Bridging the Gap

Posted at: 05/08/2025

Bridging the Gap: Informal Repairers in a Formal Digital India

Context

India has recently accepted a **proposal to introduce a Repairability Index** for electronic products. This is seen as a major step toward formalising the **Right to Repair** as a consumer right. However, concerns are being raised that India's **informal repair ecosystem**, which is rich in tacit and intergenerational knowledge, is being **excluded from digital and AI policy frameworks**.

Introduction

The **Right to Repair** refers to the legal right of consumers to **repair, modify, or access affordable third-party services** for the products they own. Globally, there is increasing recognition of this right, especially in the context of **sustainability and digital justice**. While India has initiated steps to recognise this right, experts argue that policy efforts must move beyond consumer rights to include **repair as a knowledge system, livelihood source, and cultural practice**.

Understanding the Right to Repair

- It gives consumers the freedom to **repair or modify** their products, either on their own or through third-party services.

- The **European Union** mandates access to spare parts and manuals for various electronics.

- Several **U.S. states** and the **UN SDG 12** promote repair to reduce e-waste and extend product life.

- In India, the **Department of Consumer Affairs** launched the **Right to Repair Portal in 2023**, covering electronics, automobiles, and agricultural equipment.

Why Repair Must Go Beyond a Consumer Right

- **Informal repair knowledge** is acquired through experience, observation, and mentorship, not through formal certification.

- Areas like **Karol Bagh (Delhi)** and **Ritchie Street (Chennai)** are hubs of such intergenerational expertise.

- Repair practices reflect India's culture of **jugaad, frugality, and resourcefulness**, helping reduce **e-waste** and extend the life of products.

- The **informal repair workforce**, although central to the **circular economy**, remains **excluded from labour laws and policies**.

- Local repair practices are part of India's **indigenous technological knowledge** and reflect **regional innovation** and **adaptive reuse**.

- A growing trend towards **sealed products and disposable culture** is reducing public **repair literacy** and weakening community-based knowledge systems.

Gaps in Current Policy Frameworks

- The **E-Waste Rules 2022** focus mainly on recycling and fail to prioritise **repair as the first step in waste reduction**.

- **Skill development programmes** like **PMKVY** are too rigid and not suited for the improvisational nature of real-world repair work.

- **AI and Digital Public Infrastructure** frameworks emphasise structured data but ignore **informal, human-led repair knowledge**.

- While the **National Education Policy 2020** promotes experiential learning, it fails to classify **repair work as a legitimate skill**.

- There is **no legal recognition** or certification pathway for informal repairers, limiting their access to formal employment or digital inclusion.

Towards a Sustainable and Inclusive Repair Ecosystem

- Include **repairability standards** in **AI systems, hardware designs**, and **public procurement policies**.

- Expand the scope of the **Right to Repair** by classifying products based on **repairability**, and ensuring access to manuals and parts.

- Recognise informal repairers through platforms like **e-Shram**, and offer **custom training modules** tailored to their methods.

- Use **AI tools** such as large language models and decision trees to **digitally preserve and share tacit repair knowledge**.

- Coordinate policy efforts across ministries like **MoLE**, **MeitY**, and **MoRD** to create a **unified framework** that values repair as both labour and knowledge.

Significance for India's Development

- Strengthens commitments to **Sustainable Development Goals**, particularly **SDG-12**, and supports **Mission LiFE**.

- Enhances the **dignity and visibility** of informal workers by recognising them as skilled contributors.

- Promotes **digital inclusion** by ensuring that human knowledge is not excluded from the AI-driven future.

- Encourages **economic empowerment** by bridging the gap between grassroots innovation and national digital ambitions.

- Establishes India as a **global leader** in building a sustainable, repair-inclusive **circular economy**.

Conclusion

As India progresses in building robust **AI and digital public infrastructure**, repair should be viewed not just as a **consumer right**, but as a **national responsibility**. Recognising and integrating the **silent, generational wisdom** of informal repairers is essential to creating an **inclusive, sustainable, and just technology ecosystem**. As **Michael Polanyi** observed, *"We know more than we can tell."* India must value and preserve what it cannot afford to lose.