THE CLEAN IRRIGATION SOLUTION
Transforming smallholder irrigation through affordable, emission-free pumping.
THE SUNFLOWER PUMP

A solar-powered efficient, versatile, and cost-effective piston pump

Includes a port for charging a cell phone

Low-cost motor adapted to run from either PV panels or AC grid

All pump components accessible for easy replacement and maintenance

Capable of pumping up to 16 cubic meters of water daily

Battery-free system reduces pump cost by half. Payback period is 1-2 growing seasons

Pump is paired with a drip irrigation system, which saves water and labor while increasing crop yield and value

Piston pump designed for suction lift or deep well pumping

The Sunflower pump radically changes the way smallholder farmers irrigate their fields:
• It requires no fuel and has no recurring costs
• When paired with a low-pressure drip system, labor requirements are significantly reduced
iDE is creating a CLEAN IRRIGATION SOLUTION that will provide millions of smallholder farmers across the developing world the opportunity to mechanize their farming with zero carbon emissions. Technology development is only one component needed to bring the Sunflower pump to scale. IDE’s Renewable Energy Initiative more broadly encompasses five key factors to scaling renewable energy technologies.

IDE is working with the PRACTICA Foundation to develop a low-cost solar pump called the Sunflower pump.

IDE is introducing the Sunflower pump in Zambia, Nepal, and Honduras and is developing materials to train local technicians in pump installation, maintenance, and repair.

IDE is partnering with Futurepump, a private company that will be responsible for the manufacturing and global distribution of the Sunflower pump.

IDE recognizes the need for a finance model to bring the Sunflower to scale and is exploring the feasibility of microfinance partnerships and pay-as-you-go models.

IDE and Futurepump have established manufacturing capabilities for the Sunflower in India. IDE is identifying national and local distributors, retailers, and technicians for the Sunflower in Nepal, Zambia, and Honduras.

IDE continues to look for partnerships to scale the reach of renewable pumping and deepen interventions across business plan, finance model, and supply chain creation, technology development, and marketing and educational efforts.

Sarah Nuernberger
iDE Technology and Innovation Project Manager
1031 33rd St., Suite 270, Denver, CO 80205 USA
(t) +1-720-984-1355
(e) snuernberger@ideorg.org
www.ideorg.org
iDE is an international non-profit organization dedicated to creating an enabling environment for poor rural households to participate effectively in rural market systems, so they may increase their income and begin an upward spiral out of poverty. For more than 30 years, iDE has focused on creating innovative solutions to development problems, through products, services, and business models.

www.ideorg.org