Consultancy: Gender and Digital Advisory Services Assessment
Location: Ghana
Duration: 3 months

This assignment is perfect for someone looking to apply their experience and Knowledge within an organisation that is focused on helping to deliver 8 of the Sustainable Development Goals: (1) No Poverty; (2) Zero Hunger; (3) Quality Education; (5) Gender Equality; (12) Responsible Consumption and Production; (13) Climate Action; (15) Life on Land; and (17) Partnerships for the Goals.

We live in a world where the demand for multiple land uses constantly rises and climate change places additional stress on the sustainable use of natural resources. While solutions to issues such as hunger and poverty are now within our reach, how we act today will make a big difference to how we live tomorrow.
1. Background and Rationale

Digital technologies available for farmers have increased significantly in the past few years. Digital technologies have the potential to increase access to services in rural areas, reduce transaction costs, optimize the use of input and natural resources and increase resilience to shocks. But, ICTs can also exacerbate existing inequality. Rural women living in low-income countries are being left behind, as they face the triple divide of digital, rural and gender. 1  2

Various studies show that many existing ICT for agriculture solutions have a low proportion of women users compared to men. 3  4  5  6 Women’s limited use of these services in low and middle-income countries is attributed to low access to the internet and digital devices. The gender mobile ownership gap is 19% in South Asia and 13% in Sub-Saharan Africa. 7 Most people in rural areas use mobiles for internet services. The gender mobile internet gap is 41% in South Asia and 37% in Sub-Saharan Africa. 8 Women’s limited access to mobiles and mobile internet is, in turn, explained by factors, such as the inability to afford mobile devices and mobile data plans and lower levels of literacy and digital skills among rural women. 9 In conservative cultures, social norms can also be barriers for women, as they are not allowed to have smart phones or access social media. 10 However, even when women have mobiles, they often don’t use digital agriculture services because of lack of awareness, or because of gender norms. Gender norms limit women’s formal interaction with agri-service providers, as men who are heads of households are expected to carry out these roles.11

Low access to digital tools for agriculture information is not limited to women farmers. A similar trend is observed among women service providers, agriculture extension agents and agro-dealers. CABI’s evaluation of CABI academy users, using 29% of the users for which data on sex of the user was available, found that the number of male users is almost twice as much as female users. Eighteen percent of the users were men, while 10% were women.

1 FAO. 2018. Gender and ICTs: Mainstreaming gender in the use of information and communication technologies (ICTs) for agriculture and rural development, by Sophie Treinen and Alice Van der Elstraeten. Rome, Italy
3 Lisa Chassin, May 2022, Reaching and Empowering Women with Digital Solutions in the Agricultural Last Mile, GSM Association
4 Gender and rural advisory services assessment in Ghana, 2022
5 Gender and rural advisory services assessment in Pakistan, 2022
6 Gender impact study: cross-cutting final report, Mercy Corps AgriFin, April 2021
8 Matthew Shanahan, 2022, The Mobile Gender Gap Report 2022, GSMA.
9 Matthew Shanahan, 2022, The Mobile Gender Gap Report 2022, GSMA.
11 Lisa Chassin, May 2022, Reaching and Empowering Women with Digital Solutions in the Agricultural Last Mile, GSM Association

By sharing knowledge and science, CABI tackles global issues like poverty, hunger, education, equality, sustainability, climate change and biodiversity. We do this by helping farmers grow more and lose less of what they produce, combating threats to agriculture and the environment from pests and diseases, protecting natural habitats from invasive species, and improving access to scientific knowledge.

CABI is an international, inter-governmental, not-for-profit organization that improves people’s lives worldwide by providing information and applying scientific expertise to solve problems in agriculture and the environment. Our approach involves putting information, skills and tools into people’s hands. CABI’s 49 Member Countries guide and influence our work which is delivered by scientific staff based in our global network of centres.

CABI is committed to making a difference, playing its part in creating a brighter, more equitable and sustainable future.

You can learn more at: www.cabi.org
An online survey conducted by CABI on the use and benefits of Plantwise digital tools in Bangladesh found that out of the total 62% of survey respondents for which the sex of the respondent was identified, only 6% were women users. A study in Kenya which assessed the impact of ICT4Ag solution introduced by Farm Africa and its use by extension agents found that women extension agents, unlike their male counterparts, preferred the face-to-face training. The study also indicated that preference for face-to-face training is related to lower education and digital literacy levels among women extension agents.

Under the PlantwisePlus programme, CABI aims to enhance the knowledge and uptake of climate smart plant health practices by agriculture service providers through responsive digital advisory tools. CABI is trying to equip agriculture advisory service providers with information and decision-making tools through digital systems, to share information with farmers about pest management and other agricultural practices. Digital tools promoted by CABI include: the Plantwise Knowledge Bank, the Plantwise Factsheets Library App, Simulator games on pest diagnostic and crop management, CABI Academy, CABI BioProtection portal, Plantwise Online Management Systems (POMS) and Crop App Index.

It is important to make sure that these digital tools are accessed by both men and women agriculture service providers and benefit men and women farmers equally. Various works of literature on gender and digital advisory services indicate digital agriculture services can advance inclusion if a gender-sensitive approach is followed. This involves using context analysis to understand factors that contribute to the exclusion of certain groups from the use of digital tools and adopting the content of information shared and the format of communication to make it relevant and accessible to women and other excluded groups.

A few studies have already been done on access and use of PlantwisePlus Digital tools. An evaluation has been done on CABI academy users and the challenges users faced to enroll in the CABI academy course. In Bangladesh, a study in 2022 looked at the demographics of users of digital tools, use rates of different digital tools, factors that influenced use and how the digital tools are used for decision-making by agriculture service providers. Both studies did not have an exclusive gender focus, although they have identified women service providers with limited use of digital tools. Another CABI study conducted in Ghana in 2022 has explored women and men farmers’ use of agricultural information shared through mobile and how it changed during the COVID-19 pandemic. The findings have confirmed existing
literature about the gender mobile and internet gap in rural areas and women’s limited awareness of digital agriculture advisory services and low digital literacy levels.\textsuperscript{21}

This study aims to build on these previous studies and explore further gender related barriers agriculture service providers face to access and use digital tools promoted by CABI and other actors in the agriculture sector. The study will also look at the extent to which the content of the information in CABI digital tools aligns with women farmers’ agricultural roles and explore needs that are not addressed. As CABI under the PlantwisePlus program also aims to reach lead farmers in digital advisory tools, the study will look at trends in men and women farmers’ use of digital advisory services.

2. Objective of the Study

The objectives of this study are to understand what works in bridging the gender gap in access and use of digital tools for agriculture, by both agriculture service providers and farmers in Ghana.

The following are key research questions the study will address:

- What is the status of access and use of PlantwisePlus digital tools by men and women agriculture service providers?
- Outside of the PlantwisePlus digital tools, what other digital tools are used by men and women agriculture service providers?
- What are the challenges for access and use of digital tools among women service providers and how do they differ from challenges faced by male service providers?
- How do service providers use PlantwisePlus and other digital tools to provide advice to farmers?
- How does the content of information shared through the PlantwisePlus digital tools align with the information needs of women farmers, i.e., with the agricultural activities and value chains women farmers are engaged in?

Which group of men and women farmers directly access digital advisory services? What are the drivers and barriers for access among women farmers and which form of digital communication is more accessible to women farmers?

3. Methodology and Scope of the Study

Qualitative tools will be used for data collection. Data collection tools are listed below. The table below shows the information that will be captured using the different tools.

- Key informant interviews with agriculture extension and plant protection departments and other private sector and non-governmental organizations developing and promoting digital tools for agriculture
- In-depth interviews with agriculture service providers (extension agents, plant doctors and agro-dealers) using a semi-structured questionnaire
- Focus group discussions with men and women farmers living in program areas/sites where CABI and other organizations promoting digital tools in agriculture are operating

\textsuperscript{21} Tamsin Davis, Digital access to agricultural information during CoVID: a gendered perspective from Ghana, September 2022.
### Table 1- data collection tools

<table>
<thead>
<tr>
<th>Data collection tool</th>
<th>Description of data that will be captured</th>
<th>Respondents/ sources of information/ documents to be reviewed</th>
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</table>
| Key informant interview | The number and type of digital advisory tools available in Ghana  
How the tools are promoted or popularized to extension agents and farmers  
Available information about their current use and barriers to access and use | National level – Directorate of Agriculture Extension Services, Plant Protection, ICT wing in MoFA;  
Regional level – Agriculture Extension Directorate line offices government extension and plant protection departments (at national and regional levels)  
The relevant staff of Farmerline and ESOKO  
Assessment or evaluation reports produced on the different digital tools |
| In-depth interviews with agriculture service providers | Practice in using PlantwisePlus and other digital tools for agriculture  
Barriers to access and use of digital tools for agriculture  
Use of information from digital tools to advise farmers  
Information needs of women farmers and the extent to which available digital tools respond to these needs | Extension agents, plant doctors and agro-dealers working in CABI program sites (at regional and district levels) |
| Focus group discussion | Practice using digital advisory tools among farmers, barriers and facilitators for access and use of digital tools | Men and women farmers living in CABI program areas and program areas of other organizations promoting digital tools |

### 4. Study Site and Sample Selection

The study will be conducted in Bono and Ashanti regions and 2 districts per region.

In the study districts agriculture service providers (extension agents, plant doctors and agro dealers) will be selected using purposive sampling methods for in-depth interviews. Efforts will be made to include an equal number of men and women agriculture service providers in the sample of respondents.

Focus group discussions with men and women farmers will be held in two villages selected from one district per region. One village located closer to the district town and another village remotely located from the district town will be selected. In each village, two focus group discussions with women and two focus group discussions with men farmers will be conducted. Both the men and women focus group discussions will include FGDs with younger women/men groups below the age of 35 and adult men/women groups above the age of 35.

The tables below give the number of different groups expected to participate in the study in Ghana and Bangladesh.
## Data collection table for Ghana

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<thead>
<tr>
<th>Region</th>
<th>Selected Districts</th>
<th>Focus Group Discussions (FGDs)</th>
<th>Key informant interviews</th>
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<td>Men farmers (younger men group &lt;35 &amp; older men group &gt;35)</td>
<td>National &amp; regional agriculture extension &amp; plant protection departments &amp; ICT wing in MOFA</td>
<td>Women agriculture extension agents and plant doctors</td>
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<td>Women farmers (younger women group &lt;35 &amp; older women group &gt;35)</td>
<td>Farmerline &amp; ESOKO and other private/NGO promoting digital tools for agriculture</td>
<td>Men agriculture extension agents and plant doctors</td>
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**No. participants = No. FGDs x 8**  
128

**Total number of key informants & in-depth interviews**  
39
5. Data Analysis
A qualitative method of data collection and analysis will be used.

6. Outputs of the Assessment
The assessment will make recommendations on strategies to adopt to make PlantwisePlus digital advisory tools more accessible and usable by women agriculture service providers and farmers.

7. Expected Deliverables and Timelines
All written documentation will be submitted in English using Microsoft Word in electronic copy. The main body of all reports should be written in simple, non-technical language, with any technical material to be presented in annexes. All primary data collected and analysis conducted for the assessment shall remain the property of CABI and must be submitted electronically, and in a clear and comprehensible format in Excel, and any other statistical software. The consultant will provide:
- A draft final report within **10 weeks**, for review by CABI
- A final report within **2 weeks** of return of comments by CABI, to include:
  - Executive summary of max. 1 page
  - Methodology/approach
  - Key findings
  - Conclusion
Annex with data in Excel, and supporting tables per country

8. Requirements
- Strong experience in carrying out surveys with rural advisory services and farmers in Africa
- Demonstrate presence in the identified countries
- Track record of working in the agricultural development arena and supporting organisations in this area
- Good knowledge of public agricultural extension service delivery and information service provision
- Strong analytical, data interpretation, and communication skills
- Excellent reporting and presentation skills

9. Management and Implementation Responsibilities
The consultant will report directly to the CABI gender team. Any proposed changes to the team composition listed in the application must be approved by CABI. The Consultant shall be responsible for:
- Applying and obtaining ethics clearance for the study from the appropriate national bodies, or the CABI Ethical Review Board
- Conducting all data collection. The use of digital data collection tools is highly recommended
- Data cleaning and data quality assurance, analysis and reporting, in a clear and accessible format
- Cater for all his/her field expenses and those of the team of enumerators
• Regular progress reporting to the CABI gender team, including responding to any comments or technical inputs within agreed timelines.
• Producing deliverables within agreed timelines, and following quality requirements from CABI
• Seeking comments and feedback from CABI, through the gender team, in sufficient time to discuss and incorporate these into the final report
• Producing the final report as specified above
• Submitting to CABI the clean datasets

CABI shall provide:
• Proposed study tools and sampling approach
• Guidance and technical support as required throughout the assessment, including on links with CABI ethical review board
• Introductory meetings with key staff
• Comments and feedback on, and approval of all deliverables, within agreed timelines.

10. Requirements
• Excellent understanding of gender issues, preferably within an agricultural context
• Strong experience in carrying out key informant interviews and focus group discussions in Ghana
• Track record of working in the agricultural development arena and supporting organisations in this area
• Good knowledge of public agricultural extension service delivery and information service provision
• Strong analytical, data interpretation, and communication skills
• Excellent reporting and presentation skills

11. Management and Implementation Responsibilities
The consultant will report to the CABI Monitoring and Evaluation (M&E) team and the Project Manager. Any proposed changes to the team composition listed in the application must be approved by CABI.

The Consultant shall be responsible for:
• Proposing a research design and implementation plan for agreement by CABI
• Conducting all data collection
• Data cleaning and data quality assurance, analysis and reporting, in a clear and accessible format
• All his/her field expenses
• Regular progress reporting to the CABI M&E team and Project Manager, including responding to any comments or technical inputs within agreed timelines.
• Producing deliverables within agreed timelines, and following quality requirements from CABI.
• Seeking comments and feedback from CABI, through the M&E team, in sufficient
time to discuss and incorporate these into the final report.
• Producing the final report as specified above.

CABI shall provide:
• Guidance and technical support as required throughout the assessment
• Introductory meetings with key staff.
• Comments and feedback on, and approval of all deliverables, within agreed
timelines.

12. Proposal for Assignment
Interested candidates or firms are requested to submit:
1. A proposal detailing their interpretation of the TOR, proposed methodology including,
sampling, work schedule and plan of activities. The proposal should ideally not
exceed 10 pages
2. The proposed budget, in US Dollars (Propose a realistic budget for this assignment),
including a breakdown of the budget and a justification of expenses. The budget
should include only those costs that can be directly attributed to the activities
proposed, with an explanation of budget line items
3. Evidence that the firm can deliver the work / has previously worked across all the
geographic regions required
4. Upon a review of the submission, CABI may require additional documentation to fulfil
due diligence requirements. Requests for this will be made on a case by case basis,
and a timeframe for turnaround agreed.

13. How to apply
All documents must be submitted by email to: procurement-africa@cabi.org by midnight on
17th August 2023.
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