

Case Study

ONergy has installed over 250 Solar Pumps for purpose of Irrigation, Water Purification, Drinking Water, Sanitation & Water Supply. This has impacted more than 250 village communities and over 5000 farmers / households.



No. of Farmers – 8 Farmers
Location - Betna village, Nadia, West Bengal
Area Served – 8 to 10 Bigha
Pump – 2 HP(Previously using a 5 HP Diesel Pumpset)
Payment Model – Pay As you Go

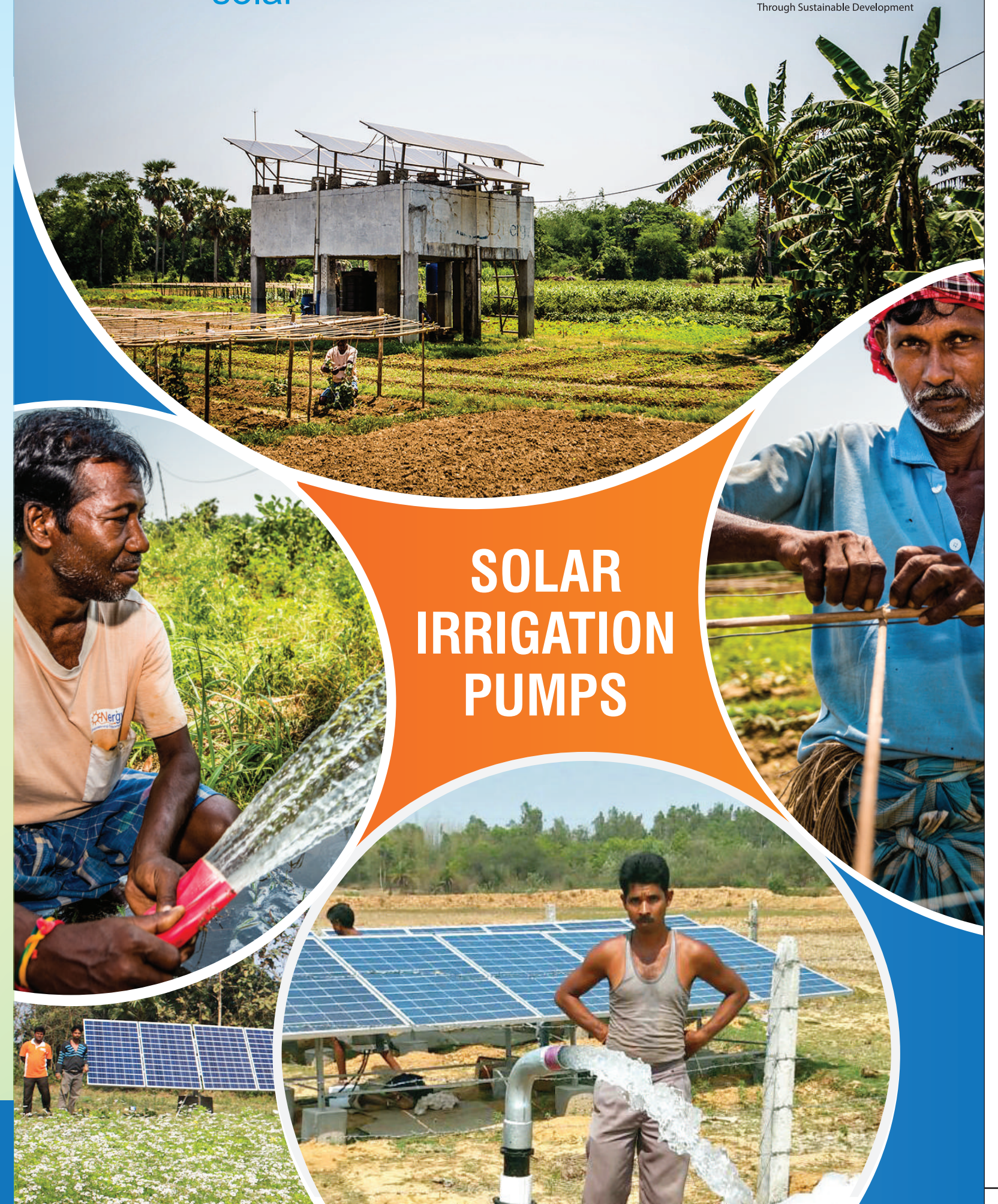
“Diesel is expensive but with Solar Irrigation, we are not affected by price rise and farmers can save money- previously farmers were paying Rs. 100 for diesel & mobil, whereas in solar we are paying Rs. 70 per hour.”
- Soumitra Biswas.

No. of Farmers – 12 Farmers
Location - Joka village, Howrah, West Bengal
Area Served – 10 to 15 Bigha
Solar Pump – 3 HP
(Previously using a 5 HP Diesel Pumpset)
Payment Model – Seasonal Contract

“There is a lot of labour involved with the diesel pump set and also an annual maintenance and repair charge, the solar pump is very easy to use and hardly requires any maintenance, it has brought a lot of pride to me.”
- Robin Koley

Challenges Addressed	Innovative Solutions
High Upfront Cost	Innovative Financing - Pay as you Go, Seasonal Payment, Farmer Aggregation (JLG)
No availability in early mornings/ Late evenings	Storage tank provided with system
Falling Water Table	Sprinkler and Drip Irrigation
Theft	Community / Entrepreneur Management and Ownership
Challenges with Collection	Entrepreneurship Model – Replacing Diesel with Solar

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About Us

ONergy Solar (Punam Energy Pvt. Ltd.) estd. in 2009 is a leading and rapidly growing solar enterprise providing complete solar solutions. ONergy is renowned for its extensive sales and service network across India with 20 renewable centres. ONergy Solar offers the following value :

- 1. Best Service Support** – ONergy has the best solar service network (company owned through our propriety, Renewable Energy Centers) in India.
- 2. Best in Class Technology** - Phase Toleration, High Efficiency, Minimized System Losses.

Awards & Benefits

ONergy's work has been widely recognized both nationally and internationally and it has received a multiple awards.



Benefits of Solar Irrigation Pump

- **Pay Back in 3-5 years** – Replacing Diesel Pumps makes great economic sense
- **Savings** – No recurring energy costs
- **Long Life of the System** – Life of panel more than 25 Years
- **More Reliable** – Simple and Assured Operation and water output
- **More Convenient** - Saves time and labor
- **Robust and Hardy** - Almost No Maintenance
- **Free Power** – After paying bank loan, free power for irrigation
- **Improves Lifestyle** - General quality of life improves with higher level of income
- **Water Saving** - Application for sprinkler irrigation, tube wells, water lifting
- **Remote Monitoring** - Pump operations can be monitored remotely on a real time basis

Esteemed Customers & Bank Partners



Solar Pump Bank Finance - Subsidy Program

ONergy Solar has collaboration with rural or other private commercial banks on developing First Loss Default Guarantee (FLDG) agreement to enhance the confidence of farmers in shifting from diesel pumps to solar irrigation systems.

Switch ON with support from ONergy Solar is building appropriate Financing Models for small and marginal farmers to uptake solar irrigation systems. Below mentioned are the two models we are promoting to replace diesel pump sets with solar irrigation pumps under the above facilities.



Joint Liability Group (JLG)

We are setting up JLGs, which is an informal group comprising preferably of 4-10 individuals coming together for the purpose of availing bank loan for solar irrigation against a mutual guarantee. The JLG will pay the bank EMI based on their land holding and water usage.

Water Entrepreneur

We are identifying water entrepreneurs and replacing their diesel pumpsets with solar irrigation systems. The water entrepreneur sells water on a hourly or a contractual basis to a farmer group, the collection from the revenue made goes into the loan repayment for the irrigation systems.



Technical Specification

HP	Type	Head Range (Meter)	Water Output (Litres per Day)	Solar Panel Size (WP)
1	AC Surface	12	81000	900
	AC Submersible	45	38400	1200
	DC Submersible	29-42	32500	1200
2	AC Surface	15	162000	1800
	DC Submersible	30-40	65000	1800
3	AC Surface	15-25	243000-121500	2700
	AC Submersible	45-100	96000-39000	3000
	DC Submersible	28-111	98000-32500	3000
5	AC Surface	15-25	432000-216000	4800
	AC Submersible	70-150	91200-40800	4800
	DC Submersible	34-112	119000-65000	4800