



# Food and Agriculture Organization of the United Nations

Call for participation

**Technical workshop on the use of Whole Genome Sequencing (WGS) for food safety management**  
FAO Headquarters, Rome, Italy, 18 – 20 April 2023

**Application deadline: 17 February 2023**

## Background

[Whole Genome Sequencing](#) (WGS) technology has the potential to play a significant role in the area of food safety. However, in many developing countries, the level of understanding regarding benefits and implications concerning the use of genome sequencing in the area of food safety has been low.

In May 2016, the Food and Agriculture Organization of the United Nations (FAO) organized a [global technical meeting](#) on the impact of WGS on food safety management. FAO also published the first technical paper entitled [the Applications of WGS in food safety management](#) in the same month to provide better understanding of the technical matters with concrete case studies for food safety competent authorities, particularly those in the low- and middle-income countries (LMICs). As an update, a peer-reviewed article "[Investing in Food Safety for Developing Countries: Opportunities and Challenges in Applying Whole-Genome Sequencing for Food Safety Management](#)" was published in the journal of foodborne pathogens and disease in 2019, and article summarized the potential barriers for the LMICs to practically integrate the technology into their everyday food safety management.

The global pandemic of Covid-19 suddenly and drastically changed the context everywhere in the world with regards to the use of genomic sequencing and its usefulness to precisely detect, quantify and analyze microorganisms. Many people, including the general public and policy makers have become familiar with the terms such as genome, PCR, variants, sequencing and so forth, and thus FAO published an article of the potential opportunities of the use of WGS in food safety (see the FAO news "[A silver lining of the pandemic: Whole-genome sequencing and food safety](#)" that summarizes the [article of the same title contributed](#) to the Food Safety Magazine).

## Workshop

Given this context, FAO will organize a workshop at the FAO headquarters in Rome, Italy from 18 to 20 April 2023, inviting government sector professionals from LMICs to discuss the real needs and practical applications of the technology to improve food safety. The workshop will be organized in-person and no real-time streaming / online participations are planned.

## Expected outcomes

- Enhanced understanding of relevant competent authorities on the application and impact of Whole genome sequencing in food safety management.
- Practical guidance provided to support understanding of using WGS in food safety management, benefits, drawbacks and challenges for countries with limited capacities and resources.

## Travel support

FAO will provide financial support to the selected participants for the return travel to and stay in Italy. Daily substance allowance will be provided under FAO liability rules. Obtaining visa to enter Italy will be a solo responsibility of each participant.

## Who can apply?

As this is a global pilot workshop, FAO accepts applications from officers/experts in the government sector, and will select participants from 10 to 12 low- and middle-income countries based on the criteria below. For each country, FAO asks three people to form a team (please see the desired profile of the team members in the following section) to complete the application. As a strong focus is put on national food safety regulatory management, people/experts from private / NGO sectors will not be the target audience, unless they are officially affiliated with the respective government agencies.

### **Three members to form a team – desired profile of the team members**

1. Team member 1 (leader) – senior government official in food safety who is part of decision making for food safety policies in the country.
2. Team member 2 - technical specialist who is likely to perform or direct to perform genome sequencing if the equipment and conditions exist in the country.
3. Team member 3 – technical specialist who is currently tasked to analyze or interpret the relevant laboratory data to provide scientific advice for food safety management / monitoring.

### **Selection criteria and considerations**

Team applications that meet the criteria below will be selected.

- The team is from a low- or middle-income country.
- The team has three members with the desired profile explained in the previous section.
- All team members are affiliated with a government entity.
- All team members are proficient in English as the workshop will be conducted in English.

In addition, gender and geographical balance will be considered to select the applications.

### **Conditions**

To be eligible for financial support, following conditions will apply.

- Selected participants will respond to a series of online questionnaires before and after the workshop.
- Selected participants will be expected to share the results of the workshop in their countries after the workshop.
- Selected participants will be fully responsible to obtain their visas to enter Italy. FAO can provide an invitation letter but cannot intervene the visa issuance process.
- Selected participants will attend the workshop in full. Missing sessions, arriving at the workshop late, and leaving the workshop early will result in cancellation of the financial support.

### **How to apply**

Complete the [application form](#) by the end of the day (local time of the applicants), Friday 17 February 2023.

### **Note**

Any questions regarding the call can be sent to Ms Maura Di Martino (pronouns: she, her, hers) at [Maura.dimartino@fao.org](mailto:Maura.dimartino@fao.org). FAO gratefully acknowledge the financial support from the governments of Australia, Canada and the United States of America for this workshop.