The International FAO Antimicrobial Resistance Monitoring (InFARM) system

Enrolment questionnaire

# Introduction

FAO has developed this brief enrolment questionnaire as a first step to joining the International FAO Antimicrobial Resistance System (InFARM) and its IT platform. Through this questionnaire, your country can identify national focal point(s) responsible for reporting data to InFARM and express the needs and commitment for progressively strengthening monitoring and surveillance capacities.

It is encouraged that InFARM focal point(s) is/are nominated in dialogue and agreement with national coordination structure(s) overseeing the implementation of AMR monitoring and surveillance activities in animals and food. InFARM national focal point(s) should be national expert(s) with knowledge and/or experience in epidemiology and/or microbiology, and data management of antimicrobial susceptibility testing results (i.e., AMR data) originated from samples collected in animals and food.

A single InFARM national focal point could be nominated to cover all AMR surveillance and monitoring in food and agriculture sectors. Alternatively, several InFARM national focal points could be nominated, one per specific AMR surveillance programme under FAO’s remit according to the national surveillance network structure.

The InFARM country focal point(s) is/are requested to fill and return this questionnaire to [**FAO-AMR-InFARM@fao.org**](mailto:FAO-AMR-InFARM@fao.org). Upon FAO internal validation, the focal point(s) will receive the credentials and instructions necessary to access the InFARM IT platform and further guidance on the next steps for submission of AMR surveillance information and InFARM AMR data files.

For more information and guidance, please read the FAO manual for implementation of the InFARM System.

# InFARM system enrolment questionnaire

***IMPORTANT NOTICE: This Word document is intended for national authorities responsible for AMR monitoring and surveillance in agrifood systems to nominate InFARM focal points. Please respond carefully in the corresponding sections or tick boxes without altering or modifying the original contents. Any modifications to the original content may compromise the accuracy or integrity of the information contained herein. If you have any doubts, please contact*** [***FAO-AMR-InFARM@fao.org***](mailto:FAO-AMR-InFARM@fao.org)***.***

**Section A – identification of InFARM focal points and national AMR focal points**

A1. Country:

A2. Date of filling the questionnaire (dd/mm/yyyy):

A3. Name and contact details of the person filling this questionnaire:

|  |  |  |
| --- | --- | --- |
| Surname, Name | Job position  (Please include institution) | Contact details  (Email address, phone number) |
|  |  |  |
|  |  |  |
| *Please add more rows as needed* |  |  |

A4. Name and contact details of the nominated InFARM national focal point(s)[[1]](#footnote-2) responsible for submitting AMR surveillance information and InFARM AMR data files:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Surname, Name | Job position  (Please include institution) | AMR Surveillance programmes\* | Email Address | Phone Number  (If available) |
|  |  | Choose an item. |  |  |
|  |  | Choose an item. |  |  |
|  |  | Choose an item. |  |  |
|  |  | Choose an item. |  |  |
| *Please add more rows as needed* |  | Choose an item. |  |  |

*\*In the case only one InFARM national focal point is nominated to cover several surveillance programmes please indicate “several or all food and agriculture surveillance programmes”. If more than one InFARM national focal points are nominated, please indicate the AMR surveillance and monitoring programme under FAO’s remit (i.e., healthy terrestrial animals, diseased terrestrial animals, healthy aquatic animals, diseased aquatic animals, food at processing and/or point of sale).*

A5. Name and contact details of additional national focal points overseeing overall AMR activities by sector:

|  |  |  |  |
| --- | --- | --- | --- |
| Sector | Surname, Name | Job position  (Please include institution) | Contact details.  (Email address, phone number) |
| Animal Health (Terrestrial) |  |  |  |
| Animal Health (Aquatic) |  |  |  |
| Food safety |  |  |  |
| Codex Alimentarius |  |  |  |
| Feed safety |  |  |  |
| Environment |  |  |  |
| Plant Health/Production |  |  |  |
| AMR Surveillance laboratory network (chairperson) |  |  |  |
| One Health Committee  (chairperson) |  |  |  |
| *Others* |  |  |  |
| *Others* |  |  |  |

**Section B – Additional questions**

B1. Credentials to access the InFARM System and its IT platform.

|  |  |  |  |
| --- | --- | --- | --- |
|  | Question | Answers | Comments |
| B1a | Would your country want to provide credentials to access the InFARM IT platform to additional national AMR focal points not responsible for submitting AMR surveillance information and InFARM AMR data files?  *Please note that by providing credentials, the user(s) will receive email notifications during the processes of AMR data submission and validation.* | No, share credentials only to the InFARM focal point(s) identified in the table A4.  Yes, share credentials to all national AMR focal point(s) identified in table A5.  Yes, share credentials to selected national AMR focal point(s) identified in table A5 (please answer B1b). |  |
| B1b | If yes to *“share credentials to* ***selected*** *national AMR focal point(s)”* (**B1a)**, please indicate which selected national AMR focal point(s) identified in table A5 should receive credentials to access the InFARM IT platform | Animal Health (Terrestrial)  Animal Health (Aquatic)  Food safety  Codex Alimentarius  Feed safety.  Environment  Plant Health/Production  AMR Surveillance laboratory network (chairperson)  One Health Committee  (chairperson)  Others, please indicate below:  ………. |  |

B2. Participation in the annual open call for data

|  |  |  |  |
| --- | --- | --- | --- |
|  | Question | Answer | Comments |
| B2a | Is your country planning to participate in the InFARM open call for data this year? | Yes  No |  |
| B2b | Is your country planning to submit AMR data to the InFARM IT platform? | Yes (please answer to questions B2c and B2d)  No (please answer to question B2e) |  |
| B2c | If yes to B2b, at which level of confidentiality? | Level 1- private: only sharing data in the InFARM private interface and only visible for my country.  Level 2- private and public: sharing data in the InFARM private interface and allowing data migration to the InFARM publicly available interface on an annual basis. For this option, visualizations in the public interface are protecting country identity by aggregating data at regional and subregional levels. Additionally, anonymized aggregated data at regional and subregional level will be migrated to the Quadripartite Global Integrated System for Surveillance of AMR and AMU (GISSA).  Level 3- private and public: sharing data in the InFARM private interface and allowing data migration to the InFARM publicly available interface showing country identity. Additionally, data at country level will be migrated to the Quadripartite Global Integrated System for Surveillance of AMR and AMU (GISSA).  Decision under discussion | *Different InFARM AMR data files should be created by year, level of representativeness of the data, and surveillance domain. Please explain here if the country plans to report the different InFARM AMR data files using different levels of confidentiality.* |
| B2d | If yes to B2b, which data model option will be used for reporting antimicrobial susceptibility testing (AST) results (i.e. AMR data)? | Option A: each line of an InFARM AMR data file represents the AST data from one bacterial isolate. This option allows reporting of raw quantitative AST results (i.e. inhibition zone diameters including the disk content or MIC values).  Option B: each line of an InFARM AMR data file represents the aggregated data on the total number of isolates per bacteria-antibiotic combination distributed across the different categories for interpretation of AST results, and stratified by sample origin, animal species and specimen. This option only allows reporting of already interpreted AST data (i.e. it does not allow reporting of raw quantitative AST results).  Decision under discussion | *Different InFARM AMR data files should be created by year, level of representativeness of the data, and surveillance domain. Please explain here if the country plans to report the different InFARM AMR data files using different data model options.* |
| B2e | If no at B2a – what are the reasons for not being able to submit AMR data? | No national surveillance system has been established.  Not enough human/material resources to conduct national AMR surveillance.  Not enough routine AMR data available because of low utilisation of bacteriology for diagnostics.  Challenges with data capture at local laboratory level.  Challenges with data transfer from local to national level.  Challenges with data collation and preparation of InFARM data files for submission.  Concerns about data quality.  Concerns about data confidentiality in the InFARM platform.  Other*, please specify \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_* |  |
| B2f | Is your country making the AMR data analysed publicly available in databases and/or periodic reports? | Yes, both AMR data and periodic reports are publicly available.  Yes, only periodic reports are publicly available.  Yes, only AMR data are publicly available.  No  Unknown | *In case they are publicly available, please provide here the link or contact details for requesting them* |

B3. Identification of gaps for strengthening AMR surveillance and monitoring

|  |  |  |  |
| --- | --- | --- | --- |
| B3a | Does your country need additional support or advice to set up or strengthen national AMR surveillance in food and agriculture sectors? | Yes  No |  |
| B3b | Type of support/advice needed.  *(Multiple answers allowed)* | Support to conduct assessment of existing situation/capacities and identify actions for progressive improvement.  Support to build a national AMR surveillance network in food and agriculture, including peripheral laboratories, reference laboratory(ies), and national. coordination structure or epidemiology team.  Support to identify peripheral laboratories receiving samples from surveillance sites across the different AMR surveillance domains.  Support to identify national reference laboratory(ies) providing support to peripheral. laboratories on AST and quality assurance.  Support to identify a national coordination structure or epidemiology team providing support for programming, harmonization and reporting of national. AMR surveillance in food and agriculture.  Support to improve laboratory methodologies for bacteriology and AST (e.g. SOPs, quality assurance programs).  Support to improve the design of AMR surveillance and monitoring (e.g. reduce sampling bias, improve statistical representativeness).  Support to improve data capture at local level through data management software (e.g. WHONET, Laboratory Information Management Systems).  Support to improve harmonization and transferring of local data to national coordination structure or epidemiology team (e.g. providing AMR data model template, data format).  Support to improve data analysis, interpretation and reporting for using the information generated by AMR surveillance.  Other*, please specify: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_* |  |

**Section C – Terms of Use of the InFARM System**

The International FAO Antimicrobial Resistance Monitoring System (hereinafter called “InFARM”) collects, analyses, and reports back aggregated comparable and validated data on antimicrobial resistance (AMR) and on the status of implementation of national AMR surveillance activities in animals and food (hereinafter called “Data”) to inform decision-making, drive local, national, and regional action, and provide the evidence for interventions and advocacy in agrifood systems.

The Food and Agriculture Organization (FAO) developed InFARM to support the implementation of the FAO Action Plan on AMR 2021-2025 approved by the 166th session of the FAO Council.

By accessing the InFARM dedicated and protected web-based internet platform (hereinafter called “IT platform”) for data collection the national officer(s) mandated as focal point(s) to represent national surveillance programmes in animals and food (hereinafter called “User”) takes note of and accepts the terms of use contained herein. Failure to comply with these terms of use may result in FAO terminating access to the InFARM IT platform.

FAO reserves the right to update these terms of use at any time and without notice and accepts no liability for any error or omissions in this regard. The amended terms of use will automatically be effective when published on InFARM IT platform.

Data are the basis for all sound actions to protect the health of animals, humans, plants and the environment, and the benefits of data sharing are widely recognized. Whenever possible, FAO wishes to promote the sharing of AMR data primarily generated through antimicrobial susceptibility testing (AST) in priority bacterial species of interest to animal and public health for the purpose of generating and disseminating information on AMR prevalence, patterns, and trends.

In this connection, and without prejudice to information sharing and publication pursuant to legally binding instruments, by providing the Data to FAO through the InFARM IT platform, the User confirms and agrees to the following:

1. He/she has the full legal right to share the Data with FAO for the purposes described herein.
2. The transfer of the Data to FAO and use of the data as provided herein does not and will not violate any intellectual property rights of any third party.
3. The Data submitted have been collected in accordance with applicable national laws, rules and procedures including, but not limited to data protection laws aimed at protecting the confidentiality of identifiable persons as well as intellectual property laws.
4. The AMR data submitted to the InFARM IT platform does not and will not contain any personal identifiable data.
5. The User shall verify and must ensure that the Data is accurate, complete, and up to date prior to sharing to the InFARM IT platform. FAO shall not be considered responsible for any errors or omissions in the contents of the Data available in the InFARM IT platform.
6. Access to the Web-based internet InFARM platform requires an electronic identification which consists of username, password, and potentially other security measures. The User is responsible for the safekeeping of this access information. The User may not sell, share, or publish their access information.
7. FAO shall use all reasonable efforts to ensure adherence to the level of confidentiality (I, II or III as per the

The International FAO Antimicrobial Resistance Monitoring (InFARM) System: Manual for implementation)[[2]](#footnote-3) expressly indicated by the User when submitting AMR data. In this regard FAO will not disclose, disseminate, or publish outside of FAO any Data at product level expressly indicated to FAO as confidential by the User.

1. FAO is entitled to use the Data not indicated as confidential by the User in any format and in any manner it may wish in line with its mandate without having to ask for additional permission. This includes the right for FAO to disseminate the data, incorporate them in any works, and authorize their use to third parties working with FAO.
2. FAO will take reasonable measures to ensure appropriate acknowledgement for the provision of the data in accordance with its policies and practices.
3. Use of the FAO name and emblem is not authorized in connection with any matter relating to this InFARM IT platform.
4. Although all reasonable precautions have been taken to verify the content provided by the Users into the InFARM IT platform, FAO makes no warranties, express or implied, regarding the content, presentation, appearance, completeness, or accuracy of the data in InFARM IT platform.
5. FAO shall not be liable for any loss or damage arising directly or indirectly in connection with, or resulting from, the use of the InFARM IT platform. FAO further expressly excludes liability for any indirect, special, incidental, or consequential damages which may arise in respect of the InFARM IT platform and its use, and the results thereof, including, without limitation, any use of the data.
6. The country or area designations employed in the InFARM IT platform do not imply the expression of any opinion whatsoever on the part of FAO concerning the legal status of any country, territory, city or area, or of its authorities, or concerning the definition of frontiers and borders.
7. Any mention of specific companies or of certain manufacturers’ products does not imply that they are endorsed or recommended by FAO in preference to others of a similar nature that are not mentioned.
8. Nothing contained herein shall be construed as a waiver of any of the privileges and immunities enjoyed by FAO under national or international law, and/or as submitting FAO to any national court jurisdiction.

**Please check this box to confirm that all InFARM focal points have read and agree with the above Terms of Use of the InFARM System.**

**Questions**

Questions relating to the use of the InFARM System, or these terms of use can be sent to the following email address: [FAO-AMR-InFARM@fao.org](mailto:FAO-AMR-InFARM@fao.org)

1. InFARM national focal point(s) is/are nominated in coordination with the national bodies overseeing the development and implementation of AMR monitoring and surveillance in food and agriculture. InFARM national focal point(s) is/are ideally national expert(s) with knowledge and/or experience in epidemiology and data management of antimicrobial susceptibility testing results (i.e., AMR data) originated from samples collected in food and agriculture sectors. A single InFARM national focal point can be nominated to cover all AMR surveillance programmes in animals and food. Alternatively, several InFARM national focal points can be nominated, one per specific AMR surveillance programme under FAO’s remit according to national surveillance network structure. [↑](#footnote-ref-2)
2. Extracted from the Manual for Implementation of the InFARM System:

   “The InFARM IT platform offers the possibility of sharing individual AMR data files at three levels of confidentiality:

   Level I. Private: the AMR data file shared into the InFARM IT platform and associated interactive data visualizations will only be visible to the country InFARM focal point(s). Data shared at this level will not be included in regional, subregional, and global analyses. This level of confidentiality offers the highest privacy but also limits the possibility of understanding interpreting the data as compared with other countries, subregions, regions or at global level.

   Level II. Public with aggregation by region and subregion: the AMR data file shared into the InFARM IT platform and associated interactive data visualizations will be visible to the country InFARM focal point(s). Data shared at this level will be included in the production of publicly available interactive data visualizations aggregating information at subregional, regional, and global levels (i.e. keeping the identity of the country anonymized). This level of confidentiality offers the possibility of understanding and interpreting the data as compared to other subregions, regions or at global level.

   Level III. Public showing country identity: the AMR data file shared into the InFARM IT platform and associated interactive data visualizations will be visible to the country InFARM focal point(s). Data shared at this level will include the production of publicly available interactive data visualizations at country level (i.e. displaying country identity) and aggregating information at regional, subregional, and global levels. This level of confidentiality offers the possibility of understanding and interpreting the data as compared to other countries, subregions, regions or at global level.” [↑](#footnote-ref-3)