



mWomen
mAgri

WOMEN IN AGRICULTURE: A TOOLKIT FOR MOBILE SERVICES PRACTITIONERS

GSMA mWOMEN AND
GSMA mAGRI PROGRAMMES
MAY 2014

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Executive Summary

Delivering mobile-enabled agricultural services (“mAgri services”) to women in developing countries is a major market opportunity for the mobile industry that also offers substantial social benefits. The mAgri services market is nascent but growing—GSMA has tracked 106 active, global deployments by mobile network operators (MNOs) and third party providers.¹ Women working in agriculture account for an estimated 556 million potential users globally,² but are underserved as a unique customer segment.

The GSMA mWomen and mAgri programmes have produced the Mobile Agricultural Services Toolkit as a guide for mobile operators, other mobile providers, and development practitioners to better serve women in this segment. It includes recommendations and tools for each stage of the product development process, as well as examples of good practices. The products and services in question include value-added services (information, advisory, matchmaking, or other), mobile financial services, and basic services (voice, SMS, and data) delivered via mobile phone. While the focus is broadly on Sub-Saharan Africa, South Asia and Southeast Asia, the framework may also be applied to other developing regions.

The commercial opportunity

In emerging markets, women working in agriculture are an untapped market for mobile operators.

- As urban areas reach saturation in mobile penetration, rural markets represent high-growth opportunities for mobile operators seeking to reach new users. For example, Vodacom noted at the end of 2012 that future growth in Tanzania will come from rural areas that currently have low connection penetration rates (25% compared to 80% in urban areas).³
- Women comprise up to 50% of agricultural workers, an estimated 556 million potential users globally.⁴

The social opportunity

Agriculture is a major source of livelihood for most resource-poor populations in developing regions. Women play a core role in agriculture, but underperform in terms of productivity largely because they lack access to resources such as finance, skills training, and information services.⁵

Mobile technology could bridge this gap, helping to:

- Increase productivity and incomes of rural women and their households
- Empower rural women in their households and communities and
- Improve livelihoods overall for underserved communities

1. The GSMA mAgri Deployment Tracker maps the products and services using mobile in agriculture across the developing world

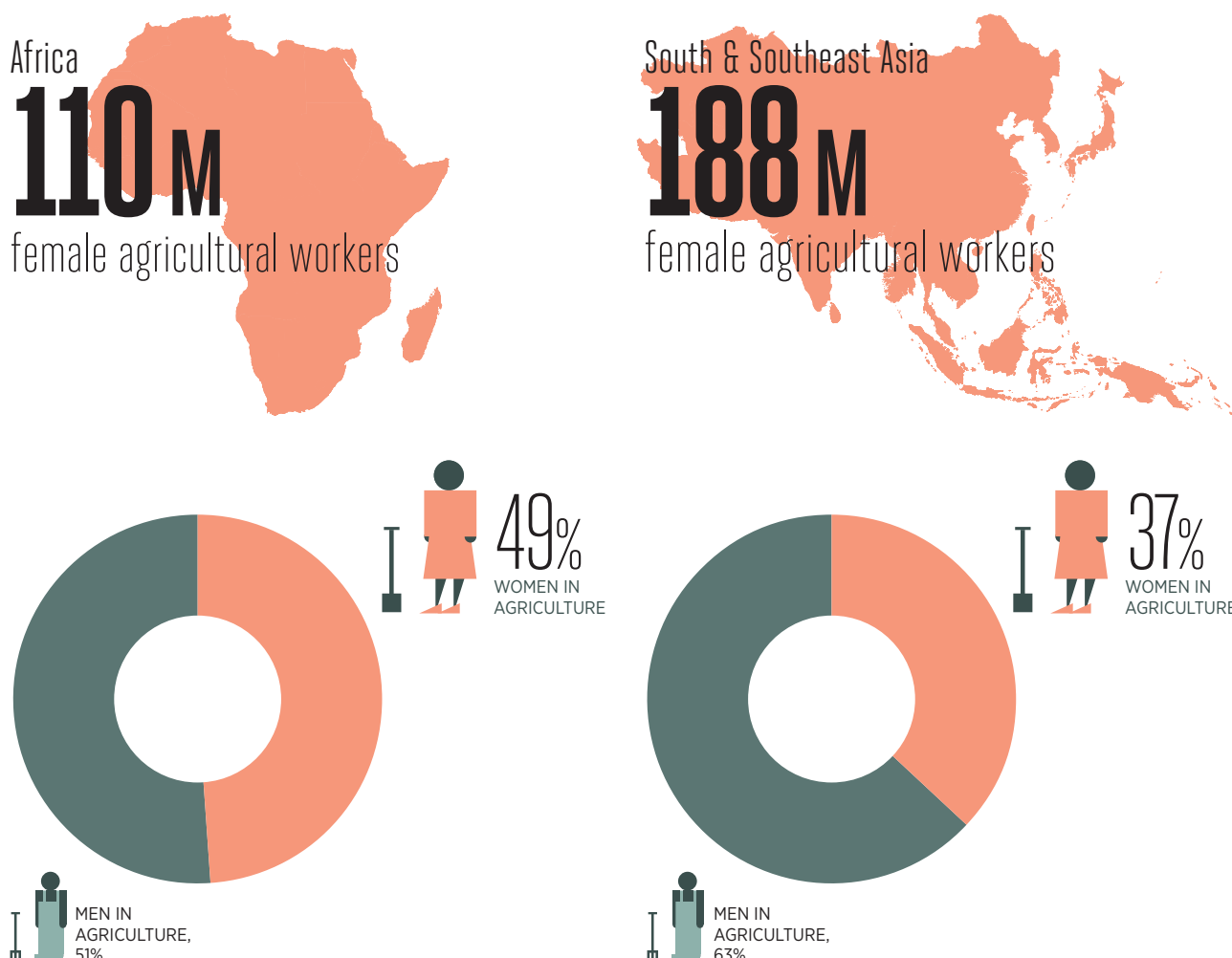
2. FAOSTAT 2013 estimate of female agricultural laborers in emerging markets

3. GSMA Sub-Saharan Africa Mobile Economy Report 2013

4. FAOSTAT 2013 estimate, includes Less Developed Countries in the Americas, Africa, and Asia (including China)

5. Gender in Agriculture Toolkit, World Bank

FIGURE 1

GENDER DISTRIBUTION OF THE AGRICULTURAL LABOUR FORCE IN TARGET REGIONS⁶

What is unique about mAgri services to women?

Women in agriculture require a tailored approach because they:

- Play different roles in agricultural production and the household (women generally have more 'informal' roles that are often smaller scale, localised, or 'invisible')
- Have different price sensitivities and purchasing priorities than men, reinvesting an estimated 90% of their income in their families, while men reinvest just 30–40%⁷
- Access information through different, often informal channels
- Are less likely to have access to technology due to cultural barriers, lower literacy levels, and less disposable income.

Table 1 illustrates the key stages in product development, with recommendations and tools summarised for easy reference.

6. FAOSTAT, 2013 estimates, accessed 1 February 2014

7. Engendering Development through Gender Equality, World Bank, 2001

TABLE 1
TOOLKIT CONTENTS

CLICK TO GO TO RELEVANT PAGE | SEE APPENDIX FOR THIS CONTENT

STAGES	KEY RECOMMENDATIONS		TOOLS & CASE STUDIES
1. DEFINE THE MARKET	1. ASSESS THE MARKET OPPORTUNITY FOR WOMEN-FOCUSED mAGRI SERVICES	<ul style="list-style-type: none">Define the range of possible mAgri servicesFocus on small-scale actors (farmers, other agricultural workers)Estimate the size of the market	Guide to Value Chain Analysis through a Gender Lens Estimating market size
	2. OBSERVE KEY TRENDS	<ul style="list-style-type: none">Observe generational differences in mobile adoptionConsult industry research via GSMA and others	
2. GENERATE CONSUMER INSIGHTS	1. LEVERAGE EXISTING DATA	<ul style="list-style-type: none">Challenge the common belief that data on women does not existBeware of biased and poor quality data	Question Guide: Segmenting the market by cultural factors influencing women's use of mobile services Question Guide: Segmenting the market by gender roles in agriculture Guide to Analysing Household-Level Consumer Insights through a Gender Lens GSMA mWomen Consumer Insights Research Toolkit Consumer Insights & Design Methodologies Guide to Analysing Consumer Insights on the Agricultural Cycle through a Gender Lens Key Consumer Insights from GSMA's Striving & Surviving Research Women of Tanzania – Illustrative Consumer Insights Profiles
	2. SEGMENT THE MARKET AND SET INITIAL PRIORITIES	<ul style="list-style-type: none">Consider how culture and agricultural roles drive segmentationSet priorities to form the basis of consumer insights research	
	3. INITIATE CONSUMER INSIGHTS RESEARCH USING A GENDER LENS	<ul style="list-style-type: none">Understand how gender influences consumer needsConduct research internally or with partnersDiscover women's hidden roles in agricultural value chains	
3. DESIGN PRODUCTS & SERVICES	1. DESIGN TO MEET WANTS AND NEEDS	<ul style="list-style-type: none">Design to meet women's purchasing prioritiesConsider common design features women preferDesign to overcome low levels of technological literacy	Question Guide: Evaluating the best pricing package for women working in agriculture Essential Handset Design Features for Women in Agriculture Common Good Practices in Interactive Voice Response IKSL's Gender Guidelines for Agricultural Information Content Managers Criteria for assessing content partners
	2. INCLUDE MEN IN THE DESIGN PROCESS	<ul style="list-style-type: none">Gather input from men in the development and testing processIncorporate complementary services/messages for men	
	3. IDENTIFY CONTENT SOURCES	<ul style="list-style-type: none">Find partners that deliver gender-sensitive contentSource content that meets women's needsCurate content that is appealing and engaging to women	
4. BRAND & PROMOTE	1. CRAFT MESSAGES THAT APPEAL TO WOMEN	<ul style="list-style-type: none">Position mAgri services to benefit the whole householdPromote mAgri services as an income-generating activity and a tool for empowerment	Sample of effective adverts from Asiacell, Esoko Ghana, and Tigo Kilimo ARDA's Resource Kit: Gender-Sensitive Guidelines for Communicating with Women Farmers
	2. SELECT COMMUNICATION CHANNELS AND ACTIVITIES	<ul style="list-style-type: none">Reach rural women via television and radioAccess less formal information channels to reach womenExplore community-based marketing channelsReach women and men at different times of day	
5. DISTRIBUTE & GROW	1. DEVELOP COST-EFFECTIVE DISTRIBUTION CHANNELS	<ul style="list-style-type: none">Work with women's groupsPartner with existing female distributorsExplore tax relief and government subsidies	Sri Lankan MNO Dialog Axiata's 5-Star Partner training programme for women agents Ethiopia's Kebele Women's Association approach to overcoming gender barriers
	2. DEPLOY AGENT NETWORK TO INTERACT EFFECTIVELY WITH FEMALE CUSTOMERS	<ul style="list-style-type: none">Provide user educationTrain distribution agents to spend time with women usersTrain women to be agents and entrepreneursAddress cultural barriers and prevent negative side effects	
6. MONITOR & IMPROVE	1. DEFINE CLEAR PERFORMANCE OBJECTIVES	<ul style="list-style-type: none">Use gender-focused social and commercial indicatorsBuild data point reporting into service design and feedback loops	Airtel Chama Project's Key Performance Indicators (KPIs) Grameen Foundation's CKW programme's data collection method
	2. MONITOR & EVALUATE PERFORMANCE	<ul style="list-style-type: none">Tag feedback by genderCollect data from multiple sourcesIncorporate feedback loops to improve performance	

Acknowledgements

GSMA mWomen and GSMA mAgri would like to thank the following organisations and individuals for their contributions to this Toolkit.

- Airtel Africa
- Centre for Agricultural Bioscience International (CABI)
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- Handygo Technologies
- IFFCO Kisan Sanchar Limited (IKSL)
- International Livestock Research Institute (ILRI)
- Jemimah Njuki
- MercyCorps
- Technoserve
- Tigo Tanzania
- United States Agency for International Development (USAID)
- Vodafone Ghana

How to Use this Toolkit

This document is a tool for mAgri service providers and development practitioners to reach and serve women working in agriculture more effectively. The toolkit provides recommendations, insights, and examples of good practices and tools for each stage of the product development process, and covers a full range of mobile services, including value-added (information, advisory, or other), financial, and basic services (voice, SMS, and data).

The format of the toolkit is intended to be modular, with certain sections applying to those performing specific management functions within a mobile operator's organizational structure.

The toolkit is comprised of six key stages, each of which includes a specific set of recommendations:

1. **Define the Market:** The core business case rationale is developed in this stage, with recommendations on how to define and assess the target market of women working in agriculture.
2. **Generate Consumer Insights:** Describes methods and guidelines for identifying user needs and conducting research on women in the agricultural value chain, with recommendations for market segmentation.
3. **Design Products & Services:** Highlights several design features best suited to women in agriculture, and recommends methodologies for incorporating consumer insights into service design.
4. **Brand & Promote:** Illustrates effective marketing strategies to engage women working in agriculture.
5. **Distribute & Grow:** Provides recommendations for creating and adapting cost-effective channels to reach women in agriculture.
6. **Monitor & Improve:** Suggests tactics and strategies for monitoring performance and correcting course to create long-term value for both mobile providers and women users.

These stages should be part of an on going, iterative development process that will update and improve services over time.

The recommendations also suggest potential partnerships and outsourcing options for mAgri service providers when they need to access additional skills and resources.

Look for these symbols throughout the document



potential partnerships



working example



insights



tool



good practice

It should be noted that women working in agriculture are an extremely diverse group with highly variable incomes, geography, skills, opportunities, and challenges. To ensure mAgri service offerings provide value to the target population of women, operators must tailor them to the local context, taking the particular crop type, farming methods, language, and cultural context into account. The purpose of this toolkit is to provide a methodology and examples for mobile operators to understand this emerging segment of the market and to provide a starting point for tailoring their products and services to meet the unique needs of women in agriculture across the developing world.

DEFINE THE MARKET

GENERATE
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Stage 1: Define the Market

In this stage, the Toolkit guides mAgri service providers in defining the target market, assessing the size of the opportunity, and identifying trends that will affect market growth. These efforts will help to determine both the actual expected revenue and the relevant market factors in prioritising mAgri services in go-to-market strategies.

KEY RECOMMENDATIONS

1. ASSESS THE MARKET OPPORTUNITY FOR WOMEN-FOCUSED mAGRI SERVICES

- Define the range of possible mAgri services
- Focus on small-scale actors (farmers, other agricultural workers)
- Estimate the size of the market

2. OBSERVE KEY TRENDS

- Observe generational differences in mobile adoption
- Consult industry research via GSMA and others

1. Assess the market opportunity for women-focused mAgri services

Defining the market will enable mAgri service providers to set initial priorities, focus resources for product development, and identify service areas and target customer groups.

Define the range of possible mAgri services

There are five main types of mAgri services best suited to small-scale agricultural users:

1. Information services – automated information on weather, crop management practices, prices, etc.
2. Advisory services – communication between agricultural workers and expert advisers on specific topics.
3. Supply chain management – services that manage work flow at various stages of the agricultural cycle.
4. Market linkages – services that enable connection with buyers, either directly or through collective sales.
5. Mobile financial services for agricultural workers – money transfer within agricultural value chains (e.g. payments, savings, loans, insurance, and other services).

At this stage, mobile providers can assess which services fall within existing or planned capabilities.

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Focus on small-scale actors (farmers, other agricultural workers)

Of the 2.5 billion people in poor countries living directly off products and income from agriculture, an estimated 1.5 billion live in small households. In fact, small-scale farmers manage 80% of the farmland in Sub-Saharan Africa and Asia. These small households therefore represent a large potential market for mAgri services.⁸



Small-scale production predominates in Kenya. Small-scale agriculture accounts for 75% of total agricultural output and 70% of marketed agricultural produce in Kenya, which comes mostly from farms averaging 0.2–3 hectares. Interestingly, this rate varies by product, with small-scale farmers producing 50% of tea, 65% of coffee, 80% of milk, and up to 85% of fish in Kenya.⁹

BOX 1

CONDUCT AN ASSESSMENT OF AGRICULTURAL VALUE CHAINS IN TARGET AREAS



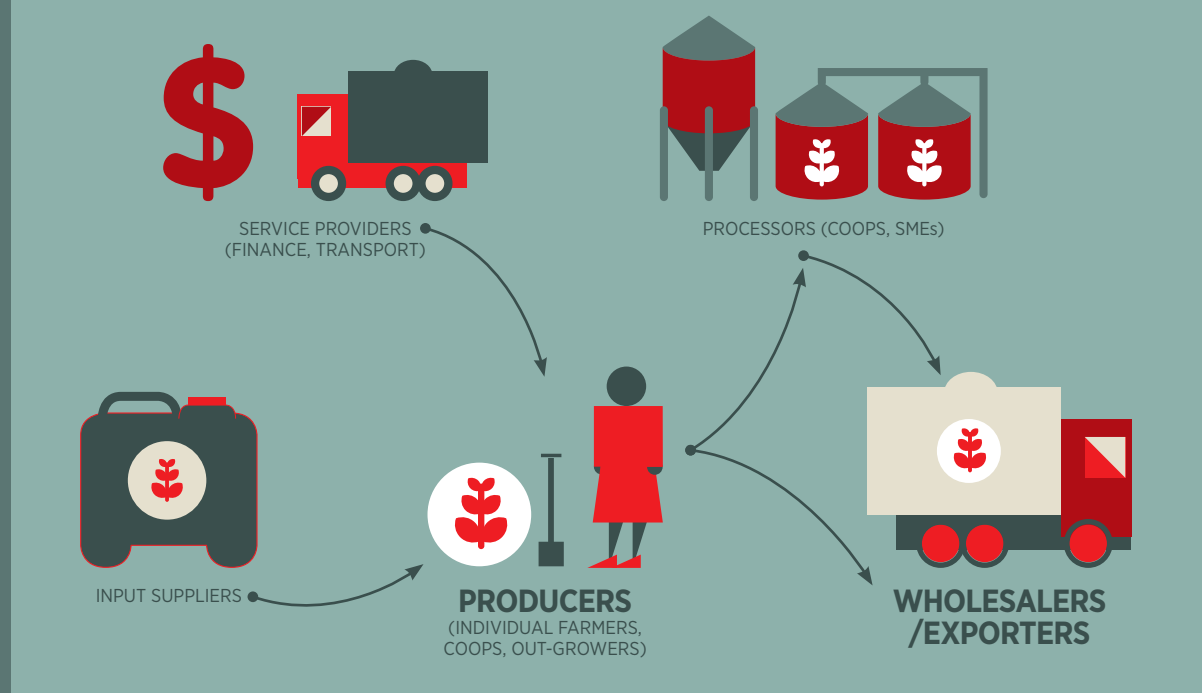
A 'value chain' describes the full range of activities that brings a product from conception to end use.

Producers and processors are at the core of the value chain, while input suppliers and various service providers support production. Aggregators (exporters or domestic wholesalers) and retailers bring agricultural products to market.

FIGURE 2

THE AGRICULTURAL VALUE CHAIN

Women's activities fall mainly within the production and processing stages of the agricultural value chain.



8. Food and Agriculture Organization of the United Nations (FAO), "Smallholders and Family Farmers", 2012.

9. Peter Njenga, Dr. Fridah Mugo & Romanus Opiyo, "Youth and Women Empowerment through Agriculture in Kenya", 2013.

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Small-scale producers and processors are the main target groups for mAgri services and the focus of this Toolkit. These groups generally fall within the following categories:

- Farmers – Individuals within a household who prepare, plant, harvest, sell, or manage the consumption of agricultural products
- Livestock keepers – Individuals within a household who maintain goats, cattle, poultry, or other animals
- Agricultural labourers – Farm workers who do not own or manage agricultural assets, but contribute to agricultural production
- Small-scale processors – Individuals, small businesses, or cooperatives that process agricultural products through canning, drying, or other value-added methods

Note that some of these groups may overlap, and that the value chains vary significantly based on crop, region, and many other factors. In addition, the informal sector, where many women work, is often highly complex and challenging to map.

For more guidance on performing this assessment, see *Appendix A: Guide to Value Chain Analysis through a Gender Lens*.



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Estimate the size of the market

One method of estimating the size of a market is to first assess the target ‘value chain’ and then use population data to define the user base. Existing usage and ownership data can then be applied to estimate the revenue opportunity.

- **Conduct a value chain assessment to identify user groups.** A value chain assessment will define potential user groups involved in agricultural production, whether for subsistence consumption or for the sale of products. See Box 2 below and Appendix A: Guide to Value Chain Analysis through a Gender Lens
- **Use brand tracker research and national and regional population data to assess the revenue opportunity.** Brand trackers can gather data on usage, brand awareness, attitudes, perceptions, and factors influencing purchasing decisions. See Box 2 for more detail on cross-analysing national or regional statistical data with brand research
- **Target both handset owners (current, lapsed, and future) and non-owners (borrowers, non-SIM fixed services).** Identifying these users can be a challenge, but existing data should be examined since many rural women will access and purchase mAgri services on a phone they do not own. For instance, one phone may be used by multiple women in more than one household to access mAgri services periodically

BOX 2

ESTIMATING MARKET SIZE



One method to estimate market size is to match national statistics with internal MNO consumer brand research (‘Brand Trackers’), which typically gathers data on usage, brand awareness, attitudes, perceptions, and factors influencing purchasing decisions. The recommended steps are:

Analyse population data

- Identify target groups within national statistics such as population, household expenditure/incomes, voting records, land registration, or welfare surveys
- Quantify market by gender, region, income levels, occupation (‘value chain role’), or similar factors

Analyse usage data

- Collect usage and expenditure data for mobile, Internet, and other types of communications at the national level or for comparable regions
- Within mobile data, identify, if possible, segments of the population that own their phones, borrow phones, or do not have access to phones at all. Targeted additional research on these segments is useful when data is not readily available

Assess market size

- Identify groups of customers to validate by segment within the brand tracker results
- Compare customers’ actual usage data and cross-analyse with population data to estimate potential market size

Examples: The Pakistan Telecommunications Authority publishes annual statistics on mobile uptake and usage in its industry reports. The Government of India has introduced an **Open Government Data Platform** with broad economic data, which can be a useful source of national, regional, and local statistics.

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2. Observe key trends

The market size of mobile services for women in agriculture is affected by several key trends that service providers should take into account.

Observe generational differences in mobile adoption





Young mobile users in developing countries are often the first in their households to try and adopt new technologies, from social networks to new farming techniques. In Sub-Saharan Africa, 200 million youth between the ages of 15 and 24 make up 20% of the population and 37% of the workforce.¹⁰ Providers should focus on this segment of the market first, as early adopters will introduce the technology to the rest of their household and the community. Notably, whereas younger users may be quicker to adopt mobile technology, they may not be the first to adopt new farming technologies because decision-making power often lies with parents or elder relatives.



Almost 60% of mKisan users in India are below the age of 29: mKisan, an mAgri solution developed jointly by Handygo Technologies, CABI, and ILRI that includes IVR, SMS, and a helpline, found that the majority of its customers were young, but only 11% female. Tigo Kilimo in Tanzania also found that most of its users (53%) were below the age of 25; this is significantly higher than in the wider population, where 19% are 14–25 years old.

TABLE 2

MAIN BARRIERS TO WOMEN OWNING AND USING MOBILE PHONES¹¹

 COST	High overall cost of handset, services, and power
 CULTURE	Phones often registered in men's names and often primarily owned by male household members Using a phone challenges traditional gender roles Phone-sharing is a common practice, which prevents women from realizing the full range of services offered by mobile
 ILLITERACY	Low literacy and numeracy Poor technology skills
 PERCEPTIONS	Do not understand the value of a mobile phone Prioritize other areas such as health and nutrition over mobile phone access

Consult industry research via GSMA and others

The GSMA, as well as many other private sector companies, NGOs, and governments publish news and analysis of current mobile industry trends. Both the GSMA mAgri and mWomen teams, for instance, have hosted a series of useful [webinars on mobile technology](#). The World Bank's Consultative Group to Assist the Poor (CGAP) also publishes regular [blog posts and studies](#) on topics related to mobile services and agriculture, often with a strong emphasis on gender issues. Table 2 identifies the main barriers to women owning and using mobile phones based on research by the GSMA mWomen Programme. Box 3 includes two examples of trends to watch.

10. Julius Agbor, Olumide Taiwo & Jessica Smith, "Sub-Saharan Africa's Youth Bulge: a Demographic Dividend or Disaster?", in *The Brookings Institution Africa Growth Initiative, Foresight Africa: Top Priorities for the Continent in 2012, January 2012*.

11. Source: Women & Mobile: Global Opportunity, 2009.

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BOX 3

TWO TRENDS TO WATCH



Labour migration is leaving women to farm

In many regions, the migration of men to work in cities or abroad has left a larger number of women working in agriculture and overseeing food production. Between 1970 and 1990, Malawi's rural male population declined by 21.8%, while the female population fell by only 5.4 per cent. In Nepal, approximately nine out of every 10 people who left the country in 2011 were men.¹²



Smartphones: A growing, medium-to-long term opportunity

Although the market for smartphones has grown, research by the GSMA suggests they may not be drivers of growth for rural mAgri services until after 2017 because the costs are prohibitively high.¹³ However, smartphones could be breakthrough technologies, especially for women working in agriculture who may find the interfaces easier to use. For more insights on this issue, watch the GSMA mAgri Webinar: "Present & Future of Mobile Technology for Agricultural Value-Added Services (VAS)".

12. Worldwatch Institute, "Valuing Women's Work in Agriculture", 2012.

13. mAgri Webinar: "Present & future of mobile technology for Agricultural Value-Added Services (Agri VAS)," 6 December 2013.

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Stage 2: Generate Consumer Insights

With the overall market opportunity defined in Stage 1, Stage 2 is dedicated to examining the wants and needs of women in agriculture that will ultimately drive their purchase and use of mAgri services. This research should relate to all stages of the product development process and reveal wants and needs ranging from life priorities, behaviour patterns, and purchasing criteria to the most effective methods of marketing and distribution. Insights may be gleaned from existing data as well as new research. These should be shared and understood by all departments within the mAgri service provider, as well as partners involved in executing the go-to-market strategy.

KEY RECOMMENDATIONS

1. LEVERAGE EXISTING DATA	<ul style="list-style-type: none"> • Challenge the common belief that data on women does not exist • Beware of biased and poor quality data
2. SEGMENT THE MARKET AND SET INITIAL PRIORITIES	<ul style="list-style-type: none"> • Consider how culture and agricultural roles drive segmentation • Set priorities to form the basis of consumer insights research
3. INITIATE RESEARCH USING A GENDER LENS	<ul style="list-style-type: none"> • Understand how gender influences consumer needs • Conduct research internally or with partners • Discover women's hidden roles in agricultural value chains

1. Leverage existing data

Mobile providers should start by leveraging existing data, as it often helps to address many of the research objectives and will limit the need for additional, costly custom research. Data analysis allows operators and other providers to compare women users to the overall mobile market, and provides insight on women users' and non-users' brand awareness, key purchasing criteria, etc.

Challenge the common belief that data on women does not exist

Before investing in new research, it is advisable to explore existing data and research, such as brand trackers, consumer satisfaction surveys, and segmentation studies. In fact, there are often existing gender tags that can be cross-analysed. These may be obtained internally within an MNO or may be publicly available through an NGO or other market research. See Table 3 for more information on the types of existing data to examine.



The **GSMA mWomen Marketing Handbook** is a step-by-step guide to identifying and analysing existing data on women consumers.

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Verify existing data

When possible, existing data should be compared with other, external surveys conducted for that region or market segment. This will avoid the risk of product or service failure.

Beware of biased and poor quality data

Potential biases in existing data and market research need to be factored in properly. For instance, SIMs are often registered under the name of a husband, brother, or other male relative, which can be misleading. Customer Registration Information (CRI) data obtained during SIM sales is generally poor quality; either incorrect or improperly stored. Furthermore, phone-based surveys should be used with caution, as women are often less likely than men to take calls from phone interviewers.

TABLE 3
TYPES OF EXISTING DATA TO EXAMINE

DATA SOURCES	USEFUL GENDER-TAGGED INDICATORS TO EXAMINE:	THIS CAN ENABLE THE OPERATOR TO:
<ul style="list-style-type: none"> Call logs and usage data Brand trackers Consumer satisfaction surveys Segmentation studies 	<ul style="list-style-type: none"> Number of total calls by MSISDN Time and length of calls Data and VAS usage Basic connectivity services (text vs. voice) Access (borrowing) vs. ownership Top-up patterns Average available airtime balance 	<ul style="list-style-type: none"> Optimise peak vs. off-peak hours to reach women more cost-effectively Prepare tariff plans to provide incentives for women working in agriculture Re-focus marketing efforts on services used specifically by women and men

2. Segment the market and set initial priorities

The **Agri-VAS Market Entry Toolkit** recommends segmenting the rural market by one or more of the following factors: mobile coverage, culture, agro-ecological zones, type of crop, and attitude to innovation. Cultural issues and gender roles have been observed to be the most prominent influences on women's access and use of mobile services. This initial segmentation of the market establishes the framework for research in the next stage.

Consider how culture and agricultural roles drive segmentation

It is important to note that cultural barriers to mobile phone use can vary even from village to village, as has been witnessed in neighbouring villages in India. See Box 4 for guidance on questions to ask when segmenting the market by cultural influences on women's use of mobile services.

Set priorities to form the basis of consumer insights research

The following question guide can be used to set priorities for each market segment, and ultimately create a framework for full-scale consumer insights research.

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BOX 4

QUESTION GUIDE: SEGMENTING THE MARKET BY CULTURAL FACTORS INFLUENCING WOMEN'S USE OF MOBILE SERVICES

Are there beliefs or practices that dictate or limit women's mobility, social interaction, activities, or access to resources?

- Is there resistance from husbands, mothers-in-law, or other community members that prevent women from accessing mobile services?
- What leadership roles do women play in the community?
- Are there any observed cases of violence against women in the community?
- Are there institutional constraints that restrict women? (For example, banks that lend only to male heads of household)
- Are these factors changing? At what pace?

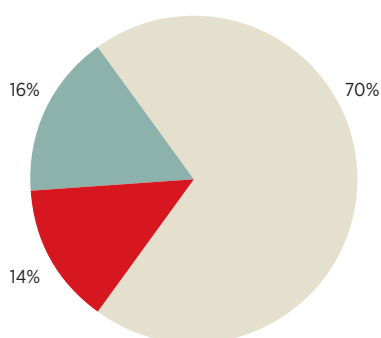
Users will have different information needs at different points in the agricultural cycle (planning, planting, growing, harvesting, and selling), and women's roles may vary greatly by socioeconomic status, crop or culture, across regions, and even between neighbouring villages.

FIGURE 3

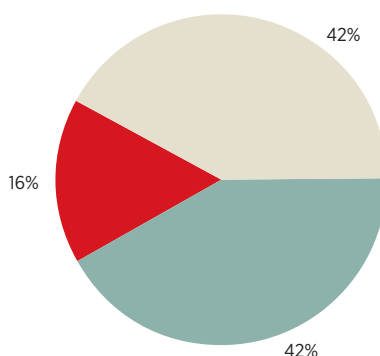
GENDER OF THOSE TAKING LEADING ROLES IN THE AGRICULTURAL VALUE CHAIN

In a Voluntary Service Overseas (VSO) study in Kenya, women were found to take the lead or share the leading role in the following areas the majority of the time.

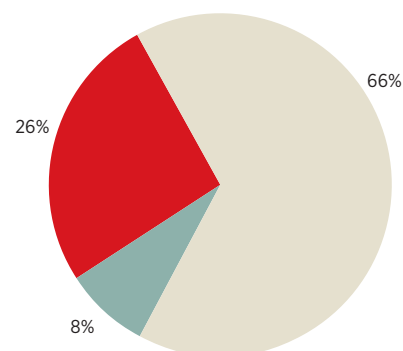
CROP FARMING



PROCESSING



TRADE/MARKETING



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BOX 5

QUESTION GUIDE: SEGMENTING THE MARKET BY GENDER ROLES IN AGRICULTURE

What roles do women play in planning, planting, harvesting, tending to livestock, marketing and/or other roles?

- Do women work in the fields or the house? Do they travel outside the community to attend events such as trade fairs?
- Are there crops that are tended to specifically by women or men?
- In what arrangement are the target women working? Are they 1) employed as labourers, 2) working on contract with a commercial farm or outgrower scheme, 3) engaged in subsistence farming, or do they 4) produce for direct sale to buyers (such as through the local markets and/or to wholesalers/exporters)?
- What role do women play in managing financial and purchasing decisions?
- What assets do women access and control? E.g. do women need men's approval to sell products/labour? Are they landowners?
- Are these factors changing? At what pace?

3. Initiate consumer insights research using a gender lens

Understanding the wants and needs of women in agriculture will enable mAgri service providers to set priorities for the product development process. It is recommended that the research be organised by market segment, as defined in the initial segmentation phase (see previous section).

Understand how gender influences consumer needs

The consumer insights research should analyse the wants and needs related to all aspects of women's responsibilities and interests as an agricultural worker, ranging from agricultural information and services to basic household responsibilities (education, health, etc.), entertainment and social interactions, access to government services, and support for legal rights.

Box 6 outlines the framework for developing guiding questions included in *Appendix B: Guide to Analysing Household Consumer Insights through a Gender Lens*.

BOX 6

APPENDIX B: GUIDE TO ANALYSING HOUSEHOLD-LEVEL CONSUMER INSIGHTS THROUGH A GENDER LENS

Appendix B provides a set of guiding questions for this assessment, including a gender analysis that focuses on four aspects:

- Division of labour
- Access to resources
- Decision-making
- Gender roles in the community

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Conduct research internally or with partners

Consumer insights research is generally conducted through:

- **Face-to-face interviews** – conduct interviews with women and men living in rural areas. Sample sizes can vary depending on the degree of segmentation required in the market. Interview users and community leaders to understand the local context
- **Group interviews** – Focus groups enable qualitative insights to be gathered efficiently
- **Voice or SMS-based surveys** – Efficient form of data gathering, but limited reach beyond current customers
- **Ethnographic research** – Direct observation of end-user behaviour through immersion in home, community or business environment to understand in-depth customer behaviour



Consumer Insights Methodologies. There are several recognised consumer insights research methodologies that have been successfully used to develop mobile solutions for resource-poor populations.

- The GSMA mWomen's Research Toolkit provides guidelines and tools to perform consumer insights research. See Appendix C for a more detailed description
- IDEO's Human Centered Design Toolkit and the University of Cambridge's Inclusive Design Toolkit are detailed in Appendix D: Consumer Insights & Design Methodologies

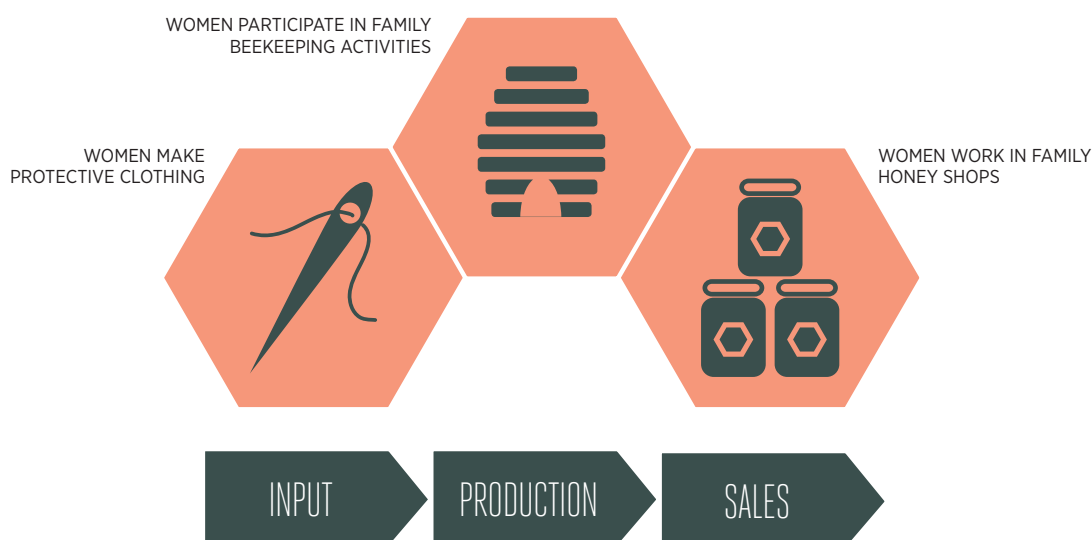
Discover women's hidden roles in agricultural value chains

As demonstrated in Figure 4, women's roles are often less formal or 'invisible' and are therefore challenging to quantify. For instance, women are often not of ficial land title owners, but they may be the primary decision-makers for household purchases.

Expert interviews with individuals at NGOs and social sector organisations working directly with women at the base of the pyramid can provide valuable insight into the context in which women live and work in the agricultural value chain.

FIGURE 4

THE INVISIBLE ROLES OF WOMEN IN THE HONEY VALUE CHAIN



WOMEN PLAY KEY ROLES IN THE HONEY VALUE CHAIN, THOUGH THEY MAY NOT APPEAR IN FORMAL ECONOMIC DATA

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Appendix E: Guide to Analysing Consumer Insights on the Agricultural Cycle through a Gender Lens provides guidance on discovering women's hidden roles.



GSMA mWomen's Striving and Surviving research project studied the wants and needs of women mobile users: mWomen surveyed more than 2,500 resource-poor women from four countries chosen to represent a range of social, cultural, and market contexts: Egypt, India, Papua New Guinea, and Uganda. For research results related to women working in agriculture, see *Appendix F: Key Consumer Insights from Striving and Surviving Research*.

BOX 7

THE UNIQUE INFORMATION NEEDS OF WOMEN FARMERS IN INDIA¹⁴

- **Legal rights** – As frequently informal and/or substitute labourers, women need information on legal rights, such as obtaining insurance and legitimate pay standards
- **Government schemes targeted to women** – In India, the Integrated Scheme of Oilseeds, Pulses, Oil Palm and Maize predominantly benefits small farmers, and stipulates that 30% of benefits must go directly to women farmers¹⁵
- **Access to credit** – Women farmers are effective savers in the household and are often the primary decision-makers on agricultural inputs
- **Animal health** – Women generally tend to livestock in rural India and are therefore the ones who will first notice animal diseases such as mastitis



Tigo's *Women of Tanzania* profiles potential women subscribers. The GSMA mAgri team worked with Tigo to produce consumer insights profiles of potential mobile subscribers. See *Appendix G: Women of Tanzania* for this example of good practice.



14. Source: Interviews by GSMA mAgri partners with various stakeholders

15. Government of India, Ministry of Agriculture, "State of Indian Agriculture 2012/2013"

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Stage 3: Design Products & Services

Women working in agriculture have specific requirements that an mAgri service provider must consider, including handset features, tariff bundles, and other service offerings. The product and service design stage incorporates consumer insights on wants and needs to trigger adoption by women users and overcome barriers. Since implementation will likely require collaboration with external partners, this section offers insights on how the service provider should identify and work with these partners.

KEY RECOMMENDATIONS

1. DESIGN TO MEET WANTS AND NEEDS	<ul style="list-style-type: none"> • Design to meet women's purchasing priorities • Consider common design features women prefer • Design to overcome low levels of technological literacy
2. INCLUDE MEN IN THE DESIGN PROCESS	<ul style="list-style-type: none"> • Gather input from men in the development and testing process • Incorporate complementary services/messages for men
3. IDENTIFY CONTENT SOURCES	<ul style="list-style-type: none"> • Find partners that deliver gender-sensitive content • Source content that meets women's needs • Curate content appealing and engaging to women

1. Design to meet wants and needs

Mobile products and services for women in agriculture must meet a range of different needs.

Design to meet women's purchasing priorities

Gender can be a significant determinant of consumer spending. Box 8 includes some questions to guide the process of creating an appropriate pricing package, and Box 9 identifies good practices in the development of pricing solutions.



GSMA mWomen's Striving and Surviving research revealed women's priorities. In this four-country study, the life priorities of resource-poor women included housing, health, food and nutrition, education, and income-generating activities. For more detail on these findings, see Appendix F: Key Consumer Insights from GSMA's Striving and Surviving Research.



Tigo Kilimo found women to be more price sensitive: Tigo Kilimo, an mAgri information service for small farmers across Tanzania, found that women farmers were especially conscious of the costs of the service and raised this issue more often in group discussions. This is most likely due to the fact that men generally control the household income, assets and resources, especially in rural areas, so women have lower disposable incomes to spend on items such as mobile phones or related services.¹⁶

¹⁶ The SOFA Team and Cheryl Doss, FAO, "The Role of Women in Agriculture", March 2011.

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BOX 8

QUESTION GUIDE: EVALUATING THE BEST PRICING PACKAGE FOR WOMEN WORKING IN AGRICULTURE

- What income do women in farming households control?
- Are there fluctuations in income between seasons or between years?
- What 'value' do women expect, or have already obtained, from mobile services?
- What assets do women control, or could they liquidate, to purchase mobile services for their household?
- What other purchases do women forgo when purchasing mobile products and services?

BOX 9

PRICING SOLUTIONS FOR WOMEN IN AGRICULTURE: GOOD PRACTICES

- **Bundle packages appeal to lower income women** – Daily, weekly, or even monthly product bundles with rates lower than a single SMS could increase subscription rates
- **Free trial or pay-as-you go option** – If users have never experienced the service before, they will be more reluctant to buy a package upfront
- **Seasonal offering** – Offer seasonal subscriptions post-harvest when more resources are available



Asiacell's Almas provides special pricing for women. Iraq's second largest operator, Asiacell's Almas, has a product line for women with features that include: 1) 'step charging', which offers a 50% discount after the third minute and freedom for women to choose their own off-peak hours; 2) discounted rates for off-network calls; and 3) a free 'bye-bye' service that blocks potential harassers from calling or texting. The proportion of Asiacell's female subscribers grew from 20% of the Iraqi operator's subscriber base in 2011 to close to 40% in 2013 due in large part to this campaign.

Consider common design features women prefer

Accommodating the needs of women in agriculture will make mAgri services more accessible and easy to use, especially hardware and interface design. At Mobile World Congress 2012, GSMA mWomen hosted a panel which discussed how a greater understanding of women's wants and needs can contribute to the design of appropriate handsets. (See Box 10: *Essential Handset Design Features for Women in Agriculture*.)

BOX 10

ESSENTIAL HANDSET DESIGN FEATURES FOR WOMEN IN AGRICULTURE

- *Simple, intuitive interface* for users with low levels of both basic and technological literacy (simple UX/navigation)
- *Feature rich* – radio, music player, camera, flashlight, and ability to access value-added services
- *Durable* – for long outdoor use and extended sunlight
- *Power efficient* – to accommodate limited recharge access
- *Low cost* – due to lower disposable incomes

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Women listen to radio on their phones. In one village in India, women farmers use their phones to listen to radio programmes and music as they labour in the fields for 8–12 hour periods.

Design to overcome low levels of technological literacy

Innovative audio and visual interfaces, such as Interactive Voice Response (IVR), can address literacy challenges. The winners of the **GSMA mWomen Design Challenge** proposed innovations to improve the user experience. *Appendix I: Common Good Practices for IVR* also lays out useful methods.



Touchscreen reader for illiterate users: Scientists at the Swiss Federal Institute of Technology Lausanne (EPFL) are developing a new smartphone interface for farmers in India. Innovations include a ‘touchscreen reader’ which provides audio on all screen entries and a mix of pictures, icons, numbers, and text.¹⁷



Basic characters deliver pictorial messages. In Ghana, mAgri services provider Esoko is using simple SMS characters to send illiterate farmers weather forecasts, with cloud, rain, or sun displayed using basic keyboard characters. For example:

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BOX 11

POTENTIAL DESIGN PARTNERS



Partners that have had success in product and services design for resource-poor women include:

- University of Cambridge Engineering Design Centre (EDC)
- IDEO
- Grameen AppLap
- Frog Design

See *Appendix D: Design Methodologies* for details and links to additional information and tools.

2. Include men in the design process

Men must ultimately share in the benefits that women in their household derive from mobile solutions.

Gather input from men in the development and testing process

As the mobile phone is often a shared asset in the household, men are essential stakeholders to consider in understanding usage patterns and priorities.

Incorporate complementary services/messages for men

Developing services for men that reinforce the adoption of women’s services and products can promote adoption and reduce potential resistance to women using mobile phones.

17. Hendrik Knoche, PR Sheshagiri Rao, and Jef rey Huang, “Human-Centered Design for Development,” 2011.

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Curate messages for male mobile owners to reach women. Recognising the sensitivity of household power dynamics and the fact that men typically own the household mobile phone, Vodafone's Connected Farmer Alliance in Tanzania curates messages to reach women agricultural workers. The message may suggest that the listener "share with members of your household" information that may be relevant to them. This simple, direct reminder can be highly effective.

"Men have to be part of the solution", says Jemimah Njuki, an expert in gender and agriculture in Africa and Asia. "We won't empower women without changing men's attitudes towards gender equality and without a focus on the household and the community as a whole."



Include men when designing a mobile offering to reach women. Through the Aponjon programme, MAMA aims to reach three million pregnant women, new mothers and their families in Bangladesh within three years, achieving sustained improvements in knowledge, healthy behaviours and health outcomes. Substantive research showed that in Bangladesh men and other household's decision makers can be the champions or detractors to any approach. MAMA tackled this issue by including them within their mobile maternal health services.

Results from a recent pilot programme show that:

- Husbands showed a higher willingness to pay for the service than their wives once they saw the value of the product. This translates into higher revenues for the operator and the service provider, and in better access to life-enhancing health services for new and expectant mothers
- Creating awareness amongst other household decision-makers about the specific needs of women during pregnancy resulted in improved nutrition and more frequent antenatal visits and better preparation for delivery, which had a direct positive impact on the women
- When these household decision-makers see the value in the product, they are more likely to grant women access to their mobile phones, which improved women's technical literacy and comfort with the phone

3. Identify content sources

Finding effective content sources is important to the success of an mAgri service.

Find partners that deliver gender-sensitive content

Matching the criteria below will help to identify content partners.



Agri VAS service IKLS applies gender guidelines to content: IFFCO Kisan Sanchar Limited (IKSL) developed specific *Gender Guidelines for Agricultural Information Content Managers*, which are detailed in *Appendix J*. IKSL has a helpline and voice message repository as its communications channels.

Source content that meets women's needs

Any commercial service aiming to serve women in agriculture must meet the actual needs and fit the life priorities of these women.

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BOX 12

CRITERIA FOR ASSESSING CONTENT PARTNERS



- **Trust and visibility** – Does the target audience of women trust the partner?
- **Quality of content** – Is the content accurate, relevant and up to date?
- **Reach and scale** – Does the partner have a significant presence in areas covered by the service?
- **Sustainability of relationships** – Does the potential partner have an on going and long-term relationship with the target audience of women, such as through loan repayment schedules or a training schedule?
- **Financial expectations** – Are the partners' revenue share expectations in line with existing standards? (Typical content partners receive between 30% and 50% of VAS revenue)
- **Partnership vehicle** – What form of partnership will create the most value for all partners? For example, licensing can amortize the content development costs across a wider user base, which will limit the refresh rate



Women in India demand livestock information: For its mKisan service, Handygo Technologies sources content from the International Livestock Research Institute (ILRI). In India, women have a larger role in caring for livestock because the animals are generally kept in the house, while men travel to markets to sell the household's products. Because of this, women demand information on 1) feeding and milking livestock; 2) diseases to watch for and vaccinations; and 3) special pricing on feed. ILRI has created a comprehensive guide called [Understanding and Integrating Gender Issues: A Checklist for Practitioners](#), which encapsulates the priorities and principles of meeting women's needs related to livestock issues; these can be adapted for the content of mAgri services.



Curate content that is appealing and engaging to women

Content presented in an engaging way leads to better uptake. For instance, in some markets, mobile-delivered IVR services have found that women tend to trust a message more when it is delivered in a woman's voice. Delivering messages in a way that women find entertaining will also increase the appeal, whether by including popular music or partnering with local TV or radio personalities.

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Stage 4: Brand and Promote

This stage in the Toolkit relates to crafting effective marketing that appeals to women in agriculture, as well as recommendations for how to identify communications channels to reach them effectively. It is important to stay aligned with the overall brand strategy while adapting the messaging and delivery methods. These insights will be used by the mAgri service provider's internal marketing team or can serve as guidelines to share with marketing partners.

KEY RECOMMENDATIONS

1. CRAFT MESSAGES THAT APPEAL TO WOMEN

- Position mAgri services to benefit the whole household
- Promote mAgri services as an income-generating activity and a tool for empowerment

2. SELECT COMMUNICATION CHANNELS/ACTIVITIES

- Reach rural women via television and radio
- Access less formal information channels to reach women
- Explore community-based marketing channels
- Reach women and men at different times of day

1. Craft messages that appeal to women

Developing effective messaging to appeal to women within the local context is essential.

Position mAgri services to benefit the whole household

This is especially important since the mobile phone can disrupt household power dynamics by empowering women who acquire their own handsets.



Asiacell TV ad links mobile services to family values: Asiacell television campaign for its Almas product line targets women, but also speaks to men by portraying the services as linked to deep traditional values.



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Promote mAgri services as an income-generating activity and a tool for empowerment

Most rural households have multiple income streams with women contributing in various ways. GSMA's *Striving and Surviving* research found that 73% of the women surveyed had an interest in entrepreneurship and 55% of women said that a “stable income” is one of their top priorities in life. Accessing information and advice via mobile can empower women to contribute more to decision-making in the household purchasing decisions and greater leadership in the community.



mAgri services empower women with information. One woman who uses Tigo Kilimo's Agri VAS service said that she can “bargain for a fair share of the household's income” now that she is informed of the current market price for the produce her family harvests.



Hire women agents to provide customer service. Esoko Ghana, an Agri VAS provider in Ghana that offers push voice, text, and helpline services, has hired both men and women to provide customer service on its helplines.



2. Select effective communication channels and activities

mAgri service providers must develop effective distribution channels based on consumer insights.

Reach rural women via television and radio



GSMA's *Striving and Surviving* consumer insights research found that 53% of women surveyed in four countries watched television regularly, 36% of them on a daily basis. In Uganda, 95% of women surveyed listened to radio.



ARDA uses radio theatre to deliver climate change information to rural farmers. In Nigeria, the African Radio Drama Association (ARDA) uses theatrical performances delivered through ‘radio listeners clubs’ to teach rural communities about climate change. [ARDA's Resource Kit](#) provides valuable gender-sensitive guidelines for communicating with women farmers.

Access less formal information channels to reach women

Understanding who women trust and from where they source their information helps to frame the most effective messaging about mAgri services and to choose the most effective delivery channels.

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Explore community-based marketing channels

Women are known to be the emotional connectors within a community, which is a valuable element for delivering the message of new life-enhancing mAgri services.

Women in Papua New Guinea trust local leaders most for business information

Sources for business information

- Local leaders
- Female friends
- Husband
- Radio, newspaper, magazine, and TV
- Mother/Father

Source: GSMA mWomen S&S Research

IKSL uses special activities to reach rural women.

IKSL, which provides voice-based agricultural information services to rural farmers in India, instructs its content managers to initiate at least one special activity that exclusively involves women each month. Some examples include:

- Special phone-in programmes involving women
- Ask the Expert: each month one expert on a women's issue is available to answer helpline queries
- Women's knowledge groups are being developed as a virtual subscriber community
- Working with local women's groups (see above photo of IFFCO-sponsored self-help group activity)



Etisalat in Togo and Benin reach rural women Through the Weena ambassador programme. Women chosen as participants to support the promotion of Weena leverage their personal networks, recruit, select and approve new Weena agents, and ensure that Weena agents are receiving the support they need in terms of training and material. For more information on this programme, see GSMA mWomen's recent [case study](#).

Reach women and men at different times of day

For TV, radio, SMS, or other media-delivered marketing, consider that men and women within a community have different time schedules.



IKSL provides guidelines for timing message delivery. IKSL, the Agri VAS focused on rural markets in India, states in its guide that “the preferable timings for women-centred messages should be mid-noon to early afternoon when both the men and women generally do not have any other activities. However, the actual timings should be adjusted to the local custom.”

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Stage 5: Distribute & Grow

Tailored distribution channels are necessary to reach women in agriculture cost-effectively, deliver mAgri services, and educate women on their use. Based upon the consumer insights analysis, the most relevant and efficient distribution channels should be identified and included in a portfolio of channels that meets the needs of mAgri service providers across target segments and geographical areas.

KEY RECOMMENDATIONS

1. DEVELOP COST-EFFECTIVE DISTRIBUTION CHANNELS

- Work with women's groups
- Partner with existing female distributors
- Explore tax relief and government subsidies

2. DEPLOY AGENT NETWORK TO INTERACT EFFECTIVELY WITH FEMALE CUSTOMERS

- Provide user education
- Train distribution agents to spend time with women users
- Train women to be agents and entrepreneurs
- Address cultural barriers and prevent negative side effects

1. Develop cost-effective distribution channels

Effective distribution can be expensive and should be synchronised with other groups and activities to maximise the cost-benefit ratio.

Work with women's groups

Women's groups are an effective way to reach women cost-effectively; they are a channel with established, built-in trust. This can include self-help or microfinance/microsavings groups, many of which have reached significant scale in target markets.



Digital Green reaches women through self-help groups in India. The group's videos allow farmers to share agricultural tips and training. Digital Green Analytics show that 89% of successful adopters of Digital Green's agricultural practices are women, due largely to distribution through self-help groups, which were originally formed to access credit.



Airtel is partnering with the GSMA and Grameen Foundation to deliver mobile financial services for women through Chamas (savings groups). This leverages existing organisational relationships and builds on the trust that has already been developed between group leaders and fellow group members. The Chama product will launch to savings groups in Uganda later in 2014.

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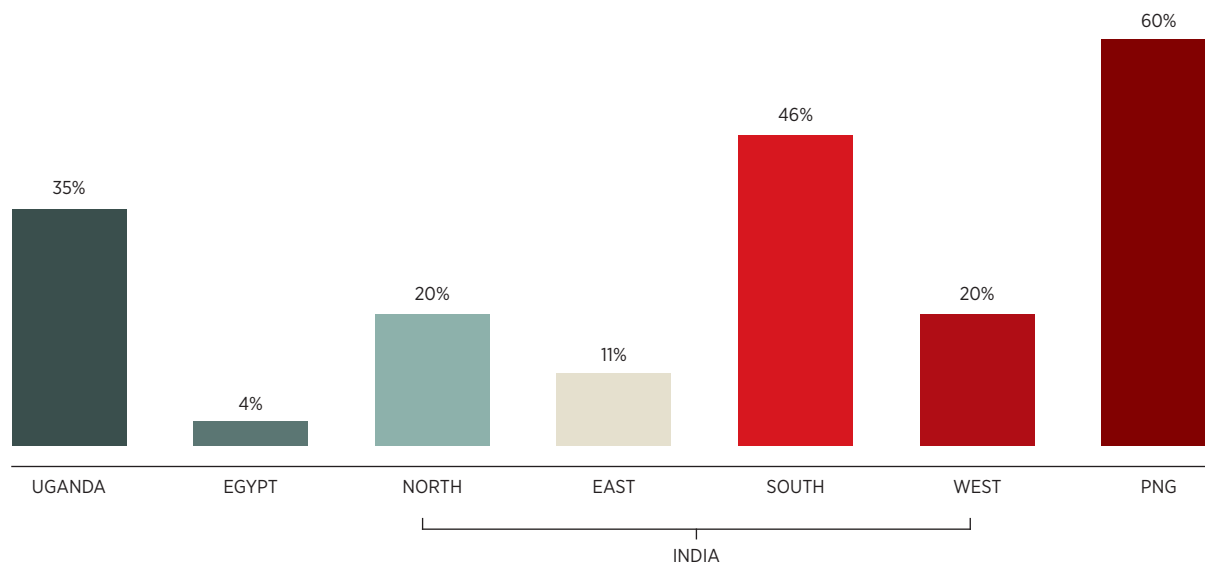
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FIGURE 3

PERCENTAGE OF RESPONDENTS ACROSS MARKETS/REGIONS WHO REPORTED ATTENDING A WOMEN'S GROUP WEEKLY OR MORE OFTEN



Partner with existing female distributors

Female-operated distributors, such as retail store owners, mobile money agents, airtime and SIM-cards distributors, and agricultural product providers can be engaged to promote mAgri services.



A female-owned fertiliser kiosk doubles as a mobile services distributor. MercyCorps found that in Kutawaluya, Indonesia, the head of a female farmer group owned a kiosk that distributes fertiliser, which also doubles as a top-up service for adding credit to mobile phones and could potentially distribute additional mAgri services.

Explore tax relief and government subsidies

Many government programmes offer incentives to deliver services to women working in agriculture to offset costs. For instance, the government of India's Integrated Scheme of Oilseeds, Pulses, Oilpalm and Maize stipulates that 30% of benefits be applied to women farmers.¹⁸



WOMEN MEET AT AN AIRTEL CHAMAS GROUP

¹⁸. State of Indian Agriculture 2012-2013, Government of India.

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2. Deploy agent network to interact effectively with female customers

Effective interaction with women is key to acquiring and growing the customer base of women in agriculture, especially for mobile agents.

Provide user education

While this extra layer (and cost) may not be necessary in the long term, education about new concepts and services eases the transition. To offset the cost of these programmes, mobile providers can partner with NGOs, government, or donors. Another way to keep costs low is to leverage existing rural 'connectors', such as extension services and other networks.



Paraprofessionals in Tanzania leveraged to provide training. Paraprofessionals are local workers who are able to read and write, and deliver extension and veterinary services. Financing is often provided either by NGOs or from a margin of product sales. These paraprofessionals can be a channel for reaching rural communities, and particularly women, with mAgri services training.

Train distribution agents to spend more time with women users

Women value interaction with sales agents, particularly when they are new to the technology and rely on vendors to introduce the products. To educate new mobile money customers, experts estimate that 10 to 15 minutes of face time with an agent is required for them to feel comfortable using the product.¹⁹

Train women to be agents and entrepreneurs

Training programmes that offer a flexible schedule to accommodate women's work and family responsibilities will be more inclusive. This could include offering training on evenings, weekends, or part-time. Providing child care is also a successful and effective way to attract both women trainees and trainers.



Sri Lankan MNO Dialog Axiata trains women to be 5-Star Partners. Dialog is training women as 5-Star Partners, an exclusive corps of highly trained entrepreneurs who market the MNO's mobile services to rural areas.

"Female retailers are vital to Dialog and the social ecosystems they operate within, increasing access to a vital demographic segment," - *Charithra Ratwatte, Chief Manager – Sustainability*.²⁰

Address cultural barriers and prevent negative side effects

In many developing countries, certain cultural barriers hinder the delivery of communications or advice to women working in agriculture; local customs may prevent women from interacting with men or even with women outside their families. In addition, when women gain access to entrepreneurial opportunities or new services for the first time, which may both enrich them financially and give them access to information and services, their husbands or other men in the family may become jealous.²¹



Ethiopia's male extension workers overcome cultural barriers to reach women: Male extension workers employ various approaches to deliver messages to women, such as getting a husband's permission to talk to his wife, working with local women's organisations to arrange group meetings of women, and meeting with women during community gatherings, such as coffee ceremonies. In one area of Amhara in Ethiopia, extension workers connect with women through the **Kebele Women's Association**.

19. Beth Cobert, Brigit Helms & Doug Parker, McKinsey & Company, "Mobile money: Getting to scale in emerging markets", McKinsey & Company, May 2012.

20. Julia Burchell, "Female retailers 'vital' to Dialog's rural growth targets", GSMA mWomen Programme, July 13, 2012.

21. Jacqueline Ashby, Maria Hartl, Yianna Lambrou, Gunnar Larson, Annina Lubbock, Eija Pehu & Catherine Ragasa, "Investing in Women as Drivers of Agricultural Growth", in Agriculture and Rural Development: Gender in Agriculture, The World Bank, FAO & IFAD, 2008.

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Stage 6: Monitor & Improve

Successfully acquiring and retaining users requires clearly defined goals and objectives, appropriate key performance indicators (KPIs) and effective reporting systems to measure success, and feedback to improve performance. All of this builds a framework for a perpetual feedback loop that helps providers to adapt and upgrade the quality, delivery efficiency, and profitability of mAgri services. A clear KPI framework also helps to manage the mAgri service providers' network of implementing partners to ensure interests stay aligned.

KEY RECOMMENDATIONS

1. DEFINE CLEAR PERFORMANCE OBJECTIVES

- Use gender-focused social and commercial indicators
- Build data point reporting into service design and feedback loops

2. MONITOR AND EVALUATE PERFORMANCE

- Tag feedback by gender
- Collect data from multiple sources
- Incorporate feedback loops to improve performance

1. Define clear performance objectives

To monitor progress, it is important to include gender-focused KPIs which track commercial factors and relevant social indicators.

Use gender-focused social and commercial indicators

Empowering new women consumers to use mobile services, and thus promoting gender equity, creates a completely new customer segment with purchasing power.



Social indicators drive commercial success for Airtel and Grameen. Airtel Uganda has partnered with Grameen Foundation to deliver **mobile financial services to savings groups in Uganda**. The programme's KPI framework shows how positive performance on social indicators, such as gender equity and access to phones, drives commercial performance. See *Appendix K: The Airtel Project - Key Performance Indicators (KPIs)*

Build data point reporting into service design and feedback loops

KPIs should cover key stages in the launch, marketing, and distribution of services. This allows for on going, iterative updates. This could include the number of women in a target market (market sizing stage), the percentage of women participating in marketing surveys (consumer insights stage), and the increase in the proportion of women customers or percentage of female agents (distribution stage).

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2. Monitor and evaluate performance and incorporate feedback loops

With clear KPIs in place, effective monitoring and evaluation can then be employed to improve the service in an iterative feedback loop.

Tag feedback by gender

A simple directive to include a gender tag in existing and planned data collection will make future targeting of women working in agriculture more effective.

Collect data from multiple sources

KPI data can be collected in creative ways, such as from NGOs and other partners, agents, or through peer networks.



Airtel and Grameen Foundation share data collection responsibilities. Airtel Uganda's platform and reporting system dashboard will collect and monitor commercial data. Social KPIs will be captured in baseline and end-line studies, using focus group discussions and/or in-depth interviews as appropriate, which are designed and managed by the Grameen Foundation.



The Grameen Foundation's CKW programme recruits peers to collect data from women farmers. In Uganda's Community Knowledge Worker (CKW) programme, farmers chosen by their peers are tasked with conducting mobile phone-based surveys of the farmers they help. Grameen also found that female CKWs are more effective at reaching female farmers. This information is then fed back to improve the service and better address the needs of farmers.

Incorporate feedback loops to improve performance

Monitoring data should drive an iterative process to improve performance on an on going basis. This should be a live system that adapts as the market evolves.



A COMMUNITY KNOWLEDGE WORKER
OFFERING A FARMER INFORMATION

Key References

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- *GSMA mWomen Research Toolkit*, 2012
- *Realising the mWomen Opportunity: A Framework for Designing the mWomen Business Case*, GSMA mWomen, 2012
- *GSMA mWomen Marketing Handbook*, 2013
- *GSMA's Agricultural Value Added Services (Agri VAS): Market Entry Toolkit*, GSMA mAgri, 2011
- *Striving and Surviving: Exploring the Lives of Women at the Base of the Pyramid*, GSMA mWomen, 2013
- *mAgri Webinar: Present & future of mobile technology for Agricultural Value Added Services (Agri VAS)*, GSMA mAgri, 6 December 2013
- *Women & Mobile: A Global Opportunity. A study on the mobile phone gender gap in low and middle-income countries*, GSMA mWomen and the Cherie Blair Foundation for Women, 2009
- *Lessons from our first usability test of an mFarmer service in Tanzania*, GSMA mAgri, M. Ashrafuzzaman, 2013

Other Partner Resources

- *Understanding and Integrating Gender Issues into Livestock Projects and Programmes: a Checklist for Practitioners*, 2013
- *Gender Tools: Agriculture, Tools and Resources by Module*, Gender in Agriculture Source Book, World Bank
- The Bill & Melinda Gates Foundation *Gender Checklist*
- University of Cambridge Engineering Design Centre's *Inclusive Design Toolkit*
- IDEO's Human Centered Design Toolkit
- *Human-Centered Design for Development*, H. Knoche, PR Sheshagiri Rao, and J. Huang, 2013
- *CARE Gender Analysis Guiding Notes*

Appendices

A: Guide to Value Chain Analysis through a Gender Lens

mAgri service providers can use this value chain questionnaire to identify the main consumers of their products and services in a target area. This methodology is adapted from USAID's [inclusive value chain approach](#).

A 'value chain' describes the full range of activities that brings a product from conception to end use. A single analysis will generally focus on the major agricultural product within a target region. As most target regions produce multiple products, the analysis may either consider these separately, or choose to focus on the dynamics of a primary product's value chain.

	CORE QUESTIONS	GENDER LENS
CORE VALUE CHAIN ACTORS	<ul style="list-style-type: none"> • <i>Products.</i> What range of products is being offered? (type of crop, level of processing, seasonality) • <i>Driving relationships.</i> Who are the main buyer-sellers? How much value is added at each stage? • <i>Size and scale.</i> What is the size and scale of the main types of entities? (number of people employed, sales volume/value) 	<ul style="list-style-type: none"> • Which actors are predominantly represented by men or by women?
GOVERNMENT AND SUPPORTING BODIES	<ul style="list-style-type: none"> • <i>Government.</i> What government programmes, policies, and/or regulations affect the market? • <i>Associations.</i> What are the representative bodies for the industry? • <i>Donor activity.</i> What donor and government programmes are active in the sector? 	<ul style="list-style-type: none"> • Are there existing (NGO, donor, or government) programmes supporting women in agriculture? • Are there policies/programmes serving women?
PRODUCTION AND SUPPORTING FACTORS	<ul style="list-style-type: none"> • <i>Standards.</i> What quality standards impact production? • <i>Supporting services.</i> Who are the important actors outside the value chain (e.g. business service providers, financial service providers)? • <i>Workforce.</i> What is the nature and quality of the labour force in the industry? • <i>Logistics and supporting services.</i> What is the availability of supporting services (financial, logistics, administrative) and what are the bottlenecks? • <i>Infrastructure.</i> How developed is the supporting infrastructure? (transportation, electricity, water, land, etc.) 	<ul style="list-style-type: none"> • Do women play different supporting roles than men? • How many men and how many women are employed as workers at the different stages of the value chain? • Do women have fewer skills than men in the value chain? • Do women perform higher or lower value tasks?
INFORMATION FLOW	<ul style="list-style-type: none"> • <i>Current state.</i> How effective is the flow of information (market trends, changes in price, external cost pressures)? • <i>Awareness.</i> How aware are the producers/farmers of the downstream market dynamics of the industry (market trends, demand conditions, pricing)? 	<ul style="list-style-type: none"> • Where do women obtain their information from? • Are there barriers to women's access to information?
GROWTH AND INNOVATION	<ul style="list-style-type: none"> • <i>Growth.</i> Is the value chain evolving or changing? Is this affected by outside demand or other trends? • <i>Innovators.</i> Who are the innovators in the industry? What/who drives growth and change? 	<ul style="list-style-type: none"> • Are women's roles and contributions evolving? • What trends will change women's position?

B: Guide to Analysing Household-Level Consumer Insights through a Gender Lens

DIVISION OF LABOUR	<ul style="list-style-type: none"> • What is the division of labour in the household amongst women and men, young and old? • What leadership roles do women play in the community? • Have there been changes due to war, migration for labour, HIV/AIDS pandemic, or other reasons?
RESOURCES	<ul style="list-style-type: none"> • Who controls the assets in the household (livestock, agricultural produce, cash, equipment, etc.)? • Are these assets legalised in women's or men's names and who is able to sell them? • How is the money generated from the sale of products used? How is income redistributed within the family? How is it invested? In whose name are the new assets purchased? • Who has control over different resources, including new ones, resources from institutions, development projects, or other outside interventions (governmental, firms, etc.)? • What types of communications technology (mobile, TV, radio) are in the household? Do women have equal access to this technology? • Do men and women access financial services? Are there differences in conditions?
DECISION-MAKING	<ul style="list-style-type: none"> • Who is the primary decision-maker on household resources and activities? • How do women participate in decision making? • Who makes decisions about the freedom of mobility of household members?
CULTURAL GENDER ROLES	<ul style="list-style-type: none"> • Are there beliefs or practices that dictate or limit women's mobility, social interaction, activities, or access to resources? • Is there resistance from husbands or other community members that prevent women from accessing mobile or other communications services? • Are there any observed cases of violence against women in the community? • Are there institutional constraints that restrict women? (For example, banks that lend only to male heads of household.) • Are these factors changing? At what pace?

For additional details on methods for analysis, please see [CARE's Gender Toolkit](#) and the [Agri-Pro Focus Gender Value Chain Toolkit](#), from which this table was adapted.

C. GSMA mWomen Consumer Insights Research Toolkit

This toolkit contains all the research tools used to create GSMA mWomen's report, "Striving and Surviving: Exploring the Lives of Women at the Base of the Pyramid." This research explored the lives of women in middle and lower income countries to discover ways in which mobile technologies can deliver positive change in their lives.

The research tools are available on the [GSMA mWomen website](#) and can be useful for mAgri service providers to adapt to their local markets. They include:

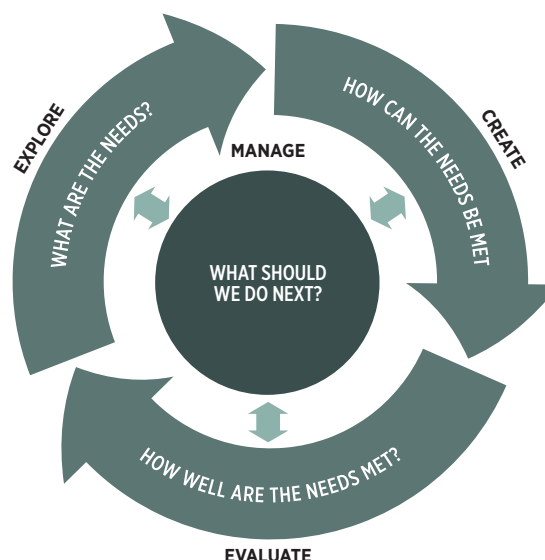
- *Ethnography Observation Guide* – designed to understand the daily lives and challenges of underserved women through observation and appropriate, targeted probing questions. It will help researchers understand women's daily routines, mobility patterns, the local places and spaces women meet and interact, and key sources of trusted information.
- *Focus Group Discussion Guides* – help to explore motivations for mobile phone uptake, the wants and needs of women in general and in relation to phones, as well as mobile phone and communications-related behaviour. There are separate guides for men's and women's focus groups.
- *Opinion Leader Discussion Group* – a guide to understanding the impact of the community (via cultural norms, practices, and attitudes) on women in general in order to arrive at a more nuanced and contextualised understanding of their lives.
- *Basic Customer Insights Questionnaire* – designed to guide researchers in performing primary research in the field and interviewing individual women consumers.

For the full set of tools, visit the [GSMA mWomen website](#).

D: Consumer Insights & Design Methodologies

Example #1: University of Cambridge Engineering Design Centre's Inclusive Design Toolkit

Inclusive design applies an understanding of consumer diversity to the design of mainstream products to better satisfy the needs of more people. Products that are more inclusive can reach a wider market, improve customer satisfaction and drive business success, especially given the ageing population. As shown in the diagram, the four fundamental questions of design are solved through successive cycles of exploration, creation and evaluation, guided by project management. Click [here](#) for more information on the Inclusive Design Toolkit.



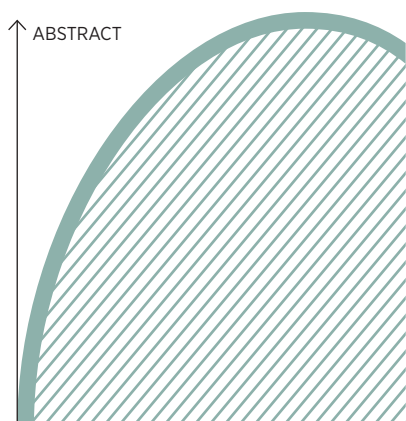
Example #2: IDEO's Human-Centered Design Toolkit

This framework guides the design process for interventions and supports activities such as building listening skills and running workshops. The system focuses on the needs, wants, and limitations of end users at each stage of a product or service life cycle to drive design, rather than forcing users to change their behaviour to adapt to a new system.

THE HUMAN-CENTERED DESIGN PROCESS HAS THREE PHASES

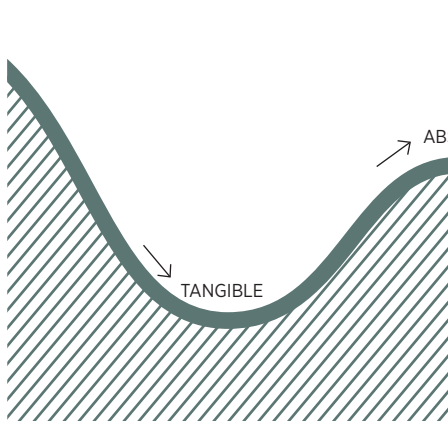
DISCOVER

I HAVE A CHALLENGE.
HOW DO I APPROACH IT?



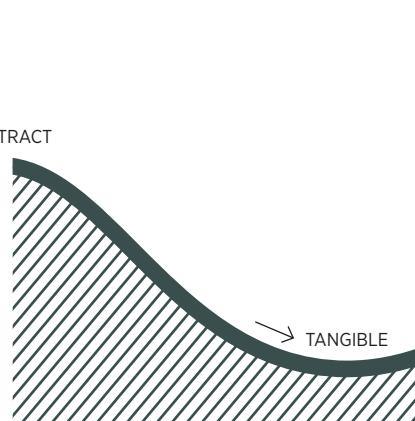
IDEATE

I LEARNED SOMETHING.
HOW DO I INTERPRET IT AND BEGIN
DESIGNING FROM WHAT I LEARNED?



PROTOTYPE

I HAVE AN IDEA.
HOW DO I BUILD AND REFINE IT?



Click [here](#) for more information on the Human-Centered Design Toolkit.

E: Guide to Analysing Consumer Insights on the Agricultural Cycle through a Gender Lens

This builds upon the framework developed in the GSMA Agri VAS Market Entry Toolkit. This set of questions could be applied by segment, as identified in the consumer insights stage, with a separate and complete analysis performed for each segment.

AGRICULTURAL CYCLE	INSIGHTS	GENDER LENS
PLANNING	<ul style="list-style-type: none"> How much time is spent planning and preparing during an average year or harvest season? From whom does the agricultural household obtain inputs (fertiliser, seeds)? What production technologies does the household use and where do they source them? What communications or supply chain management technologies does the household use? Is the household part of a cooperative or other local association? Does the household access government services? What financial services does the household use? What financial needs are unmet? What type of emergency or disaster planning is in place? Where does the household get information for planning? What information does the household need to plan better? 	<ul style="list-style-type: none"> What roles are played by women versus men? Are there crops that are tended to specifically by women or men? Do men or women usually handle the input procurement? Do women procure and/or have access to these inputs? Do women in the community have equal access to ICT tools? What role do women play in this management tier? Are these gender-specific roles? Are there women's finance groups or possibly women-focused government services available?
PLANTING, GROWING, HARVEST, POST-HARVEST	<ul style="list-style-type: none"> How much time is spent planting during an average year or harvest season? What information and communication (ICT) solutions are used by workers at each stage? (e.g. radio, information services, advisory services) Are these accessed via mobile or other devices? What information is needed at each stage and how is this need currently met? 	<ul style="list-style-type: none"> What roles are played by women versus men? Is there variation in access and use by men versus women? Are there constraints to use for women at this stage?
SALES AND MARKETING	<ul style="list-style-type: none"> Is the produce mostly consumed within the household or sold commercially? Who maintains the relationships with buyers? How does the household find buyers for their products? How do they determine the price that they will charge? Does the household access any ICT tools to find buyers or to enable collective sales? Which member of the household visits field days or other events to sell products? Who manages the finances related to the sale of products for the household? 	<ul style="list-style-type: none"> What are the roles of men versus women in this stage? Are they fixed? Do men or women decide what is to be consumed versus sold commercially? Is there variation in access and use by men versus women? Is it generally acceptable for women to attend these events too?

F: Key Consumer Insights from GSMA's Striving and Surviving Research

The GSMA's mWomen Programme conducted research into the wants and needs of resource-poor women, surveying more than 2,500 resource-poor women from four countries chosen to represent a range of social, cultural, and market contexts: Egypt, India, Papua New Guinea, and Uganda.

Consumer insights: resource-poor women's consumer wants and needs

The following is a summary of the findings from the study as they relate to women working in agriculture.

Agriculture supports key needs in resource-poor women's lives by:

- Providing nourishment for the family
- Serving as an additional income-generating activity
- Giving women a channel through which to educate themselves
- Enabling entrepreneurial opportunities

Resource-poor women's life priorities focus on:

- Housing and essential utilities such as water and firewood
- Health-related challenges – 84% of women wanted better healthcare information
- Food and nutrition
- Education for their children – 74% of women see this as a priority
- Income-generating activities – 73% had an interest in entrepreneurship and 55% of women said that a “stable income” was one of their top priorities in life

Despite low education levels, resource-poor women have a desire to learn:

- 83% of respondents did not have secondary education
- Women have a “hunger” to learn more and improve their education

Resource-poor women prioritize feeding their families consistently (food security) and acquiring sufficient nutrition:

- A ‘good meal for my family every day’ is one of the things they would like to achieve in future (one-third of the women stated it was their aspiration).
- Imperative to improve on nutrition – ‘I wake up in the morning not knowing whether I would be able to feed my kids at night or not.’

Saving time is a priority:

- Services that can reduce the time spent on day-to-day activities are needed
- Services that reduce transport costs are desired

Consumer insights: marketing

Several key insights inform marketing for potential mAgri services:

- Deliver message to the family heads (often men) that mobile is a tool for the whole family
- Services to raise agricultural incomes and productivity benefits the whole family
- Services oriented towards supporting entrepreneurial spirit and opportunities, including access to microcredit, would be well received
- Using existing networks in combination with trusted communication sources (TV, radio, posters) to reach women
- One-third of women attend women's groups weekly

Consumer insights: service design

Several key insights inform service design for potential mAgri services:

- SMS not a preferred platform: only 37% of women send SMS, generally 'don't like it' regardless of literacy
- BOP women have low experience with complicated menus and user interface
- Voice channels are preferable and live person advice is the most comfortable way of getting the information
- If SMS channels are used for a service, an educational campaign is needed
- Very low mobile internet awareness and usage (5%)

For more in-depth information, read “[Striving and Surviving: Exploring the Lives of Women at the Base of the Pyramid](#)”, published by the GSMA mWomen Programme in 2012.

G: Women of Tanzania – Illustrative Consumer Insights Profiles

Tigo Tanzania was awarded an Innovation Fund grant by the GSMA mWomen Programme and used the opportunity to commission a qualitative research study to understand the daily lives, aspirations, and mobile use of low-income women in Tanzania. Three of these representative profiles are summarised below.

Consumer Insights Profile #1: Janet, 44 years old

CURRENT MOBILE PHONE, DAY FARM LABOURER

I have six children and one grandchild and I live in Morogoro, Tanzania. I live in a one-bedroom home with my four youngest children.

Mobile phone ownership: I own a phone, which my sons bought me as a gift.

How she earns income: I work as a day labourer in the farms near my home. I would love to work in the hotel industry if I had more money and skills. Also, in our neighbourhood, we share communal tasks such as cleaning.

Barriers to ownership: Need to spend money on other things.

Her main priorities in life

- Health – staying healthy to provide for family
- Getting capital to start a business – getting out of farming and working in the hotel business
- Housing – finding a better home to provide my kids with a better atmosphere for living

Training content desired

- Information on how to get capital for a business
- Empowerment information on how to start a business

Best communication channels to reach her

- Women's group – I go to a women's group where we save money together
- TV – I do not have a radio or TV, but a friend of my daughter's has a TV so we go over to their house to watch Nigerian movies and breaking news on Saturday
- Church – I go on Sunday to pray



Consumer Insights Profile #2: Upendo, 34 years old

FORMER MOBILE PHONE OWNER, FARM OWNER

I am 34 years old and live in Uyole in Mbeya, Tanzania. I have three children and am divorced. I was thankfully able to keep the rice farm we own and the house after the divorce.

Mobile phone ownership: I used to have a mobile phone, but I had to sell it when I became pregnant.



How she earns income: I plant, harvest, and sell from my rice farm, which I own. I manage the four phases of rice farming myself: preparing and planting the rice, weeding, and harvesting. If I have extra money, I hire labourers to help. When I want to sell rice from my farm, I call a retailer nearby, and he picks it up from my barn.

Barriers to ownership: Financial constraints – money is always tight until the harvest comes in.

How she suggests eliminating barriers: Harvest specials could allow farmers to buy a discounted phone at the time when they have the money to buy the phone.

Her main priorities in life

- Money – more money to invest in my farm and to invest in other business ideas
- Education – getting kids through school and providing them with tuition if possible
- Electricity – getting electricity would be a life-changing event

Mobile services she desires

- Tigo Biashara (business training) – I have an aspiration to get into business, so this would teach me entrepreneurship
- Tigo Tuition for my kids to learn more even after school
- M-Pesa to save money and to receive money from my brothers

Best communication channels to reach her

- Church and community groups – I participate in these
- Neighbours and other farmers – we help each other out
- Billboards – I see these in passing

Consumer Insights Profile #3: Grace, 18 years old

FUTURE MOBILE PHONE OWNER, WORKER ON FAMILY-OWNED FARM

My parents died of HIV/AIDS and I live with my aunt and uncle. Eleven people live in my home, and we have no electricity, TV, or radio. I dream of returning to school to be a nurse.

Mobile phone ownership/usage: I have never used a mobile phone before, but I learned about them from road shows and I know the brands like Tigo and Vodacom from my aunt and uncle and also my friends.

How she earns income: I work odd jobs on my aunt and uncle's rice farm. During planting I dig the holes for seeds. During weeding, I weed and during harvest I have the role of removing the rice husks to extract the rice. One of my major tasks is to travel to the veterinarian to get information — being able to make a call for this would save me a lot of time.

Barriers to ownership: Financial constraints mainly—I must ask aunt and uncle for money. Also, this is not a priority—I would rather be saving for school than spend the money on a phone.

Her main priorities in life

- Education – passing the Form 4 exam and continuing school
- Health – staying healthy and becoming a nurse
- Farming – producing high yields to make more money

Training content she desires

- Health information to protect myself from disease
- Form 4 tutorials like the Alfa Coursework to study for the Form 4 exam
- How to produce greater yields
- Types of pests and diseases harming rice

Best communication channels to reach her

- Radio – sometime I listen to my neighbour's radio
- Friends – We like to play cards
- Church – I learn about faith at church



I: Common Good Practices in Interactive Voice Response

In December 2013, GSMA's mAgri Programme released the guide, *Agri VAS Functional Requirements & Best Practice: SMS & IVR*, which contains recommended practices for both SMS and IVR services. The purpose of the document is to outline the different types of services that can be delivered by a mAgri service provider using SMS and IVR channels. This aids mAgri service providers in identifying the types of services to include and how to plan for different scenarios that arise. The document also contains best practices for both SMS and IVR services.

Types of IVR Services

The document gives examples and recommends good practices for each of these types of services:

1. Dial in and listen – one way delivery of audio message
2. Dial in, listen, and record – customer can record message with feedback or other request
3. Dial in, listen, record, and order – enables downloading of content
4. Dial in and provide user information for registration – for data mining or pre-registration for any service
5. Quiz competition – builds user loyalty through an entertainment forum
6. Voting and public opinion polling – to understand users' wants and needs
7. Personal Content Album – enables creation of lists or favourite menus of most-accessed content
8. OBD (Outbound Dialling) – dialling out to subscribers at a predefined time to deliver a voice message

Other common good practices

Some of the most useful practices for serving women working in small-scale agriculture with low levels of literacy and numeracy are listed below.

Shorten IVR trees (the number of menus and dialling options) for low-literacy users

A long IVR tree containing many necessary options is often difficult for low-literacy users to remember. Multimodal access to sub-level short code is a good way around this.

Deploy adaptive menu structure for ease of use

A long and complicated IVR drives user traffic away from the system and decreases users' loyalty. If results from user testing or marketing campaign surveys show that many users try the service but only a few are successful in accessing content, then immediate action should be taken to redesign the structure of the IVR.

Clear instructions

For rural VAS users, it is recommended that IVR instructions are very clear and each instruction repeated to increase the chance that the user will follow it correctly. (For example, repeat the main menu and repeat the prompt to select the sub-level.)

J: IKSL's Gender Guidelines for Agricultural Information Content Managers

IFFCO Kisan Sanchar Limited (IKSL) provides voice-based agricultural information services to rural farmers in India. The service has an innovative gender policy which adapts the VAS (outbound voice message and a helpline) for the women in the farming community who subscribe to IKSL.

As part of the service, the user receives five recorded voice messages, free of charge, each day covering both local and national agricultural topics. IKSL distributes Airtel SIM cards branded 'Green SIM', which function as a normal SIM as well as providing these agricultural VAS. Green SIM users can also access an Agri Helpline where they can get answers to farming questions from agricultural experts.

IKSL is a trilateral joint venture between the Indian Farmers Fertiliser Cooperative Ltd (IFFCO) and Airtel, the largest mobile network operator, along with Star Global Resources Limited, rural telephony experts.

IKSL's gender policy integrates gender sensitivity into the content management system for both the Voice Message and the Helpline work stream. An 'Expert Committee' was created to inform various processes within the guidelines. The Committee consists of local experts and community members.

Voice Messages – Create, deliver, and track women-centred information

This messaging service delivers one-way communication of information on topics to callers.

- **Topics.** A comprehensive list of knowledge domains/topics was prepared by the Expert Committee per the outcome of the field study (consumer insights research), including: nutrition, family health, personal hygiene, micro-enterprises, women empowerment schemes, and policies and agriculture for nutrition.
- **Woman's voice.** Wherever possible, the 'Women Centred' Voice Message is to be narrated by a woman– this has been found to be more appealing to women. The content manager can make use of local NGOs, volunteers, etc. for this purpose.
- **Frequency.** Minimum three voice messages per zone per week on women-centred knowledge domains/topics to be delivered by each content manager.
- **Timing.** The preferable timing for the women-centred messages should be noon to early afternoon when both men and women generally do not have other activities. However, the actual timing should be adjusted to the local custom to ensure that, during the delivery of the messages, women have maximum opportunity to listen to the messages.
- **Reaching women.** The voice message script clearly indicates that it is a message meant for women so that even if a man listens to it, he will pass on the information to the woman in the household.
- **Gender tag.** All key knowledge domains/topics related to 'Women-Centred Activities' are tagged in the content management repository (factsheets, approved sources, etc.) and the voice message log with a gender tag.
- **Updating.** Women-centred topics are to be updated every six months.

Helpline – A guide to women-centred data tracking

The Helpline service delivers two-way communication of information answering questions from callers.

- **Helpline.** All questions asked by women are tagged as "Women Centred" in the Helpline query documentation template, regardless of whether it is a women-centred topic or not. If a man asks a question on a topic that is already tagged as women-centred in the repository, it will not be tagged by the content manager as women-centred.
- **Monthly analysis.** Every month each content manager prepares an analysis of the questions asked by women on the Helpline, along with the respective topics, and sends it to the Expert Committee. The Expert Committee reviews the gender tag definitions based on this analysis once every six months, and upgrades the list (as mentioned in the guideline) for voice messages with new women-centred topics.

K: The Airtel Chama Project* – Key Performance Indicators (KPIs)

TYPE OF KPI	TOPIC	INDICATOR	DATA SOURCE	FREQUENCY
COMMERCIAL	Uptake of phones	% of women as proportion of subscriber base in target footprint	MNO records	Monthly
	Uptake of services	% increase in women's adoption of services/new customers		
	Usage	% increase in average transactions/day/gender (for MFS or other transaction-based services)		
	Profitability	Revenue generated by of ering in reporting period		
		% increase in ARPU (Average Revenue per User) per user versus all women subscribers in of ering footprint		
	Loyalty	% reduction in churn rate among users		
		% female/male users who remain on the product or service after 3 months of use		
	Brand equity	% increase in brand awareness amongst all consumers (positive perception of brand)		Monthly, baseline and end-line
SOCIAL	Access	# of women who begin to use a mobile phone as a result of grants (own and/or borrow)	NGO partner survey	Baseline and end-line
	Value to women/communities	% of women users who perceive the of ering to add value to their lives		
	Equity	% of women in footprint who report that women have a need for a mobile phone		
		% of men in footprint who report that women have a need for a mobile phone		
	Access to finance	% increase in women's registration for mobile financial services		
		# of women who have first-time access to financial services as a result of the of ering		
		# of women who report having improved access to financial services they value as a result of the of ering		
		% of women who report that they prefer the new of ering to their previous non-mobile tools		

* A partnership between Airtel Money and Grameen Foundation in Uganda



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About the GSMA mWomen Programme

The GSMA mWomen Programme aims to increase women's access to and use of mobile phones and life-enhancing mobile services in low- and middle-income countries. The programme objectives are to encourage the mobile industry to serve resource-poor women, increase the availability of relevant mobile services, and promote innovation.

Visit www.gsma.com/mwomen to learn more about how to participate.
Follow GSMA mWomen on Twitter: @GSMAMWomen | Email: mwomen@gsma.com

The GSMA's mAgri Programme catalyses scalable, commercial mobile services that improve the nutrition, productivity and incomes of smallholder farmers and benefit the agriculture sector in emerging markets.

Visit: <http://www.gsma.com/mobilefordevelopment/programmes/magri> to learn more
Email: mAgri@gsma.com Follow us on Twitter @GSMAMAgri