

Solar Powered Chicken Farm Installation



*Solar Panel for
Chicken Coop*

Charge Controller



Inverter

Battery Bank

Solar Panel for Home

*Solar Panel for
Water Distribution Pump*

Notes:

- **Chicken coop Load: $150W_{DC}$ & $110W_{AC}$**
- **Residence Load: $1.8kW_{AC}$**
- **Water pump Load: $200W_{DC}$**
- **Other Load: $100W_{AC}$**
- **Location has 9.5 hrs of daylight /day**
- **Energy demand of Farm is $56.4kW$ /day**

Calculations:

- **Load cycle demand: $\approx 41kW$ /night**
- **Size of Solar Panel: $2850Wp$**
- **Size of Battery: $\approx 2750Ah$**

Benefits:

- ***Significant utility savings***
- ***Energy independence and security***
- ***Better quality of life***
- ***Higher returns from poultry and egg harvest***
 - *Less stressful living conditions for chickens yielding more eggs and healthier poultry*
- ***Environmental friendly***
 - *Contributing to a cleaner environment and protecting Gaia*
- ***Unexpected income***
 - *Leveraging from green energy and ecological process to attract a new revenue stream from farm visits (by tourists)*