



23 Aug 2024

National and International News

T

<p>Lunar Magma Ocean</p>	<p><b>Why in the news?</b></p> <ul style="list-style-type: none"><li>India's recent <b>Chandrayaan-3 mission</b> findings have <b>reignited interest in the Lunar Magma Ocean (LMO) theory</b>, a key concept in planetary science that explains the moon's early formation.</li></ul> <p><b>About Lunar Magma Ocean:</b></p> <ul style="list-style-type: none"><li><b>Chandrayaan-3 Discovery:</b><ul style="list-style-type: none"><li><b>Pragyan rover identified ferroan anorthosite</b> in the lunar south pole region.</li><li>This <b>aligns with Apollo and Luna mission observations</b>, confirming the <b>theory of remnants from an ancient magma ocean</b>.</li></ul></li><li><b>Lunar Magma Ocean (LMO):</b><ul style="list-style-type: none"><li><b>Hypothesized early stage</b> in the moon's <b>history</b> with a fully molten surface.</li><li>Believed to have <b>formed after a catastrophic impact between early Earth and a Mars-sized body</b>.</li></ul></li><li><b>Ferroan Anorthosite:</b><ul style="list-style-type: none"><li><b>Crucial evidence of the LMO</b>.</li><li><b>Formed as the magma cooled and solidified</b>, with <b>calcium and aluminium-rich minerals</b> floating to the surface to form the moon's initial crust.</li></ul></li></ul>
--------------------------	--



తెలుగు



Daily Current Affairs Encyclopedia

Prime Minister Employment Generation Programme (PMEGP)

Why in the news?

- The Department of Posts and KVIC have collaborated to enhance the implementation of the PMEGP across India.

About PMEGP:

- **Administering Ministry:** Ministry of Micro, Small and Medium Enterprises (MSME).
- **Objectives:**
  - **Generate employment opportunities in rural and urban areas** through self-employment ventures, projects, and micro-enterprises.
  - **Provide self-employment opportunities to traditional artisans, rural and urban unemployed youth**, helping them remain in their local areas.
  - **Increase the wage-earning capacity of workers and artisans**, contributing to the growth of rural and urban employment.
- **Eligibility:**
  - Individuals aged **18 and above**.
  - **No income ceiling** for assistance under PMEGP.
  - **Educational qualification:** For projects costing above **₹10 lakh (Manufacturing)** and **above ₹5 lakh (Business/Service)**, beneficiaries must have at least a pass in the VIII standard.
- **Implementing Agency:** Khadi and Village Industries Commission (KVIC).

National Space Day 2024

Why in the news?

- India to celebrate the first National Space Day on 23 August 2024.

About National Space Day 2024:

- Celebrates the successful soft landing of the Vikram Lander from Chandrayaan-3 on the lunar surface on August 23, 2023.
- India became the fourth country to land a rover on the moon and the first to land near the southern polar region.
- The day commemorates India's growing prowess in space exploration, officially declared by the government.



# Daily Current Affairs Encyclopedia

- **Theme for National Space Day 2024:** Touching Lives while Touching the Moon: India's Space Saga.
- **Future Space Missions:**
  - Union Minister Dr. Jitendra Singh announced **Chandrayaan-4** and **Chandrayaan-5** as follow-up missions to Chandrayaan-3.
  - The **Gaganyaan Mission**, aiming to send the **first Indian into space**, is scheduled for **2025**.
  - India **plans to establish the Bhartiya Antariksh Station by 2035** and an **Indian landing on the moon by 2045**.

## Global Peace Index 2024



## Why in the news?

- Countries like **Yemen, Afghanistan, and Sudan** are among the **most dangerous due to ongoing conflicts** that have **severely impacted their populations and infrastructure**.

## Key points:

- **Global Peace Index (GPI):**
  - The **GPI is compiled by the Institute for Economics and Peace**, a non-profit organization.
  - It provides a **critical measure of the safety and stability of 163 countries**, focusing on those most affected by war, violence, and unrest.
- **Evaluation Criteria:**
  - The **GPI assesses countries across 23 indicators**, including **internal conflicts, societal safety, and levels of militarization**.
  - This index offers a **comprehensive assessment of global peace and security**, highlighting the most dangerous countries in the world.



తెలుగు



## Daily Current Affairs Encyclopedia

### Genome Editing- ISDra2TnpB

#### Why in the news?

- A recent **breakthrough** in **plant genome editing** was achieved through a **collaborative effort** between **ICAR-National Rice Research Institute in Cuttack, India**, and **Pennsylvania State University, USA**.

#### About Genome Editing- ISDra2TnpB:

- A **new genome-editing tool** derived from the **bacteria Deinococcus radiodurans**.
- **Key Features of ISDra2TnpB:**
  - **Size Advantage:** **Less than half the size of Cas9 and Cas12**, allowing for **more efficient delivery and function within plant cells**.
  - **High Editing Efficiency:** Demonstrates a **33.58% editing efficiency in average plant genomes**, making it promising for various crops.
  - **Versatility:** **Effective in editing both monocot plants** (e.g., rice) and **dicot plants** (e.g., Arabidopsis).
- **Potential Applications in Agriculture:**
  - Pest Resistance
  - Nutritional Enhancement
  - Resilience to Environmental Stress



#### Copyright © by Adda247

All rights are reserved. No part of this document may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without prior permission of Adda247.