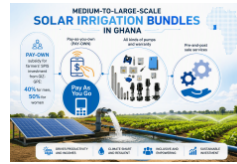


Solar-Based Irrigation Bundle (SBIB): Solar Irrigation Solution with Flexible Payment and Services



International Water Management Institute
Dr. Thai Thi Minh

Affordable Solar Irrigation for Year-Round Farming!

The Solar Irrigation Solution with Flexible Payment and Services combines solar-powered irrigation equipment with flexible financing and technical support. It reduces the financial barrier of purchasing solar irrigation equipment upfront while improving access to installation, maintenance, spare parts, and repairs. This integrated approach creates opportunities for farmers and private sector providers to expand access to solar irrigation and support year-round farming.

This technology is **pre-validated**. Scaling readiness: idea maturity 9/9; level of use 8/9

1881 USD

Cost Per season

2225 USD

Revenue Per season

344 USD

Net income Per season

18 %

ROI Per season



Open source / open access

Problem

- High upfront costs make solar irrigation difficult for farmers to invest in.
- Limited financing options restrict farmers' ability to purchase solar irrigation systems.
- Inadequate services limit access to technical support, spare parts, and repairs.
- Limited pump availability restricts access to solar irrigation equipment.
- Limited access to solar irrigation constrains year-round crop production.

Solution

- Flexible payment options reduce the upfront investment barrier for farmers.
- Tailored payment arrangements make solar irrigation easier to purchase and access.
- Sales and after-sales services strengthen technical support and equipment maintenance.
- Sales and service networks expand access to solar irrigation equipment and services.
- Solar irrigation supports year-round farming and creates opportunities for agricultural businesses.

Key points to design your business plan

- **End User** : Access an integrated solar irrigation package combining pumps, irrigation and borehole services, flexible financing, technical support, and agricultural extension services.
- **Distributor/ Service Provider**: Supply and scale integrated solar irrigation solutions by collaborating with private-sector providers and partnering with IWMI, MoFA, and farmer groups to strengthen market linkages and technical support.

Inclusion assessment

12

12

12

Climate impact

6

Commodities

Livestock, Horticultural crops

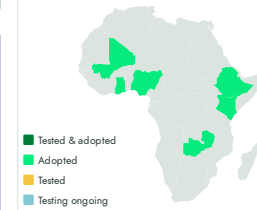
Sustainable Development Goals



Categories

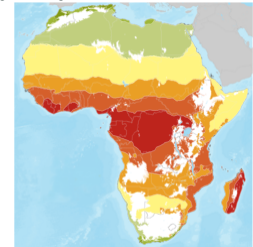
Production, Equipment

Tested/adopted in



Where it can be used

This technology can be used in the colored agro-ecological zones.



Target groups

Development institutions, Farmers, Governments, Researcher center, Advisory and Extension Services, Cooperatives and Agribusinesses



Solar-Based Irrigation Bundle (SBIB)

<https://taat.africa/lgm>

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