

26 Nov 2021: PIB Summary & Analysis

TABLE OF CONTENTS

1. [Lithium Ion Battery Technology](#)
2. [National Multidimensional Poverty Index](#)
3. [The Revival of Namda Craft](#)
4. [National Cadet Corps](#)

1. Lithium Ion Battery Technology

Context: The International Advanced Research Centre for Powder Metallurgy and New Materials (ACRI) signed an agreement for the indigenisation of lithium ion battery technology through scaling up and commercialization and to set up a fabrication lab. ACRI is an autonomous R&D centre of the Department of Science and Technology.

About Lithium Ion Batteries:

- Lithium ion batteries are the most commonly used energy storage systems that contain lithium metal oxides in an electrolytic set-up.
- The electrolytic set-up consists of lithium salts dissolved in organic carbonates. This results in the storage of lithium ions in the positive electrode and carbon in the negative electrode.
- The batteries work by the transfer of lithium ions in two phases. While charging these ions move from positive to negative electrode and the reverse occurs when they are discharged.
- They do not require temperature monitoring for functioning.

Advantages:

- The lithium ion batteries are largely in demand because of their accessibility and reliability.
- Technologies that run portable devices, hybrid electric vehicles and electric vehicles use lithium batteries as the most potential energy storage system.
- They also facilitate the storage of renewable energy because of their low cost per cycle.
- The operating voltage of these batteries can be regulated using combinations of materials that undergo chemical reactions. This can be useful for memory back-up, digital watches with solar cells.
- They have a high capacity of fast discharge which makes them most suitable for portable electronic devices.
- Besides, the lithium batteries have efficiency with a long life cycle, high energy density and high power density.

Disadvantages:

- The depth of discharge affects the battery life cycle and also requires an onboard computer to operate which increases the overall cost.

- They are highly fragile and combining them with flammable organic electrolytes increases the risk and hazards.
- Overheating tendency of the lithium batteries causes their damage at high voltage.

About the Agreement :

- The agreement between ACRI and Nsure Reliable Power Solution will allow the technology transfer and development of expertise in lithium ion processes.
- It also aims at the introduction of the technology into electric scooters and solar street lamps which will be coordinated with [Atmanirbhar Bharat Abhiyan](#).
- This partnership will be an enabler to reduce the carbon footprint and play an essential role in tackling climate change.
- The R&D labs of ACRI were directed to look for alternative energy materials beyond lithium ion batteries as the electrode materials cost huge, increasing India's import dependency.
- Efforts will be made under the agreement to promote and indigenise lithium ion technology.

Read more about Lithium ion batteries: [Lithium Ion Battery](#)

2. National Multidimensional Poverty Index

Context: An explainer note on the National Multidimensional Poverty Index has been developed by the NITI Aayog based on the report of National Family Health Survey – 4 (2015-16). NFHS is a country-wide exercise conducted by the International Institute for Population Sciences under the Ministry of Health and Family Welfare to assess the health and social development indicators across the country.

Why has NFHS 4 data period been used?

- NFHS 4 was carried out in the 2015-16 period that witnessed the introduction of various flagship programmes on housing, drinking water, sanitation, electricity, cooking fuel, financial inclusion, nutrition, schooling.
- This period offers a useful ground to assess the baseline situation and the impact of the various developmental schemes.

Aim of the National Multidimensional Poverty Index (MPI):

- According to the Global MPI 2021, India's rank is 66 out of 109 countries. In order to create a comprehensive Reform Action Plan with the intention of improving India's rank for Global MPI, the National MPI has been developed under the nodal agency, [NITI Aayog](#) which is responsible for its operation.
- It will ensure a statistic that shifts towards the national priorities by using a set of dimensions, indicators with respect to the urban and rural areas of India along with an indicator- wise deconstruction and breakdown.
- The National MPI intends to provide a holistic view of poverty at the national level.

About the National Multidimensional Poverty Index (MPI):

- The baseline report that was developed by the NITI Aayog included a thorough consultation with ministries, state governments and the publishing agencies like the Oxford Poverty and Human Development Initiative and [UNDP](#) (United Nations Development Programme).
- This intends to reduce the proportion of men, women, children of all ages living in poverty by half as envisaged by 1.2 of the [SDG](#).

To Read about the findings of the NFHS check [CNA](#) dated 27th November 2021

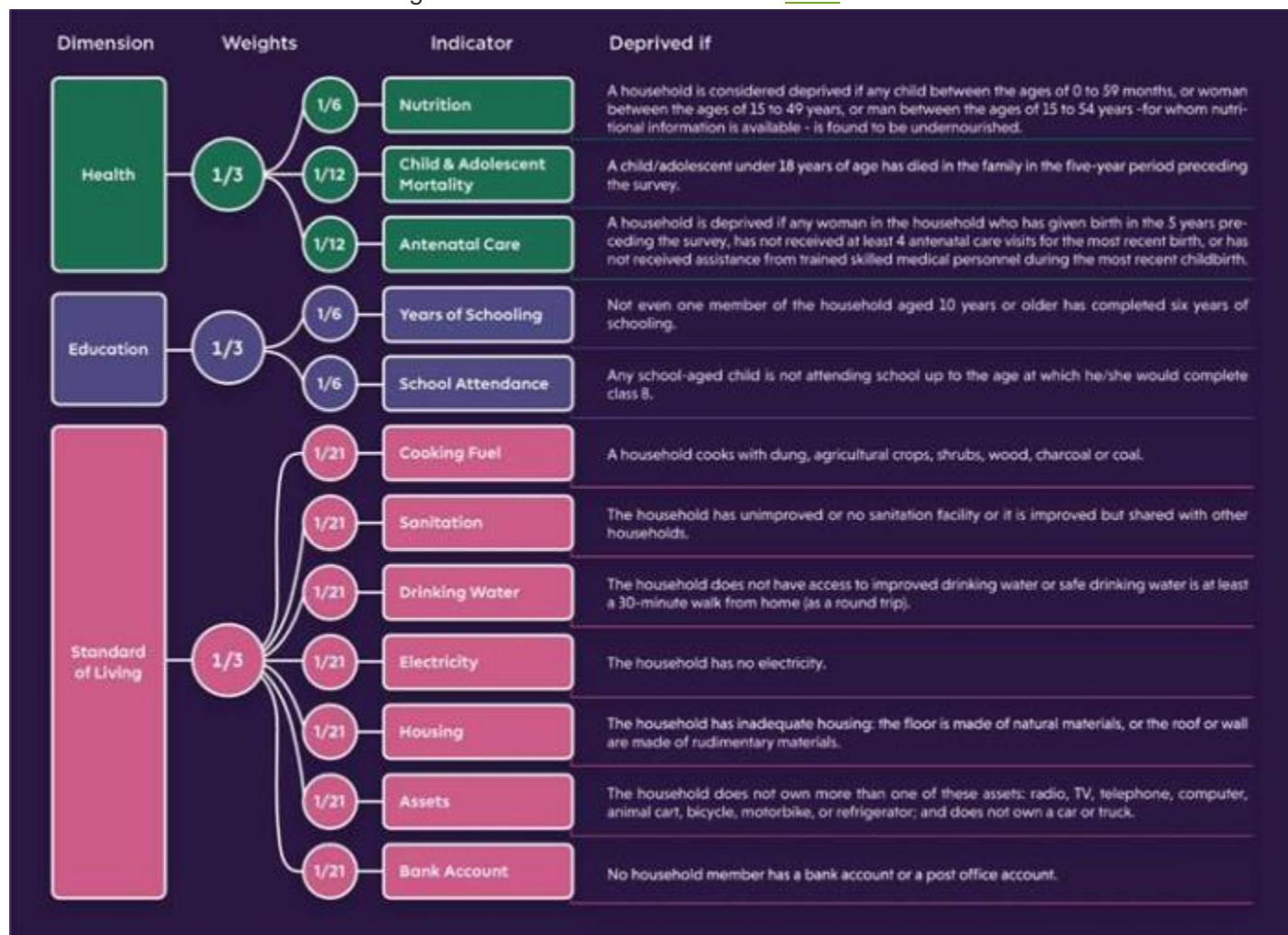


FIGURE 1: INDICATORS IN INDIA'S NATIONAL MPI

The image depicts the indicators, weight and dimensions of National MPI

The image is taken from: <https://static.pib.gov.in/WriteReadData/userfiles/image/image001QBX3.jpg>

3. The Revival of Namda Craft

Context: The Ministry of Skill Development and Entrepreneurship launched two pilot projects in Jammu and Kashmir.

Pilot Projects that were launched:

- Revive the traditional Namda craft under Pradhan Mantri Kaushal Vikas Yojana ([PMKVY](#)).
- Upskilling the artisans and weavers of Kashmir under Recognition of Prior Learning (RPL) which is a component of the Pradhan Mantri Kaushal Vikas Yojana.

Aim of the projects:

- To strengthen the local weavers and artisans of kashmir with enhanced productivity through learning, assessments and certifications.
- To preserve the traditional crafts of the region. The Namda project aims to benefit many craftsmen across 30 clusters in Kashmir.
- Therefore the major aim is to establish a linkage between industry and market that will empower micro-entrepreneurship in Kashmir.

About Namda Craft:

- Namda craft involves a rug made of sheep wool through felting technique instead of normal weaving techniques.
- Felting is a process of converting a protein fiber derived from animals like sheep, alpaca, and yak into a fabric by interconnecting the individual fibers. These felts can be shaped, cut and sewn.
- They have high resistance towards water absorption with high durability.
- The Namda craft traces its origin from the 11th century Mughal reign of Akbar when a man named Nubi for the first time created a felted cloth from sheep wool. Since then this craft has been practiced by Pinjara, Mansuri communities and Sama muslims of Kachchh. Over a period of time it spread across Kashmir, Himachal Pradesh and Rajasthan.
- The Namda craft includes a detailed procedure that involves steps such as carding, Creating borders, Creating layers, sprinkling soap solution, rolling the Namda (fibre to fibre fusion) and Drying.
- After drying the Namda is beautified with aari work which is a type of embroidery.
- Due to the unavailability of raw materials, human resources, marketing support and design upgradation the Namda craft declined completely.
- This present initiative of the Ministry of Skill Development and Entrepreneurship will encourage the craftsmen to refurbish this beautiful traditional craft.

4. National Cadet Corps

Context: The Director General of NCC inaugurated the celebration of the 73rd anniversary of NCC and paid homage to the heroes of the entire NCC fraternity at the National War Memorial.

About NCC:

- The NCC is the largest uniformed organization in the world.

- It was formed by the National Cadet Corps Act of 1948 and it was the successor of the University Officers Training Corps which was established by the British in 1942.
- The NCC was formed on the recommendation of a committee headed by Pandit H.N. Kunzru.
- It is open to schools and colleges for voluntary participation students in Army, the Navy and the Air wing.
- NCC is headed by the Director General who is an officer of three-star rank and headquartered in Delhi.
- The cadets and associates of NCC officers played pivotal roles by actively participating in programs such as Ek Bharat Shreshtha Bharat, Atmanirbhar Bharat, Fit India, Swachhta Abhiyan.
- They also facilitated bringing awareness about Digital literacy, International Yoga day, Tree plantations and COVID-19 vaccination drive.

Aims:

- To develop qualities of character, courage, comradeship, discipline, leadership, secular outlook, spirit of adventure and sportsmanship.
- Promote the sense of selfless service as a responsible citizen.
- To create human resource of organised, trained and motivated youth