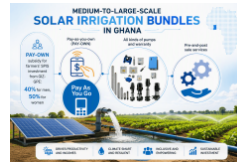


Solar-Based Irrigation Bundle (SBIB): Solar Irrigation Solution with Flexible Payment and Services

Affordable Solar Irrigation for Year-Round Farming!

The Solar Irrigation Solution with Flexible Payment and Services provides an integrated approach to expanding smallholder farmers' access to solar-powered irrigation. Flexible payment arrangements reduce the need for a large upfront investment, while sales and after-sales services help address technical and maintenance barriers. By combining equipment, financing, and support services, the solution can facilitate wider adoption of solar irrigation and support year-round agricultural production.



International Water Management Institute
Dr. Thai Thi Minh

Commodities

Livestock, Horticultural crops

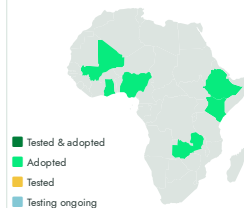
Sustainable Development Goals



Categories

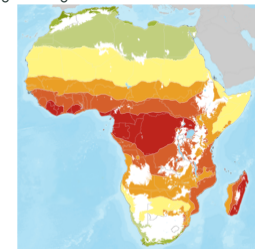
Production, Equipment

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

This technology is **pre-validated**.

9·8 Scaling readiness: idea maturity 9/9; level of use 8/9

Inclusion assessment

12

12

STOP 12

Climate impact

6

Problem

- High upfront costs limit smallholder farmers' access to solar irrigation.
- Limited financing options create barriers to wider technology adoption.
- Inadequate support services restrict access to technical assistance and maintenance.
- Limited market availability slows wider access to solar-powered irrigation.
- Limited adoption constrains year-round agricultural production.

Solution

- Flexible payment options improve smallholder farmers' access to solar irrigation.
- Tailored financing helps reduce the upfront investment barrier.
- Sales and after-sales services strengthen access to technical support and maintenance.
- Sales and service networks support wider access to solar irrigation equipment.
- Solar-powered irrigation supports wider adoption and year-round agricultural production.

Key points to design your project

The Solar Irrigation Solution with Flexible Payment and Services can support government programs to expand access to solar irrigation and promote year-round agricultural production.

- Target smallholder farmers and underserved areas.
- Facilitate access to solar pumps, flexible financing, installation, and after-sales services.
- Strengthen partnerships and monitor adoption, production, and sustainable water use to support scaling.

1881 USD

Cost Per season

2225 USD

Revenue Per season

344 USD

Net income Per season

18 %

ROI Per season



Open source / open access



Solar-Based Irrigation Bundle (SBIB)

<https://taat.africa/eor>

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