

CALL FOR PROPOSALS

Research and Development Project for Charkha Development

1. Background

The Charkha, a quintessential symbol of India's independence movement, embodies self-reliance and sustainability in the socio-economic fabric of the nation. Even today, it remains central to the Khadi industry, which promotes rural employment, preserves traditional craftsmanship, and fosters eco-friendly practices. In the present context, revitalizing the Charkha through innovation can further strengthen its role as a catalyst for sustainable development and inclusive growth.

With this vision, the Ministry of Micro, Small & Medium Enterprises (MSME), Government of India, has taken a strategic initiative to infuse technological innovation and design thinking into the age-old Charkha to enhance its relevance and efficiency. Accordingly, a National Level Committee has been constituted for Charkha Development to invite research proposals from diverse stakeholders for scrutiny and recommendation to the Ministry.

2. Objective

The objective of this project is to develop a robust, industry-ready prototype of a manual operated Charkha (Manually operated portable yarn spinning machine) that is:

- Reduction in drudgery and operative effort
- Capable of enhancing yarn quality and productivity
- Ergonomic, efficient, and user-friendly
- Cost-effective, durable, and easy to maintain
- Scalable for mass adoption

3. Evaluation Metrics

Proposals will be evaluated against the existing 8-spindle NM Charkha (KVIC certified) on parameters such as:

- Degree of innovation
- Yarn quality and productivity (TPI, CSP, Count)
- Torque reduction and ergonomics
- Operative power requirement
- Cost reduction and maintenance ease
- Weight reduction and portability
- Scalability and market feasibility

4. Submission Guidelines

- The proposals should be submitted in the given format.
- Proposals must be realistic in terms of methodology, design, and implementation with a brief writeup clearly indicating the S&T interventions envisaged in the given format.

- R&D project period shall be up-to 9 to 12 months clearly indicating the timeline stages along with reasonable budget.
- The last date for submission is 20th October 2025.
- The proposals can be submitted by email: charkhamgiri25@gmail.com

FORMAT FOR SUBMISSION OF PROJECT PROPOSAL

PART-A: Applicant Details

1	Name of the Institution/Organization/Individual:	
2	Office Address: Project Coordinator: Phone: e-mail:	

PART-B: Brief Outline of the Project

1	Objective:
2	Brief description on interventions to be envisaged: (Design & Drawings Optional)
3	Implementation Methodology:
4	Time Schedule:
5	Budget (in Lakh): (Head-wise Recurring and non-recurring)
6	IPR and Technology transfer: