

# Empowering smallholders through strengthened digital ecosystems

## Call to action

September 2021

### Rationale

As a group of farmers and private sector organisations, together with NGOs and multilateral agencies such as IFAD, who are committed to empowering smallholder farmers (SHF) to have a profitable and resilient future, we have concluded that **Digitalization for smallholder agriculture can be a game changer in supporting and accelerating agricultural transformation across low- and middle-income countries**. Investing in building this digital infrastructure will enable new capabilities in agriculture and revolutionize how communities secure their livelihoods leading to our shared vision of a living income for all.

**Digital platforms** can enable such services to be provided efficiently and at low transactions costs to smallholders. In addition, they can help create traceability, boost the true value of food and provide extra income streams. Yet, at present, many challenges arise in smallholders being able to access the full range of services they need, in understanding which are the best services to use, and in ensuring the privacy of their data. At the same time, organizations offering digital solutions struggle to scale and create lasting impact, while remaining agile and adapted to context and client-specific needs. A key challenge is fragmentation of service provision in the agri-food sector, where many operators tend to be small in size, so the key is creating awareness and structures that allow/strengthen complementarity.

Many digital platforms are being developed to serve smallholders, so we are not proposing to develop or deliver a new one. Yet **many smallholders are beyond the reach of these emerging platforms** and not benefiting. Evidence shows that substantial gaps still exist in the availability of, and access to, data services for the world's farming populations. These gaps prevent many smallholder farmers from benefiting from the latest technological innovations and must be addressed in order to move towards fairer, more inclusive and equitable food systems. Some of the challenges relate to the unsuitability of the digital solutions provided for the local context, in terms of the technology used, the messages provided (many generic and not useful for SHF), the cost of the service, the digital literacy gap, and the limited reach, in particular to women farmers and the poorest SHF. It will take a number of years for smallholder farmers to deal directly with advanced technologies as they still require added support. Additionally, some structural barriers prevent access such as the costs of infrastructure like fiber connections in rural communities or the cost of ADSL dishes in remote areas, with data being even more expensive compared to developed countries. It is crucial to address these structural challenges to promote access to digital tools for groups like schools and farmer community centres, as well as farmers.

In the currently published and publicly available **national pathways** documents, several countries such as Albania, Burundi, Cambodia, Eswatini, Honduras, Kuwait, Malaysia, Poland, Marshall Islands, Rwanda and South Africa have highlighted the importance of strengthening their smallholder digital ecosystem to drive food systems transformation.

### Objective

We believe that it will take the development of “**Platforms of Platforms**” to connect the evolving platforms and digital product and service providers into a functioning digital ecosystem. This needs to be supported by appropriate policy and regulatory frameworks to improve the outcomes for and with smallholders. A stronger ecosystem needs to include good infrastructure, clear roles for digital

services and human agent models, good understanding, and capacity of SHFs and rural institutions in each context to adopt and use these solutions. ‘Rules of engagement’ for each ecosystem, such as who pays for what and how data privacy is secured, should be established to crowd in, rather than exclude low-income producers and create value for SHF.

In brief, we would like to see how to build on the digital platforms and services already existing or under development, to address the basic needs of smallholder farmers more directly. Developing **change agents** with digital literacy is vital. They can provide the human face to the technologies that will enable access and use by millions of lower income smallholders. These agents will link technology companies to smallholders, fostering a new breed of young ICT ‘agripreneurs’. Such agents can also be lead farmers or members of farmers organizations. It is critical that the agents have viable business models that provide a broad array of income opportunities, not just relying solely on the digital service, which are often provided for free as part of a larger bundle.

The emerging Decent Work and Living Incomes and Wages (100% LI/LW) Coalition for Action calls, *inter alia*, for:

1. Providing technical services and upskilling (including inputs, mechanization, irrigation, advice, training, crop diversification)
2. Increasing access to markets (including access to finance, innovative on/off-farm business models, insurance, fintech, digital advisory services (DAS)) ecommerce

In particular, the “platforms of platforms” should aim to build **resilience** of SHF to climate and other shocks, through early warning systems, weather and soil information systems, and other digital advisory services that can be provided through the same platform.

For countries that join the Decent Work and Living Incomes and Wages coalition, this initiative could provide **digital “experts”**, helping to demonstrate how a strengthened digital ecosystem can contribute to achieving a living income/wage by enabling farmers to run their farms as businesses, address key pain points by SHF especially adoption of these digital technologies through improved technical and agronomic solutions, effectively supported by public and private organizations. During the transition to this brighter future, we need instruments that help finance these transformations – such as blended finance, de-risking tools and other means of transitional finance.

## Call to action

We call for action that supports all smallholder farmers to run their farms as businesses, supported by digital solutions and agents across a strengthened ecosystem, including:

1. **Consistent national agriculture and food policy** in support of digitally enabling SHF empowerment
2. **Catalytic (public) finance** that promotes inclusivity to reach low income SHF and rural poor, by de-risking financing of gaps in the digital ecosystems, especially in lower income communities
3. **Digital and physical infrastructure, data and service interoperability**, public support for digital innovation, and an overall enabling environment for SHF digital ecosystems to thrive
4. **Appropriate legislation** around data ownership and privacy, Open Access, and digital public goods
5. **Social impact and value of food for consumers**
6. **In-depth research on barriers to digital adoption** like language, user friendly digital literacy levels, importance of digitalization within primary education

With these concrete asks we call on national governments to help build this coalition with us, fitting to their local needs and priorities.

## Signatures

### **Netherlands Food Partnership (NFP)**

Myrtille Danse - Executive Director

### **Global Farmer Network (GFN)**

Mary Boote – CEO

### **International Fund for Agricultural Development (IFAD)**

Thouraya Triki – Director Sustainable Production Markets and Institutions

### **ISEAL Alliance**

Kristin Komives - Director of Programmes

### **Rabobank**

Suzanne van Tilburg - Global Head Food & Agriculture Networks

### **Rabobank Foundation**

Alexander Meyer - Head of Rabobank Foundation International

### **Syngenta Foundation for Sustainable Agriculture**

Simon Winter - Executive Director