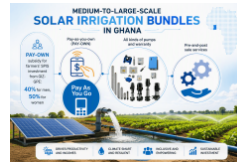


Solar-Based Irrigation Bundle (SBIB): Solar Irrigation Solution with Flexible Payment and Services

Affordable Solar Irrigation for Year-Round Farming!

The Solar Irrigation Solution improves smallholder farmers' access to solar-powered irrigation. Flexible financing and payment options reduce upfront investment barriers, while technical and after-sales services support continued use. By combining equipment, financing, and services, it promotes wider adoption and year-round agricultural production.



International Water Management Institute
Dr. Thai Thi Minh

Commodities

Livestock, Horticultural crops

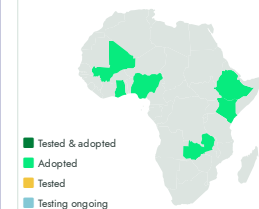
Sustainable Development Goals



Categories

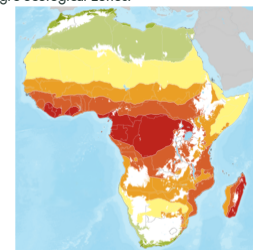
Production, Equipment

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

12

Climate impact

6

Problem

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

Solution

- Flexible payment options help smallholder farmers overcome upfront investment barriers.
- Tailored payment arrangements improve access to solar irrigation.
- Sales and after-sales services provide continued technical and maintenance support.
- Sales and service networks improve access to solar irrigation equipment.
- Solar-powered irrigation supports year-round agricultural production.

Key points to design your program

The Solar Irrigation Solution combines solar pumps, flexible financing, and technical services to improve smallholder farmers' access to irrigation. It supports year-round production and contributes to **SDG 1, SDG 2, SDG 6, and SDG 7**.

- Assess irrigation needs and facilitate access to suitable pumps and flexible financing.
- Support training, installation, maintenance, after-sales services, and demonstrations.
- Build partnerships to strengthen market linkages, sustainable water management, and 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/hox>

Last updated on Sep 4, 2026 printed on Sep 4, 2026

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