

Since there is no shortage of fuel, the affordability of solar energy can be achieved by addressing some challenges.

India currently produces around 30 GW solar energy, and it has pledged for 100 GW by 2022. And in the pursuit to lead the world, 'self sufficiency' in domestic market is important.

challenges

i) MANUFACTURING

India produces only 30 GW of solar panel annually against the demand for 20 GW because

a) Import dependency on china for poli silicon, wafers, ingots etc.

b) high capital cost, high interest etc vis-a vis foreign players.

c) WTO ruling against local sourcing.

(ii) Schemes

a) KUSUM scheme - The local sourcing norms has increased cost of farmers specially small farmers.

Govt. subsidy is not reaching to small farmers.

without net metering farmers cant benefit from grid connected pumps.

b) After initial success UDAY scheme is showing declining trend.

(iii) Duty structure

high safeguard duty without manufacturing base is hurting the consumers due to high cost.

(iv) stand alone systems

→ are unable to serve 24/7.
→ They can't transmit solar energy from surplus hour/region to deficit hour/region without efficient storage capacity.

way forward

Government has taken steps like

(i) Hybrid renewable energy system.

(ii) National solar mission - a comprehensive vision to address all issues.

(iii) 100% FDI permission to boost investment

(iv) 25% capital subsidy through M-SIPS

& viability gap funding.

But more needs to be done like

(i) plugging transmission loss with

net metering, checking power theft

and efficient connections.

(ii) Boosting competition through SARAL
Index. promoting R&D and Innovation
with budgetary allowance.

(iii) Adopting world's best practices like
'sole champion' of china to allow
cluster based development with cheap
loan, land etc.