



## India's Interests in Africa's RE Potential

**For Prelims:** [International Solar Alliance \(ISA\)](#), [Renewable Energy](#), [Solar Energy](#)

**For Mains:** Africa: A Potential Global Leader in Renewable Energy, [Importance of Africa for India](#)

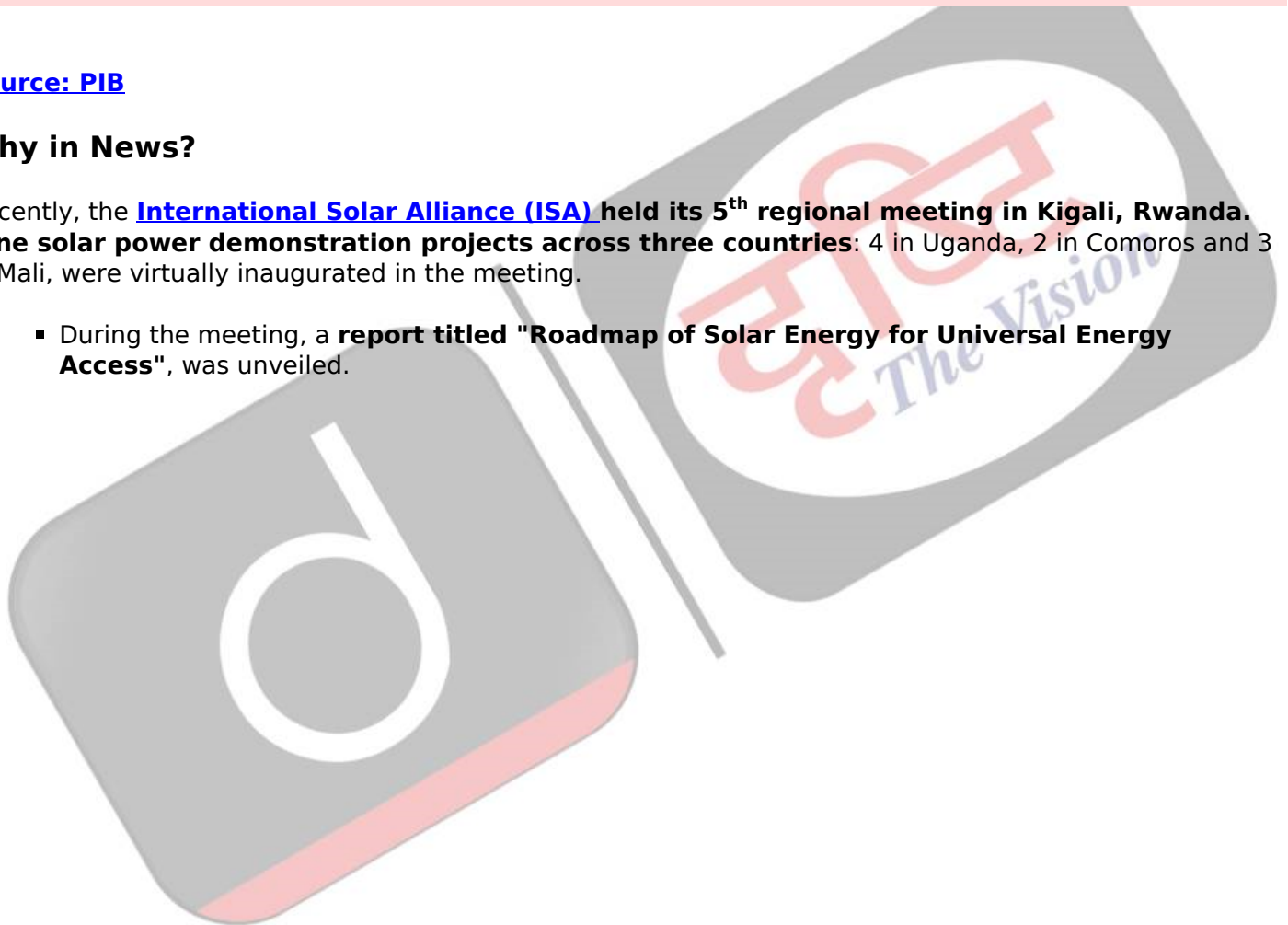
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### Why in News?

Recently, the [International Solar Alliance \(ISA\)](#) held its 5<sup>th</sup> regional meeting in Kigali, Rwanda. **Nine solar power demonstration projects across three countries:** 4 in Uganda, 2 in Comoros and 3 in Mali, were virtually inaugurated in the meeting.

- During the meeting, a **report titled "Roadmap of Solar Energy for Universal Energy Access"**, was unveiled.

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## What are the Key Highlights of the Report?

- The report outlines a strategic approach to effectively and economically tackle the **global energy access challenge using solar-powered solutions**. It encompasses **case studies, real-world examples, and innovative policies** aimed at bringing about a transformative shift in the implementation of solar mini-grids.
- The report's **conclusions hold significant relevance for Africa, especially the Sub-Saharan region** and rural areas. It identifies a range of electrification strategies centred on **solar energy**, particularly focusing on solar mini-grids and **Decentralised Renewable Energy solutions**.
  - These approaches **offer effective solutions to address diverse energy access challenges**.
  - Promoting these solutions **could encourage the emergence of local innovations and business models**, thereby advancing the adoption of solar energy generation within the

country.

## Note:

- A decentralised energy system is **characterised by locating energy production facilities closer to the site of energy consumption.**
  - This allows for **more optimal use of [renewable energy \(RE\)](#) as well as combined heat and power**, reduces **[fossil fuel](#)** use and **increases eco-efficiency.**

## What is the Significance of Solar Power Projects?

- **Creating Solar Project Models that can be Replicated in Member Countries:**
  - The main objective of these projects is to **enhance the well-being of underserved communities.** The projects are not just limited to providing energy, but they **also serve as drivers of advancement and symbols of global cooperation.**
- **Promoting Solar Energy to Enable Sustainable Energy Transition:**
  - ISA is **partnering with the [G20 Presidency of India](#) and promoting solar energy as a means to achieve universal energy access** and enable a sustainable energy transition.
- **Tackling the Lack of Affordable Credit and Technical Expertise:**
  - The central idea behind these projects is **to highlight the substantial potential of solar technology applications in improving the quality of life** for individuals across the member nations.
  - ISA will address the critical lack of affordable funding and technical expertise in its member countries, **especially focusing on [LDCs](#) and [Small Island Developing States \(SIDS\)](#).**

## What is Africa's Potential in Global RE Transition?





- **Africa holds the potential to emerge as a prominent force in renewable energy generation** and innovation on a global scale.
- Despite facing various obstacles, **the continent is endowed with a rich array of renewable energy sources**, including substantial solar capacity, wind resources, [geothermal areas](#), [hydro energy](#), and [green hydrogen](#) prospects.
- Furthermore, **Africa possesses over 40% of the world's crucial mineral reserves** crucial for renewable and low-carbon technologies.
- Leveraging these resources offers the opportunity for Africa to not only fulfil its energy requirements but also **to establish itself as a significant player in RE production and advancements worldwide.**
  - However, there is a **need for collaboration among governments, private sector entities, and international organisations** to fully unlock the potential of solar energy across the continent.

## What is the Importance of Africa for India?

- **Potential Market:** Africa is **home to over half a dozen of the fastest growing countries of this decade** such as Rwanda, Senegal, Tanzania, etc. making it one of the growth poles of the world.
  - The African continent has a **population of over one billion with a combined GDP of 2.5 trillion dollars** making it a huge potential market with a wide range of opportunities **for economic growth, trade expansion, and strategic partnerships, benefiting both regions in various ways.**
- **Rich in Resource:** Africa is a **resource-rich nation dominated by commodities like** crude oil, gas, leather, gold and other metals, **all of which India lacks in sufficient quantities.**
  - Namibia and Niger are **among the top ten global producers of uranium.**
  - **South Africa is the world's largest producer of platinum and chromium.**
  - India is seeking diversification of its oil supplies away from the Middle East and Africa can

play an important role in India's energy matrix.

- **Indian Ocean Geopolitics:** Eastern African nations' geographical location, natural resources, security concerns, and regional engagements **collectively position them as key actors in the global geopolitics of the [Indian Ocean Region \(IOR\)](#)**, with significant implications for international trade, security, and diplomacy.
  - Eastern African nations, such as Somalia, Kenya, Tanzania, and Mozambique, are strategically positioned along the eastern coast of Africa, which borders the Indian Ocean.
  - This location gives them access to important sea lanes and trade routes in the IOR, making them critical players in maritime security and commerce.
- **Trade MoUs:** India **has signed MoUs with all African nations on the [Indian Ocean Rim \(IOR\)](#)** is evidence of increased defence engagement with African countries.
  - Under the **Pan African e-Network Project (initiated in 2009)**, India has set up a **fibre-optic network to provide satellite connectivity**, tele-medicine and tele-education to countries of Africa.
  - The subsequent phase, **e-VidyaBharti and e-ArogyaBharti (e-VBAB)**, **introduced in 2019, focused on providing free tele-education to African students** and continuing medical education for healthcare professionals.

## Way Forward

- **India Assisting Africa in Harnessing Solar/RE Potential:**
  - **Technical and Financial Support:** India can offer technical expertise and financial assistance to African nations in developing their RE infrastructure.
  - **Capacity Building and Collaboration:** India can facilitate capacity-building programs and **research partnerships through collaborative projects** that address specific energy challenges in African countries and foster technology transfer.
- **India Taking Advantage of Africa's RE Potential:**
  - **Investment Opportunities:** India can explore investment opportunities in African RE projects while contributing to local economic development.
  - **Exporting Renewable Technology:** Indian companies can export RE technologies and equipment to African markets. Leveraging India's manufacturing capabilities, **this can be a win-win for both regions.**
  - **RE Partnerships:** India can work towards regional energy partnerships with African countries, fostering cross-border energy trade.
    - This can **involve the development of energy corridors and transmission infrastructure to efficiently transfer RE across borders**, ensuring a stable and sustainable energy supply.

## UPSC Civil Services Examination Previous Year Question (PYQ)

### Prelims:

**Q. Consider the following statements: (2016)**

1. The International Solar Alliance was launched at the United Nations Climate Change Conference in 2015.
2. The Alliance includes all the member countries of the United Nations.

**Which of the statements given above is/are correct?**

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

**Ans: (a)**

**Q. Consider the following statements: (2016)**

1. The India-Africa Summit
2. held in 2015 was the third such Summit
3. was actually initiated by Jawaharlal Nehru in 1951

**Which of the statements given above is/are correct?**

- (a) 1 only  
(b) 2 only  
(c) Both 1 and 2  
(d) Neither 1 nor 2

**Ans: (a)**

**Mains**

**Q. How does India see its place in the economic space of rising natural resource rich Africa? (2014)**

**Q. Increasing interest of India in Africa has its pros and cons. Critically Examine. (2015)**

PDF Reference URL: <https://www.drishtias.com/printpdf/india-s-interests-in-africa-s-re-potential>

