
Solar Garment - Business Model and Current Status

Presentation by

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8th June 2017, Manila
19th century was marked as an Era of industrial revolution where maximum thrust was given on the mechanization, automation, productivity and luxury of life leading to Urbanization. Is there any need for New Era Industrialization concepts for sustainable green development? **YES**

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<th>Why?</th>
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<td>Industrial Revolution as of now had a little concern on the approach towards environmental issues to create sustainable employment generation through women empowerment in the rural sectors less employment avenues and high level of drudgery with low productivity and non-global competitiveness global warming and heavy urbanization are big problems</td>
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<td>Adopt technologies and systems which could support sustainable industrial activities in the rural areas Empowering women to apply clean/green energies for sustainable employment generation activities introducing sustainable decentralized technologies and automation in the form of Man-Machine systems coupled to RE sources innovation, awareness and implementation of quality practices for rural industries to produce globally competitive products</td>
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AIVIA to MGIRI: A Distinguished History

1934: Gandhi initiated All India Village Industries Association (AIVIA)

Prominent Scientists and Technologists, leaders in public life and industry became advisors to contribute towards Rural Industrialisation and great Gandhian stalwarts such as Dr. J.C. Kumarappa and others substantially contributed in this direction during the initial phase.

1956-57: Jamnalal Bajaj Central Research Institute (JBCRI)

AIVIA is renamed as JBCRI after the establishment of Khadi and Village Industries Commission (KVIC) in the same place to promote Rural Industrialisation through innovative S&T inputs in KVI sector.

2008: Mahatma Gandhi Institute for Rural Industrialisation (MGIRI), Wardha

An outcome to cope with the changes and challenges of the nineties. This was a revamping process done by the collaborative efforts of KVIC and IIT Delhi as a National R&D Institute for accelerating the movement of Rural Industrialization in India under the Ministry of MSME, Govt. of India.
MGIRI

VISION
To accelerate the process of Rural Industrialization in the country along the lines of Gandhian vision of sustainable and self reliant village economy and to provide S&T support to upgrade the products of rural industry so that they gain wide acceptability in the local and global markets
Innovative Implementation of Decentralized Solar Applications for Rural Industrialization

HOW?

Selecting the Industrial Segment that can be implemented in Rural Sectors.
Optimizing the power requirements through redesigning, segmenting and scaling down process machineries for Solar application to justify the internal rate of returns (IRR).
Decentralized solar applications by coupling suitable DC drive systems to the above process machineries.
Utilizing the locally available Solar energy resources to provide sustainable employment round the year.
Innovative Decentralized Solar Applications for Khadi & Textile Industry Rural Sector in India
Solar Charkha Individual Enterprise Business Model in Khadi Sector and implemented in the Six KVIC Zones of the country

-Lakhs of Poor Lady Spinners to double their income without drudgery-
Under a collaborative **Indo-German program (IGEN-RE)** of German International Agency, Govt. of Germany (GIZ) and Ministry of New & Renewable Energy, Govt. of India (MNRE) have conducted study on the new business model development possibilities of decentralized solar application in garment manufacturing. A market research agency MART was assigned the responsibility of the survey and the report submitted have indicates two-three possible Business Models for sustainable income and employment generation in the rural sector for India and the world.
Proposed Business models

**Business Model 1**
This model can be applied on any existing charkha or loom for producing the solar garment at very low power consumption. The major purpose of developing the solar charkha and loom is to reduce the drudgery among the spinning and weaving community.

![Diagram: The Production Process: Cotton to Cloth Value chain](image)

**Business Model 2**
It is all about the use of solar technology on looms. This model has been derived from an understanding of creating a business opportunity for the entrepreneur who wants to set up this technology particularly on loom and can earn the profit.

![Diagram: The Production Process: Cotton to Cloth Value chain](image)
Solar Charkha Cluster implementation in 11 Blocks of Amravati District of M.S. for 220 Women from Backward class

Solar Charkha Cluster for 500 Women at Navada, Bihar
Hon’ble Prime Minister appreciated Solar Charkha Cluster in ‘Maan Ki Baat’
Solar Garment Unit (Ashti Model)

- Solar Spinning
- Solar Powered Weaving
- Solar Bobbin Winding
- Solar Powered Garmenting
Solar Powered Loom Business Models
Solar Garment Business Models implemented at various places in the country
Web linkages

Solar Garment:
http://www.youtube.com/watch?v=Q5UCDo4j7jE

Solar Charkha:
http://www.youtube.com/watch?v=cP7fT_IdDUI
https://www.youtube.com/watch?v=SAnNMcsAZRs
https://www.youtube.com/watch?v=qN0D10VKMgA
https://www.youtube.com/watch?v=sJbrEr_-w0k
https://www.youtube.com/watch?v=xed6hNkCOSU
https://www.youtube.com/watch?v=X3-X_vb9WtM
http://www.newsnation.in/videos/india/news-items-8/19979
https://www.youtube.com/watch?v=-29m3XPjTm

LED light training in Prisons:
https://www.youtube.com/watch?v=s6Y0hzROvuA
http://punemirror.indiatimes.com/pune/civic/articleshow/50799097.cms?

Thank You