

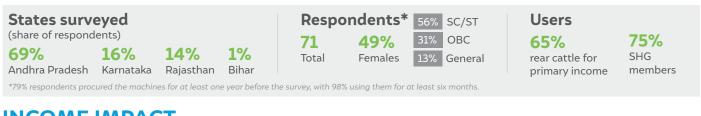


IMPACT OF SOLAR-POWERED VERTICAL FODDER GROW UNITS ON RURAL LIVELIHOODS



A solar-powered, microclimate-controlled, hydroponics unit enables users to harvest about 25 kgs of fresh green fodder daily with less than a bucket of water. This solution promises an increase in the milk and meat yield of animals, thereby helping animal rearers realise better incomes while reducing the time and drudgery involved in fodder procurement and preparation. Till date, approximately 210 solar-powered vertical fodder grow units have been deployed in India.

The findings below are from a primary survey conducted through in-person and telephone interviews between February - September 2022.



INCOME IMPACT

Users experienced income increase



Source: CEEW analysis 2022





20%



11%



66% users also realise better milk prices with an average increase of ₹ 2 per litre

2%

Top five spends of increased income



Source: CEEW analysis 2022

PRODUCTIVITY IMPACT



69% users reported a decrease in time spent around fodder collection

2 hours

saved on feeding

cattle

a day, average time



of users experienced a **decrease in** physical effort



0.7 ltrs average increase in daily

milk yield per animal, with a farmer typically owning 4 cows

Source: CEEW analysis 2022

Technology usage at the time of survey

61% Using it		38% Not using it		1% Never used it	
Top five reasons for not using it					
35% Produce/ output not as expected	23% Faults in the unit that need repair	23% Miscellaneous	12% Have some issues in the unit	6% Earnings not as expected	

91%

87%

in family

66%

believe they have **better**

agency to take decisions

more confident about

using **public/private**

transport on own

users reported

to earn and work

improvement in confidence

Source: CEEW analysis 2022

SOCIAL IMPACT

97%

users experienced increased support from family members/spouse

53%

users now have a better ability to buy assets and save on own

Source: CEEW analysis 2022



IMPACT ON WOMEN

91%

report increased participation in **public**/ community events

75% believe they have the relevant knowledge & skills to become self-reliant

Source: CEEW analysis 2022



About Powerina Livelihoods

Powering Livelihoods, a CEEW-Villgro initiative, mainstreams clean energy-based livelihood solutions. The findings presented here are based on the Programme's interim impact assessment conducted by CEEW.

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