



Scope of Work

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| Firm or Individual: | Firm |
| Program: | AgriFin Digital Farmer (ADF II) |
| Scope of Project: | Digital Services Data Analytics Consultancy |
| Country: | Kenya, Uganda, Nigeria, Ethiopia & Tanzania |
| From: | 22 nd August 2022 |
| To: | 28 th February 2023 |
| Task Manager: | Mercy Corps AGRIFIN MERAL Director- Mercy Corps SPARC Innovation Director |
| Technical Manager: | Mercy Corps AGRIFIN MERA officer |

Mercy Corps Background

Mercy Corps is a leading global organization powered by the belief that a better world is possible. In disaster, in hardship, in more than 40 countries around the world, we partner to put bold solutions into action—helping people triumph over adversity and build stronger communities from within. Now, and for the future. As a global organization with programs in over 40 countries, we focus much of our advocacy on influencing governments, multilateral institutions as well as foundations and the private sector to improve relevant policies, practices and decisions in order to better help vulnerable communities lift themselves out of poverty.

Program Context

The consultancy is supported by two Mercy Corps programs - Agrifin Accelerate and SPARC - that support innovation for farmers, agro-pastoralists and pastoralists. This consultancy focuses on 5 countries: Kenya, Ethiopia, Uganda, Tanzania and Nigeria.

Nearly one and a half billion poor people live on less than US\$1.25 a day. One billion of them live in rural areas where agriculture is their main source of livelihood¹.

An estimated 70 million Smallholder Farmers live in Sub Saharan Africa, over half of whom are women². Smallholders, who typically farm two hectares or less, provide over 80% of the food consumed in a large part of the developing world, contributing significantly to poverty reduction and food security³. However, increasing fragmentation of landholdings, especially in infrastructure, coupled with reduced investment support, growing competition for land and water, rising input prices and climate change threaten this contribution, leaving many smallholders increasingly vulnerable.

Pastoralism is the dominant livestock production system in African arid and semi-arid lands (ASALs or drylands), occupying at least 40% of the continent's land mass⁴. In SSA alone, livestock is the primary source of income for 25 million pastoralists and 250 million agro- pastoralists. Pastoralists make over 50% of their income from livestock production, and agropastoralists make over half their income from

¹ IFAD, Smallholders, food security, and the environment, 2013

² IFAD, "Sub-Saharan Africa: The state of smallholders in agriculture", Schonberger and Delaney 2011.

³ Peck, Anderson, "Segmentation of Smallholder Households: Meeting the Range of Financial Needs in Agricultural Families", CGAP Focus Note #85, April 2013.

⁴ FAO. 2018. Pastoralism in Africa's drylands. Food and Agriculture Organization of the United Nations, Rome, Italy.



agriculture overall and at least 10% from livestock⁵. Pastoralism is often the most adaptive form of agriculture that can be practiced due to variable climate and soil fertility levels; however it can have negative impacts on the environment, including land degradation and greenhouse gas emissions.

Given increasing world populations and demand for food, smallholder farmers and (agro)pastoralists occupy an important segment of the global agricultural value chain⁶. Multinational buyers will increasingly rely on smallholders to secure their supply of commodities and to help satisfy consumer sustainability preferences⁷.

At an estimated \$450 billion, the global demand for smallholder agricultural finance is large—and largely unmet. Credit provided by informal and formal financial institutions, as well as value chain actors, currently only meets an estimated USD 50 billion of the more than USD 200 billion need for smallholder finance in the regions of sub-Saharan Africa, Latin America, and South and Southeast Asia⁸. Impact driven smallholder agricultural lenders currently satisfy less than two percent of the demand.⁹ The volume and value of savings, lending and payment transaction smallholder farmers in most African countries is not specifically measured.

Mobile phones are a powerful tool to access the electronic national retail payments system and enable vast numbers of clients to use a range of financial and informational services at lower cost. In agriculture, progressively more services are being delivered via mobile phone. Applications now deliver direct specific, timely information on agricultural production methods to farmers through their mobile phones. Moving beyond one-to-one communication, there are internet- and SMS-based services that allow farmers to access inputs, access price information on different crops and provide a platform for smallholders to collectively sell crops and buy inputs, thereby lowering costs and accessing new markets.¹⁰ We believe that digital innovation can revolutionize the way smallholder farmers, agropastoralists and pastoralists feed the world, that's why, based on years of learning and iterating, we built the AgriFin model to facilitate that process.

Launched in 2012, **AgriFin's** primary target group is un-banked smallholder farmers living on less than USD 2 per day. Mobilizing a vast network of partners, AgriFin ensures that the needs of farmers inform the design of partner products and services. Our shared global context is challenging – climate variability and population growth present unprecedented challenges. Yet, our experience tells us that farmers are determined to beat the odds. With access to the right tools, smallholder farmers can build the resilience they need against climate and emergency shocks, and continue to feed their communities. We know that government and private sector partners are best suited to deliver those tools, and that technology is a critical accelerator. Our aim is to connect smallholder farmers to products and services that increase their productivity and income by 50%, with a 40% target population of Women and Youth.

Launched in 2020, the Supporting Pastoralism and Agriculture in Recurrent and Protracted Crises (SPARC) program aims to develop, broker and manage knowledge, in order to enhance the ability of the

⁵ Swift, J. J. 1988. Major issues in pastoral development with special emphasis on selected African countries. FAO, Rome, Italy.

⁶ Dalberg, 2013

⁷ Dalberg, 2013

⁸ MasterCard Foundation, "Inflection Point: Unlocking growth in the era of farmer finance", April 2016

⁹ Dalberg, 2013

¹⁰ Peck, Anderson, "Segmentation of Smallholder Households: Meeting the Range of Financial Needs in Agricultural Families", CGAP Focus Note #85, April 2013.



development community to assist pastoralists, agro-pastoralists and farmers living in the context of climate change, protracted crises and ongoing conflicts. These groups represent dryland communities that are faced with significant transitions in their livelihoods resulting from both multiple pressures (climate, conflict), as well as in response to opportunities (jobs). The SPARC Innovation Research Facility was established to co-create, curate and broker evidence on what innovations are most relevant, impactful, and scalable (when, where, and how); and what policies enable the success of these innovations in the FCAS / ASALs context.

Purpose of Engagement

The objective of this exercise is to understand and benchmark the use and access to digital financial and information services among smallholder farmers, agro-pastoralists and pastoralists across the respective value chains. ADF II and SPARC programs therefore seek to recruit a research firm with expertise in data analytics to conduct deeper analysis of existing secondary data/information on access to digital services by smallholder farmers including agro-pastoralists and pastoralists in the arid and semi-arid areas. The respective household will be used as a unit of analysis, to generate relevant insights across 5 countries starting with Kenya and Nigeria then later in Uganda, Ethiopia and Tanzania.

The specific objectives of this work are to:

1. Conduct analysis of existing secondary data on access and utilization of financial and non-financial digital services, exploring relevant areas while presenting the key crop and livestock value chains, respective producers characteristics/profiles, the levels of DFS/DIS utilization and usage patterns.
2. Undertake an in-depth profiling of producers, both crop and livestock, indicating the value chains they participate in, access and utilization of DFS and/or DIS, income and poverty levels, and other segmentation variables that will enhance the understanding of them.
3. Develop and share with AgriFin and SPARC teams various communications outputs (e.g. PPT decks, word documents) that share the methodology and results in practical and engaging formats.

Research Questions:

The following are the questions the research is expected to answer, for both crop farmers and (agro)pastoralists, to the largest extent be disaggregated by gender and age:

1. What is the profile of an average producer (disaggregated by gender, demographics, socio-economic factors, type of farming-crops & livestock)? What is the average number of value chains (both Crops and livestock) they are actively involved in? What are other sources of income other than agriculture (i.e. casual labor, remittances, contract work etc.)?
2. What is the current level of access and use of digital and other information services; non-financial services such as training and advisory services? (i.e. what services, how often used, what have they liked and not liked about getting information electronically, is there any service they are paying for, etc.)

3. How do producers access information services? (i.e. through input suppliers, traders, private and/or public agriculture extension workers, farmer cooperatives, local community leaders, religious organizations, NGOs, friends, neighbors, relatives, radio, TV programmes like “Shamba Shape-up?”, other platforms like One Acre, e-Soko, etc.)
4. How do producers currently access financial services? (i.e. MFIs, banks, cooperatives, contract buyers, input suppliers, friends, neighbor’s, relatives, money-lenders, VSLAs, Vicobas etc.)
5. What is the current level of access and use of financial services? (i.e. how much in loans do they take and from whom, family and informal sector loans, savings in cash, stored value in a mobile money wallet, how many loans/ accounts, how often, how much, etc.)
6. What channels are used in the dissemination of digital financial & information services? Which ones are effective and why, disaggregated by different types of producers?
7. What challenges are there in access to digital financial & information services? (i.e. gender disadvantage, lack of useful products, socio-cultural norms, trust, lack of information about the products, lack of appropriate service delivery channels, lack of mobile phones/Tvs/Radios which limit access to DIS/DFS, distance to the financial institution, confusing menus, language barriers, network coverage, technical ability, financial literacy etc.)
8. What challenges are there in coping with unexpected events, what are their coping strategies? (i.e. household emergencies like medical/death in the household, COVID pandemic, desert locust, fall armyworm, etc)
9. Where are the opportunities for increasing smallholder farmers’/pastoralists income through provision of digital information and financial services? Are these opportunities centered on improved productivity, improved yields, improved income or reduced costs? Can these be addressed by mobile applications or digital channels?
10. What is the current need in terms of information? What types of information? (i.e. market pricing, weather data, input recommendations & training for seed, disease control information, fertilizer & pesticide, or information and recommendations on future crop prices and buyer demand for specific commodities in order to plan harvest cycles)?
11. What is the need for financial services among producers? What types of financial services? (i.e. loans, savings, insurance, value chain payments, remittances, bill pay, etc.)?
12. What do producers perceive as their largest constraint to achieving greater productivity, yields & income? (i.e. poor seed, lack of fertilizer, poor quality of seed and fertilizer, disease control for crops or livestock or lack of credit etc.)
13. What organizations, cooperatives, CBOs or other related organizations are working with producers in the identified value chains (both crops & livestock) to enhance their access to digital services?



The consultant will be expected to conduct the following activities.

1. Conducting inception/kickoff meeting with the AgriFin MERAL and SPARC programs teams to discuss the objectives of the research, the approach and expected deliverables.
2. Develop a detailed research protocol and work plan and timelines for the research
3. Develop a research protocol indicating their understanding of the understanding of what is outlined in the SoW, and the research design and methodology to be used during the research and key themes/codebook that will guide them during data analysis
4. Conducting in-depth review of existing literature (FinAccess/FinScope reports, relevant program documents, case studies, journal articles, books, etc) to collect data on access to digital services by smallholders, including pastoralists in ASALs
5. Identify existing available data sources and conduct deeper/additional data analysis as guided by the outlined research questions above
6. Provide regular updates to the AgriFin MERAL and SPARC teams detailing the progress of the research
7. Develop a draft report, indicating initial draft report in powerpoint on key findings indicating the profile of average producers, level of access and types of digital services for producers by type, providers of digital services, challenges experienced in accessing digital services, existing opportunities to enhance use of digital opportunities and recommendations to be utilized by AgriFin, SPARC and their partners
8. Develop a final data analytics report in powerpoint, indicating the outcome of the research and recommendations to be adopted by the AgriFin and SPARC programs. The consultant will also include references in the report.
9. The consultant is also expected to share any data/information gathered during the analysis and a codebook used to guide the data analysis
10. Indicate the research questions not answered and gaps identified for follow-up by Mercy Corps team.

The research firm and Mercy Corps team will have to agree on the standard definition of the variables that will be used in the research e.g pastoralist, income levels, crop farmer, etc.

This research activity implementation shall be fully consultative with the ADF II and SPARC programs, while all research results, and recommended strategies will be developed in conjunction with support from the technical teams of both programs so that strategic alignment is built within the program.

Deliverables

The consultant will work to produce the following deliverables, in close collaboration with the AgriFin MERAL and SPARC team;

1. **Inception report and workplan:** An inception report indicating the firm's understanding of the research objectives, a detailed proposal of the methodological approach for conducting the data analysis, and a detailed **work plan** indicating the activities to be implemented and the timeframes.
2. **5 country specific reports with targeted chapters:**
 - a. **Country overview and summary:** The consultant will consolidate the smallholder farmers and pastoralist reports into one country report including country farmer profile introduction followed by two chapters for smallholder farmers and Pastoralists, to be presented at country-level workshops/webinars to present the insights for each country



to Mercy Corps and key stakeholders. It should include a brief comparison highlighting differences and variances in opportunities for support

- b. **Focus on Smallholder farmers:** 5 country-specific final reports for Kenya, Uganda, Nigeria, Ethiopia and Tanzania, in powerpoint on key findings of the data analytics research incorporating feedback from AgriFin and SPARC technical teams focusing on smallholder farmers. The report should be include charts, figures & tables and references
- c. **Focus on Agro-pastoralists and pastoralists:** 5 country-specific final reports for Kenya, Uganda, Nigeria, Ethiopia and Tanzania, in powerpoint on key findings of the data analytics research incorporating feedback from AgriFin and SPARC technical teams focusing on Agro-pastoralists and pastoralists.on the draft reports. The report should be include charts, figures & tables and references

The table below indicates the expected timelines on when the deliverables are to be submitted;

| Deliverable | Description | Estimate deliverable due date |
|-------------------------------|---|--------------------------------|
| Inception report and workplan | An inception report indicating their understanding of the research objectives, a detailed proposal of the methodological approach for conducting the data analysis, and a detailed work plan indicating the activities to be implemented and the timeframes. | 5 th September 2022 |
| Kenya draft country report | Country consolidated report with specific chapters on smallholder farmers and (agro)pastoralist producers, in powerpoint, on key findings of the data analytics research. The report should be include charts, figures & tables and references | 5 th October 2022 |
| Kenya country report | Final report incorporating feedback from AgriFin and SPARC technical teams | 17 th October 2022 |
| Nigeria country report | Country consolidated report with specific chapters on smallholder farmers and (agro)pastoralist producers, in powerpoint, on key findings of the data analytics research. The report should be include charts, figures & tables and references | 5 th November 2022 |
| Ethiopia country report | Country consolidated report with specific chapters on smallholder farmers and (agro)pastoralist producers, | 5 th December 2022 |

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| | in powerpoint, on key findings of the data analytics research. The report should be include charts, figures & tables and references | |
| Uganda country report | Country consolidated report with specific chapters on smallholder farmers and (agro)pastoralist producers, in powerpoint, on key findings of the data analytics research. The report should be include charts, figures & tables and references | 6 th January 2023 |
| Tanzania country report | Country consolidated report with specific chapters on smallholder farmers and (agro)pastoralist producers, in powerpoint, on key findings of the data analytics research. The report should be include charts, figures & tables and references | 5 th February 2023 |
| 5 Dissemination workshops/webinars | The consultant will present at least 5 country-level workshops/webinars to Mercy Corps and key stakeholders. | 28 th February 2023 (all complete, likely to be rolling during assignment) |

Budget and Terms of Payment

The budget commitment from ADF II to the indicated services and work will be determined with the consultant. Payment will be approved upon receipt and acceptance of final deliverables. In addition, the payments will be attached to each final country-specific report.

Necessary Skills and Experience

1. Extensive experience in Research, monitoring, and evaluation, including conducting in-depth review and analysis of secondary data
2. Strong experience in evaluating digital financial service extension, ideally to smallholder farmers, including (agro)pastoralists in ASALs
3. Prior experience conducting research in Sub-Saharan Africa, with a specific focus on program areas of agriculture, finance, and technology, ideally in Kenya, Uganda, Ethiopia, Tanzania and Nigeria
4. Ability to translate evidence from the research into actionable lessons learned and strategic recommendations for Mercy Corps AgriFin and SPARC programs
5. Strong data analytics and writing skills and knowledge of qualitative and quantitative evaluation methodologies



6. The lead should have at least a master's degree in quantitative and qualitative social sciences such as development and/or agricultural economics, monitoring and evaluation or demography with technical skills in finance, business systems or other relevant fields
7. Demonstrated ability to bring a strong gender and youth lens into secondary data analysis
8. Able to lead technical services in all areas listed under the Scope of Work, to include expertise in digital financial services, agriculture, gender and climate change, monitoring and evaluation, partnership development, public learning and project management and coordination.

Ownership/Control of Work Product/Publication

Matters relating to ownership and control of work product and publication of materials produced during the course of this engagement are addressed in the main contract agreement entered between Mercy Corps and the Consultant for performance of services for AgriFin Digital Farmer.

Authorship and Acknowledgement

Matters relating to authorship and acknowledgment of any materials produced by the Consultant during this engagement are addressed in the main contract agreement entered into between Mercy Corps and the Consultant for performance of services for AgriFin Digital Farmer.

Task Manager/Reporting

The Task Manager for this engagement is MERAL Director, supported by the MERL technical team and the SPARC Innovation Director. The Consultant will direct all communications to designated program point person(s) and the task manager will ensure full coordination and timely fulfillment and delivery of the deliverables. Regular invoicing will be made against contract agreed deliverables upon satisfactory delivery and acceptance of deliverables by the Task Manager.

Application

To apply, candidates should submit the following:

Pitch deck on proposal for the assignment including:

- approach
- key team members
- relevant team & firm experience
- budget
- timeline for deliverables