Terms of Reference (TOR)

Internship with the Data, Digital Agriculture, and Innovations (DADI) team, Agriculture and Food Global Practice, The World Bank

Background:

The Data, Digital Agriculture, and Innovations (DADI) team in the Global Engagement Unit of the Agriculture and Food Global Practice (AGF) leads the global analytical and advisory work on data-driven digital agriculture at the Work Bank.

Data and Digital Agriculture are catalysts with wide-ranging potential to transform food systems and affect the lives of billions. Digital technologies dramatically change the interactions between unparalleled actors across the food system, comprising farmers, upstream and downstream enterprises, consumers, and public sector institutions. With a growing two-thirds of the world population having a mobile subscription and nearly half using the internet, digital technologies can offer the 570 million farmers worldwide solutions to make more precise decisions on labour, capital, and natural resource management, lower the costs of linking them to the upstream and downstream markets, increase transparency of agricultural value chains through improved access to information and product traceability, and enhance the knowledge of the world's 8 billion consumers on food choice aspects such as price, nutrition, production practices, climate change and environmental impacts.

Demand to harness digital technologies and data to transform their national agri-food systems is growing among World Bank client countries. In the last four years, the team supported designing and implementing 53 projects with data and digital components across 36 countries, totaling USD 1.15 billion in investment. Currently, 13.5% of all the Agriculture and Food investment projects have a data and digital component, with such investments rapidly growing. In the next 2-3 years, most of the projects will likely have a data and digital component.

To inform and support the growing demand, the Data, Digital Agriculture, and Innovations team of the SAGGL hosts a Global Data & Digital Agriculture Advisory Program at the World Bank, aiming to catalyze investments in digital agriculture through operationalizing data, analytics, innovation, and global knowledge on digital solutions in the agrifood system and linking them to local needs. The Program will be structured around four pillars - Data, Investment, Innovation, and Impact Evaluation, underpinned by Knowledge, Learning, and Partnership resources.

Moreover, there is a [knowledge and learning platform](#), which is a One-Stop-Shop to share knowledge, analytics, innovations, tools, and best practices among practitioners, policymakers, innovators, researchers, and experts in the area of Data-driven Digital Agriculture. The team hosts and manages the What's Cooking-Digital Agriculture Learning Series with the objective of bringing different stakeholders together to discuss strategies,

innovations, and challenges in transforming the digital agriculture ecosystem. The team has organized 88 webinars, which were attended by more than 11,000 participants globally. In October 2022, the team also offered first-of-its-kind Global Flagship e-learning on "Transforming Agriculture and Food Systems through Data-driven Digital Agriculture: Learning from Practitioners". The participants during the course of four weeks directly interacted with Agtech Company CEOs, seasoned program managers of World Bank, and Government Leadership who are part of large-scale digital investments. The course was well-received and more than 1500 participants enrolled for this course.

Objective and Scope of Work:

The DADI team seeks a highly motivated and talented intern who can take initiative on various research tasks. The intern will investigate one of the key research areas in 1) food tech, 2) food trade, 3) smart farms, 4) artificial intelligence and machine learning in agriculture and food systems. The intern will start with a broad search of global examples and the landscape of each designated research area in agriculture and food systems. The research will include how start-ups and innovators in each field develop and use data and technologies to improve production, processing, marketing, and agriculture produce and food quality. The intern will research the South Korean landscape and provide preliminary sources to screen Korean agencies that we can potentially partner with. The intern will also conduct research and analytics on various topics related to data-driven digital agriculture to support the team's various analytical and knowledge products, providing Communication and editorial services. All findings will be compiled and used for webinars, blog posts, and learning content in our What's Cooking Webinar series, along with corresponding stakeholder meetings.

The specific activities will include:
- Producing a learning note. The intern will research, write, and improve the report based on feedback and review, making it publishable. The report will synthesize notes and compile findings of the desk research and primary interviews.
- Converting the note into a presentable slide deck and presenting it to the DADI team and a wider audience. The presentation should have text, graphics, visuals, and pictures.
- Working closely with the Knowledge and Learning team to create content that effectively communicates data-driven insights to both internal and external stakeholders.
- Drafting reports, summaries, and other communication materials based on data analysis.
- Assisting in the preparation of presentations for internal and external audiences
- Collaborating with the team to develop publishable products such as research papers, articles, and case studies
- Conducting literature reviews and contributing to the synthesis of information for publication. Ensure adherence to publication standards and guidelines
- Participating in training sessions to enhance skills in data analysis, digital agriculture, and communication
- Sharing knowledge and insights with team members and contributing to a culture of continuous learning
- Writing a blog on the designated key research area in agriculture and food systems.
- Establishing linkage with Korean public and private sector agencies working in food tech and security, and artificial intelligence and machine learning in agriculture and food systems and helping the DADI team organize learning events and webinars.

- Identifying, conceptualizing, and carrying out research and analytics on various topics related to data-driven digital agriculture in support of the team's various analytical/knowledge products, providing communication and editorial services
- Providing support for the AgriFood Data implementation
- Research assistance on Circular Food Systems (CFS) through literature review, data collection and analysis.
- Preparation of case studies outlining policies, innovations and business models for circular food systems
- World Bank portfolio analysis and presentation, using internal and external resources

Key Deliverables:
Deliverables would correspond to the above scope of work. They would be either in the form of progress reports or specific reports agreed with the TTL.

Duration of the Internship:
The internship will run from July 15, 2024, until Dec 30, 2024, with a possibility of extension dependent on the intern's work performance and availability.

Desired skills and qualifications:
Preferably an undergraduate degree in Economics, Agronomics, Public Policy, Law, Data Science, and Communication or a related discipline or at least enrolled and pursuing one; a cross-disciplinary background in both data or digital technologies (for example, computer or data science) and public policy would be highly valued
- Interest in the Agriculture and Food sector; background studies and experience on this is desirable;
- Experience with search using Google Scholar, ChatGPT and academic databases.
- Clearly summarizing academic papers, reports and WB project documents.
- Proficiency with data analysis and visualization using MS Excel is required. Familiarity with
  STATA, R, Tableau or other software is preferred.
- Proficiency with developing presentations in MS Power Point is required.
- Interest in data and digital innovations; background studies and experience on this is desirable;
- Interest in public policy, particularly on data governance, would be valuable;
- Ability to write and communicate confidently in English;
- Ability to work collaboratively in a team environment.
- Interest in agriculture, digital technologies, and their intersection
- Interest and knowledge in policy environment in other countries are also helpful; as would the ability to speak the language of these other countries.

Financial Compensation
The intern will receive a grant from EPIS Korea for the five-month duration of the internship under the Overseas Agricultural Sector Intern Scholarship (OASIS) Program hosted by the Ministry of Agriculture, Food and Rural Affairs (MAFRA), Republic of Korea.

Reporting
The intern will work closely with the DADI team and report to Parmesh Shah, Global Lead, Data, Digital Agriculture, and Innovations.

Total Interns Expected: (04)

Interns	To be working on
Expected Intern - 1	Data Driven, Digital Agriculture and Innovation
Expected Intern - 2	Data Driven, Digital Agriculture and Innovation
Expected Intern - 3	Circular food systems
Expected Intern - 4	Digital Agriculture Learning and Knowledge products research and publications