

Rastriya Dhaan Diwas
Renewable Energy Confederation of Nepal
(RECON)
Solar Energy Initiative



SUNFARMER



SUNFARMER

Nepal is an Agrarian economy that presents opportunity and challenges , majority (>60%) population depends upon Agriculture.

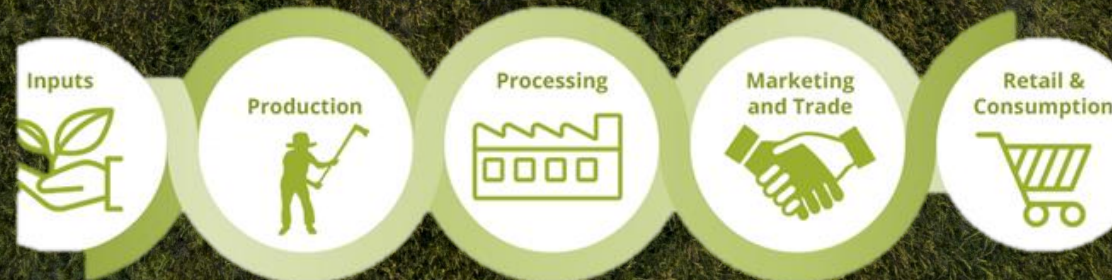




SUNFARMER

Across the agriculture sector – Crop plantation, livestock, forest etc. there are several layers in the value chain

Each segment of the value chain presents an opportunity for ease of doing and increasing profitability harnessing Renewable Energy





SUNFARMER



Inputs
Irrigation
Supply / manufacturing
of raw materials
Machineries



Production
Machineries
Greenhouse




Processing
Operations
Plant and Machineries
Storage

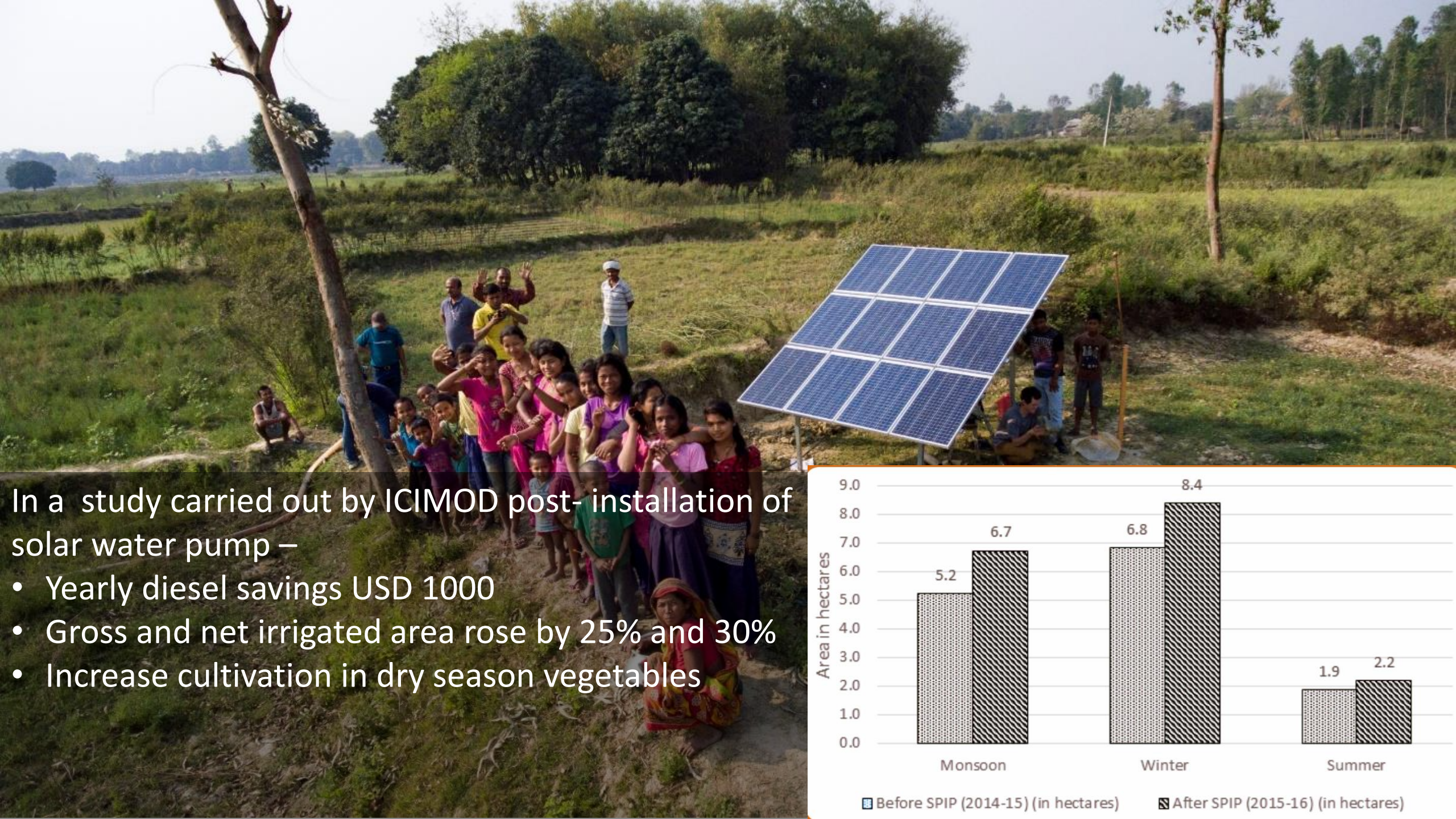


Marketing and Trade
Operations
Logistic
Storage



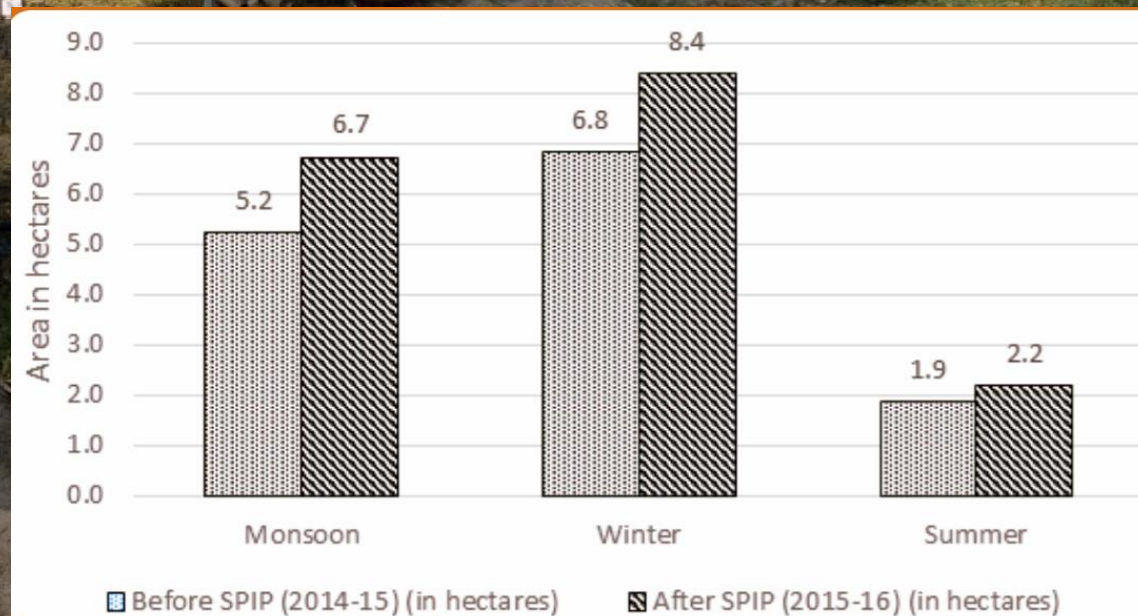
Retail & Consumption
Operations
Logistic
Storage

- 
- > 40% of the Cultivable land (1.8 mill. Ha) has no access to irrigation
 - Annual progress is ~20K Ha/ year
 - The last 3 years for vegetable import has increased by > 200%
 - Vegetable production contributes to 9.7% of the country's GDP



In a study carried out by ICIMOD post- installation of solar water pump –

- Yearly diesel savings USD 1000
- Gross and net irrigated area rose by 25% and 30%
- Increase cultivation in dry season vegetables





“We used to rely on hand pumps and invested a lot of effort drawing water for our livestock. With solar pump, one just has to turn on the switch.”

-Sarita Regmi

Summary of improvements

*Milk production
increased by 20%*



*Less daily variability
of milk production*



*Healthier livestock
with fewer infections*



Increased income



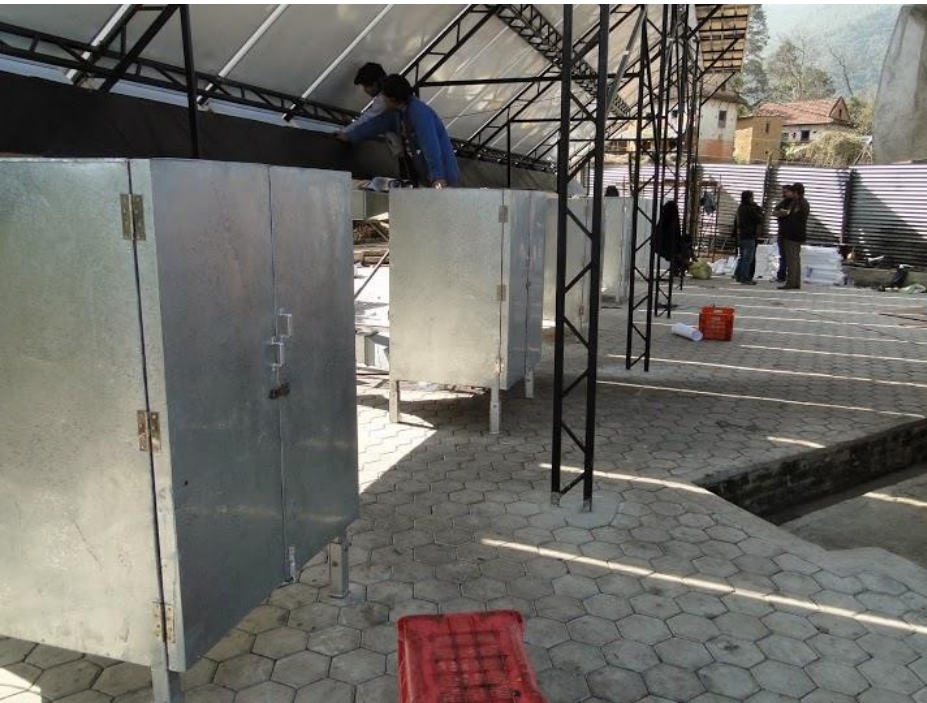
Expansion of herd





Indirect Solar / biomass hybrid dryer

- Reduced drying time by >50%
- Increased food hygiene
- Reduced land foot print (~2 Anna land per batch)



Barriers

- High initial investment
- Structured loans – tailored to client needs using non-standard assets
- Limited subsidy funds
- Lack of technology awareness





Thank you
Avishek@sunfarmer.org