



MINISTRY OF AGRICULTURE
ANIMAL INDUSTRY &
FISHERIES

Ministry Mission:

“To transform subsistence farming
to commercial agriculture”



UgIFT
MICRO-SCALE
IRRIGATION PROGRAM
Improving farmers' livelihood

A GUIDE FOR **FINANCIAL INSTITUTIONS**

HOW DO I BECOME INVOLVED IN THE
MICRO-SCALE IRRIGATION PROGRAM?

AUGUST 2020

Why is the **Micro-scale Irrigation Program** relevant for **financial institutions**?

The Micro-scale Irrigation Program by the **Ministry of Agriculture, Animal Industry, and Fisheries (MAAIF)** and **Local Governments** supports smallholder farmers to purchase and use micro-scale irrigation equipment.

Under the Program, the farmer and the Government co-pay for the individual micro-scale irrigation equipment, which is then owned, operated and managed by the farmer.

The majority of smallholder farmers do not have enough money available to meet their co-payment. Your role as a financial institution is essential, as you can advance credit to farmers to co-finance the irrigation equipment.

Farmers will be able to repay their loans because their income will increase from irrigation. Once the farmer starts using the irrigation system, they will be less exposed to weather risks, grow more crops, produce better quality products, diversify their crops, and sell their produce at higher prices.



The Micro-scale Irrigation Program may be of great interest to your financial institution as it provides:

Up to **14,000** smallholder farmers

over the next two years. Farmers will undergo a rigorous assessment under the Program, reducing your cost of farmers identification.

Up to **UGX 90 billion**

prospective business volume for loans for irrigation equipment, in addition to opening up opportunities to market other financial products to farmers.

Reduced risk on quality of equipment

as irrigation equipment suppliers are pre-qualified under the Program and required to offer after sale service to farmers, thus increases the likelihood of the equipment long-lasting.

Up to **75%**

reduced exposure due to Government co-financing.

Reduced risk of default

as Program provides farmers with extension services and creates peer pressure for farmers to repay.

Why **Irrigation** For **Smallholder Farmers**?

Smallholder farmers in Uganda are affected by increasing rainfall variability.

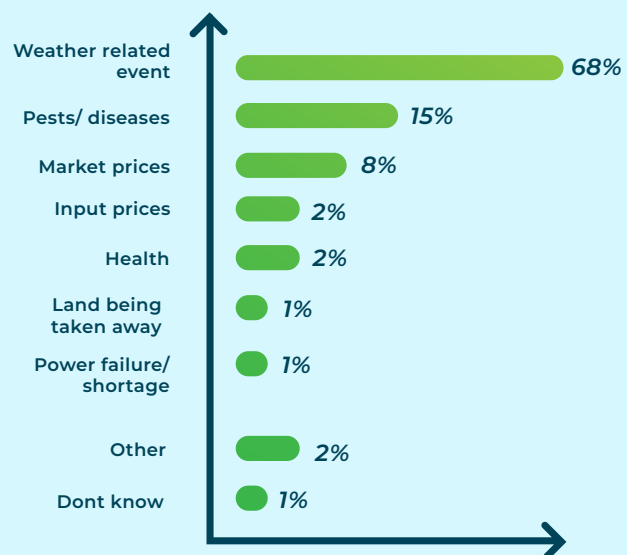
The rainy season has become shorter. Farmers cannot predict when rainfall is going to start, and cannot decide the best moment to plant. Sometimes a dry spell hits during the cropping season, resulting in lower yields and lower quality product. It is challenging for smallholder farmers to face these uncertainties.

With increasing rainfalls variability due to climate change, farmers now perceive weather as the main risk to their production, and it will be even more so in the future.

Irrigation can greatly benefit **smallholder farmers** facing weather uncertainties.



Irrigation is to supply water for crop production in addition to rainfall.

Most significant risk to agricultural activities according to smallholder farmers.



Source:
National Survey and Segmentation of Smallholder Households in Uganda, CGAP, 2016

Thanks to irrigation, smallholder farmers could:

	Achieve consistent yields and quality despite dry spells.		Decide when to plant, so to hit the market when prices are higher.
	Produce year round, including during the dry season.		Introduce high value crops like horticulture crops and coffee.

Farmers will be able to grow more, diversify their crops, and sell their produce for higher price, thus improving their livelihood.

Many smallholder farmers in Uganda have water nearby: a stream, a river, a lake, a well or a borehole. This is an opportunity for these farmers to introduce irrigation independently, without the need of any expensive public or common infrastructure. The farmer can irrigate his or her own farm simply by using a pump (solar or petrol) to take water, a pipe to bring the water to the farm, and an on-farm system (hose, sprinkler or drip lines) to distribute the water to the crops.

A micro-scale irrigation system is an ideal opportunity for entrepreneurial smallholder farmers who want to transition towards more commercial agriculture.

About the Micro-scale Irrigation Program



What is the Program Objective?

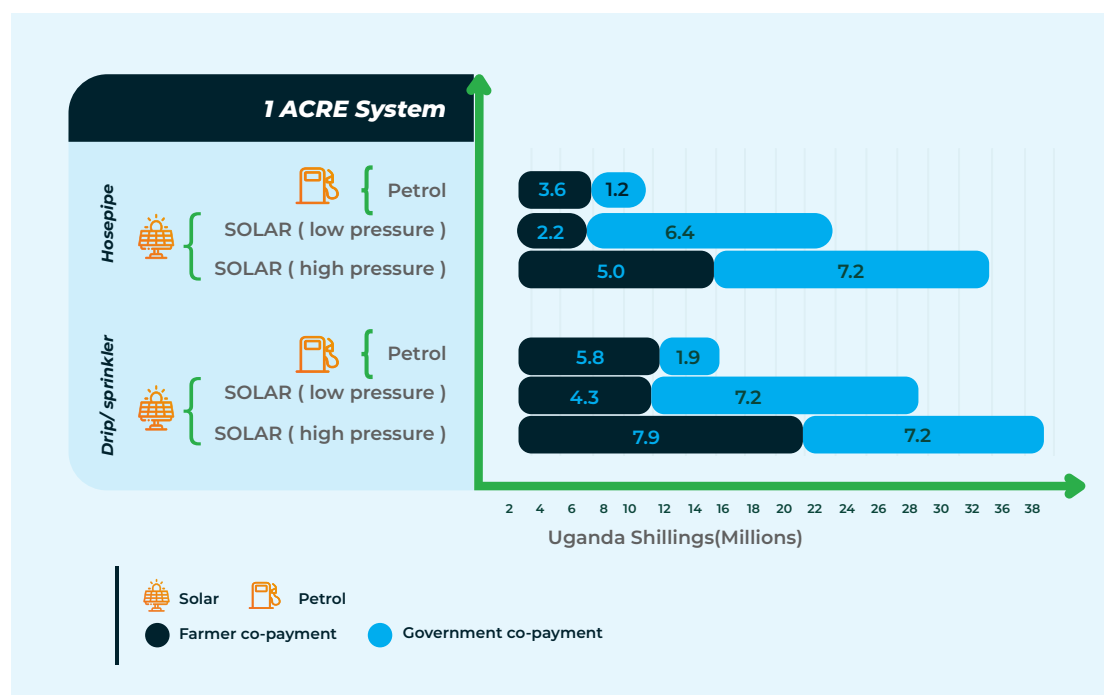
The Micro-scale Irrigation Program supports farmers to purchase and use micro-scale irrigation equipment.

How does the Program work?

The farmer and the government each co-pay for the irrigation equipment, which is then owned by the farmer. The amount of the respective co-payment depends on the farm area, the farm situation, and the irrigation technology chosen by the farmer. The Program will also teach farmers how to use the irrigation equipment, and when and how to water the crops.

The graph below presents the co-payment amounts for a 1 acre farm, which is the maximum area supported by the Program.

These are indicative costs and co-payments amounts. Actual values are expected to vary by -30% and +20% depending on the specific farm conditions and farmer's preferences.



Who are the Program beneficiaries?

The Micro-scale Irrigation Program targets male and female farmers interested in introducing irrigation on up to 2.5 acres.

To be eligible for the Program, the farmer needs to have access to water nearby, and access to land (either rented or owned) for at least one year.



It is expected that by *June 2023*, the Program will support between **6,000** and **14,000 smallholder** farmers across **40 Districts**. This corresponds to a government co-payment of **UGX 75 billion** and a total farmers' co-payment (*potential portfolio for financial institutions*) ranging between **UGX 40** and **90 billion**, with the potential to increase substantially should the Program be *scaled up nationwide in 2023* with *Phase 2 Districts*.

How the Program benefits farmers?

The graph presents an example of a smallholder farmer introducing irrigation to one acre of vegetables under the Micro-scale Irrigation Program.

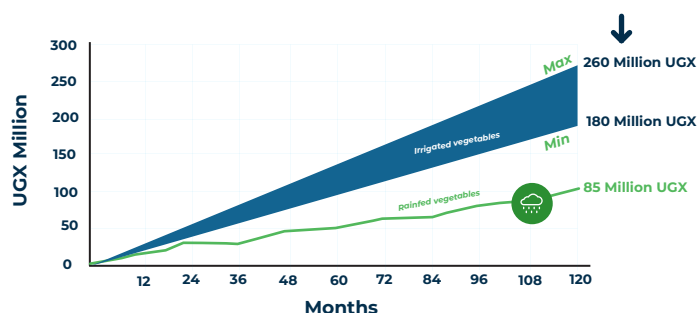
The graph compares the cumulative profits over ten years in three scenarios:

- (i) without irrigation (only rainfall),
- (ii) with a petrol powered irrigation system,
- (iii) with a solar powered irrigation system.

Irrigation allows the farmer to substantially increase the profit. The farmer would be able to pay back the investment cost of the solar powered irrigation equipment after 6 months only, and the farmer would make the most profit over ten years. The farmer would be able to pay back the petrol powered irrigation equipment after 12 months, and the total profit over ten years would be lower than solar due to cost of fuel.



Range of net farm income for 1 Ha of irrigated vegetables versus rainfed farming in Uganda (lifetime cost over 10 yrs)



How does the **Micro-scale Irrigation Program** work?

The Program is implemented in two-year long cycles. This page presents the first cycle of the Program (**July 2020 – June 2022**), which is implemented **in 40 Districts**. A new cycle will be launched after one year (**July 2021 – June 2023**) in the same **40 Districts**.

The following year, the Program has the potential to be scaled up nationally.

July - October 2020

The District organizes awareness-raising activities to inform farmers about the benefits of irrigation and the opportunities of the Program. Farmers who express interest in the Program are recorded through the Program's App called IrriTrack.

October - December 2020

The District visits the farm to collect information on land and water resources as well as land tenure and business plans. This information may include which crops farmers plan to introduce, and what benefits are expected. The farmer selects the kind of irrigation equipment preferred, receives an indicative estimate of the cost, and of his/her co-payment.

The farmer assesses whether he/she has sufficient money available to cover the co-payment. The District can advise about financial institutions if the farmer doesn't have the co-payment in cash.

January – April 2021

The District collects quotes from irrigation equipment suppliers, and selects the one with the lowest cost. The District informs the farmer of the exact co-payment amount.

If the farmer doesn't have the co-payment in cash, the farmer needs to secure a loan from a financial institution.

The farmer provides the co-payment to the District, and to sign a Memorandum of Understanding.



June - August 2021

The District and the irrigation equipment supplier sign a contract for the irrigation equipment, and the District pays the down payment to the supplier.

July 2021 - June 2022

The irrigation equipment supplier installs the equipment on the farm. Following verification, the District pays the supplier the remainder of the cost. The farmer is trained how to use the equipment by the supplier. The farmer also joins a Farmer Field School to learn about irrigated agriculture.

How can your **Financial Institution** **contribute to** and **benefit from** **the Micro-scale Irrigation** **Program?**

As a Financial Institution, you can:

July - October
2020 —————

Organize awareness raising activities in Districts of your choice.

Districts can bring farmers together that are interested in introducing irrigation to their farms. You can join these events and activities by presenting your financial products that might respond to smallholder farmers' needs. This way, farmers will know about your offer and may contact you directly should they decide to join the Program and need a loan. During these events, you can sensitize farmers on credit-related issues, and market financial products other than those needed for irrigation.

October - December
2020 —————

Engage one-on-one with farmers who are eligible to join the Program

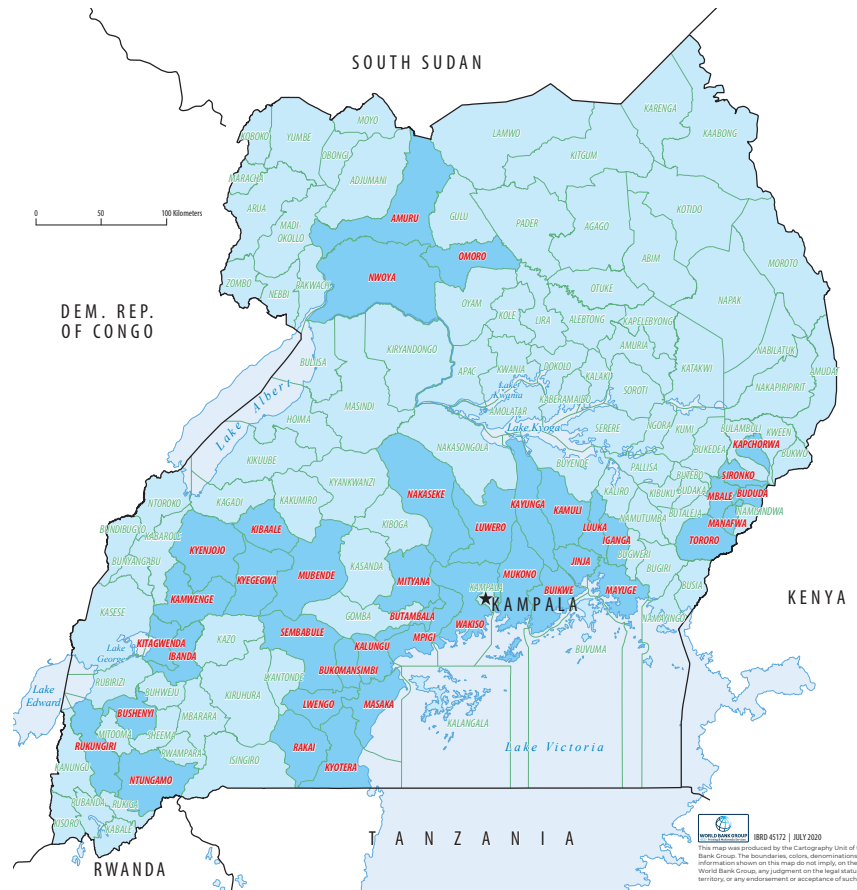
The District can provide you with a list of farmers that have completed the farm visit and need a loan to make their co-payment. You can electronically receive the dataset that includes contact information for farmers, farm conditions, and business cases, reducing costs associated with farmer identification. This information allows a desk screening of the farmers, and the opportunity to engage one-on-one with farmers of your choice to offer provisions of your packages. By the time the District selects the lowest cost option for the irrigation equipment for each farmer (January – April 2021), it will be possible for you to sign loans with interested farmers.

Where is the **Program implemented?**

The Program has a phased approach. Districts are divided into two groups: Phase 1 Districts where the Micro-scale Irrigation program will start to be implemented in July 2020, and Phase 2 Districts, where the Micro-scale Irrigation program will start to be implemented in July 2022.



Is your **financial institution** interested in contributing to the Program?



If so, please reach out to the Micro-scale Irrigation Program email address found below by September 30, 2020. Please include a list of which of the 40 Phase 1 Districts your financial institution is interested in offering its service to farmers. Additionally, please include an indication of the financial products you offer that may be of interest to smallholder farmers.

Note that financial institutions will not be prequalified under the Micro-scale Irrigation Program. Each farmer will be free to choose the financing institution, and it will be the responsibility of the farmer to negotiate the loan.

Find Out More Information:



UgIFTirrigation@agriculture.go.ug



<https://www.agriculture.go.ug/micro-scale-irrigation-programme/>

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