Environment & Ecology · GS - III

Examine the role of the PM Surya Ghar: Muft Bijli Yojana in promoting renewable energy adoption and energy security in India.

EXAM YEAR	PAPER	SUBJECT
DAILY PRACTICE 02/11/2026	GS - III	Environment & Ecology

MARKS	WORD LIMIT
10	~150 words

Answer Hint

Rooftop solar adoption; government subsidies; household savings; decentralised energy generation; energy security; implementation challenges

Model Answer

Introduction

The PM Surya Ghar: Muft Bijli Yojana promotes residential rooftop solar installations through financial assistance. It seeks to reduce household electricity expenditure while expanding India's renewable energy capacity.

Significance

1. Economic benefits: Subsidies lower the initial installation cost, making rooftop solar more accessible to eligible households. Reduced grid electricity consumption can generate long-term savings.

2. Environmental benefits: Solar power reduces dependence on fossil-fuel-based electricity and can help lower greenhouse gas emissions.

3. Energy security: Distributed solar generation diversifies electricity sources and can reduce pressure on the conventional power grid during suitable generation periods.

4. Public participation: Direct financial support encourages households to participate in India's clean-energy transition.

Challenges

High upfront costs, limited rooftop suitability, technical maintenance, uneven awareness and delays in installation or subsidy processing can constrain adoption. Solar generation also varies with weather and daylight.

Way Forward

Simplified applications, timely subsidies, quality standards, trained installers, consumer awareness and appropriate net-metering arrangements can improve implementation. Storage and grid modernisation can further strengthen reliability.

Conclusion

The scheme can advance affordable and cleaner household electricity, provided financial support is accompanied by reliable implementation, quality assurance and effective grid integration.

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