

# Solar Energy in Poultry Production

Practices and Challenges at  
Nanda Group





# Solar at Nanda Group

	STATE	CAPACITY	LOCATION	TYPE
1	Tanang, Maharashtra	50 KWh	Mash Feed Plant	Grid Connected (no battery bank)
2	Hebbani, Karnataka	80 KWh	Breeding Farm	
3	B.G.Palya, Tamil Nadu	55 KWh	Hatchery	
4	Sathnur, Karnataka	55 KWh	Breeding Farm	Off Grid System (no battery bank)

# Solar Case Study at Tanang, Maharashtra

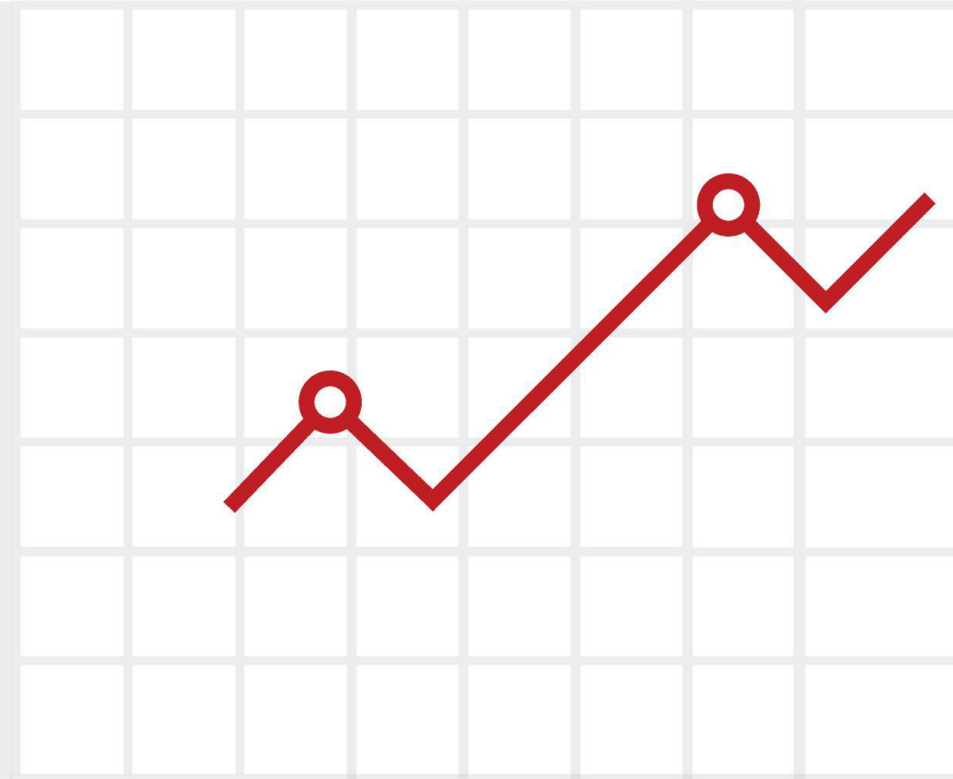
(5 TPH Breeder Mash Feed Plant)

	DESCRIPTION	WITHOUT SOLAR CY 2018	WITHOUT SOLAR CY 2021
1	No. of tons	13,391	15,842
2	MSEB bill	10,71,420	696,344
3	Cost / Ton	80	44

- Solar plant capex (grid connected, no battery bank) - Rs 23,50,000
- MSEB Savings / Year - Rs 375,076
- ROI - 6 Years, 3 Months

# CapEx/ROI

- On grid without battery bank - Rs 50,000 / KWh approx
- Off grid with battery bank - Rs 90,000 to 110,000 / KWh approx
- On grid ROI - 6 years
- Off grid ROI - 8 to 9 years
- Grid power vs Solar power
- 25 to 30% electricity bill savings



# Importance of Solar Energy



Uninterrupted power  
pellet mill jamming, ventilation  
(fans, misting) & lighting



Reduction in electricity  
charges (utility companies have  
bad financial conditions, leading  
to continuous increase in cost)



Roof top real-estate put  
to use (hatchery, feed plant  
& chicken house)



Accelerated income tax  
depreciation  
of 40% - asset creation



Safety of electronic  
equipment - low replacement  
& low maintenance cost



Clean energy, responsible  
corporate citizens

# Practices <sup>238.6 mm</sup> in Solar Space

- **OpEx vs CapEx model**
- **Ground mounting vs roof top**
- **Preheat water - reduction in steam generation cost - pellet plant**
- **AHIDF benefit - solar investment**
- **AMC concept - battery & solar panels**

# Challenges in Solar

- Oversizing of the plant - precision load calculations
- Loss making - Rs. 3.70 / unit vs Rs. 7.50 / unit
- High initial investment
- Lack of knowledge of govt. support schemes for solar
- Power generation - weather & radiation dependent
- Negative perception of people & companies towards solar solution
- Periodic maintenance - battery bank & solar panels



# Appreciate Inputs from

**Life Line Feeds India Pvt. Ltd.**  
Chikkamagaluru, India

**Padmavathi Poultry Farm,**  
Chintamani, India





# Care and invest in the future

Clean energy is the answer for our environment, our children and the generations to come

**Do  
Something!**

