# The GSMA AgriTech Accelerator

## Applicant handbook
## December 2022



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german cooperation
DEUTSCHE ZUSAMMENARBEIT

Implemented by
giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

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# Introduction to GSMA and GIZ

The GSMA is a global organisation unifying the mobile ecosystem to discover, develop and deliver innovation foundational to positive business environments and societal change. Our vision is to unlock the full power of connectivity so that people, industry, and society thrive. Representing mobile operators and organisations across the mobile ecosystem and adjacent industries, the GSMA delivers for its members across three broad pillars: Industry Services and Solutions, Connectivity for Good, and Outreach.

The GSMA AgriTech Accelerator is funded by the **Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH** on behalf of the German Federal Ministry for Economic Cooperation and Development (BMZ). GIZ is a federal enterprise with worldwide operations. It supports the German Government in the fields of international cooperation for sustainable development.



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The purpose of this applicant handbook is to provide potential applicants with an overview about the GSMA, our AgriTech programme and the potential benefits of joining the GSMA AgriTech Accelerator. We also introduce our engagement model, the roles and responsibilities of GSMA and selected cohort members during implementation and examples of the types of services that potentially qualify for the Accelerator's support.

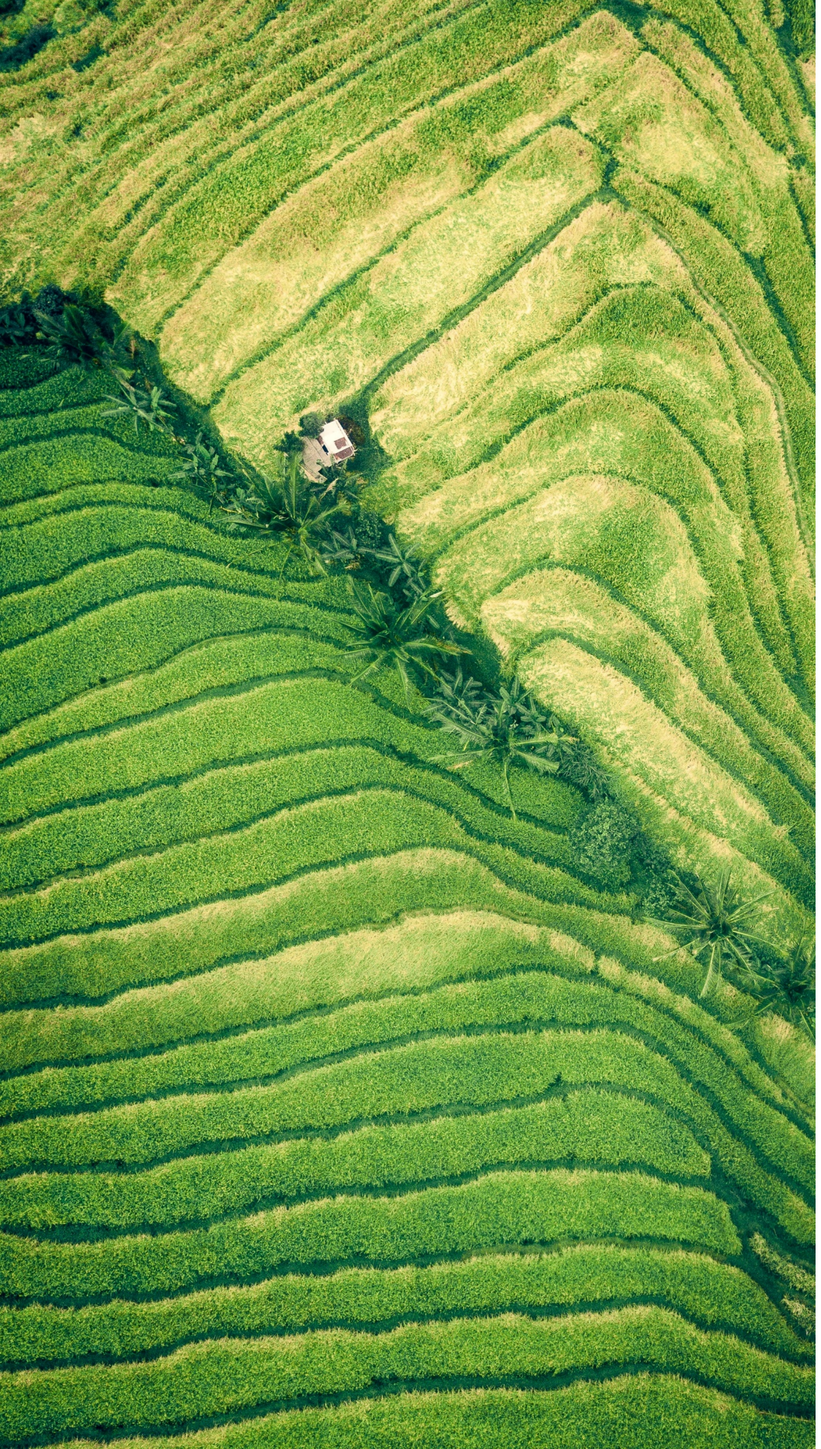
The handbook acts as a supplement to the term sheet, which is available on our website.

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# Overview

1. About the GSMA
2. The GSMA AgriTech programme
3. The opportunity: The GSMA AgriTech Accelerator
4. Project and team set-up
5. Our two-year journey: roles & responsibilities
6. Examples of use cases
7. Next steps
8. Appendix: AgriTech programme resources

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# 1. About the GSMA


The GSMA
unites
the mobile industry
unlocking the power of connectivity, so that people, industry and society thrive




# Mobile for Development

## drives innovation in digital technology to reduce inequalities in our world

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# Our team of experts focus on 4 key themes



## Digital inclusion

Unlocking the power of mobile internet

## Financial inclusion

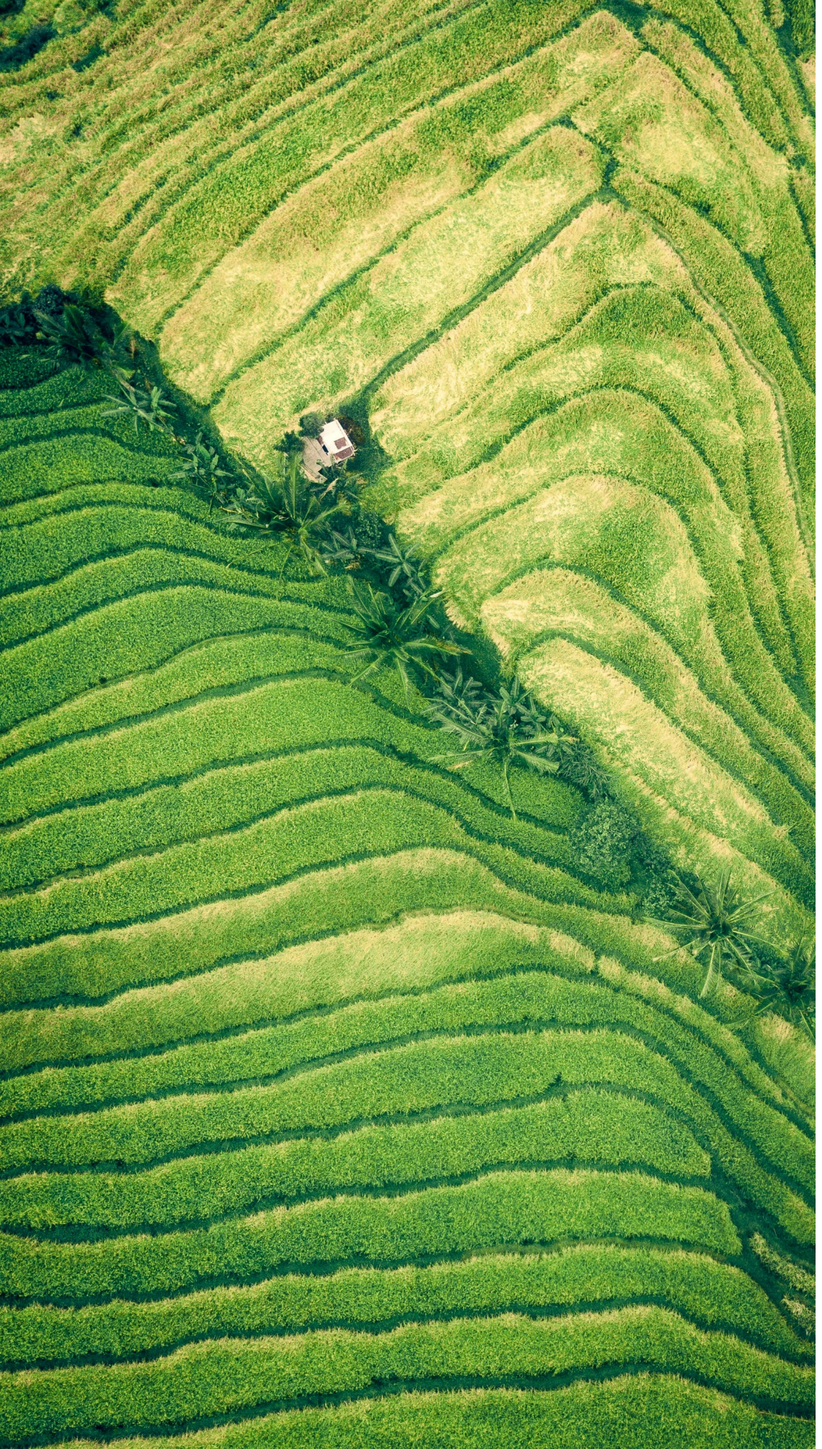
Accelerating the development of an inclusive and innovative digital financial ecosystem

## Resilience to climate change

Supporting climate change mitigation, adaptation and resilience strategies

## Humanitarian response

Accelerating the delivery and impact of digital humanitarian assistance



# 2. The GSMA AgriTech programme

AgriTech

# Digitising

## the agri value chain for smallholder farmers



**500 million households**
depend on agriculture for their livelihoods



**15.1 million smallholder farmers**
reached in Africa and Asia



* All figures as of December 2021

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# AgriTech vision/mission statement

## Vision

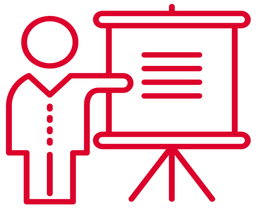
**Equitable and sustainable food chains that empower farmers and strengthen local economies.**

## Mission

**We bring together and support the mobile industry, agricultural sector stakeholders, innovators and investors in AgriTech space to launch, improve and scale impactful and commercially viable digital solutions for farmers in the developing world.**



**Research, best practice, knowledge sharing**



**Technical Assistance & Innovation Fund**



**Partnership brokering**

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# The GSMA AgriTech programme's focus areas



**Improved livelihoods**

Facilitate inclusive access to services, markets and assets through digital technology that improves productivity and profitability of smallholders.



**Financial inclusion**

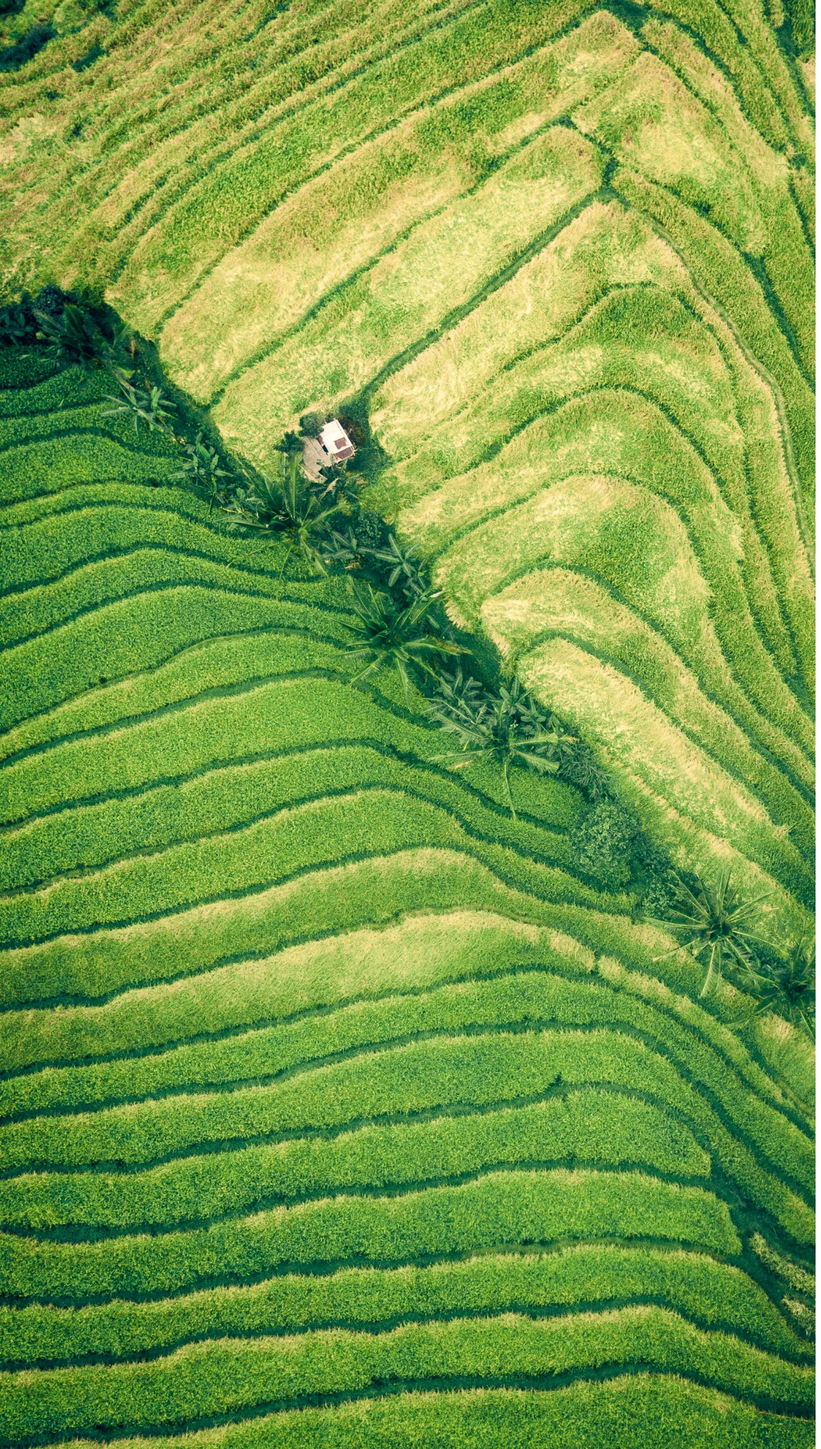
Develop farmer economic identities that facilitate inclusive access to financial instruments and income generating assets for smallholders.



**Climate resilience**

Research, understand, test and scale operational and business models for digitally enabled and inclusive climate resilience solutions.

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# 3. The opportunity: The GSMA AgriTech Accelerator

# Overview of GSMA AgriTech Accelerator



## Objective

Support and accelerate the growth of innovative, revenue-generating digital agriculture solutions that support the programme's mission of improving smallholder farmers':

1. Livelihoods,
2. Financial inclusion, and
3. Climate resilience.



## GSMA Support

10 Projects over 24 months

- Dedicated Market Engagement Manager as lead consultant
- Product design consulting
- Monitoring, evaluation and learning to inform product iteration and impact measurement
- Investment readiness support
- International exposure and networking opportunities
- Access to GSMA insights



## Example use cases*

Use cases highlighted here improve farmer livelihoods, financial inclusion & climate resilience through access to services, market and assets.

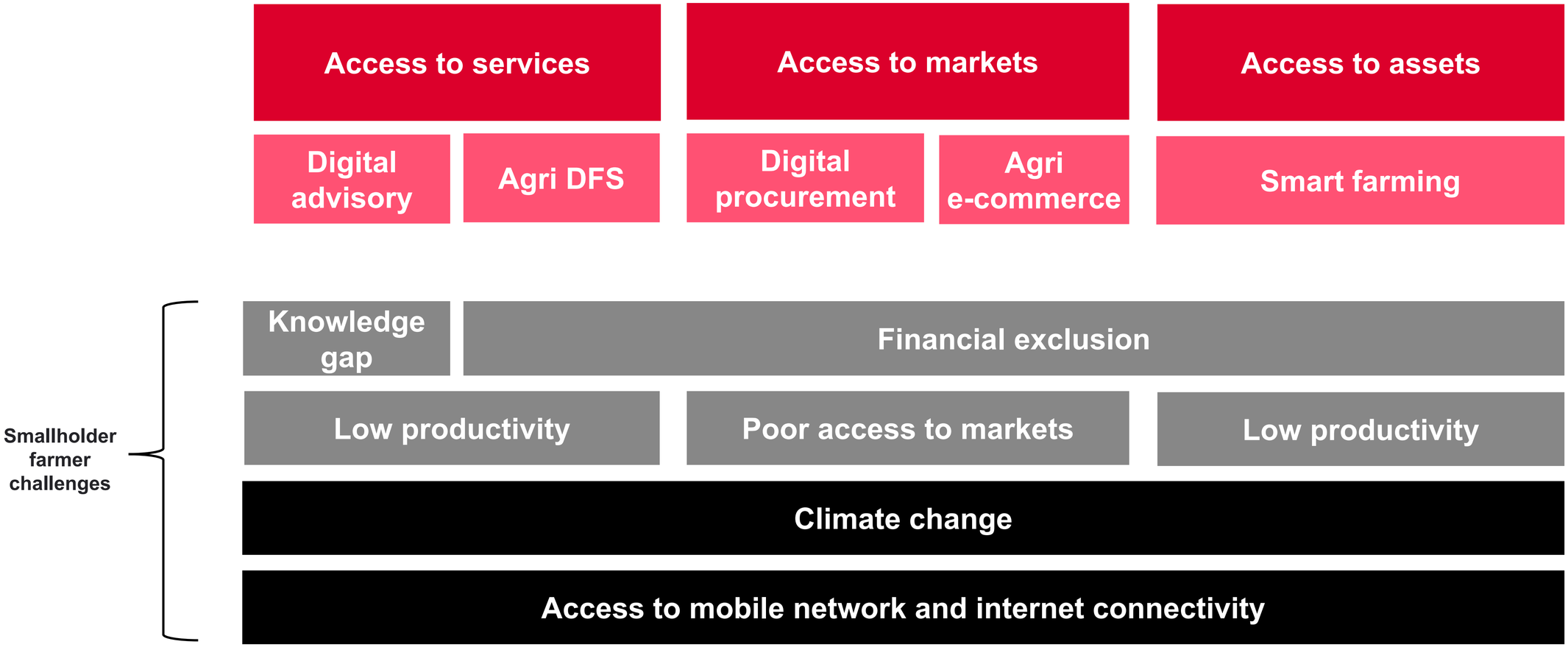
1. Digital advisory
2. Agri Digital Financial Services (Agri-DFS)
3. Digital procurement
4. Agri e-commerce
5. Smart farming

This is not an exhaustive list and we are open to receiving applications that help achieve the Accelerator's objectives through other use cases

* Further details about the use cases and sub use cases are provided in Section 6 of this handbook

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# Digital agriculture solutions help address the key challenges faced by smallholder farmers




For more information, please visit our report : Digital Agriculture Maps

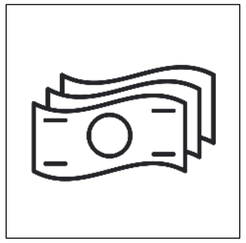
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# The GSMA AgriTech Accelerator focus areas to improve smallholder farmer lives using digital solutions



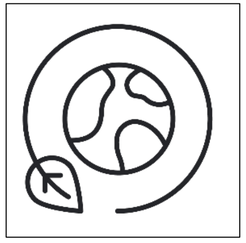
**1. Improved livelihoods**

- **Higher productivity and profitability**
- **More informed farm-level decision making**
- **Improved access to services, markets and assets with a gender-smart lens**



**2. Financial inclusion**

- **Digital footprints and economic identities**
- **Access to formal, tailored digital financial services**
- **Improved access to services, markets and assets with a gender-smart lens**



**3. Climate resilience**

- **Adoption of climate-smart agriculture practices**
- **Improved preparedness for, and response to, climate events**
- **Improved and equitable access to climate-smart services and technologies with a gender smart lens**

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# The GSMA AgriTech Accelerator focus areas

## 1. Improved livelihoods



- Higher productivity and profitability
- More informed farm-level decision making
- Improved and equitable access to services, markets and assets

## 2. Financial inclusion



- Digital footprints and economic identities
- Access to formal, tailored digital financial services
- Improved access to assets

## 3. Climate resilience



- Adoption of climate-smart agriculture practices
- Improved preparedness for, and response to, climate events
- Improved and equitable access to climate-smart services

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# GSMA Technical Assistance

## UX & design research

- Access to UX & design consultants
- Understand farmer needs & how the service meets them
- Review service UI/UX
- Capacity building/coaching for cohort members

## Product design

- Functional specifications/ mock-ups for product development and/or enhancement
- Suggestions to improve UI/UX for the product/service

## Data Analytics & Go to market consultancy

- Access to GSMA Business Intelligence analyst for data analytics to identify key usage trends
- Strategise the right marketing mix, channels, revenue model and customer acquisition plan with cohort members

## Product Iteration Workshops (PIWs)

- Post launch review of service usage data, user feedback & further design research to identify areas of improvement
- Leverage accumulated GSMA insights & knowledge to guide cohort members on product/ service growth

## Investment Readiness

- Access to investment readiness consultants to coach cohort members on fundraising
- Connect cohort members to investors for fundraising
- Access to world's largest and most influential connectivity event and innovation platform, MWC Barcelona

## Monitoring, Evaluation & Learning (MEL)

- Develop customised theory of change with cohort members to scope out the pathway towards project objectives
- With support from specialised MEL consultancy, evaluate the cohort members' success in achieving quantifiable objectives

## Insights and best practices

- Access to GSMA Insights and events to understand global best practices and enhance visibility for your organisation
- Knowledge sharing with other partners
- In-person Field Focus Weeks to understand the agritech space in different markets

## Service-specific support

Subject to budget availability, examples may include:

- Credit scoring support for digital lending services
- Partnership brokering
- Other support based on cohort members' feedback

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# Eligible countries

**Latin America:** Colombia, Ecuador, Peru

**Asia:** Jordan, Pakistan, Cambodia



**Africa:**

Burkina Faso
Cameroon
Côte d'Ivoire
Egypt
Ghana
Madagascar
Malawi
Mali
Morocco
Mozambique
Nigeria
Senegal
Togo
Tunisia
Zambia

**For eligibility requirements and selection criteria, please refer to the term sheet**

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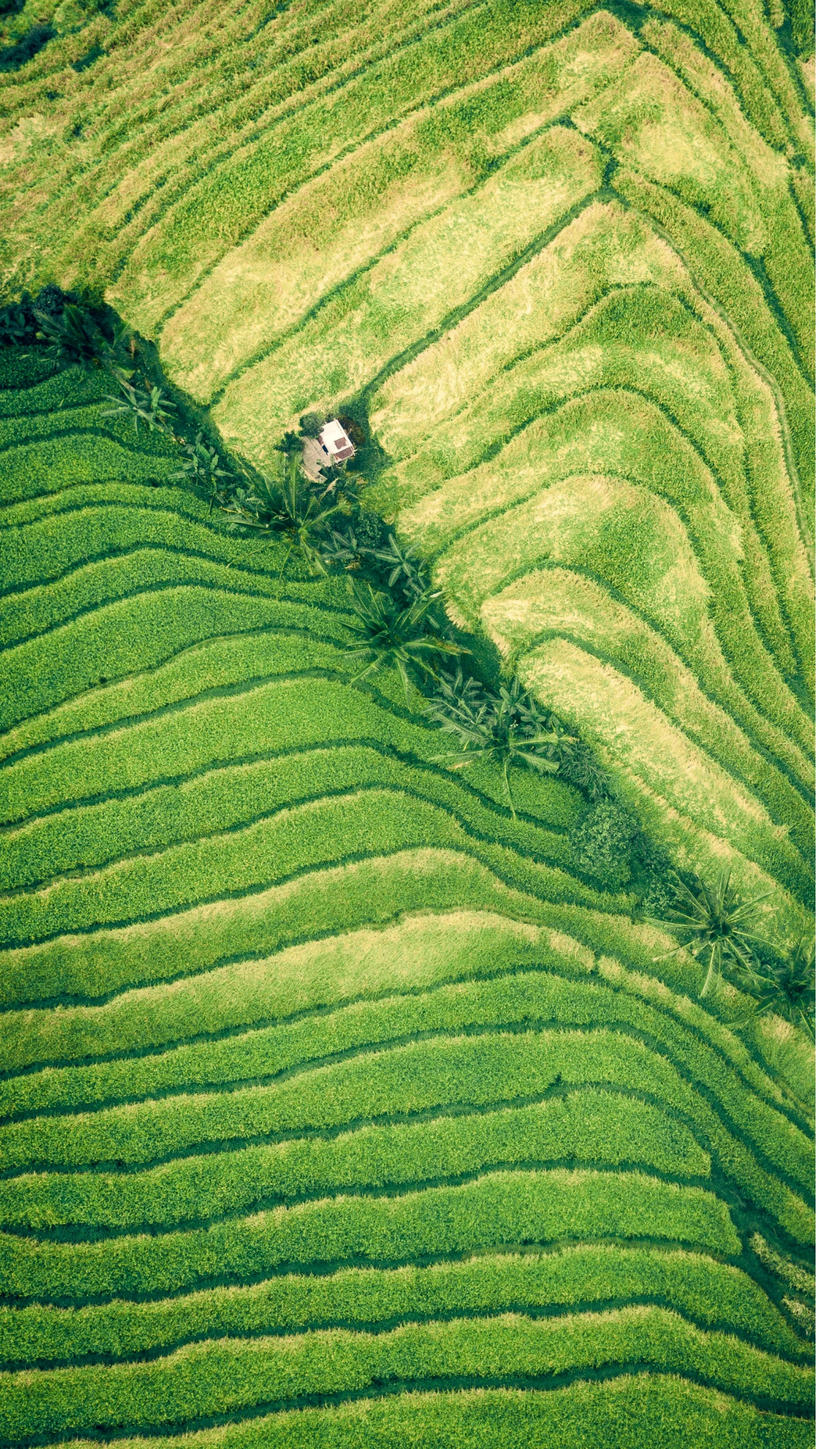
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# Timeline for the GSMA AgriTech Accelerator



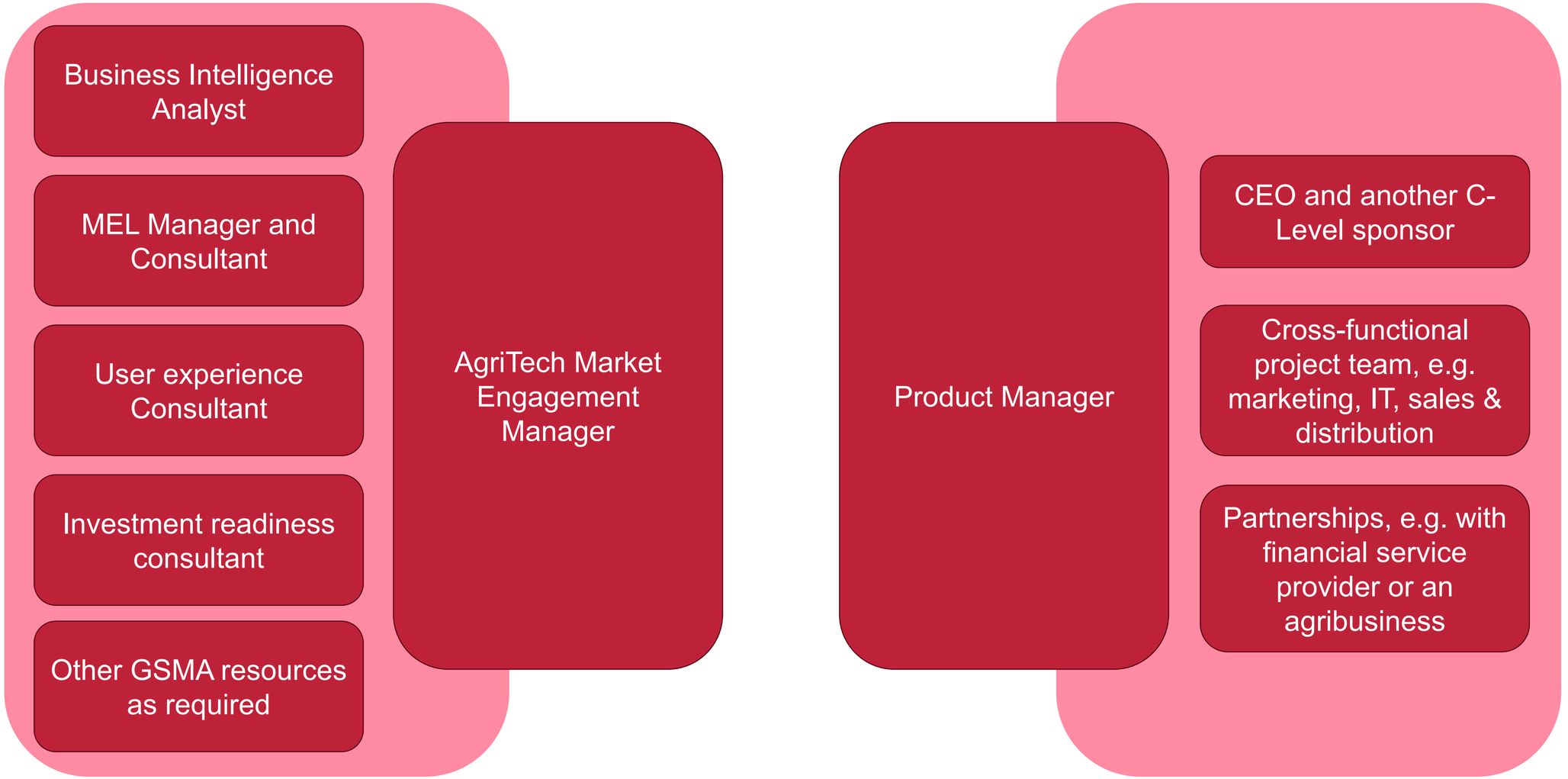

* Further clarifications/documents might be needed from applicants during this phase

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# 4. Project and team set-up

# Successful services require holistic product teams




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# Project Team (1/2)

## GSMA AgriTech

The GSMA **Market Engagement Managers** (MEMs) are agri-digitisation professionals with proven expertise designing, deploying and scaling successful agritech projects in different markets. Their role is to provide projects with consultancy on human-centred design, go-to-market plans, data driven product improvement as well as required industry expertise for successful delivery of the project.

The MEM is the GSMA lead for each engagement and is supported by a cross functional team consisting of:

- **MEL Manager and MEL Consultants:** help develop a customised theory of change with each cohort member, conduct surveys and analyse their results to measure project impact and support product iteration
- **UX Design Consultants:** working collaboratively with GSMA and the cohort member, conduct user experience research, propose product improvements based on user feedback and support the conduct of GSMA Product Iteration Workshops (PIWs)
- **Business Intelligence Analyst**: conducts analysis of service data to identify areas of improvement and support product iteration
- **Investment Readiness Consultant:** delivers group capacity building sessions and one-to-one coaching to support cohort members in being ready to pitch to commercial investors

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# Project Team (2/2)

## Cohort Member

- A pre-requisite for selection is **endorsement** of the digitisation initiative from the **CEO of the applicant**.

- The project must have a **C-Level Sponsor** who:
  - provides thought leadership for agri-digitisation,
  - owns key external partnerships (such as agribusinesses or FSPs) critical to the delivery of KPIs agreed with GSMA,
  - commits to quarterly review calls with GSMA, and
  - maintains the connection between the GSMA Accelerator's work & their own broader organisational strategy.

- The day to day working of the team must be led by a **dedicated Product Manager** who can demonstrate:
  - A proven track record of product design, management & growth, ideally in the agritech space
  - Clear KPIs & incentives tied to project success

- **Cross functional support team** for product design input, rollout & participation in product workshops
  - **Internal CFT**: core stakeholders; e.g. business development/sales, technology, BI/analytics, UX & design, etc.
  - **Consortium CFT: k**ey members from partner organisations; e.g. agribusinesses, FSPs, vendors etc.

- The cohort member should demonstrate adequate internal capacity and provide a clear contingency plan for staff turnover.

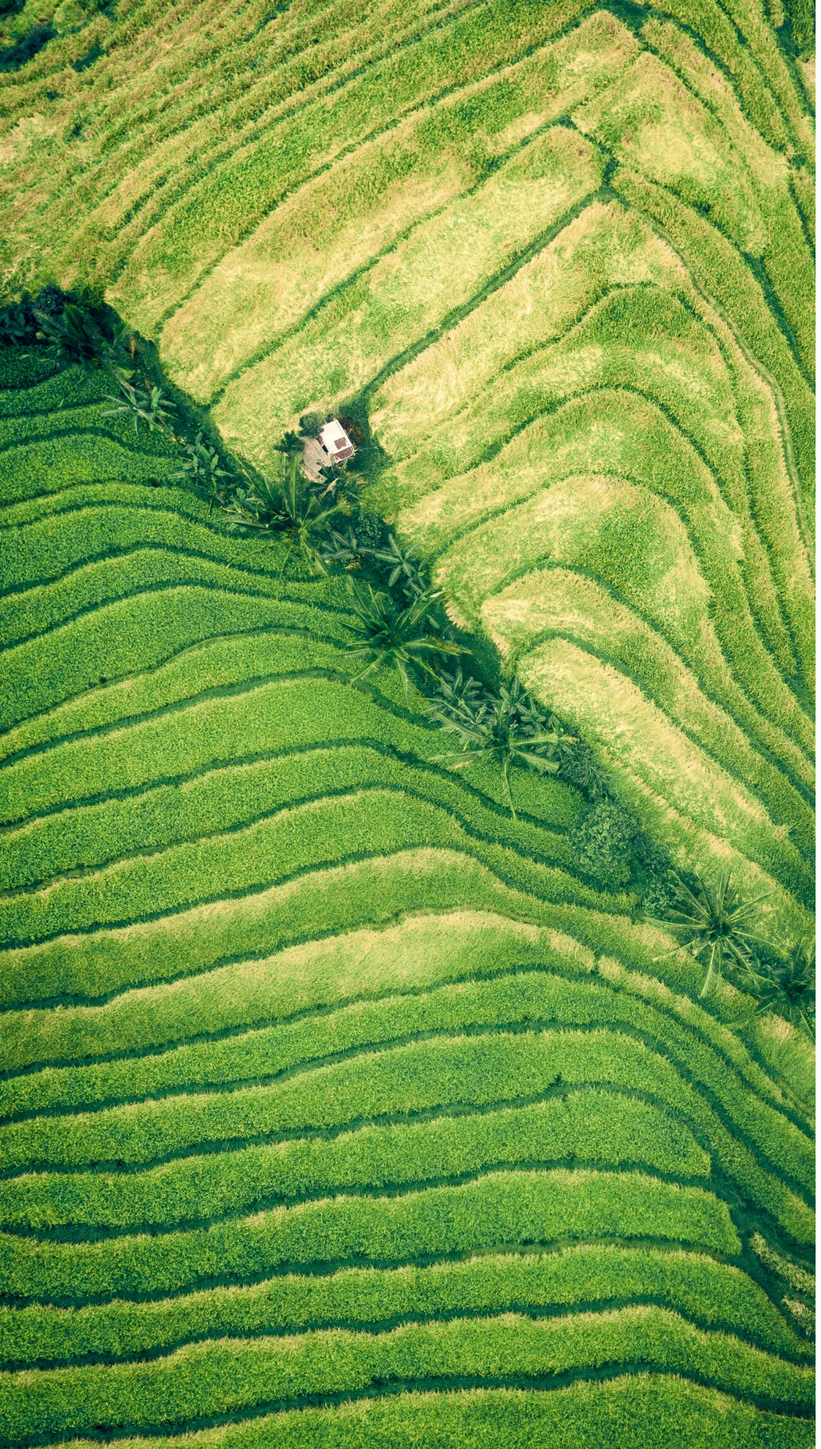
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# Knowledge Sharing Platform

## Collaborative Learning & Sharing Best Practices*

- Cohort members will have access to a global knowledge sharing network of fellow cohort members, agritechs, agribusinesses and GSMA AgriTech.
- Additionally, there are plenty of platforms and opportunities for profile-raising as panelists or via speaking slots through a number of events hosted by GSMA, in addition to contributing to blogs, webinars and publications.
- At the programme level, GSMA AgriTech organises knowledge sharing webinars and social network groups for cohort members to share and learn best practices from each other.
- The very popular bi-annual Field Focus Weeks (FFWs) brings all cohort members and related stakeholders together, for a week of knowledge sharing and practical learning. The cost of travel and accommodation for at least one person from each cohort member will be borne by the GSMA AgriTech Accelerator.

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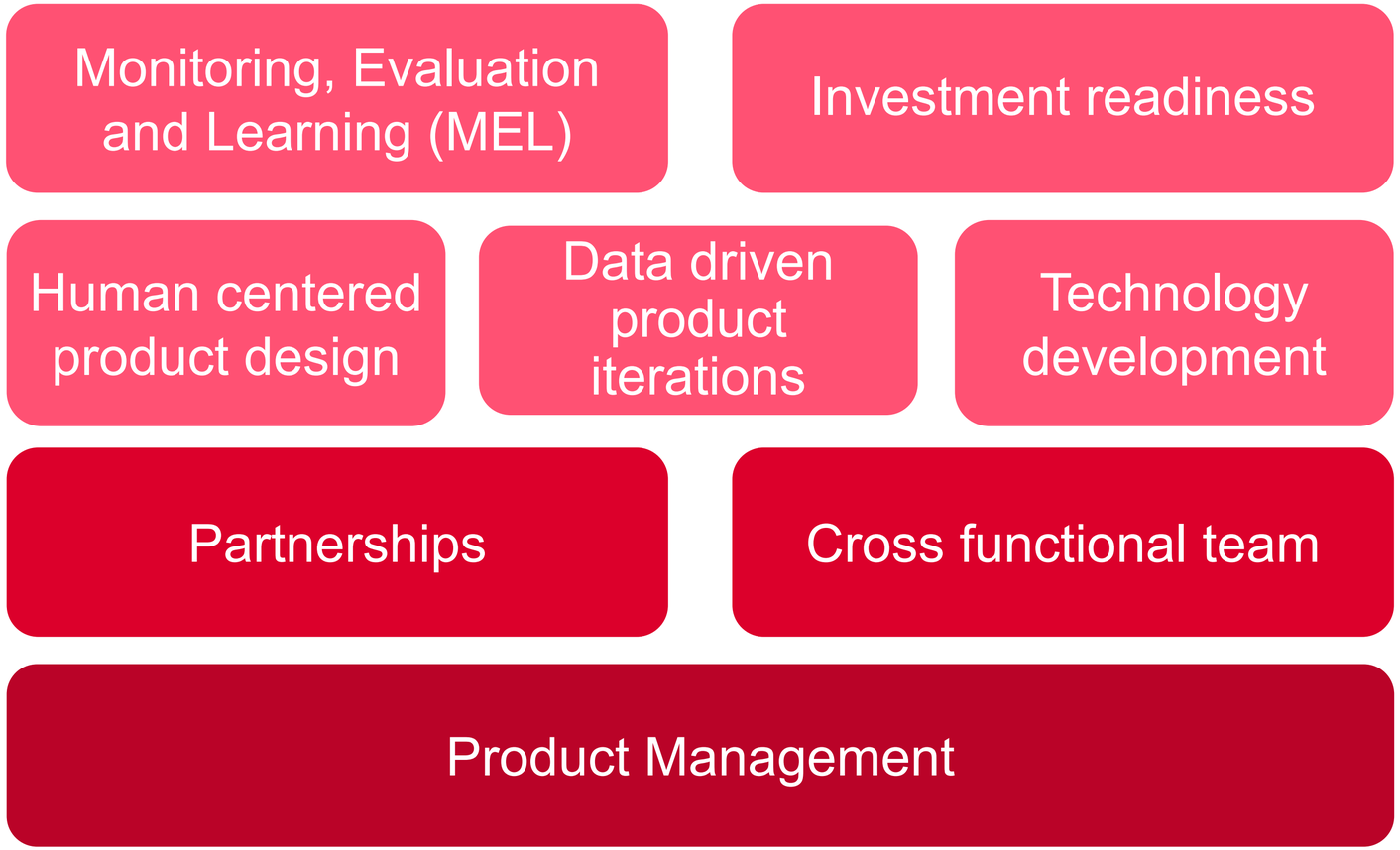


# 5. Our two-year journey: Roles and responsibilities

# Building block for project success

Having worked with a wide variety of organisations developing digital services for agriculture, the GSMA AgriTech team have identified a number of building blocks which need to be in place to ensure project success.

We cannot emphasise enough how having a strong product manager provides the foundation on which successful services are built in addition to effective partnerships.




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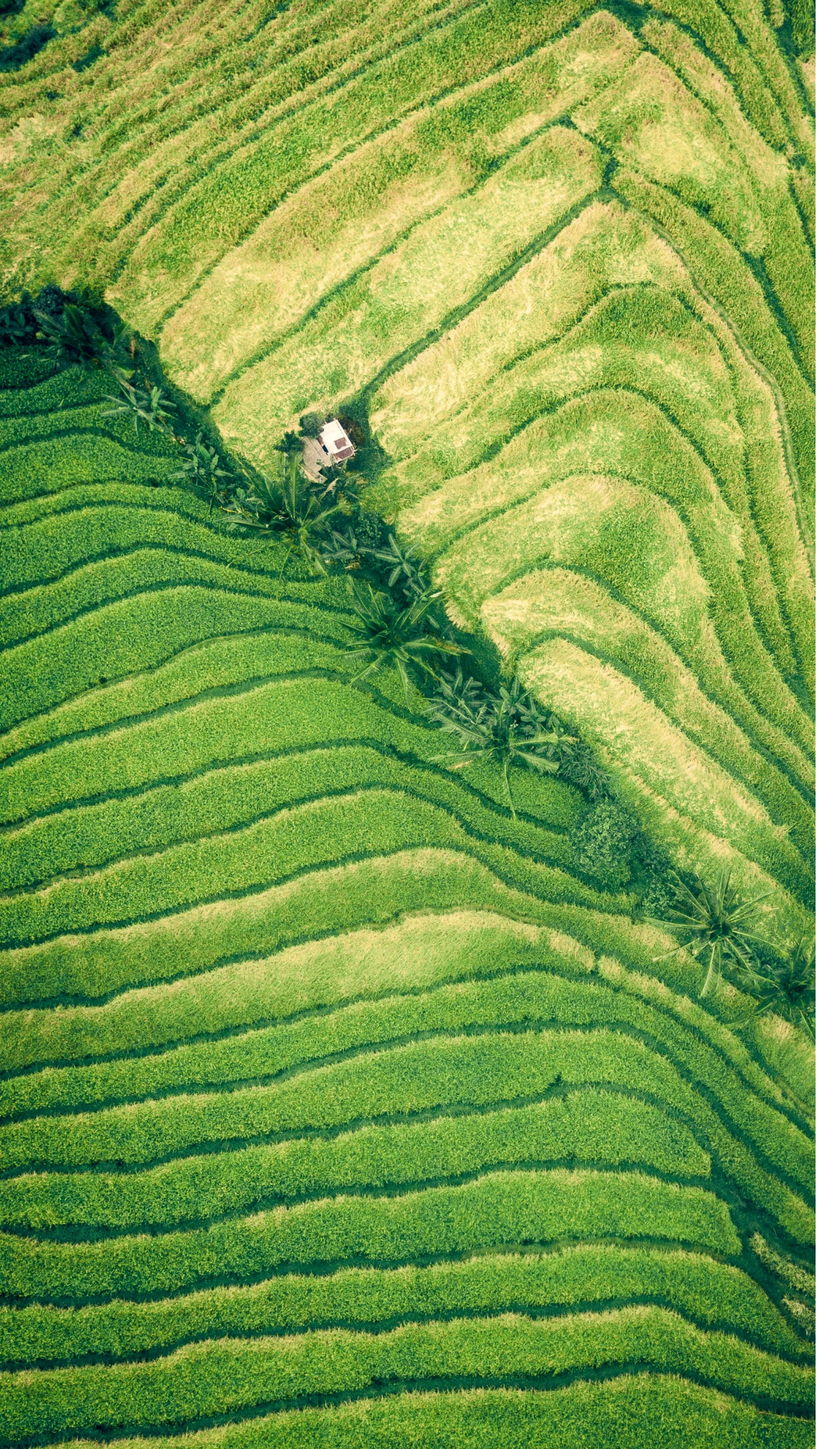
# Roles and responsibilities*

| | GSMA Contributions | Cohort member Commitments |
|---|---|---|
| **Product Management** | • Product Management capacity building<br>• Product Management consulting through MEM | • Assign experienced product manager<br>• Apply best practices in product management |
| **Partnerships** | • Introductions to potential & relevant partners<br>• Support in preparing pitch materials for partners | • Drive partner recruitment<br>• Secure and manage partner commitments |
| **Cross Functional Team** | • Workshop facilitation<br>• Support in setting up efficient CFT coordination | • Assign and manage CFT members<br>• Allocate commercially meaningful KPIs |
| **Human Centred Product Design** | • User experience consultancy<br>• Actionable tools and resources<br>• Direct support in conducting research | • Participate in field research activities<br>• Support with on-ground transportation to rural areas |
| **Data driven product iterations** | • Business intelligence analysis<br>• User satisfaction feedback surveys | • Data sharing or internal analysis support<br>• Support with carrying out feedback surveys |
| **Technical Development** | • Best practices on documenting functional specifications | • Ensuring product iterations follow mutually agreed functional specifications |
| **Monitoring, Evaluation and Learning** | • MEL consultancy<br>• Co-creating and conducting surveys<br>• Sharing survey results and insights | • Co-creating of surveys<br>• Service improvement based on mutually agreed plans derived from survey results |
| **Investment Readiness** | • Hiring investment specialists for coaching<br>• Access to opportunities to pitch to investors | • Transparent sharing of fundraising plans and relevant data under an NDA & active engagement with specialists |

*Roles and responsibilities evolve over the course of the project – this table serves as an indicative example of what the roles & responsibilities will look like

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# 6. Examples of use cases

The use cases listed here are examples and we are open to receiving applications that address the GSMA AgriTech Accelerator's focus areas through other use cases.

# Digital Advisory

## Definition

Information-based services providing smallholder farmers with agronomic and livestock advice and best practices, information on market prices, weather and climate information as well as financial and digital literacy training.



## Sub use cases*

Agri VAS, weather information, pest and disease management, product verification, record keeping

## Business model

Business-to-Farmer (B2F), Business-to-Business-to-Farmer (B2B2F)

*The list of sub use cases is not exhaustive.

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# Digital Advisory – Sub use cases

| | |
|---|---|
| 1. Agriculture value-added services (Agri VAS) | One-to-many advisories covering agricultural and livestock information, weather and climate information and information on market prices. Agri VAS are delivered via voice channels (IVR, helplines), text channels (SMS and USSD) and via apps. |
| 2. Smart advisory | Data-driven advisory based on tailored, farm-level agro-climatic and crop specific information to support decision making, maximise productivity and reduce costs. Technologies such as sensors, satellites and drones, as well as big data analytics and AI, underpin many of these services. |
| 3. Weather information | Specialist services that provide regional and localised weather forecasts. This sub-category may include weather-adaptive and climate-smart advice. |
| 4. Pest and disease management | Digital tools that help farmers diagnose plant disease and develop strategies to treat diseased plants as well as mitigate future outbreaks. Most of the services are accessible via mobile applications and require a farmer to upload a picture of the infected plant for diagnosis. Some services are also accessible via USSD. Also includes national and regional-level pest and disease early warning systems. |
| 5. Product verification | Digital tools designed to enable farmers to validate the authenticity of agriculture inputs such as seeds, fertilisers, agro chemicals etc and prevent the proliferation of counterfeit products. Most services require farmers to send a scratch-off code from the product to a specified number via SMS. |
| 6. Record keeping | Digital tools that enable farmers to keep detailed records of livestock, including health and feeding data, to help mitigate diseases and avoid missed conceptions. Record keeping tools are also used to keep details of input usage, procurement, cost and revenue and sales records. |

*The list of sub use cases is not exhaustive.

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# Agri Digital Financial Services

## Definition

Digitally-enabled financial services for smallholders to facilitate their inclusion in the formal financial economy and allow investment in farming activities. These services are customised to meet farmers' needs and tailored to suit their cropping cycles.



## Sub use cases*

Insurance, credit, savings, credit scoring, digital payments, crowdfunding, input financing

## Business model

Business-to-Farmer (B2F), Business-to-Business-to-Farmer (B2B2F)

*The list of sub use cases is not exhaustive.

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# Agri Digital Financial Services – Sub use cases

| | |
|---|---|
| 1. Credit and loans | Lending products that target smallholders and address specific agricultural needs. Most of these products enable the provision of short-term financing for agricultural inputs. |
| 2. Credit scoring | Digital solutions that assess the creditworthiness of smallholder famers using aggregated data from multiple sources including bio data, procurement records and mobile money transactions. These tools enable financial service providers to serve smallholder farmers and lower their risks. |
| 3. Crowdfunding | Online platforms that enable investment in smallholders by sourcing funds from individuals (investors or sponsors). Most platforms also allow investors to "follow" the farmers they have invested in by providing updates via text, pictures and videos from their dashboard through a website or an app. |
| 4. Input financing | Digital tools that enable financing for the purchase of inputs like seeds, fertiliser, pesticides/herbicides from various sources including governments through subsidies. |
| 5. Savings | Targeted digital savings products for farmers designed to match their spending and savings habits, enabling them to put money aside for agricultural activities. |
| 6. Digital agri wallet | Digital wallets enable farmers to transact with various actors within the agriculture ecosystem, for instance, making and receiving payments, including electronic vouchers with which to redeem agricultural inputs. Digital wallets also allow farmers to save money and develop a transactional history, which can be used alongside other types of data to access additional financial services. |

*The list of sub use cases is not exhaustive.

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# Agri Digital Financial Services – Sub use cases (cont.)

| | |
|---|---|
| 7. Insurance | Digitally-enabled agricultural insurance services that help smallholder farmers mitigate the risks associated with external shocks such as weather events and pest and disease outbreaks. Agricultural insurance includes weather index, area yield index, multi-peril, livestock and livestock index insurance products. |
| 8. Accountability tool | Digital tools designed to help farmers view farming as a business by allowing them to track farming expenses and revenues and prove their creditworthiness. |

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*The list of sub use cases is not exhaustive.

# Digital Procurement

## Definition

Digital solutions in the agricultural last mile that enable a range of digital systems and processes to transition from paper to digital. They help agribusinesses increase transparency in their transactions with smallholders and improve efficiency and operational profitability. At the same time, farmers benefit from more transparent transactions and improved market access.



## Sub use cases*

Farmer profiling, traceability, digital payments, transactional records, receipting, advisory

## Business model

Business-to-Business-to-Farmer (B2B2F)

*The list of sub use cases is not exhaustive.

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# Digital Procurement – Sub use cases

| | |
|---|---|
| 1. Digital records | Digital solutions that replace paper-based systems and digitise transactions between farmers and agribusinesses. |
| 2. Digital records with payments | Digital solutions that replace paper-based systems, digitise transactions between farmers and agribusinesses and enable the integration of digital payments for the procurement of crops. |
| 3. Digital records with traceability | Digital solutions that replace paper-based systems, digitise transactions between farmers and agribusinesses and support the traceability of produce from "farm to fork". |
| 4. Digital records with payments and traceability | Digital solutions that replace paper-based systems, digitise transactions between farmers and agribusinesses, enable the integration of digital payments for the procurement of crops and support the traceability of produce from "farm to fork". |

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*The list of sub use cases is not exhaustive.

# Agri e-Commerce

## Definition

Digital platforms that enable the buying and selling of agricultural produce and inputs online. Although most agri e-commerce businesses sell domestically to urban consumers, agri e-commerce also enables farmers to reach international buyers.

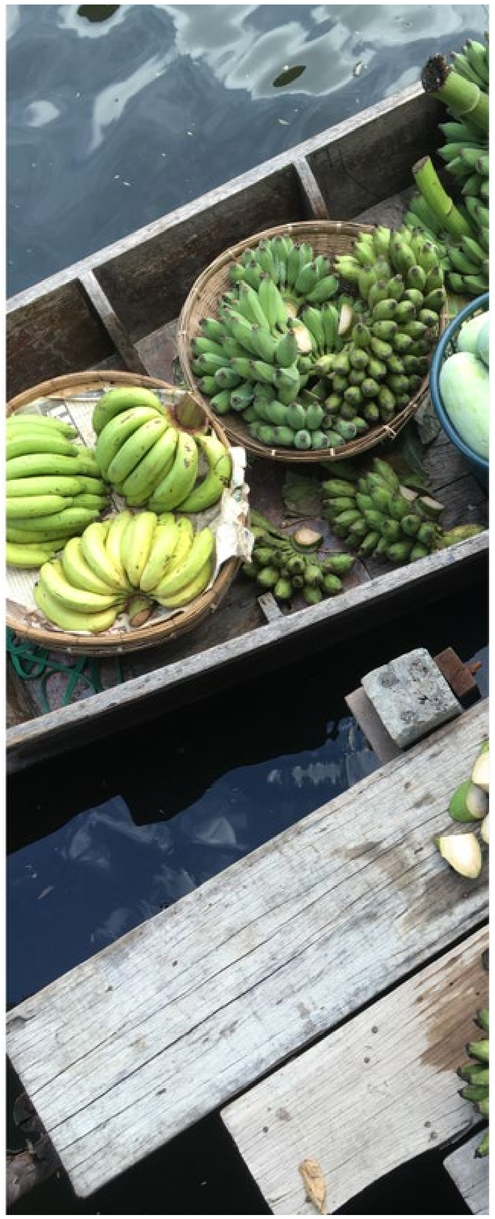
## Categories*

Inputs, outputs

## Business model

Business-to-Farmer (B2F), Business-to-Business (B2B), Business-to-Business-to-Farmer (B2B2F)

*The list of categories is not exhaustive.



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# Agri e-Commerce – Sub use cases

| | |
|---|---|
| 1. Inputs | Agri input platforms enable the sale of inputs such as seeds, fertilisers, pesticides/herbicides from input suppliers to farmers. Such platforms may also enable groups of farmers to aggregate demand and place bulk orders. |
| 2. Outputs | Platforms that enable farmers to sell to consumers (B2C model) and to enterprise customers (B2B model) such as companies in the catering industry (e.g. hotels, restaurants) and market retailers, or a hybrid of the two. |
| 3. Inputs and outputs | Platforms that enable the sale of agricultural inputs to farmers from input suppliers, as well as the sale of agricultural produce from farmers to consumers and businesses. |

*The list of sub use cases is not exhaustive.

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# Smart farming

## Definition

Smart farming refers to the use of on-farm and remote sensors to generate and transmit data about a specific crop, animal or practice to enable the mechanisation and automation of on-farm practices and achieve more efficient, high-quality and sustainable production of agricultural goods.



## Sub use cases*

Smart crop management, smart livestock management, mechanisation access services

## Business model

Business-to-Farmer (B2F), Business-to-Business (B2B), Business-to-Business-to-Farmer (B2B2F)

*The list of sub use cases is not exhaustive.

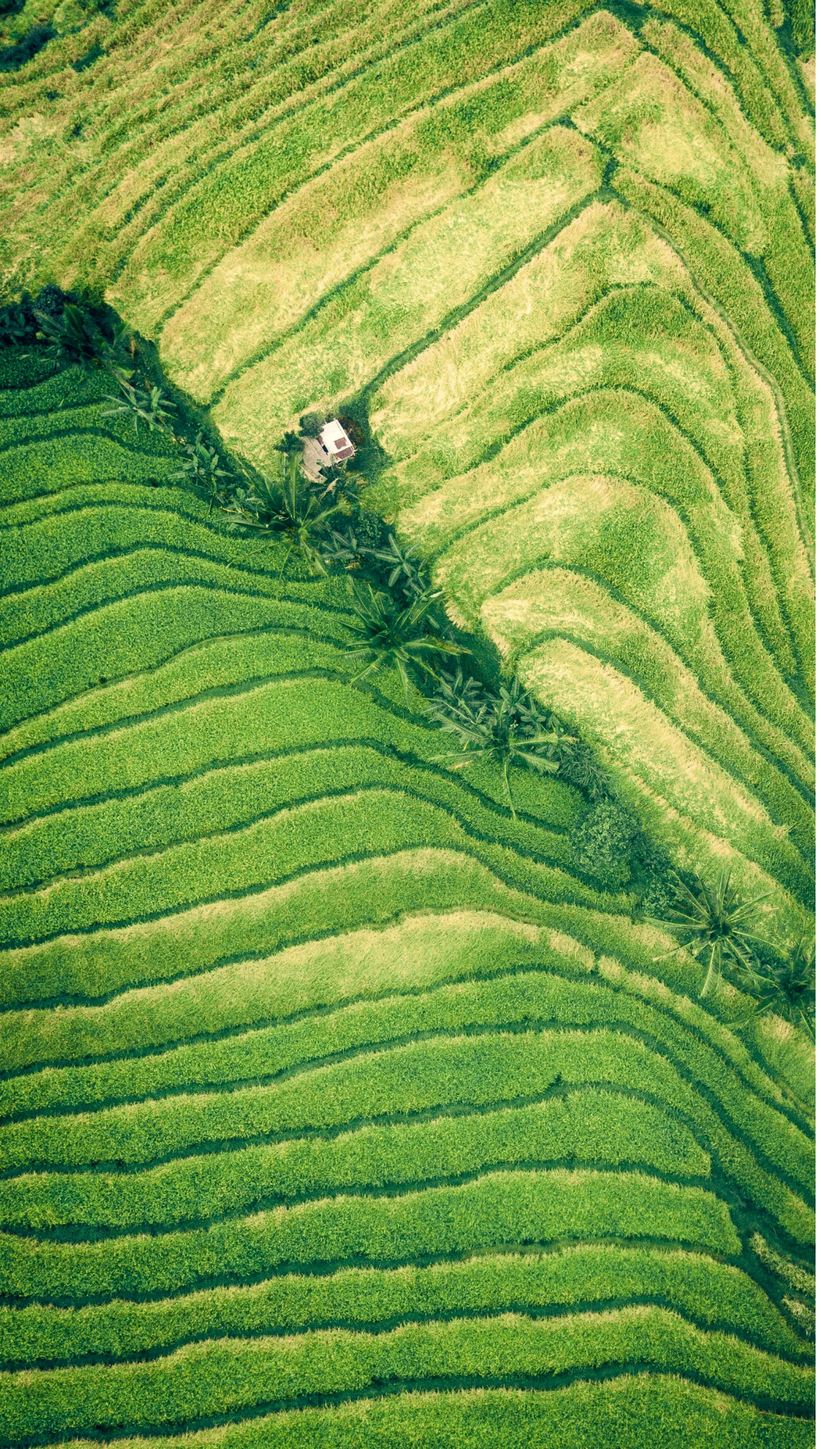
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# Smart farming – Sub use cases

| | |
|---|---|
| 1. Equipment monitoring | The smart monitoring of equipment such as irrigation systems that enable farmers to remotely control, track and look after their equipment and farming operations, leading to a reduction in water consumption and wastage. |
| 2. Livestock and aquaculture management | Digital tools that allow farmers to monitor herds remotely in order to determine their exact location at anytime, track the health and habits of livestock including when they are in estrus or about to calve. Similarly, aquaculture management systems enable farmers to monitor feeding patterns of fish and other aquaculture, detect diseases in advance, control water quality, and in some cases automate feeding altogether. |
| 3. Smart shared assets | Digital tools that enable the sharing economy for assets such as tractors, drones and other mechanised farming equipment. They provide smallholder farmers an opportunity to mechanise processes such as crop spraying, crop monitoring and land preparation. |

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*The list of sub use cases is not exhaustive.



# 7. Next steps

# Applicant Pack

Your applicant pack includes the following documents

- Term Sheet
- PDF version of the Concept Note questions
- FAQs
- Product Manager guidelines

*Please note that this PDF document is only to provide guidance. All Concept Note applications must be submitted online.

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# Next steps

- Carefully review the term sheet and contents of the applicant pack
- Start drafting your application
- Confirm project partners
- Share your questions with GSMA AgriTech team

We will organise two webinars to answer questions from potential applicants on:

1. Tuesday 13 December 2022 (09:00 to 10:00 GMT) – Please register here
2. Thursday 15 December 2022 (15:00 to 16:00 GMT) – Please register here

Please choose one timeslot that aligns with your availability.

Contact us at agritechaccelerator@gsma.com

Concept Note Application Deadline: **17:00 GMT, 10 February 2023**

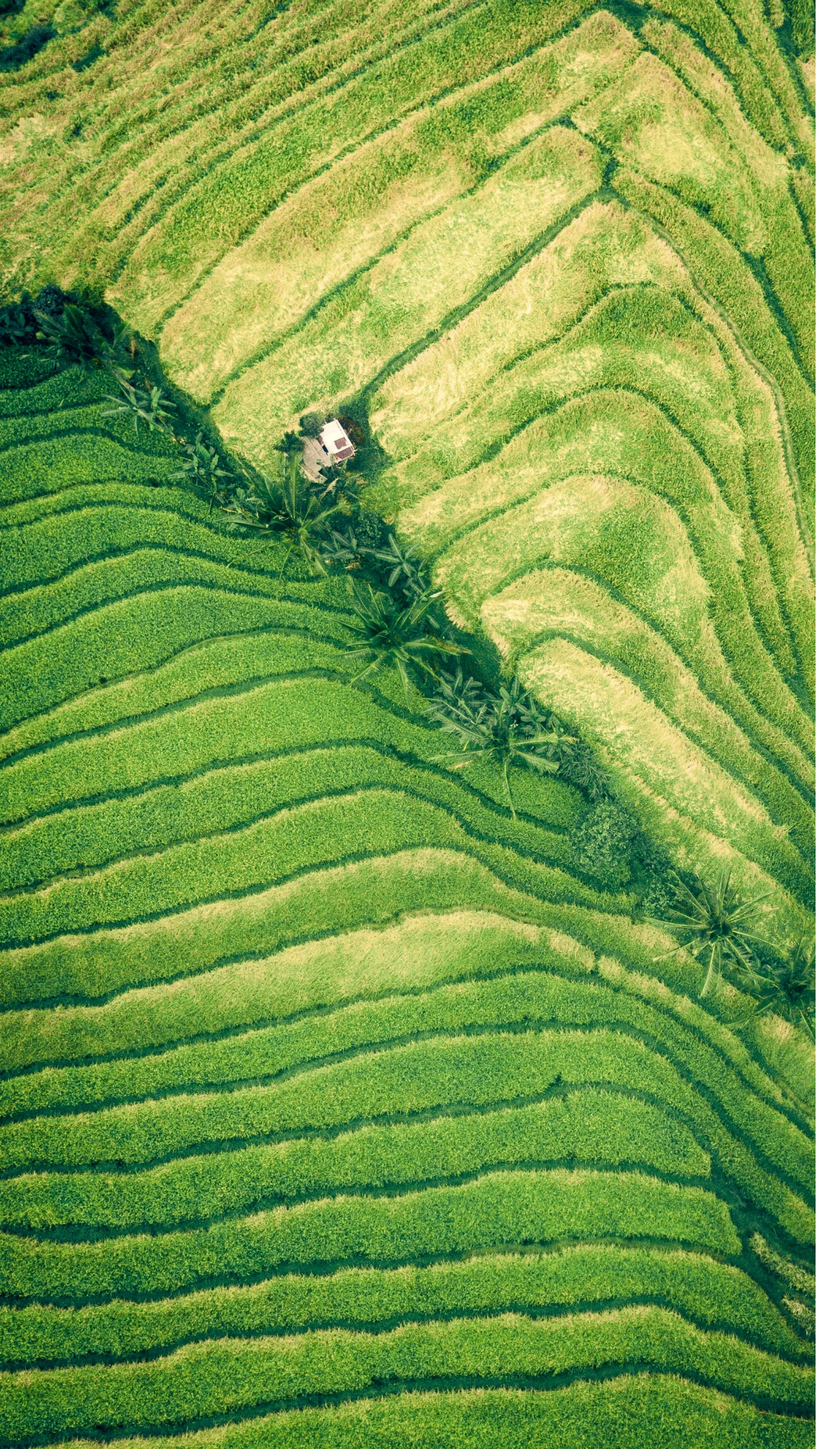
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# How to apply

All Concept Note applications must be made online here.




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# Appendix: AgriTech programme resources

# Relevant AgriTech programme resources

1. Toolkit for the digitisation of agricultural value chains
2. Creating scalable, engaging mobile solutions for agriculture
3. Agri DFS: Emerging business models to support the financial inclusion of smallholder farmers
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