

## **Exoskeleton Technology**

## Source: PIB

Bengaluru hosted the inaugural international workshop on **'Emerging Technologies & Challenges for Exoskeleton'** organised by **the** <u>Defence Research & Development Organisation (DRDO)</u> on 15<sup>th</sup> April 2024.

- Exoskeletons are wearable devices designed to facilitate fundamental human actions and used in a diverse range of fields such as Medical, Military, Rescue, operations, Industrial and Consumer uses.
  - In the medical field, these are used in occupational therapy, augmentation and rehabilitation medicine to help people who have suffered some kind of accident and need to walk or function normally again.
    - **Paediatric exoskeletons** are designed for children with mobility problems, such as those affected by spinal muscular atrophy (SMA), Spinal cord injuries, Cerebral palsy, Muscle atrophy and Muscular dystrophy.
- There are numerous **industrial applications**, including assisting workers who undertake repetitive tasks such as paint spraying, welding, assembly line material handling etc.
- Exoskeletons are used in the military, as they help to reduce the physical burden on soldiers, and augment their strength for walking long distances.
- They can be used to help pre-fighters and other **rescue** workers survive dangerous environments.

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