Context

For predominantly agriculture-based countries like Senegal and Benin, many smallholder farmers - of whom many are women - rely on largely rainfed subsistence farming and thus are highly vulnerable to climate change. The increasingly variable nature of rainfall and frequent and intense droughts result in shorter growing seasons, limiting productivity and thereby reducing income, limiting livelihood options, and decreasing food security. The farmers live in mostly off-grid rural areas without access to a reliable supply of electricity. Additionally, the ongoing war in Ukraine has drastically affected the supply of wheat in Benin and Senegal, posing a serious threat to food security in these two countries.

POSSIBLE (“Productive Horticulture Solutions for Senegal and Benin that Leverage Clean Energy”) has the opportunity to increase local food production, reduce reliance on imported food products, and improve food sufficiency and economic opportunity through innovative, market-based renewable energy programs.
The Power of POSSIBLE

By the end of POSSIBLE, we expect increased resilience and improved economic opportunities of smallholder women farmers and micro-, small- and medium-enterprises (MSMEs) through the use of renewable energy applications and technologies to increase productivity.

Farmers will have increased resilience to droughts and improved yield resulting in food security. Economically empowered, these smallholder women farmers and MSMEs in rural Benin and Senegal will be able to contribute to their community’s economy, increase rural incomes, provide more economic security for their families, and create more jobs.

Measures of Success
The program will change lives for farmers in Senegal and Benin by:

- Increasing awareness about renewable energy technology, such as solar irrigation and biogas technology;
- Promote the uptake of climate-smart technologies for smallholder women farmers;
- Strengthen the capacities of women farmers through mentorship and training in financial literacy, agronomy and horticulture, sustainable consumption of products, route-to-market, and more;
- Improve access to finance for renewable energy products by working with lenders and developing appropriate credit models that can be replicated with limited public subsidy;
- Contribute to the establishment of sustainable agriculture value chains by forging commercial relationships between farmers, distributors and buyers;
- Support women leaders and advocate for mainstreaming gender within the energy sector.

Thiès, Senegal. Fatou has a farm in rural Senegal. To irrigate her crops, she used a diesel-powered pump which cost nearly $1,400 USD in fuel and maintenance per year in a part of the world where the average GDP per capita is only $1,600 USD. The POSSIBLE program helped Fatou better understand the economic and technical advantages of solar pumps, helped her access credit through a micro-finance institution, and provided financial support and technical agronomic expertise.

After acquiring the pump, Fatou nearly doubled her annual profit and no longer needs to buy diesel for her pump.

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About Mercy Corps
Mercy Corps is a global team of humanitarians working together on the front lines of crisis, disaster, poverty, and climate change to create a world where everyone can prosper. Beyond delivering aid to meet urgent needs, we develop long-term solutions to make lasting change possible.

Mercy Corps’ Women’s Philanthropy Group
Empowering women to lead in the fight against climate change.

Learn more by contacting:
LYNDI LIERSEMANN
Director, Women’s Philanthropy Group
liersemann@mercycorps.org