



Agriculture and Food Authority

Shows and Exhibitions Innovations

Sunflower solar water pump

Innovation 3

Sunflower solar water pump

This solar powered water pump was showcased at the National Irrigation Board stand.

How it works;

The pump has three main parts: the PV panel, an 80W solar panel to convert sunlight into electrical energy; the motor, a specially designed DC motor to use the electrical energy to turn the flywheel; and the pump, a reciprocal piston pump to draw water out of a well, river or lake.

Advantages

1. It has the ability of pumping over 2,000 litres of water per hour without the use of any fuel or electricity which is the norm with other pumps thus it is cost reducing.
2. It can pump about 20,000 litres of water on a good day when you have 8-10 hours of sunshine.

3. It is also compatible and can lift water up to 10 metres high.

4. Easy to maintain by farmers with basic mechanical skills.

5. It is cheaper and has no smell.

Cost

The solar pump costs Sh. 40,000 and is robust, portable, works with drip systems and the spare parts are locally available.

Contacts

The pump is manufactured by Future Pump Ltd with distributors found locally in the Country.

AFA Potential Areas of collaboration

1. **Market linkages:** Linking farmers with the manufacturer in a bid to access the pump which will reduce the cost of production.