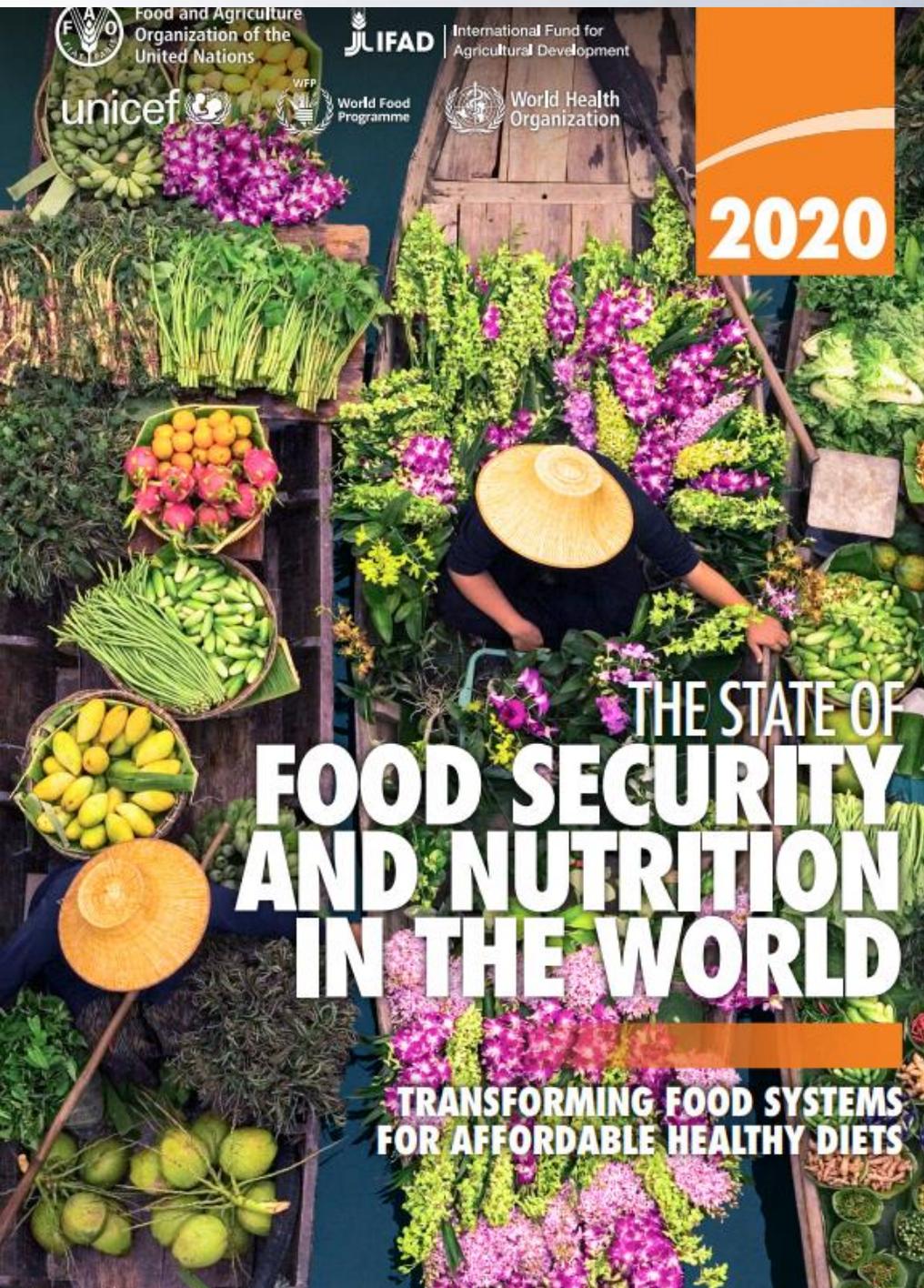
November 2, 3 and 4 2021

Opening and Instructions

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FAO Fisheries Division

How the workshop will run

- Three, three hour sessions, today, tomorrow and on Thursday – all virtual using Zoom – you should all have an agenda
- Workshop language is English – if we are speaking to quickly and if there is anything that you do not understand please tell us
- Please respect the start times and breaks
- Tomorrow there are some group sessions, you have all been assigned a group. Either red, yellow, blue or green, this is next to your name in the delegate list
- There will be a bivalve mollusc quiz on the final day, and a certificate of attendance which may count towards your Continuous Professional Development
- We want this workshop to be both useful and help us develop lasting relationships but we also want it to be FUN!



THE STATE OF FOOD SECURITY AND NUTRITION IN THE WORLD

**TRANSFORMING FOOD SYSTEMS
FOR AFFORDABLE HEALTHY DIETS**

**TABLE 1
PREVALENCE OF UNDERNOURISHMENT (PoU) IN THE WORLD, 2005–2019**

	Prevalence of undernourishment (%)							
	2005	2010	2015	2016	2017	2018	2019*	2030**
WORLD	12.6	9.6	8.9	8.8	8.7	8.9	8.9	9.8
AFRICA	21.0	18.9	18.3	18.5	18.6	18.6	19.1	25.7
Northern Africa	9.8	8.8	6.2	6.3	6.6	6.3	6.5	7.4
Sub-Saharan Africa	23.9	21.3	21.2	21.4	21.4	21.4	22.0	29.4
Eastern Africa	32.2	28.9	26.9	27.1	26.8	26.7	27.2	33.6
Middle Africa	35.5	30.4	28.2	28.8	28.7	29.0	29.8	38.0
Southern Africa	4.9	5.4	7.0	8.0	7.0	7.9	8.4	14.6
Western Africa	13.8	12.1	14.3	14.2	14.6	14.3	15.2	23.0
ASIA	14.4	10.1	8.8	8.5	8.2	8.4	8.3	6.6
Central Asia	11.0	7.7	3.0	3.0	3.0	3.0	2.7	< 2.5
Eastern Asia	7.6	3.8	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5
South-eastern Asia	17.3	11.7	10.5	10.0	9.8	9.8	9.8	8.7
Southern Asia	20.6	15.4	14.4	13.8	13.1	13.8	13.4	9.5
Western Asia	11.8	10.4	10.7	11.1	11.1	11.2	11.2	13.1
<i>Western Asia and Northern Africa</i>	10.9	9.7	8.6	8.9	9.0	8.9	9.0	10.4
LATIN AMERICA AND THE CARIBBEAN	8.7	6.7	6.2	6.7	6.8	7.3	7.4	9.5
Caribbean	21.3	17.5	17.3	17.0	16.6	17.0	16.6	14.4
Latin America	7.8	5.9	5.4	6.0	6.1	6.6	6.7	9.1
Central America	8.1	7.9	7.9	8.6	8.3	8.4	9.3	12.4
South America	7.6	5.1	4.4	4.9	5.2	5.8	5.6	7.7
OCEANIA	5.6	5.4	5.5	5.9	6.0	5.7	5.8	7.0
NORTHERN AMERICA AND EUROPE	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5

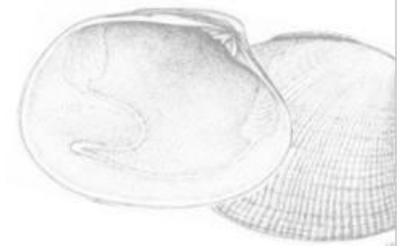
■ On track
 ■ Off track – some progress
 ■ Off track – no progress or worsening

Some figures

- Over two billion people worldwide are micronutrient deficient
- Vitamin A deficiency, iron deficiency anaemia and iodine deficiency disorders are the most common forms
- Across the world there is an estimated 1.5 million sq km (579,000 sq miles) of coastline suitable for growing bivalve shellfish. Developing just 1% of this could produce enough bivalves to [fulfil the protein requirements of more than one billion people](#).

FAO/INFOODS Databases

FAO/INFOODS global food composition database for fish and shellfish, version 1.0 - uFiSh1.0



Some figures

International trade has been the main driving factor for the rapid growth of the bivalve mollusc production industry during the last six decades, growing from nearly one million tonnes in 1950 to **17.3 million tonnes in 2018**.

According to FAO statistics, the **export value** of bivalve mollusc trade reached **US\$ 4.26 billion in 2018**.

Though bivalves are traded in different forms such as fresh, chilled, frozen or canned, the **value of trade** (Export) in live, fresh and chilled bivalves stood **at US\$ 1.44 billion in 2018**.

Food

[Section I : Meat of domestic ungulates](#)

[Section II : Meat from poultry and lagomorphs](#)

[Section III : Meat of farmed game](#)

[Section IV : Wild game meat](#)

[Section V : Minced meat, meat preparations and mechanically separated meat \(MSM\)](#)

[Section VI : Meat products](#)

[Section VII : Live bivalve molluscs](#)

[Section VIII : Fishery products](#)

[Section IX : raw milk, dairy products, colostrum and colostrum-based products](#)

[Section X : Eggs and egg products](#)

[Section XI : Frogs' legs and snails](#)

[Section XII : Rendered animal fats and greaves](#)

[Section XIII : Treated stomachs, bladders and intestines: casing only](#)

[Section XIV : Gelatine](#)

[Section XIV/XV : Treated raw material for the production of gelatine and collagen \(TCG\)](#)

[Section XV : Collagen](#)

[Section XIV/XVbis : Raw materials for the production of gelatine and collagen](#)

Section VII : Live bivalve molluscs

PDF Documents (last change date)

- [Australia \(20/11/2019\)](#)
- [Canada \(17/06/2020\)](#)
- [Chile \(20/11/2020\)](#) 
- [Jamaica \(20/03/2008\)](#)
- [Japan \(30/12/2013\)](#)
- [Korea, Republic Of \(16/07/2015\)](#)
- [Morocco \(09/07/2020\)](#)
- [New Zealand \(25/09/2020\)](#)
- [Peru \(11/06/2019\)](#)
- [Thailand \(04/01/2018\)](#)
- [Tunisia \(15/05/2019\)](#)
- [Turkey \(22/07/2020\)](#)
- [Viet Nam \(23/02/2017\)](#)

Section VIII : Fishery products

PDF Documents (last change date)

- [Albania \(20/11/2020\)](#)
- [Algeria \(04/11/2020\)](#)
- [Angola \(14/12/2019\)](#)
- [Antigua And Barbuda \(13/10/2016\)](#)
- [Argentina \(24/11/2020\)](#)
- [Armenia \(15/09/2008\)](#)
- [Australia \(24/11/2020\)](#)
- [Azerbaijan \(17/06/2020\)](#)
- [Bahamas \(18/11/2020\)](#)
- [Bangladesh \(28/08/2019\)](#)
- [Belarus \(28/10/2020\)](#)
- [Belize \(20/11/2020\)](#)
- [Bosnia and Herzegovina \(29/10/2020\)](#)
- [Brunei Darussalam \(22/11/2016\)](#)
- [Canada \(17/06/2020\)](#)
- [Cape Verde \(02/05/2019\)](#)
- [Chile \(21/11/2020\)](#)
- [China \(24/09/2020\)](#)
- [Colombia \(20/11/2020\)](#)
- [Costa Rica \(01/03/2016\)](#)
- [Cote D'Ivoire \(17/06/2020\)](#)
- [Cuba \(26/02/2018\)](#)
- [Curaçao \(18/11/2020\)](#)
- [Ecuador \(29/10/2020\)](#)
- [Egypt \(20/11/2020\)](#)
- [El Salvador \(06/12/2018\)](#)
- [Eritrea \(18/12/2009\)](#)
- [Falkland Islands \(Malvinas\) \(09/07/2020\)](#)
- [Fiji \(13/11/2020\)](#)
- [French Polynesia \(15/10/2018\)](#)
- [Gabon \(24/11/2009\)](#)
- [Gambia \(31/10/2019\)](#)
- [Ghana \(01/12/2020\)](#)
- [Grenada \(04/02/2013\)](#)
- [Guatemala \(04/10/2019\)](#)
- [Guyana \(13/03/2019\)](#)
- [Honduras \(19/12/2018\)](#)
- [India \(27/10/2020\)](#)
- [Indonesia \(06/11/2018\)](#)
- [Iran \(Islamic Republic Of\) \(28/10/2020\)](#)
- [Israel \(04/11/2020\)](#)
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- [Kazakhstan \(26/02/2019\)](#)
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- [Korea, Republic Of \(18/11/2020\)](#)
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- [Malaysia \(24/11/2020\)](#)
- [Maldives \(02/12/2019\)](#)
- [Mauritania \(21/11/2020\)](#)
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- [Mexico \(17/11/2020\)](#)
- [Moldova, Republic Of \(11/11/2016\)](#)
- [Montenegro \(30/10/2019\)](#)
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- [Myanmar \(02/12/2020\)](#)
- [Namibia \(11/09/2020\)](#)
- [New Caledonia \(03/10/2017\)](#)
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- [Nicaragua \(24/11/2020\)](#)
- [Nigeria \(01/08/2018\)](#)
- [North Macedonia \(13/09/2017\)](#)
- [Oman \(17/09/2020\)](#)
- [Pakistan \(27/02/2013\)](#)
- [Panama \(24/11/2020\)](#)
- [Papua New Guinea \(22/11/2019\)](#)
- [Peru \(10/09/2020\)](#)
- [Philippines \(13/11/2020\)](#)
- [Republic of the Congo \(05/03/2010\)](#)
- [Russian Federation \(05/11/2020\)](#)
- [Saint Helena, Ascension and Tristan da Cunha](#)
- [Saudi Arabia \(18/08/2014\)](#)
- [Senegal \(24/11/2020\)](#)
- [Serbia \(29/10/2020\)](#)
- [Seychelles \(10/01/2020\)](#)
- [Singapore \(09/08/2018\)](#)
- [Sint Maarten \(Dutch part\) \(06/11/2012\)](#)
- [Solomon Islands \(20/11/2020\)](#)
- [South Africa \(19/08/2020\)](#)
- [Sri Lanka \(12/09/2020\)](#)
- [St. Pierre And Miquelon \(23/07/2019\)](#)
- [Suriname \(29/10/2020\)](#)
- [Taiwan \(13/11/2020\)](#)
- [Tanzania, United Republic Of \(06/11/2018\)](#)
- [Thailand \(29/10/2020\)](#)
- [Togo \(14/12/2012\)](#)
- [Tunisia \(10/11/2020\)](#)
- [Turkey \(22/07/2020\)](#)
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- [Ukraine \(29/10/2020\)](#)
- [United Arab Emirates \(22/12/2020\)](#)
- [United States \(12/09/2020\)](#)
- [Uruguay \(18/06/2020\)](#)
- [Venezuela \(17/06/2020\)](#)
- [Viet Nam \(24/11/2020\)](#)
- [Yemen \(23/10/2012\)](#)

European Union Alerts and Border Rejections – Bivalve molluscs

Causes	2016	2017	2018	2019	Total
Microbiological	35	24	49	21	129
Toxins	10	10	7	9	36
Others	6	3	2	3	14
Chemical	0	0	0	2	2
Total	51	37	58	35	181

European Union Alerts and Border Rejections – Bivalve molluscs 2019

Causes	Number cases
Microbiological	21
Toxins	9
Others	3
Chemical	2
Total	35

Causes	Number cases
Escherichia coli	12
DSP	7
Salmonella	4
Norovirus	3
Poor temperature control	2
ASP	1
Cadmium	1
Contaminants	1
Hepatitis A	1
Listeria monocytogenes	1
PSP	1
Unfit for human consumption	1
Total	35

European Union Alerts and Border Rejections – Bivalve molluscs 2019

Total of 35 rejection, representing the 13 % of the alerts and border rejections of all fishery and aquaculture products

Escherichia coli mainly in clams

DSP mainly in mussels and clams

Salmonella 4 cases all in mussels

Norovirus 3 cases only in oysters

Poor temperature control 2 cases in mussels

ASP 1 case in mussels

Cadmium 1 case in mussels

Contaminants 1 case in mussels

Hepatitis A 1 case in clams

Listeria monocytogenes 1 case in scallops

PSP 1 case in mussels

Unfit for human consumption 1 case in mussels

Japan Border Rejections – Bivalve molluscs

Causes	2016	2017	2018	2019	Total
Microbiological	10	5	15	1	31
Chemical	2	0	1	2	5
Total	12	5	16	3	36

Japan Border Rejections – Bivalve molluscs 2019

Causes	Number cases
Chemical	2
Microbiological	1
Total	3

Causes	Number cases
Prometryn	2
Live bacteria	1
Total	3

Total of 3 rejections, representing the 2,7% of the total border rejections of all fishery and aquaculture products.

United States of America Border Rejections – Bivalve molluscs

Causes	2016	2017	2018	2019	Total
Others	37	11	10	51	109
Microbiological	3	1	1	0	5
Total	40	12	11	51	114

United States of America Border Rejections – Bivalve molluscs 2019

Causes	Number cases
Others	51
Total	51

Causes	Number cases
Labelling	30
Filthy	10
Packaging	6
No process	3
Adulteration	2
Total	51

United States of America Border Rejections – Bivalve molluscs 2019

Total of 51 rejections, representing the 4 % of the alerts and border rejections of all fishery and aquaculture products

Labelling 30 cases mainly in scallops

Filthy 10 cases only in scallops

Packaging 6 cases only in scallops

No process 3 cases mainly in clams

Adulteration 2 cases in mussels

Canada

European Union

Japan

USA

Border rejections

Seafood is one of most traded food commodities on the international market. Trade in fish and fishery products is likely to increase in the future to meet the continuing increasing demand.

Veterinary border control is a key factor to ensure that live animals and animal products entering markets are safe and meeting specific import conditions laid out in each country's legislation.



GLOBEFISH - Information and Analysis on World Fish Trade



About GLOBEFISH

Market Reports

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Regulatory Framework for
Bivalve Molluscs

Food Safety Regulation for
Fishery and Aquaculture
Products

Market Access

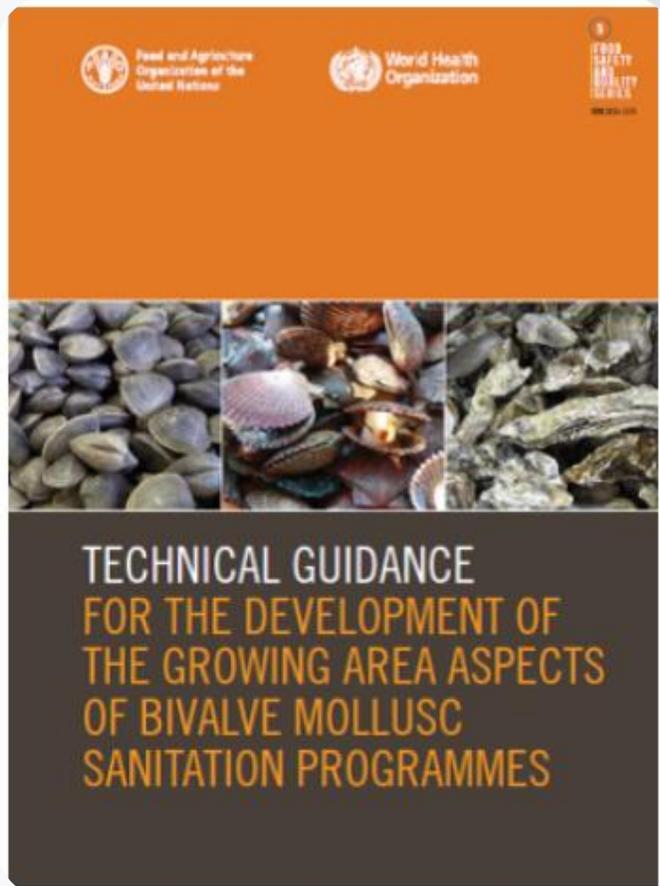
GLOBEFISH Profile



Regulatory Framework for Bivalve Molluscs

List of countries and regions:

- **Canada**
- **European Union**
- **Japan**
- **People's Republic of China**
- **United States of America**



FAO piloted Joint FAO-WHO guidance in Angola, Madagascar, Mozambique and Namibia



Bivalve Mollusc Sanitation: Growing Area Risk Profile



Bivalve Mollusc Sanitation: Growing Area Risk Profile

This course introduces the technical guidance framework for the development of growing areas for bivalve mollusc sanitation programmes. It describes the potential hazards present with live or raw consumption of bivalve molluscs and provides guidance on the completion of a Growing Area Risk Profile (GARP).

Duration: 2.5 hours

Publication Date: August 2019

System Requirements

The **online version** of this course runs on the latest versions of Chrome and Safari. In order to access this course on Internet Explorer or Firefox, you must install and enable Adobe Flash player.

The **downloadable version only** runs on Windows PC's and no additional software is needed.

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Publicado en: AGOSTO 2019

🕒 2 h 30 m de aprendizaje

📁 este curso forma parte de una serie

BIVALVE MOLLUSC SANITATION PROGRAMMES



Iniciar el curso



Descargar el curso (26.5Mb)

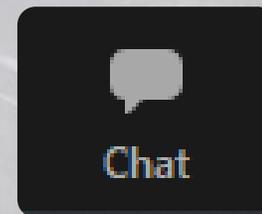
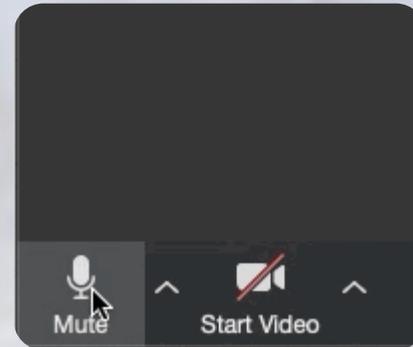
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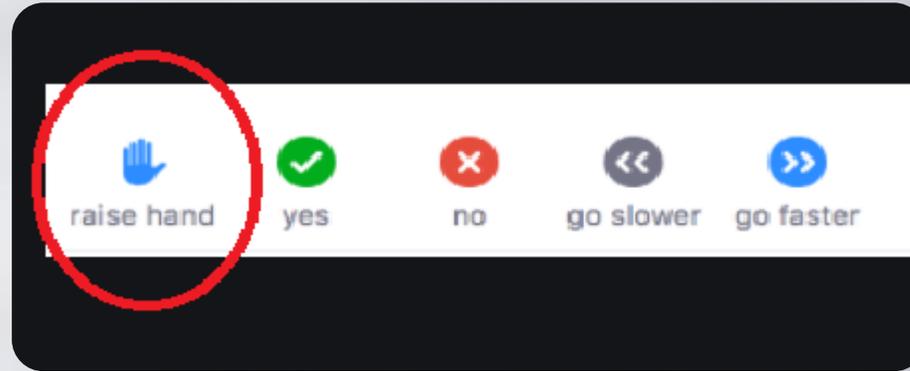
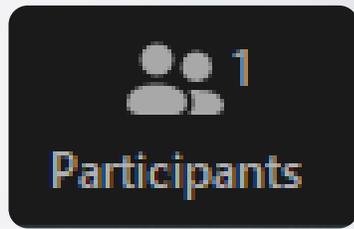
- Individual headsets with high quality microphones and echo cancelling; so you can speak with less background noise.
- A webcam with high-quality video.
- A dual monitor set up to use two screens side by side. One for viewing your screen, and the other viewing other speakers' videos and for following the chat.
- During the Workshop, please, turn off all sound notifications (skype, emails, etc.), specially during your interventions.
- Remember that your presentation will not be interpreted and not all participants are English mother tongue, so please speak slow and clear.

To get the most out of this workshop

- Before sharing your screen, please make sure your slides are open
- Please mute yourself when you are not presenting or making an intervention
- You can use the chat for questions, although we will allocate time for you to make then after each presentation



To get the most out of this workshop



- Please do not forget to add your country name before your names
- If you are having any technical issue, please contact Gloria Loriente