



THE SOLAR RAIN MAKER

**THE INNOVATIVE
BUSINESS MODEL**
SUNCULTURE

**A PAY-AS-YOU-GROW
SOLAR POWERED
IRRIGATION SOLUTION**
REG8043



EEP

ENERGY AND ENVIRONMENT
PARTNERSHIP / SOUTHERN AND EAST AFRICA





SunCulture designs, manufactures, finances and distributes solar-powered irrigation systems and services. SunCulture's solutions make it not only simpler, but also cheaper for farmers to grow high-quality fresh fruits and vegetables.

The market currently offers a limited set of options for smallholder farmers.

Solar-powered water pumping requires little to no operating cost and does not require much labor.

SunCulture's irrigation systems replace expensive and environmentally harmful fuel pumps with an efficient, environmentally friendly solar-powered solution, which helps ensure the stability of the water supply.

In addition to offering a clean alternative for drawing water, SunCulture offers a number of irrigation solutions that range from high pressure sprinklers to mist and drip irrigation systems.

The market currently offers a limited set of options for smallholder farmers. Treadle pumps, for example, not only require a substantial amount of labor to operate, but are also limited to farms with near-surface level water. Diesel pumps on the other hand require regular refueling and on-going maintenance. As an alternative, solar-powered water pumping requires minimal operating and labor costs and is more environmentally friendly.





SunCulture is a one stop-shop for farmers and has the ability to graduate its customers up the SunCulture product ladder.

Both the drip and mist irrigation systems are designed in an easy plug and play style and are suitable for high value crops, allowing farmers to increase their yield by up to 300%.

SunCulture provides both the product and services needed to ensure the customers' success. This includes installation, soil sampling, after-sales and agronomy support. SunCulture has a deep understanding of the realities smallholder farmers are faced with, including limited access to credit. This understanding has allowed the company to begin building a financing platform, Pay-As-You-Grow, which aims to close the financing gap smallholder farmers face.



Drip irrigation uses 80% less water than furrow irrigation.

Although the majority of farmland in Africa is cultivated by smallholder farmers, products and services are not tailored to their needs resulting in the fact that 80% of Africa's poorest and hungriest people are farmers.



SunCulture's latest product, the RainMaker, is a portable, internet connected, solar-powered irrigation solution. The RainMaker allows for both flexibility and reliability through its remote monitoring features. It is the most affordable, easy to use solar-powered irrigation solution on the market, with a total dynamic head of 100 meters and an installation time in under one hour.

There are hundreds of millions of hectares of farmland across Africa, of which a fraction is actually suitable for rain-fed irrigation, furthermore only 4% is currently irrigated. Switching from relying on rain to irrigation can lead to a 10x increase in a smallholder farmer's income. Although the majority of farmland in Africa is cultivated by smallholder farmers, products and services are not tailored to their needs resulting in the fact that 80% of Africa's poorest and hungriest people are farmers.

Currently, African smallholder farmers do not have access to the right tools, knowledge and financing to make them truly successful. In order to cut costs while simultaneously increase productivity it is important to take into account the global agricultural mechanisation and monitoring trend. SunCulture addresses this challenge by tailoring relevant products and services to individual farmer.

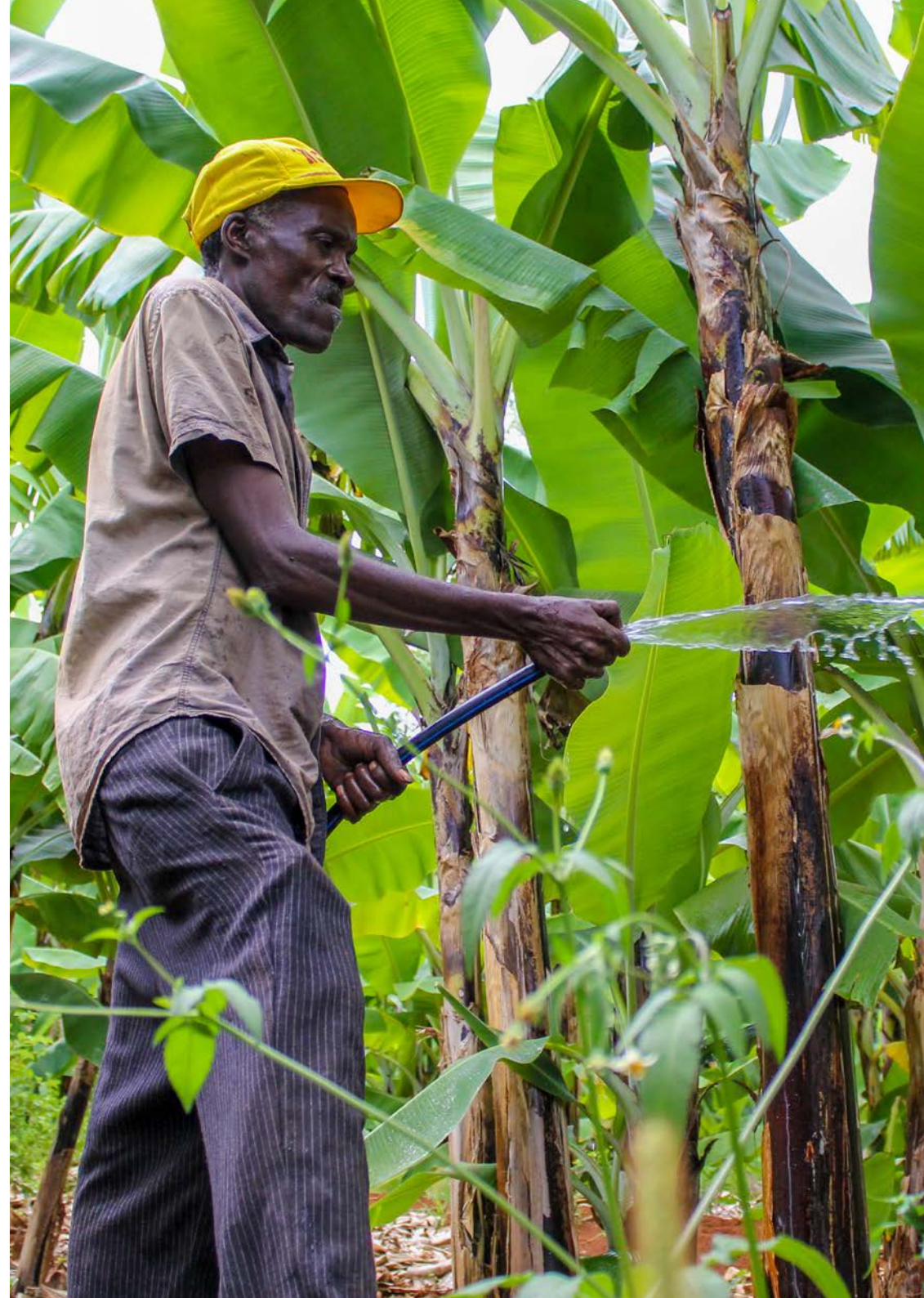


SunCulture targets the 500+ million smallholder farming households who represent over 2.5 billion people globally.



SunCulture is able to empower smallholder farmers who farm on as little as 1/8th of an acre. Given the systems' modular design, SunCulture is also able to design and install systems for large government projects, out-grower schemes and commercial farms as large as 200+ acres.

SunCulture has operations in Kenya and distribution in Tanzania, Uganda, Zambia, Ethiopia, Malawi, Mozambique, Sudan, Somalia, Somaliland, Nigeria, Ghana and Rwanda.





SunCulture's products are not only easy to use and maintain, but are also affordable. Additionally, SunCulture's plug and play systems are available on its innovative Pay-As-You-Grow financing platform.



SunCulture's products are designed according to the customer's specifications. Their bespoke irrigation systems not only make farming easier, but also significantly cuts down on labor and fuel costs. After a farmer has finished their repayments for the RainMaker, SunCulture has the ability to refinance them for other SunCulture products, moving them up the productivity ladder. SunCulture's systems are easy to use and maintain; allowing for staggered growth and ongoing food production and income generation. Lastly, SunCulture's systems are designed to be easily transported and can fit onto the back of a motorbike of a distribution partner, allowing for delivery within 24 hours after payment.

SunCulture's cutting-edge Climate Smart pump controller automatically optimizes pump performance and battery charging based on cloud cover – extending pumping by up to 6 hours on cloudy days. The controller is compatible with wireless weather and soil sensors that enable farmers to irrigate automatically based on soil moisture and climate conditions.



Christine Wajiru is 66 years old and, in many ways, she's like a lot of SunCulture's customers.

Christine Wajiru lives in a rural area of Kenya on a one acre farm with a hand-dug well and is completely off the grid. To fetch water, she would lower a 20 liter bucket to the bottom of her 70 meter well using a pulley system to bring it to the surface. On average, she uses 200 liters of water a day for her domestic needs and her cows, meaning 10+ trips to her well. If her husband came home late from work and was too tired to fetch water, their cows would not get enough water to produce the amount of milk she needed to sell, that is her main source of income.

Christine Wajiru became a SunCulture customer in August of 2017. She received her new low-cost solar-powered pump, the RainMaker, under the Pay-As-You-Grow financing program. She now gets 4,000 liters of water per day, which she uses for her domestic needs, her cows and for irrigating to her farm. Her cows have doubled their milk production, which earns her \$7.60/day and by farming just a quarter acre of her land, she is able to sell her vegetables locally, earning an additional \$1,500/year.

Published by EEP S&EA

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This material has been funded by the Governments of Finland, the UK, and Austria. The views expressed do not necessarily reflect the donor governments' official policies.

The EEP S&EA programme is funded by:



EEP S&EA service provider:

