Improvisation of Traditional Charkha

An innovative charkha has been fabricated to reduce the physical stress and improve the spinning efficiency and remuneration of artisans over traditional one.

**Name Of Institute:**
Sher-e-Kashmir University of Agricultural Science and Technology of Kashmir

**Stage of development:** Ready For Commercialization

**Patent status:** Filed

**Scientific Experts:**
- Dr. Sarfaraz A Wani
- Dr. D B Shakyawar

**Background**
Handicraft industry of Kashmir (J&K) is well established, having international reputation. Among various hand made products, the world famous pashmina shawls have achieved a royal status and are liked by all, irrespective of sex, age, and nation. For the preparation of a final product, the pashmina fibre undergoes a series of processing steps viz; dehairing, spinning, weaving, finishing etc. Spinning is a processing step, usually accomplished by the women folk of both rural and urban areas on a traditional spinning wheel locally known as Yender. The spinner operates the charkha in a specific sitting posture. It is an arduous task as it causes lot of physical stress leading to backache, numbness in the legs and several other associated problems. Besides that the job is less remunerative to the spinners. Keeping in view, the popularity of Pashmina shawls, difficult processing steps and less remuneration, an innovative Table Top Paddle Operated NAIP charkha was fabricated so as to improve the efficiency of spinning and thereby remuneration of spinners besides reducing the physical drudgery and at the same time keeping the originality (Hand spun Hand woven status) of the product intact.

**Benefits / Utility**
It has improved the spinning efficiency by 73.50%, remuneration by 146.64 % and socio-economic status as well as reduction of physical stress, without deteriorating the quality of yarn.

**Country Context**
India.

**Business and Commercial Potential**
- Cottage sector in the country
- Pashmina belt outside country especially China

**Scalability**
- Small scale industry of J&K and Himachal Pradesh
- Pashmina belt outside country especially China

**Potential investors to this technical innovation**
- Handloom Developmental Departments, J&K
- Central wool Development Board, Ministry of Textile, Jodhpur, Rajasthan
- Non-Governmental organisations (NGO’s)
- Cooperative Societies.

**Financials**
- Total Capital Investment(excluding Land and licensing fees): Rs 2.0 lacs
  - Machinery and tools: 1.25 lakh
  - Raw material: 0.50 lakh
  - Miscellaneous: 0.25 lakh
  - Expected sale/unit: Rs 0.05 lakh

**Target Market / Customer**
Pashmina spinners, mostly women folk who spun pashmina as a full time/ part time job to sustain their family.

**Limiting factors for large scale commercialization**
Financial support to spinners

**Social impact of the technology**
The innovative charkha makes the work more efficient, remunerative and lessens the physical stress, making it more approaching and lucrative among the local artisans. It also leads to the improvement of livelihood and provides socio-economic security to the