



WORLD BANK GROUP

Terms of Reference

Short Term Temporary/Intern - World Bank Agriculture and Food Global Practice, Data-Driven and Digital Agriculture Team (DD-DAT)

Support to the development of a *Global Digital Accreditation and Acceleration Facility* and a *Start-Up Fund* for a public and private investment pipeline for high impact innovation

Expected Start: End of August 2021 – 2 months

CV and Cover letter to be sent to dddag@worldbank.org before 27 August 2021

Background

The Data-Driven Digital Agriculture Team (DD-DAT), in the Global Engagement Unit of the Agriculture and Food Global Practice, leads the global analytical and advisory work on data driven digital agriculture at the World Bank.

Digital Agriculture (DA) is a catalyst with wide-ranging potential to transform agro-food systems and affect the lives of billions. Digital technologies dramatically change the interactions between the unparalleled number of actors across the food system, comprising farmers, upstream and downstream enterprises, consumers, and public sector institutions. By reducing transactions costs and asymmetry of information, they offer solutions to solve the market failures that plague our agro-food system. 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 labor, 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 7.5 billion consumers on food choice aspects such as price, nutrition, production practices, climate change and environmental impacts.

The digital transformation of the agro-food system is led by the private sector, but there is a role for the public sector to maximize societal gains of improved efficiency, equity and environmental sustainability offered by these technologies, while mitigating the potential risks. Indeed, supply and use of digital technologies in agri-food systems is fundamentally a private sector activity, driven by private gains of the profit-maximizing producers and utility-maximizing consumers. However, often private economic agents may not have the right set of incentives to make rational decisions due to the existing market or policy failures, lack of public good provision, or their bounded rationality (i.e. not having enough information about the choice options and the impacts of their decisions).

But digital transformation of the agro-food system is lagging behind other sectors and the public sector has a role to play to increase the pace of change. The development of a thriving AgTech ecosystem

requires the supply of global public goods and institutional innovation allowing to coordinate knowledge and create partnerships. Indeed, the AgTech ecosystem itself is held back by coordination failures with a scattered data and digital innovation landscape. Stakeholders (innovators, farmers, governments, research, finance) are struggling to find each other, connect and collaborate, making the use of data and analytics and the scaling up of innovative solutions particularly difficult. As a result, opportunities to use digital technologies to solve problems are not being exploited, particularly around high impact innovations for smallholder farmers. For example, recent ecosystem studies in Kenya and Nigeria, found that an important constraint for innovators, is access to use cases and data. Access to patient capital is also a problem. There is an increasing amount of initiatives supporting seed funding, but the next steps allowing solutions to reach commercial viability, are often difficult to reach. This is not necessarily because of the lack of available funds, but because of the inadequacy of information available compared to what investors need to make investment decisions. Ecosystem.

Operational staff and public sector clients are confronted by the same coordination issues as in the rest of the AgTech ecosystem. They have difficulties to find and assess data and existing innovations which could inform and solve the specific issues they are confronted to. They are also not always knowledgeable about the enabling environment, including the institutional and policy environment, needed for the scaling of these innovations. To meet the growing demand among World Bank client countries to harness digital technologies and data to transform their national agri-food systems, they need to be empowered with the requisite knowledge, data access, partnership network and core skills.

The World Bank has a role in supporting the scaling up of public sector data-driven and digital approaches by providing technical advice and facilitating partnerships to accelerate innovation and supporting policy development. To this end, the World Bank is developing Global Public Goods for data and innovation. It is also working with governments to develop a Digital Agriculture Strategy, including the development of a comprehensive and integrated data strategy and data platform, as well as digital innovation ecosystems.

Objective

DD-DAT is looking for support for the **development of a Global Public Good to support scaling up of high impact digital innovations for the food system.** This would participate in a multi-stakeholder coordination mechanisms to support the use of digital innovation in World Bank operations, the development of digital agriculture strategies by governments in client countries and the acceleration of high impact digital innovations.

To support better coordination between innovators and public and private finance institutions, the World Bank is developing a **Global Digital Accreditation and Acceleration Facility** and a **Start-Up Fund** to support **a public and private investment pipeline for high impact innovation.**

- This facility would allow to identify and accredit mature high impact solutions from around the world to make them more visible to potential public and private partners including our operational team, and help them participate in an investment pipeline with both public and private investors.
- The facility and investment pipeline would be linked to regional and local **pool of expert partners** under **Digital Innovation Hubs**, supporting access to use cases, data, knowledge, and business facilities (when possible in partnership with governments), providing an enabling environment for the scaling of selected innovations.

- Developing a **Start-up fund** with the **IFC** and **development partners** which would feed into the investment pipeline

This facility would be linked to interactive tool to make it easier for World Bank operation teams and ultimately a broader set of stakeholders, to identify technologies and example of use cases where they have been used, providing more practical information about the potential for their own operations. The information will be readily usable by operational teams, through accompanying use case examples.

Tasks:

The World Bank is looking for an Intern/Short Term Temporary to help with the creation of catalogue of potential partners under the the Digital Accreditation and Acceleration Facility for the Food System.

Tasks include:

- Create a catalogue of global public and private stakeholders supporting the Innovation Ecosystem the agro-food sector in developing economies according to their type of activities (Impact Investors, Venture Capital, Public Investors, Incubators, Accelerators, etc.).
- Research on the new financing solutions for patient capital in the digital space in the agro-food sector but also in other sectors which could have potential implementation in the agro-food sector. Research impact investment trends, related thematic areas in alternative finance, financial instruments, impact venture business models, impact assessment and reporting approaches, private sector grants, etc.
- Support the organization of workshops bringing together stakeholders from the public and private impact investing community in agriculture and food including Bilateral and International Development Finance Institutions to i) better understand constraints to investing in digital solutions for the agriculture and food system; ii) create a dialogue between different stakeholders to better understand their respective needs and identify how they could cooperate in an investment pipeline for the acceleration of digital innovation in the agro-food sector.

Desired skills and qualifications:

- Master's degree (or at least enrolled and pursuing one) in Economics, Agronomics, Finance, Business, Management, International Relations, other related discipline; a cross-disciplinary background is an advantage.
- Interest in the agro-food sector, digital innovation and agro-food innovation investment and scaling-up ecosystem;
- Ability to write and communicate confidently in English;

Duration of the appointment:

The appointment would be full time starting in end of August for a period of 2 months. Subject to availability of requisite funds, mutual interest, and the need to continue this analysis, the appointment may be extended.

Financial compensation and Reporting

Selected candidate would be provided an hourly compensation of US\$16 and would report to Ms. Marie-Agnes Jouanjan, Economist, DD-DAT, Global Engagement Unit, Agriculture and Food Global Practice.