TERM OF REFERENCE (ToR)

FOR THE RECRUITMENT OF 2024 CSC PROGRAM

**GENERAL INFORMATION**

**Post Title:** Data & Analytics internship

**Host Organization: International Fund for Agricultural Development (IFAD)**

**Host Department/Division: Information Communications and Technology Division/CSD**

**Duty Station:** Preference for In presence but can accommodate home based/hybrid

**\***subject to change according to world-wide COVID-19 situation

**Expected Places of Travel: IFAD HQ – Rome, Italy**

**Duration: 6 months**

**Expected Start Date: April, 2024 or thereafter**

**JOB DESCRIPTION**

# SCOPE OF ASSIGNMENT

# Type of assignment:

# This is a very practical assignment where the intern will join an existing team working on several initiatives in data and analytics, including data science, data visualization, machine learning, and artificial intelligence. The intern will have specific tasks assigned with expected outputs, which will include a combination of daily ICT activities and project-specific data analytics.

# Specific Description:

# Expected activities will vary according to business needs and will be modified to fit specific intern skills, background, experience, objectives, and program of work. Expected activities may include any, but not all, of the following:

# Support in developing machine learning models for various use cases, using techniques such as anomaly detection, clustering, regression, classification, and predictive analytics.

# Support in developing artificial intelligence systems for various use cases, using technologies such as natural language processing, image recognition, topic modeling, text-to-speech, speech-to-text, etc.

# Support in developing geographic information systems for various use cases related to IFAD's field projects.

# Support in developing data pipelines and data systems with particular attention to sound data management and data governance practices.

# Support in developing data products such as interactive dashboards, rich visuals, analytics reports, and web applications.

# EXPECTED DURATION OF ASSIGNMENT

**Maximum duration is 6 months**

# QUALIFICATION/EXPERIENCE

The successful offeror shall meet the following minimum criteria:

# EDUCATION

* Studying or having completed a degree in Data Science, Data Engineering, Statistics, Mathematics, Econometrics, Science, Computer Science or Computer Engineering

# \* Note) Minimum academic background for the CSC program is those who have completed the second year of university or higher

# EXPERIENCE

* Some experience of working on large data projects
* Any knowledge of agriculture or international development or working with data related to those sectors would be appreciated.

# LANGUAGE

* Good level of English – which is the working language of the project

**FUNCTIONAL COMPETENCIES**

* Strong analytical and problem-solving skills – ability to work with datasets to identify anomalies, trends or patterns
* Knowledge of any data-centric programming languages such as Python or R.
* Skills in data cleaning and pre-processing to ensure accurate and consistent data sets used in analysis.
* Knowledge of statistical methods and techniques
* Ability to document work for non-technical/senior audience to explain the work and outputs clearly
* Knowledge of data visualization tools such as Microsoft Power BI and understanding of using the most effective visualization methods to communicate the required messages

**Core Competencies**

* Collaboration and Team work – this work is part of a larger initiative and involves working with technical and non-technical people, the ability to collaborate, brainstorm challenges, share insights and learnings are key
* Attention to detail, in technical work and in communication and interactions with business users
* Ethical understanding – understanding of the ethical implications of data analysis and the need for careful adherence to data privacy and other relevant security standards