Part I: General Information and Organization Details

1. **Project Title:** Empowering Women Artisans and textile traditions

2. **Name of implementing organization, Address with Pin Code, email & phone numbers including Mobile No. of HoD**:

Malla Reddy Engineering College,
MAIN CAMPUS
Maisammaguda (H), Gundlapochampally Village,
Medchal Mandal,
Medchal-Malkajgiri District,
Telangana State – 500100
principal@mrec.ac.in
Contact No: +91 9348161125
+91 9348161303, +91 9966440958 (HoD)

3. **Project Duration: 3 Years**

4. **Proposed Objectives :**

i. **Skill Development**: Enhance women artisan skills in traditional textile processes such as weaving, dyeing, embroidery, and block printing. Provide them with training programs and workshops to help them enhance their craftsmanship and produce high-quality products.
ii. **Market Development and Economic Empowerment**: Help women artisans gain market access by organizing exhibitions, trade fairs, and online platforms to showcase and sell their products. Collaborate with retailers, designers, and export agencies to broaden their reach and guarantee that they are fairly compensated for their efforts. Create long-term employment options for women artisans by assisting them in establishing micro-enterprises or cooperatives.
iii. **Capacity Building:** Assist women artisans in developing their skills in areas such as financial literacy, entrepreneurship, marketing, and product development. Provide them with the skills and knowledge they need to run their enterprises successfully and adapt to changing market demands.
iv. **Gender Equality and Social Inclusion:** Address the social and cultural barriers that prevent women from entering the textile business. Create an inclusive atmosphere for artisans that supports cooperation, learning, and equitable chances.
v. **Design Innovation:** Encourage artisans to blend traditional techniques with contemporary designs, thereby making their products more relevant to modern consumers. Collaboration with designers can bring fresh perspectives and create unique products that appeal to a wider customer base.

5. **a. Type of implementing organization (Mark √):**

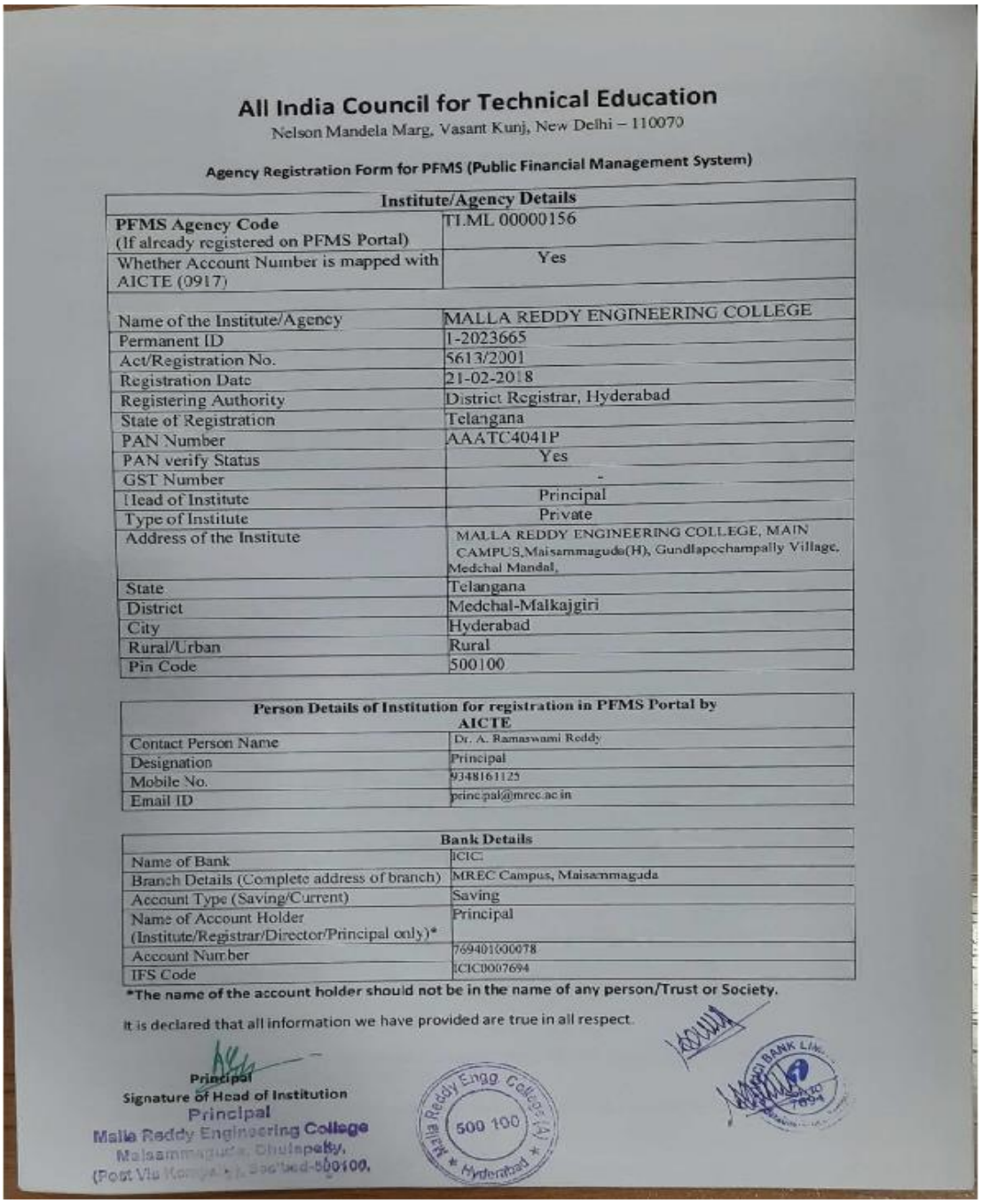
Academic institution	√
Research organization/ agencies	
S&T Council or State established autonomous organization	

Voluntary Organization registered under Societies Registration Act (1860) or a State amendment thereof Indian Trust Act (1882) or Religious and Charitable Institutions Registration Act (1920)	
Institutions incorporated under the Companies Act, setup for non-profit objectives (e.g. under Section 25)	
Professional & industry Associations	
Private R&D center (recognized by DSIR)	
Panchayati Raj Institution (PRI)	
Krishi Vigyan Kendra	
Other (please specify)	

b. Details of implementing Organizationon separate Letter Head in following table format (with documentary proofs duly authenticated by the Head of Organization)

Details of Organization
Year of Establishment: 2002
Registration No & Date: 5613 & 2001 Valid up to:
FCRA Registration No & Date: Valid up to:
PAN #: AAATC4041P TIN No.: TAN NO. GST No. Aadhar Details of the HOD/Trustees : 816407692239
Bank Account #: Branch Address & Email: Account Name: Principal, Malla Reddy Engineering College Account No.: 769401000078 ICICI Bank MREC Campus, Maisammaguda Email: principal@mrec.ac.in
Authorized Signatories: CH.Mahendar Reddy
IFSC Code: ICIC0007694 , MICR Code: 500229130
Chief Functionary: Dr. A. Ramaswami Reddy
Annual budget in last financial year: 60.91 Cr
Operational area (State, Dist.): Telangana, Medchal - Malkajagiri
Details of branch / unit offices: MREC Campus
Total staff (Administrative & technical): 272
Main science-society achievements during last three years:
Years of association with DST: 3 Years

- **Kindly see the grant installment has to be kept in an interest bearing account (Bank Details should be duly authenticated by the bank).**



All India Council for Technical Education

Nelson Mandela Marg, Vasant Kunj, New Delhi – 110070

Agency Registration Form for PFMS (Public Financial Management System)

Institute/Agency Details	
PFMS Agency Code (If already registered on PFMS Portal)	TI.ML 00000156
Whether Account Number is mapped with AICTE (0917)	Yes
Name of the Institute/Agency	MALLA REDDY ENGINEERING COLLEGE
Permanent ID	1-2023665
Act/Registration No.	5613/2001
Registration Date	21-02-2018
Registering Authority	District Registrar, Hyderabad
State of Registration	Telangana
PAN Number	AAATC4041P
PAN verify Status	Yes
GST Number	-
Head of Institute	Principal
Type of Institute	Private
Address of the Institute	MALLA REDDY ENGINEERING COLLEGE, MAIN CAMPUS,Maisammaguda(H), Gundlapochampally Village, Medchal Mandal,
State	Telangana
District	Medchal-Malkajgiri
City	Hyderabad
Rural/Urban	Rural
Pin Code	500100

Person Details of Institution for registration in PFMS Portal by AICTE	
Contact Person Name	Dr. A. Ramaswami Reddy
Designation	Principal
Mobile No.	9348161125
Email ID	principal@mrec.ac.in

Bank Details	
Name of Bank	ICICI
Branch Details (Complete address of branch)	MREC Campus, Maisammagada
Account Type (Saving/Current)	Saving
Name of Account Holder (Institute/Registrar/Director/Principal only)*	Principal
Account Number	769401000078
IFS Code	ICIC0007694

*The name of the account holder should not be in the name of any person/Trust or Society.

It is declared that all information we have provided are true in all respect.

Principal
Signature of Head of Institution
Principal
Malla Reddy Engineering College
Maisammaguda, Dhulapally,
(Post Via Kompally), Secunderabad-500100.

Malla Reddy Engg. College (A) 500 100 Hyderabad

c. Collaborative partner of proposed project, if any, give details of institution(s).

Name of the organization and collaborative partner: Khadi Gramodyoga Mahavidyalaya		
Address: Khadi village Industries commission, Rajendra nagar,		
District: Hyderabad	State: Telangana	Pin: 500030
Telephone with STD code: 040-2970 4618	Fax:	
Email: principalkgmv@gmait.com		
Website: Khadi and Village Industries Commission (kvic.gov.in)		

6. Role & responsibility of project partners:

Particular	Present collaboration/ role & responsibility	Role & responsibility in proposed project
Implementing Org.	Facilitate student internship programmes / international Certification.	Assist women artisans in developing their skills in areas such as financial literacy, entrepreneurship, marketing, and product development.
Collaborator Org.	Facilitate Skill Development Programs, Innovation, Entrepreneurship, Industry-Institute Partnership and Incubation programs.	Facilitate Skill Development & market awareness Programs and create the market opportunities for products.

7. Project Team

	PI	Co-PI	Co-PI-2/ RA/Tech. or project Asst.	Field worker
Name	Mrs Y. Sudha	Dr.P.Marimuthu		
Designation	Assistant Professor	Professor		
Organization	Malla Reddy Engineering College	Malla Reddy Engineering College		
Sex (M/F)	F	M		
Category (SC/ST/OBC/GEN)	GEN	OBC		
Date of birth	11.05.1987	11.06.1977		
Address	EEE Department, Malla Reddy Engineering College, Hyderabad-500100	EEE Department, Malla Reddy Engineering College, Hyderabad-500100		
Phone, fax, email, mobile	8121621371, sudhay@mrec.ac.in	9043872893, spm.muthu78@gmail.com		
Whether drawing salary from any other source	No	No		

8. Whether your organization has been sanctioned projects by DST or other central/state Govt. Dept. or from foreign funding agencies in the past (up to 10 years)? If yes, provide details of completed and ongoing projects **(Copy of sanction letter to be annexed):**

Sl. No.	Title of the project	File No.	Name of Division and funding agency (DST/DBT …..)	Date of completion/ status	Amount (Rs lakh)
1.	Impact of Artifical Intelligence in the field of Agriculture &	AICTE/1650 613785	AICTE-ATAL FDP	Completed	Rs. 3,00,000/-
2.	Student club under	File No: 10-	AICTE	Completed	Rs. 3,00,000/-

	the scheme for Promoting Interests, Creativity and Ethics among Students (SPICES)	73/AICTE/IDC/SPICES/2020-21			
3.	Advanced Training Program on Teaching	ISTE/AICTE-ISTE FDP/1-3513716560/2018-19	AICTE	Completed	Rs. 3,00,000/-
4.	Finite Element Analysis using ABAQUS &	Ref . N o. 34-66 / 67 / FDCISTTP/ P o I i cv -L / 2oI9 -20	AICTE-STTP	Completed	Rs. 3,15,000/-
5.	Teaching-Pedagogical Intelligence &	Ref. No. 3+-67 /1.12/FDC/FDp/p-r/201.s_20	AICTE, FDP	Completed	Rs. 4,34,000/-
6.	Solar Desalination for Nano and Micro Hierarchical Structures &	Procs No.JNTUH/TEQIP-III/CRS/2019/MECH/01	JNTU-Hyderabad	Completed	Rs. 2,85,000/- & 1 year
7.	Software defined Radio Lab	& F.No.9-204/RIFD/MODROB/POLICY-1/2017-18	AICTE-MODROB	Completed	Rs. 12,71,000/-
8.	Big Data Analytics using R, Hadoop and Spark &	F.No.34-55/223/RIFD/FDP/POLICY-1/2017-18	AICTE-FDP	Completed	Rs. 3,90,000/-
9.	Research Methodology in Engineering and Technical writing using LaTex &	F.No.34-56/70/RIFD/STTP/POLICY-1/2017-18	AICTE-STTP	Completed	Rs. 2,92,000/-
10.	LabVIEW for Measurement and Data Analysis	F.No.34-56/109/RIFD/STTP/POLICY-1/2017-18	AICTE-STTP	Completed	Rs. 2,73,000/-
11.	Recent Trends in Mineral Exploration	&Lr NoCRP/HRD/695/II/2295	SCCL	Completed	Rs. 25,000/-
12.	Engineering Drawing - An Effective Teaching Methodology &	ISTE/AICTE-ISTE Induction/Refresher Program/2018	AICTE-STTP	Completed	Rs. 3,00,000/-
13.	Unnat Bharat Abhiyaan &	D.O. No. 5-1/2016-UBA	UBA	Completed	Rs. 3,00,000/-
14.	Modernization of Microwave Engineering lab &	F.No.9- I 97 IIDCIMODROB/Policy-| 12019-20	AICTE, MODROB	On - going	Rs. 5,59,216/-
15.	Research laboratory for power quality analysis and	File No. B-214IR.IFD,/RPS	AICTE-RPS	On - going	Rs. 9,10,980/-

	enrichment &	{POLICY-1)/2078			
16.	PERFORMANCE AND VIBRATION CHARACTERISATTON of Rubber seed oil Methyl Ester(RSME) Bio-Diesel BASED VCR ENGINE MOUNTED ON AI6O51-SIC-RUBBER MOUNTS	File No. 8-38/FDclRPs (POttcY-l) l20L9-20	AICTE-RPS	On - going	Rs. 11,90,196/-
17.	Margdashan Initiative	F.No. 5B-41 /Margdarshak Cell/2020 -21	AICTE	On-going	Rs. 50,00,000/-
18.	A Smart Agriculture Application Development for Monitoring the Fields Using IoT and AI &	AI4E-2259-T5L7-21100407	Microsoft AI for Earth	On-going	Rs. 1,00,00,000/-
19.	Skill and Personality Development Programme Center for SC/ ST Students SPDC	F; IIo. 65.26/IDC/SPDC/POLIC-1/2019-20	AICTE-SPDC	On-going	Rs. 15,13,400/-

9. a). Whether, your organization is receiving Core Support from SEED, DST? No

10. Capacity and capability of organization

i. Expertise available within the organization—resource persons, technologies already developed/available related to the proposed project area

Item	**Implementing Organization**
• List of scientific manpower available in the organization	Need to be Recruit
• List of full-time staff with relevant professional qualifications	Dr. S. Udaya Bhaskar Dr. M. Vijaya Kumar Dr. T. Venkata Deepthi Dr. U Venkata Rathnam Dr. P. Marimuthu Mrs. Y Sudha
• List of persons available as professional consultants	Mr.N.Ravi kumar

a. **Links with local bodies (Panchayats/RWAs/BDO/local cooperatives):**

Name	**Purpose & inputs expected**
Smt. Sara Saraswathi	To provide the approval and facility for the project implementation.

b. **Links with voluntary organizations:**

Name	**Purpose & inputs expected**

c. **Links with S&T institutions/subject consultants:**

Name	Purpose & inputs expected

d. **Links with industry, banks/other financial institutions:**

Name	Purpose & inputs expected
Mr. N Ravi kumar	Building up of a reserve of raw materials and implements for supply to producers, creation of common service facilities for processing of raw materials as semi-finished goods and provisions of facilities for marketing of KVI products apart from organization of training of artisans engaged in these industries and encouragement of co-operative efforts amongst them.

ii. List of major equipment, infrastructure and assets available with funding source and year of procurement (may be utilized in the proposed project implementation).

Sl. No.	Equipment	Funding agency	Year of procurement
NIL			

iii. List of project proposal related publications (reports, papers, patents, etc.) by the organization

NIL

iv. Major achievements in last three years—relevant portion/annual reports

File Enclosed

v. Any other related information (please specify): NIL

Part II - Technical & Budgetary Details

1. **Project Title** : Empowering Women Artisans and textile traditions

2. **Objectives:**

i. **Skill Development**: Enhance women artisans skills in traditional textile processes such as weaving, dyeing, embroidery, and block printing. Provide them with training programs and workshops to help them enhance their craftsmanship and produce high-quality products.
ii. **Market Development and Economic Empowerment**: Help women artisans gain market access by organizing exhibitions, trade fairs, and online platforms to showcase and sell their products. Collaborate with retailers, designers, and export agencies to broaden their reach and guarantee that they are fairly compensated for their efforts. Create long-term employment options for women artisans by assisting them in establishing micro-enterprises or cooperatives.
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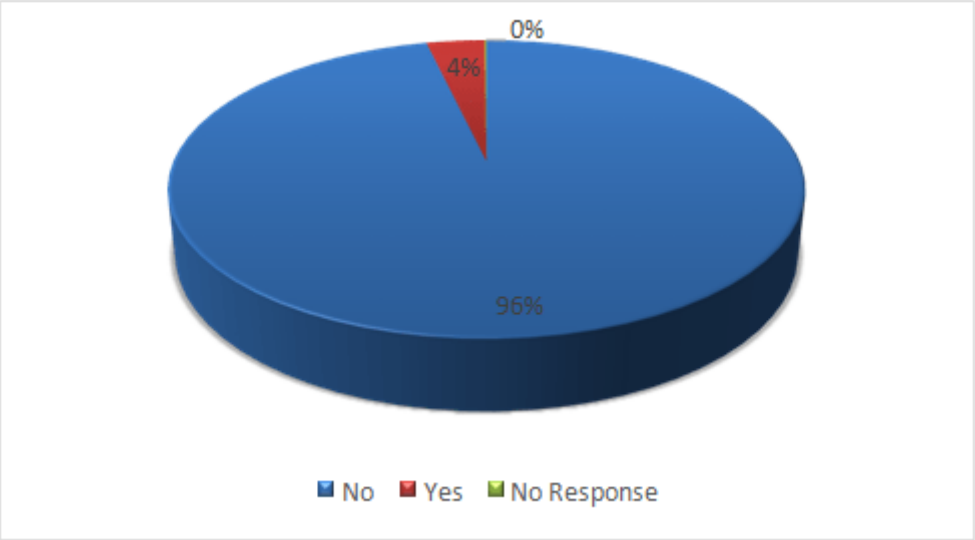
v. **Design Innovation:** Encourage artisans to blend traditional techniques with contemporary designs, thereby making their products more relevant to modern consumers. Collaboration with designers can bring fresh perspectives and create unique products that appeal to a wider customer base.

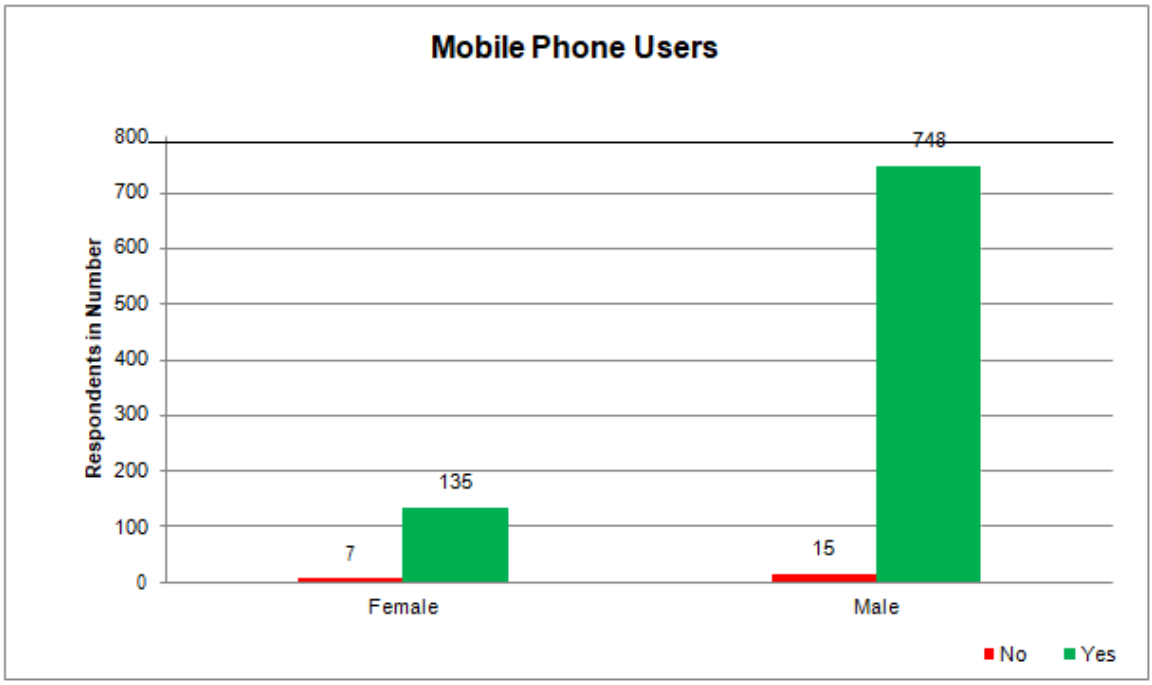
3. **I.Statement of the problem**
   i. State the women related problem you seek to address:
   Limited Economic Opportunities for Women: Women in many artisan communities often face limited access to economic opportunities, including financial resources, training programs, usage of new technologies and markets. They may experience lower wages, limited decision-making power, and barriers to entrepreneurship. This gender inequality restricts their ability to fully participate and benefit from the textile industry, hinders their economic independence, and perpetuates cycles of poverty.

   ii. Where does it occur?
   Pochampally, Yadadri Bhuvanagiri District, Telangana.

   iii. How did you come to know of this, did the people who have problem approach you or you visualized it yourself?
   Baseline Survey of Pochampally, Yadadri Bhuvanagiri District, Telangana, Survey conducted by Digital Empowerment Foundation. The report analyses the socio economic demography of weavers, ICT usage and awareness of digital interventions in the clusters.

CAD Technology





iv. Was the District Industry Centre report was examined for identification of the problem (please attach a copy)
District Industry Centre report was not available yet.

v. Why is it important to solve?
Women artisan communities face limited access to economic opportunities, financial resources, lower wages, limited decision-making power and lacking in technology advancements.

II. Technology gaps & Suggested solution:

Technology gaps:

Limited access to modern tools and equipment: Many artisanal textile communities still rely on traditional manual tools and techniques, which can be time-consuming and limit production capacity.

Lack of digital literacy and technological skills: Women artisans often lack knowledge and training in utilizing digital tools, software, and online platforms to market their products and reach a wider customer base.

Insufficient infrastructure for connectivity: In some rural areas, limited access to reliable internet connectivity hinders artisans' ability to leverage online resources, marketplaces, and educational platforms.

Suggested solution:

Technology capacity building: Provide training and workshops to artisans, specifically focusing on utilizing modern tools and equipment. This includes introducing improved weaving machines, dyeing equipment, and other advanced technologies that can enhance productivity and quality while preserving traditional techniques.

Online Marketplaces and Platforms: Create or collaborate with online marketplaces specifically tailored for artisanal products. These platforms can offer artisans with a digital storefront, access to a wider customer base, and secure payment mechanisms. Develop user-friendly websites or mobile apps that enable artisans to showcase their products and promote with potential buyers.

Digital Design and Innovation Workshops: Organize workshops and training programs focused on digital design tools and techniques. This can include training artisans in using design software, CAD (Computer-Aided Design) tools, and digital pattern production. By enhancing their design capabilities, artisans can create unique and marketable products.

i. **Outline your idea or solution you plan to develop:**

I. Assessing the Current Situation

Conduct a thorough survey and investigation to learn about the situation of women artisans and traditional textile skills in the chosen location. Identify the challenges that women artisans face, as well as the risks to textile traditions.

II. Empowering Women Artisans

Skill Development Programs and Financial and Business Support

Conduct workshops and training sessions for female artisans to help them improve their skills. Provide microloans or grants to women artisans to start or expand their businesses. Make market information and opportunities more accessible. Host regular gatherings and events to build their bonds

..

III. **Marketing and Promotion**

Create an e-commerce platform to showcase and sell artisans products
Partner with ethical fashion brands and retailers to feature artisanal products

IV. Monitoring and Evaluation

Create metrics and indicators to assess the impact on women artisans and textile traditions. Conduct regular evaluations and assessments to discover opportunities for improvement.

ii. **Did you think up the science and technology-based solution within your team or was it thought up in consultation with others (who):**

With consultation of technology expert Mr. N. Ravi kumar in our team, we came up with this solution to empower the women artisans by incorporating the modern technology tools and enhance their skills.

4. **Review of Status** - Are you aware of any other initiative related to proposed activities to solve this problem? What were the outcomes?

The artisan sector, especially in developing countries, creates employment, offers Sustainable income, fosters community development, and, sustains and preserves ancient Culture and techniques, leading to sustainable development.[1]
Framework to help textile artisan's communities transitioning to a sustainable future was co-developed with academic experts in the field [2]
Focusing on the case of John Gast, a London silk weaver, this book explores the political activism and economic struggles of artisans during the early 19th century.[3]

References:

[1] Gargi Bhaduri, The Value of 'Artisan' in the Textile and Clothing Sector: Approach for Sustainable Development, Proceedings of the Fourth International Conference on Global Business, Economics, Finance and Social Sciences (GB15 Kolkata Conference) ISBN: 978-1-63415-898-5 Kolkata, India, 18-20 December, 2015.

[2] Francesco Mazzarella, Moving Textile Artisans communities towards a sustainable Future- A theoretical Framework June 2016, DOI:10.21606/drs.2016.140, Conference: Design Research Society Conference 2016.

[3] E. J. Hobsbawm, "Artisans and Politics in Early Nineteenth-Century London: John Gast and His Times" by Thomas Waters, The Economic History Review New Series, Vol. 37, No. 3 (Aug., 1984), pp. 355-372.

5. **Baseline data:**

Project Area: ☐ Rural
Geographical Focus Area: Village(s)/urban locality: Block/Taluka: Pochampally Block District: Yadadri Bhuvanagiri District ; State: Telangana State-508284.
Project Area Profile (Give following details along with a neatly drawn location map):
I. Geographical area covered, climate, land use pattern, crops & cropping patterns, availability of natural resources & raw materials, availability of special skills/trades, etc. Pochampally village is spread over an area of 28.42 km². A total population is 51,061 people are living in this village. The Literacy percentage is 59.41 percent, out of these 35.58 percent is male literates and 23.83 percent is female literates. Total Workers percentage is 48.35 percent, out of these 28.88 percent is male workers and 19.47 percent is female workers. Total Mandal Agriculture farmers percentage is 7.26 percent in Pochampally, out of these 5.22 percent is male farmers and 2.04 percent is female farmers. Pochampally Labor percentage is 12.33 percent, out of these 5.38 percent is male labor and 6.96 percent is female labor. The Maximum temperature is 45°C during summer and 26°C during monsoon. The principal crops in the district are paddy, cotton, red gram, green gram, maize, groundnut and chillies. The climate and soil of the district is most suitable for raising

horticultural crops. The natural resources available for the targeted beneficiaries are Agricultural Land, Ground Water, Palmyra Palm Trees, Limestone and Granite stones.

II.

a) Socio economic status of handloom weavers revealed that the gender ratio in the occupation was 1:3. Most of the young adult and middle aged women weavers were involved in weaving, and the percentage was significantly lower than male weavers. The active time spent on weaving will earn more remuneration, which will enhance the socioeconomic status of the individuals. The traditional handloom procedure is still followed in these areas.

b) District Industry Centre, Local Panchayat Report of the project area: Work is in under process

c) Baseline data sheet which may be assessed annually with respect to results and deliverables during implementation of the project activities (if it is to improve livelihood opportunities through improved agriculture practices, what are the present status in terms of soil conditions, crop productivity and disease management etc.)

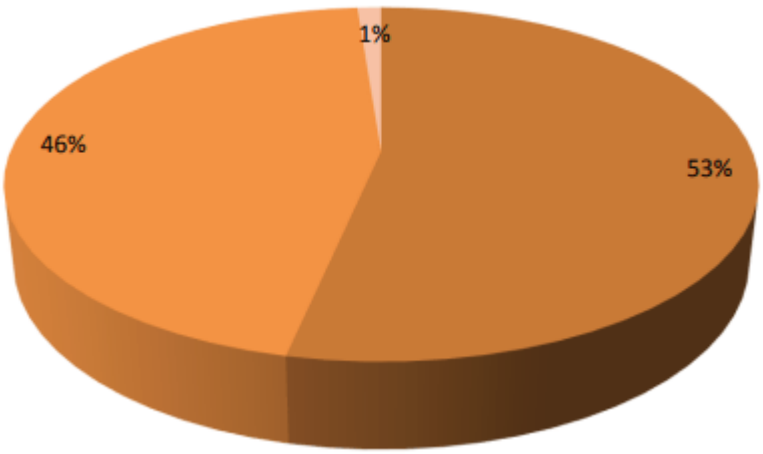


Figure shows that 46 per cent have a woman weaver in their family whereas 53 per cent do not have a female weaver and one per cent didn't respond. Among the respondents having female weavers.

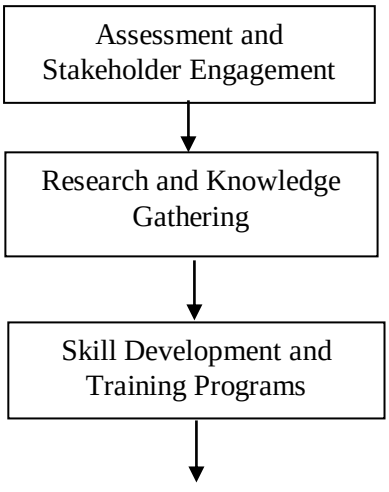
6. Methodology:

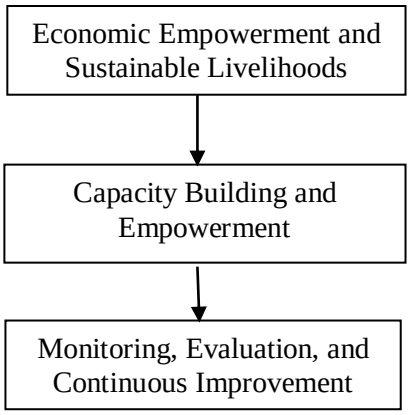
Several primary approaches are being used to leverage livelihood/economic opportunities and solve social challenges in a sustainable manner:

1. Economic Empowerment of Women Artisans:
    - Provide skill development training and capacity building to women artisans in order to improve their handicraft and business skills.
    - Facilitate access to resources, such as raw materials, tools, and equipment, as well as financial services, to help them with their business efforts.
    - Encourage fair trade practices to ensure that artisans are fairly compensated for their work.
2. Socioeconomic Development and Community Impact:
    - Create job opportunities for women artisans, so contributing to poverty reduction and socioeconomic growth.
    - Address societal difficulties and economically empower women to promote gender equality and women's empowerment.
    - Collaborate with community organizations, government agencies, and stakeholders to ensure the project's long-term viability and effect.

3. Collaboration and Partnerships:
    - Establish collaborations and partnerships with key stakeholders, such as local communities, government agencies, and industry participants.
    - Combine resources, experience, and networks to build a comprehensive and long-term support system for female craftspeople.
    - Share expertise, best practices, and lessons learnt with stakeholders, so contributing to field knowledge improvement.

Methodology Flow chart:





7. Target Women Group

Type of Target women:	**Number of target women**	**% of total population**	
☐SC population ☐ST population ☐ Economically weaker section ☐Farmers ☐Labourers ☐Artisans √ ☐ Youth ☐ Any other:	150	54.34	
Present average income level of women in proposed project area: Rs. 75,000/- per annum.			

8. Criteria to be adopted for selection of target women

Interest and Passion: Target women should have a genuine interest and passion for traditional textile arts and crafts. This ensures their motivation and commitment to learning and practicing the skills.

Artistic Aptitude: Assessing potential trainee's artistic aptitude is significant since it indicates their capacity to develop and achieve in the field of textile arts. This includes assessing their originality, attention to detail, and ability to work with colors, patterns, and designs.

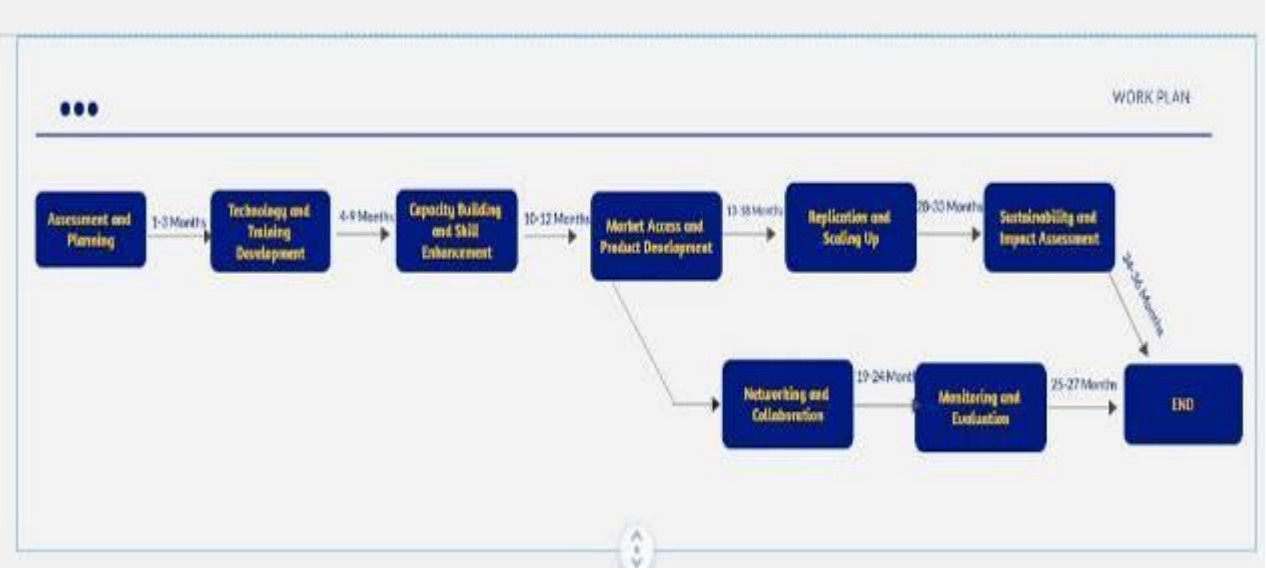
Basic Skills: While prior experience is not always necessary, candidates with basic skills in stitching, sewing, embroidery, or other related crafts may be given preference. This provides a foundation upon which more advanced techniques can be built.

Availability and Commitment: It is essential that the target women be available and committed to actively participating in the training program. This includes their desire to routinely attend training sessions and finish the necessary courses.

Economic Need: Giving priority to women who are economically disadvantaged or who are members of marginalized communities will assist address social inequalities and provide opportunity to individuals.
Number of target women to be trained per batch: 15 members per batch

9. **Work Plan** :

i. **Phase wise work plan of action with time line and deliverables in tabular form**



Phase	Timeline	Deliverables
Phase 1	Months 1-3	Conduct a needs assessment and baseline survey to identify specific challenges faced by women artisans, Establish partnerships with local organizations, and government agencies.
Phase 2	Months 4-9	Organize training programs on weaving techniques, design innovation, and business management for women artisans, Provide access to education and literacy programs for women artisans and Facilitate workshops on financial management and entrepreneurship skills
Phase 3	Months 10-12	Conduct market research to identify potential buyers and market trends, Develop a marketing strategy and branding for textiles, Organize exhibitions, trade fairs, and crafts to showcase the products of women artisans and Establish online platforms and e-commerce channels for selling textiles
Phase 4	Months 13-18	Access to microcredit and financial services for women artisans, Provide grants or financial support for upgrading equipment and purchasing raw materials
Phase 5	Months 19-24	Organize networking events and conferences to foster collaboration among women artisans, experts, and industry stakeholders.

Phase 6	Months 25-27	Implement a robust monitoring and evaluation framework to assess the impact and effectiveness of the initiatives, Gather feedback from women artisans and stakeholders for continuous improvement.
Phase 7	Months 28-33	Replication and scaling up of designing to improve the products.
Phase 8	Months 34-36	Conduct market research for Sustainability and impact analysis.

ii. **Technology Selection**

The technology selection process for addressing key problems in the project involves careful consideration of various criteria to ensure the chosen technologies are effective, sustainable, and suitable for the context. Here are the criteria used for technology selection and the assessment of available technologies:

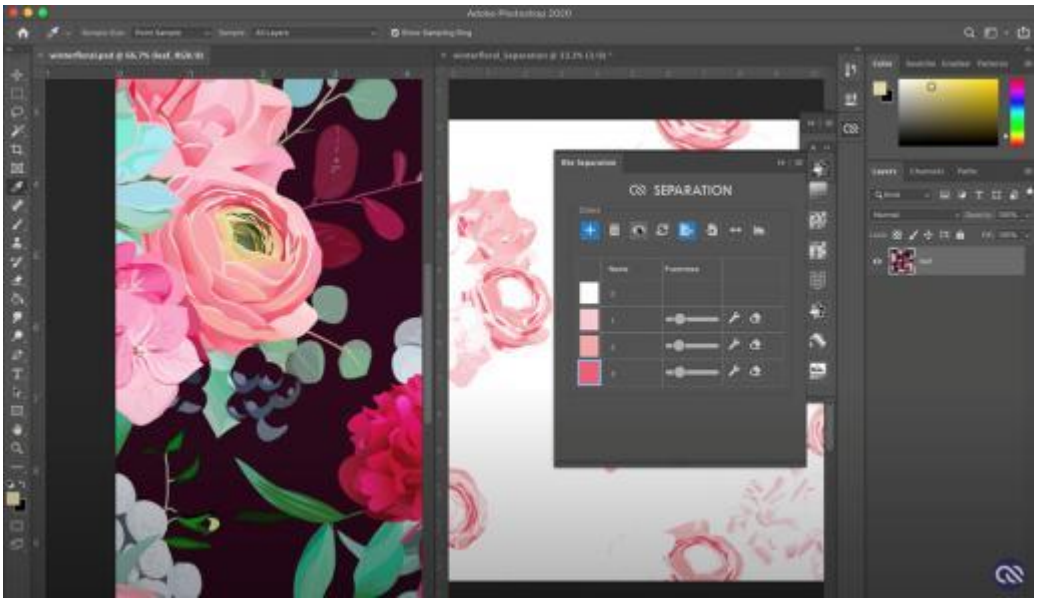
- Relevance to Textile Traditions and Artisan Needs
- Affordability and Accessibility
- Ease of Use and Adaptability
- Environmental Impact
- Scalability and Replicability
- Technical Support and Training
- Impact on Livelihood and Empowerment
- Potential for Knowledge Advancement

Assessment of available technologies:

Digital Design Software: Textile designs can be created and modified digitally using computer-aided design (CAD) software. This technology enables artists to test alternative designs, colors, and combinations before incorporating them into their creations. It can improve the productivity and precision of design creation while also making communication with designers and customers easier.

3D design software

Utilize 3D design software to create virtual prototypes of textile products, allowing artisans to visualize and refine their designs before production. Iterate and make design modifications quickly and cost-effectively using 3D printing technology, reducing time and material waste associated with traditional prototyping methods.



Handheld Embroidery Machines: Portable embroidery machines with digital designs and automated stitching capabilities can help artisans create elaborate patterns quickly and easily. These devices are very beneficial for mass manufacturing or when precision is required.

Natural Dye Extraction processes: There are several processes available for extracting and processing natural dyes from plant-based sources. These methods can increase colour uniformity, reduce waste, and optimise the dye extraction process. Innovations in this field have the potential to contribute to more sustainable dyeing practises while also retaining traditional dying procedures.

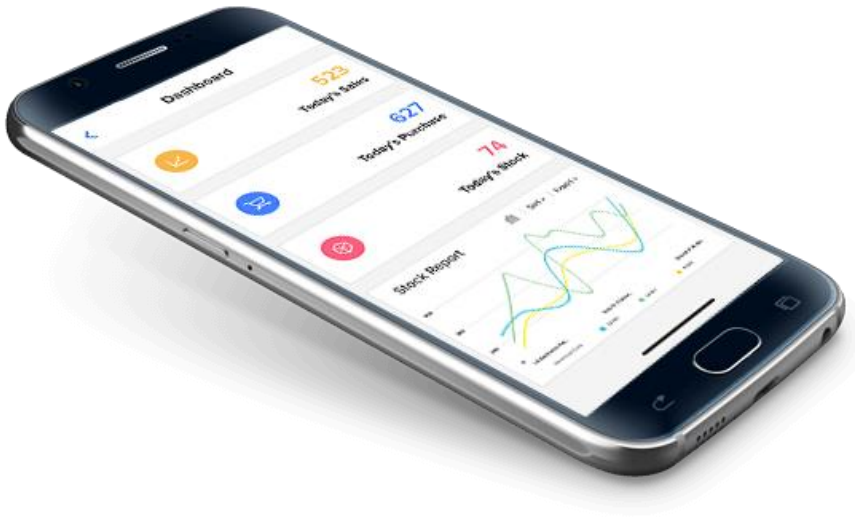
Online Marketplaces and E-commerce Platforms: By utilising online platforms and marketplaces, women artisans can gain access to a larger customer base and expand their market reach. Artisans can use online platforms to promote their products, interact with possible buyers, and perform sales transactions. This technology has the potential to eliminate geographical limitations and connect artisans to customers all around the world.

GeM
Government
e Marketplace
Efficient • Transparent • Inclusive

INDIA HANDLOOM
COMFORT | STYLE | FASHION

amazon

Mobile Applications for Business Management: Mobile applications can assist women artisans in efficiently managing their business operations. Inventory management, order monitoring, pricing, and financial management can all be aided by these programs. These technologies provide artisans more control over their businesses and allow them to make more informed decisions.



iii. **Technology Development/Adoption/Modification/Capacity Buiding**

Technology advancement and adoption:

Research and Development (R&D): R&D efforts to create or adapt technologies that are in line with the demands of artisans and textile traditions. Collaboration with professionals, artists, and research organizations to seek novel solutions may be required.

Assessment of current Technologies: Evaluate current technologies and their suitability for adoption in the context of women artisans and textile traditions. Affordability, ease of usage, scalability, and compatibility with existing practices are all variables to be evaluated in this assessment.

Pilot Testing: Before applying any new or updated technology on a broad scale, conducting pilot tests can assist evaluate its efficacy and identify any modifications or improvements that are required.

Capacity Building:

Training Programs: The project can develop comprehensive training packages to build the capacity of women artisans in using and benefiting from the selected technologies. These training programs should include both technical skills and entrepreneurial skills to enhance the artisans' overall capabilities.

Technical Assistance: Providing ongoing technical assistance and support to women artisans can ensure the successful adoption and effective utilization of the chosen technologies. This may involve conducting workshops, organizing mentoring sessions, and offering troubleshooting guidance.

Business Management Training: In addition to technical skills, capacity building should include training in business management and marketing. This equips the

artisans with the necessary knowledge to run their businesses effectively, access markets, and maximize their economic opportunities.

Scale of Operations: The initiative might begin with a pilot phase, focusing on a small group of workers to evaluate the technologies and training packages. Once the viability and success of the initiative have been proved, it can be scaled up to reach a larger number of skilled artisans.

Minimum Economic Viable Scale: The minimum economic viable scale will vary depending on factors such as the cost of technology, market demand for the artisanal products, and the income potential of the artisans. It is important to consider the market dynamics and ensure that the scale of operation allows for long-term revenue growth.

Estimated cost : The estimated cost will be determined by the precise technology and training packages chosen, as well as the number of women artisans to be educated and supported. The project should take into account both the original investment cost and the ongoing operating costs.

Likely Benefits: Increased production and efficiency, enhanced product quality, broader market access, higher income generation, and general empowerment of women artisans are all possible outcomes of the suggested technological intervention. These advantages contribute to poverty alleviation, skill development, cultural preservation, and long-term economic growth.

iv. **Types of trainings to be imparted, duration, output and number**

Types of Trainings:

Technical Skills Training: This program will focus on improving women artisans' technical skills in various textile processes such as weaving, embroidery, block printing, natural dyeing, and fabric manipulation. Hands-on practice, demonstrations, and step-by-step instructions will be included.

Embroidery

Block printing

Design and Innovation Training: The aim of this training is to help women artisans improve their design and innovation skills. Pattern development, color theory, design trends, and product diversification will be covered. The workshop will encourage artisans to experiment with new designs and blend cutting-edge features into their traditional methods.

Business Management and Marketing Training: The training program will provide women artisans with the necessary business management skills to run their businesses successfully. Financial management, pricing methods, marketing approaches, branding, market research, and e-commerce will all be covered.

v. **Details of sensitization program on health, nutrition, sanitization, fitness, yoga, etc. planned for target women**

The sensitization program for target women can include a range of topics related to health, nutrition, sanitization, fitness, and yoga. The program aims to raise awareness and provide knowledge on these important aspects to support the overall well-being of the women artisans. Here are some details of the sensitization program:

Workshop	Duration	Objectives	Content	Resource Person
Health	2 hours	- Raise awareness about women's health issues	- Basics of women's health	Health professional
		- Promote preventive healthcare practices	- Common health problems and solutions	
		- Discuss the importance of regular check-ups	- Self-care practices	
Nutrition	2 hours	- Educate on the significance of balanced nutrition	- Essential nutrients and their sources	Nutritionist/Dietician
		- Provide practical tips for healthy eating	- Meal planning and portion control	
		- Address common nutritional challenges	- Tips for maintaining a healthy weight	
Sanitization	2 hours	- Promote hygiene practices for personal and home	- Importance of personal hygiene	Health/ Hygiene expert
		- Discuss the significance of clean living environments	- Proper handwashing techniques	
		- Demonstrate effective cleaning and disinfection methods	- Sanitization practices for home and kitchen	
Fitness	2 hours	- Encourage physical activity and fitness routines	- Importance of regular exercise	Fitness instructor/Trainer

		- Demonstrate simple exercises for strength and mobility	- Stretching and flexibility exercises	
		- Provide tips for incorporating fitness into daily life	- Setting fitness goals and tracking progress	
Yoga	2 hours	- Introduce the benefits of yoga for physical and mental well-being	- Basics of yoga and its principles	Yoga instructor
			- Gentle yoga poses for relaxation and energy	
		- Teach breathing techniques and mindfulness practices	- Stress management through yoga	

vi. **Plan for the alignment with the National Skill Qualifications Framework** (Eligibility, Level, etc.)

Eligibility: Basic communication skill
Speak with others using some basic English phrases or sentences
Follow good manners while communicating with others
Work with others in a team

Level: Level-1

vii. **Source of Technology**:

Source	Technology	Name of agency /institution / individual expert
Generated in-house by staff	--	--
Generated in-house by employing outside experts	--	--
Borrowed from an outside institution/expert	--	--
Modification of technlogy / know-how being used by the beneficiaries	CAD Tools, 3D Printing and Computerized Machines	Dr. S. Udaya Bhaskar Dr. M. Vijaya Kumar Dr. T. Venkata Deepthi Dr. U Venkata Rathnam Dr. P. Marimuthu Mrs. Y Sudha
Any other (please specify):	--	--

viii. **Mechanisms for Beneficiaries/trainees mobilization & Involvement:** (Please indicate how mobilization & participation of beneficiaries/trainees in the project work will be ensured)

- ✓ Formation of new SHGs/technology user group or beneficiaries//trainees group for project implementation.
- ✓ Involvement of existing SHGs.
- ✓ Through demonstration of usefulness of technology or training package.
- ✓ Involvement of beneficiaries/trainees through formation of enterprises.
- ✓ Provision of certificates for participation/proficiency for beneficiaries/trainees.
- ✓ Involvement of the beneficiaries as trainers and/or trainees.
- ✓ Financial contribution by beneficiaries/trainees in project execution.
- ✓ Material contribution (tools/raw material, labour, etc.) by beneficiaries in project execution.
- ✓ Handholding through local panchayats/welfare organizations
- ✓ Provision of market opportunities to beneficiaries.

10. Details of Environmental, Legal and Ethical Issues in project implementation, if any:

No Environmental, Legal and Ethical Issues

11. Deliverables (Please also indicate affordability of deliverables to the target beneficiaries):

Deliverable	Mark √	Brief description
Product development/adaptation		
Process development/adaptation	√	Integration of technological solutions, into traditional processes to enhance productivity, quality, and design possibilities.
Technology package for development of the project area	√	Design and Digital Tools, Production and Machinery, Technology Infrastructure (Computer Systems, Internet Connectivity, Digital Devices), Online Presence and E-commerce
Technology capability development, training & documentation (e.g. reports, papers, articles, technology manuals, patents)	√	Provide training programs, workshops, and hands-on sessions to build artisans' technical skills and proficiency in utilizing the identified technologies.
Scientific knowledge and/or data generation leading to technology development in future	√	Gather and analyze data on consumer preferences, market trends, and emerging demands in the textile industry. Utilize consumer insights and data to drive the design of new textile products that meet the evolving needs of customers.

Technologies to be developed and Commercialized		
Number & Names of SHGs created	√	-01- SHG group name: Sudha SHG
Number & names of social enterprises/ Start-ups created	√	Two start ups will be proposed
Marketing Linkages Details	√	Analyze market demands, competition, pricing strategies, and distribution channels to inform marketing and sales strategies
Complete database of beneficiaries/trainees, Resource Persons & Expert Trainers Name, Address, Contact Number, Email ids, Aadhar Numbers(if available)	√	Yes, Details will b documented
Other (Please specify)		

12. Estimated Benefits :

Benefit	Mark √	Brief description
Economic (Cost-benefit analysis)	√	By enhancing the skills, market access, and product range of women artisans, enable them to increase their production and sales, resulting in higher income generation
Employment generation	√	Women artisans can create jobs for themselves and potentially employ others, contributing to local economic growth and job creation
Social	√	Empowering women artisans by providing them with training, skills development, and access to markets. This empowerment leads to increased self-confidence, decision-making power, and agency among women
Environmental including potential for CDM benefits	√	No Environmental issues
Others (Please specify)		

13. Possibility of replication of project in similar areas

The "Empowering Women Artisans and Textile Traditions" has been validated and effectively executed; it can be replicated in similar areas. Here are several distribution and replication options for the technology solution.

Collaboration with State Governments:

- Engage with state government departments or agencies that are in charge of women's empowerment, skill development, or rural development.
- Illustrate the project's feasibility and benefits present its success and impact.
- Investigate collaborative prospects to repeat the idea in similar areas under government initiatives or schemes.
- Seek financing, infrastructure, and policy assistance from the state government for large-scale dissemination.

Market-based Distribution:

- Collaborate with local entrepreneurs or businesspeople who can serve as technological intermediates.
- Provide these entrepreneurs with training and assistance in establishing their own enterprises based on the technical solution.
- Facilitate the transfer of knowledge, technological know-how, and resources essential for business setup and operation.

Networking and Collaboration:

- Create networks and collaborations with other organizations, non-governmental organizations (NGOs), or community-based groups working in comparable areas or sectors.
- Inform these organizations about the project's findings, best practices, and technology solutions.
- Collaborate on cooperative activities or projects to reproduce the idea and broaden its reach.
- Utilize existing networks and platforms to widely propagate the technology solution.

14. **Suggest measurable indicators** (**10-12 tangible as well as non-tangible along with means of verification)** for monitoring effectiveness of project interventions in respect to the stated objectives and deliverables. The indices you choose must permit objective measurement and determination *vis-à-vis* time line during project cycle comparing with base line data/control-list in the table is only indicative:

S. No.	Key Performance Indicators (as applicable)	Mark √
i.	Technologies adapted and propagated	√
ii.	Number of total training programmes organized—details thereof title, duration	√
iii.	Number of women trained in total	√
iv.	Technologies transferred, if any	
v.	Number of SHGs/co-operatives/enterprise formed—number, title	√
vi.	Increase in livelihood/ employment opportunities	√
vii	Improved linkages with market/ enterprises	
vii	Increased availability of resources (natural and/or physical) and assets Improved access to resources	
ix.	Collaboration with any R&D institution—	√

	Details thereof	
x.	Any dissemination booklets, manuals or films made—title & details	
xi.	No. of publications produced (Title, Journal, issue, yr.)	
xii	Outcome in terms of technologies adopted and used by the trainees for improving their livelihoods	√
xii	Standardization of various skills and training programmes (National Skill Qualification Framework) and Sustainability plan	
xiv	Increase in family income	√
xv	Contribution towards sustainable Development goals (SDGs)	√
xv	Possibility of forward & backward linkages	

15. Self- sustainability of the project after funding support from SEED division is over:

Market-Oriented Approach:

- Create a market-oriented plan to ensure that women artisans' products are in demand and can generate a sustainable income.
- Market research should be conducted to discover target markets, customer preferences, and trends.
- Aid artisans in product development, quality improvement, branding, and marketing tactics to increase their market competitiveness.
- Encourage makers to modernize their traditional skills and creations to fulfill market demands while preserving their cultural heritage.

Entrepreneurship and Business Development:

- Provide entrepreneurship and business management training and support to artisans.
- Allow makers to establish their own businesses or cooperatives, giving them greater control over production, marketing, and sales.
- Encourage artisans to seek new options and broaden their product line by cultivating a culture of entrepreneurship and creativity.

Access to Finance and Resources:

- Access financial resources, such as microcredit, grants, or revolving funds, to assist artisans in investing in their companies, purchasing raw materials, and scaling up their operations.
- Investigate partnerships with financial institutions, non-governmental organizations, or social impact investors to give financial assistance customized to the needs of women artisans.
- Develop relationships with suppliers, wholesalers, and retailers to assure a steady supply of high-quality raw materials and access to larger markets.

Collaboration and Networking:

- Encourage collaboration and networking among artists so that they can exchange information, resources, and market prospects.
- Facilitate collaborative marketing initiatives to present and sell their products, such as joint exhibitions, trade fairs, or internet platforms.
- Establish collaborations with key stakeholders, such as government agencies, non-governmental organizations, and industry organizations, to utilize their expertise, resources, and networks for the project's long-term viability.

Monitoring and Evaluation:

- Implement a robust monitoring and evaluation system to track the project's progress, impact, and financial viability.
- Regularly assess the project's outcomes, including income generation, market reach, and artisans' empowerment.
- Use the evaluation findings to make necessary adjustments, refine strategies, and improve the project's self-sustainability over time.

Part III-Budget Estimates: Summary

1. Total Budget (Rs. in Lakhs):

i. Recurring Cost (Rs in Lakhs): 32.55
ii. Non-Recurring Cost (Rs in Lakhs): 13.4

S. No.	Item	Budget			
		1st Yr	2nd Yr	3rd Yr	Total
A	**Recurring**				
	1. Human Resource	4.8	4.8	4.8	14.4
	2. Consumables	2.5	2.0	2.0	6.5
	3. Travel	1.0	0.75	0.75	2.5
	4. Field testing, Demo/ Training expenses (if applicable)	1.5	1.5	1.5	4.5
	5. Contingencies/Other costs	1.0	1.0	1.0	3.0
	6. Institutional Overheads*	0.3	0.3	0.3	0.9
	7. Any other item (Stationeries)	0.25	0.25	0.25	0.75
B	**Non-Recurring**				
	Permanent equipment:				
	1. Textile Designing Software	5.0	--	--	5.0
	2. 3D Printer	6.5	--	--	6.5
	3. Embroidery Machine (Not available in GeM)	1.9	--	--	1.9
C.	**Quotations with comparative statement in support of permanent equipment to be procured**				
	Grand Total (A+B)	24.75	10.6	10.6	45.95

(Rs. in lakhs)

A. Recurring budget head:

1. BUDGET FOR MANPOWER

Sl. No.	Designation	No.	Qualification & experience	Monthly emolument (Rs)	Budget (Rs. in lakhs)			
					1st Yr	2nd Yr	3rd Yr	Total
1	Project Associate-I	1	Master Degree in Textile or Bachelor's degree in Textile Engineering or Technology	24,000	2.88	2.88	2.88	8.64

			from a recognized university or equivalent with 5 Years of Experience					
2	Scientific Administrative Assistant / Field Worker		Graduate degree in any discipline with 5 Years of Experience	16,000	1.92	1.92	1.92	5.76

2. BUDGET FOR CONSUMABLES*

Sl. No.	Description of consumable	Qty./Yr	Budget (Rs. in lakhs)			
			1st Yr	2nd Yr	3rd Yr	Total
1	Dyes (Natural), Threads, Cloths, Needles, Frames, Button holes, Wool, Block Printing and stationary etc..	25	2.75	2.75	2.75	8.25

* Includes items like chemicals, laboratory equipment, glasswares, training materials, raw materials for fabrication, stationery, etc.

3. BUDGET FOR TRAVEL

Sl. No.	Purpose	Budget (Rs. in lakhs)			
		1st Yr	2nd Yr	3rd Yr	Total
1	Project logistics	0.25	0.1	0.1	0.45
2	Field activities	0.5	0.3	0.25	1.05
3	DST review meetings	0.25	0.35	0.4	1.0

i. International travel is not permitted
ii. The project personnel shall exercise utmost austerity while traveling.
iii. Please provide detailed justification for budget proposed under first two headings.

4. FIELD TESTING/DEMO/TRAININGS/LPAC Meetings

Sl. No.	Description of field testing/demos /trainings	No/Yr	Budget (Rs. in lakhs)			
			1st Yr	2nd Yr	3rd Yr	Total
1	Training		1.75	1.75	1.75	5.25

Note: For training give details about the subject of training(s), no. of beneficiaries/training, duration of training days, cost /training). There should be separate budget for onsite Local Programme Advisory Committee Meetings with 5-7 outside experts and a provision of honorarium for the non-officials.

5. BUDGET FOR CONTINGENCIES*

Sl. No.	Item	Qty./Yr	Budget (Rs. in lakhs)			
			1st Yr	2nd Yr	3rd Yr	Total
1	Maintenance and Servicing, incidental expenses etc..	10	1.0	1.0	1.0	3.0

* Includes items like computer time, secretarial assistance, documentation, cost of technology transfers/acquisitions (intellectual fees), lab/field trials, maintenance/servicing of equipment, incidental expenses, etc.

B. Non-Recurring budget head:

BUDGET FOR PERMANENT EQUIPMENT

Sl. No.	Equipment/Item details	Qty	Budget (Rs. in lakhs)
1	CAD - Textile Designing Software	1	5.0
2	3D Printer	1	6.5
3	Embroidery Machine	1	1.9

Part-III- Summary of Proposal

1. Title of Project: **Empowering Women Artisans and Textile Traditions**
2. Project Duration: 3 Years
3. Proposed Objectives:

i. **Skill Development**: Enhance women artisan skills in traditional textile processes such as weaving, dyeing, embroidery, and block printing. Provide them with training programs and workshops to help them enhance their craftsmanship and produce high-quality products.
ii. **Market Development and Economic Empowerment**: Help women artisans gain market access by organizing exhibitions, trade fairs, and online platforms to showcase and sell their products. Collaborate with retailers, designers, and export agencies to broaden their reach and guarantee that they are fairly compensated for their efforts. Create long-term employment options for women artisans by assisting them in establishing micro-enterprises or cooperatives.
iii. **Capacity Building:** Assist women artisans in developing their skills in areas such as financial literacy, entrepreneurship, marketing, and product development. Provide them with the skills and knowledge they need to run their enterprises successfully and adapt to changing market demands.
iv. **Gender Equality and Social Inclusion:** Address the social and cultural barriers that prevent women from entering the textile business. Create an inclusive atmosphere for artisans that supports cooperation, learning, and equitable chances.
v. **Design Innovation:** Encourage artisans to blend traditional techniques with contemporary designs, thereby making their products more relevant to modern consumers. Collaboration with designers can bring fresh perspectives and create unique products that appeal to a wider customer base.

4. Name, Address & Contact Details of PI (from NGO/ KI): Mrs Y. Sudha, Malla Reddy Engineering College, 8121621371, sudhay@mrec.ac.in

5. Name, Address & Contact Details of Co-PI (from KI/ NGO): Dr.P.Marimuthu, Malla Reddy Engineering College, 9043872893, spm.muthu78@gmail.com

6. Registration number & date of Registration as NGO/ VO / private institution:

   21-08-2001

7. NGO Darpan ID of NGO/ VO/ private institution: TS/2017/0154621

8. Area of proposed work: Life Science, Material Science & Engineering

9. Nature of the Project: Improve the Livelihood artisans

   (Pl. tick one or more boxes, as applicable)

Technology development (new product/process or up/down scaling of existing systems)	
Technology development & transfer (development of product/process followed by field adaptation trials, demonstrations & transfer of technology)	
Technology dissemination (dissemination of available technology for solution of identified problem)	√
Technology adaptation/optimization, demo and training	√
Other (Please specify)	

10. Details of collaborative partners (NGOs/ KIs/ Social Ventures/ CBOs/ SHGs/ FPOs etc.): Khadi Gramodyoga Mahavidyalaya, Khadi village Industries commission, Rajendra nagar, Hyderabad -500030

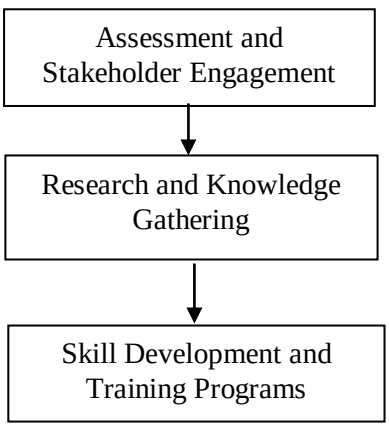
11. Role of partner organization/ agency/ group in implementation of project:

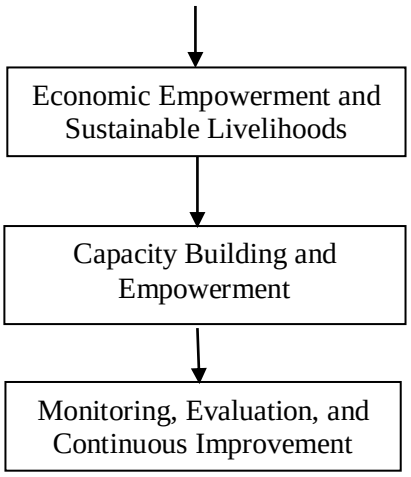
    Facilitate Skill Development & market awareness Programs and create the market opportunities for products.

12. Problem identification and baseline study for proposed project:

    Women in many artisan communities often face limited access to economic opportunities, including financial resources, training programs, usage of new technologies and markets. They may experience lower wages, limited decision-making power, and barriers to entrepreneurship.

13. Methodology (State the methodology in a sequence of clearly defined steps leading to achievement of the stated objectives & Title of the various types trainings to be imparted, number of trainees to be trained per training, outcome of such a training):





14. Geographical coverage area of proposed project (villages/blocks/districts)

Pochampally village is spread over an area of 28.42 km². A total population is 51,061 people are living in this village. The Literacy percentage is 59.41 percent, out of these 35.58 percent is male literates and 23.83 percent is female literates. Total Workers percentage is 48.35 percent, out of these 28.88 percent is male workers and 19.47 percent is female workers. Total Mandal Agriculture farmers percentage is 7.26 percent in Pochampally, out of these 5.22 percent is male farmers and 2.04 percent is female farmers. Pochampally Labor percentage is 12.33 percent, out of these 5.38 percent is male labor and 6.96 percent is female labor. The Maximum temperature is 45ºC during summer and 26ºC during monsoon. The principal crops in the district are paddy, cotton, red gram, green gram, maize, groundnut and chillies. The climate and soil of the district is most suitable for raising horticultural crops. The natural resources available for the targeted beneficiaries are Agricultural Land, Ground Water, Palmyra Palm Trees, Limestone and Granite stones.

15. Estimated year-wise budget required for project support: 3 Years

BUDGET ESTIMATES: SUMMARY **(INR in Lakh)**

S. No.	Item	Budget			
		1st Yr	2nd Yr	3rd Yr	Total
A	**Recurring**				
	1. Human Resource	4.8	4.8	4.8	14.4
	2. Consumables	2.5	2.0	2.0	6.5
	3. Travel	1.0	0.75	0.75	2.5
	4. Field testing, Demo/ Training expenses (if applicable)	1.5	1.5	1.5	4.5
	5. Contingencies/Other costs	1.0	1.0	1.0	3.0
	6. Institutional Overheads*	0.3	0.3	0.3	0.9
	7. Any other item (Stationeries)	0.25	0.25	0.25	0.75
B	**Non-Recurring**				
	Permanent equipment:				
	1. Textile Designing Software	5.0	--	--	5.0
	2. 3D Printer	6.5	--	--	6.5
	3. Embroidery Machine (Not available in GeM)	1.9	--	--	1.9
C.	**Quotations with comparative statement in support of permanent equipment to be procured**				
	Grand Total (A+B)	24.75	10.6	10.6	45.95

16. **Self- sustainability plan of the project after funding support from SEED division is over**:

Develop strong market linkages, expanding customer base, and diversifying product offerings to ensure sustainable revenue generation. Conduct regular market research and analysis to stay updated on industry trends, consumer preferences, and emerging market opportunities. Continuously adapt products and designs to meet changing market demands and consumer expectations. Offer training programs and workshops on topics such as financial management, marketing strategies, product development, and quality control. Foster networking opportunities and collaborations with other entrepreneurs, designers, retailers, and industry professionals to expand business networks and access new markets. Encourage women artisans to develop savings and investment plans to ensure financial stability and resilience. Continuously improve productivity and operational efficiency through the adoption of modern technology, efficient processes, and training programs. Explore opportunities for public-private partnerships or corporate social responsibility initiatives that align with the objectives and provide sustainable support.

Department of Science & Technology

Science for Equity, Empowerment & Development Division (SEED) Division

Terms and Conditions for Organizations selected for project support under S&T for Women Programme

1. Focus of programme is on promotion of applied research & development, adaptation of technology, knowledge generation & dissemination and transfer of proven technologies with an aim to empower women through Science and Technology with respect to various stages of life cycles of women; and to create gainful employment potential of women

2. Manpower sanctioned under project should have relevant qualifications and experience/expertise against each sanctioned post according to DST norms which should be relevant to activities proposed for three years (Ref. OM. No. SR/S9/Z-08/2018 dated 30.01.2019 and SR/S9/Z-05/2019 dated 21.08.2019).Staff recruited for a project should be paid as per the rules of the institute and guidelines of the Government of India. The same staff should not take salary from multiple projects.

3. Project manpower will work for full time in project mode as per organizations rules and regulation, and not as employee(s) of Department of Science and Technology (GOI) and may also be utilized in coordinating data collection & analysis of S&T for women programme in terms of output, outcome and impact. Such staff member will not draw salary from other projects but may receive honorarium for specific activities. The support should also be utilized to dream and visualize innovative ideas and activities.The PI & Co-I should be able to devote adequate time to the project and should not handle more than two projects simultaneously.

4. Minimum Infrastructure and support services to project manpower should be the responsibility of the organization. Each organization should also strengthen networking with KVKs, smaller VOs in respective area of influence for large scale technology dissemination and other outreach activities. Also, project personals would catalyze and promote capacity building of these partner VOs.

5. Continuation and financial support for project will depend on evaluation of progress and assessment by expert team from time to time. Non-performance may lead to stoppage of grant/disqualification for further project support.

6. International travel is not permissible under the programme.

7. After receipt of project grant, signed bio-data and joining details about the manpower recruited should be intimated to SEED Division, DST within three months.

8. Progress report along with audited statement of expenditure (SE) and utilization certificate (UC) as per timeline for each financial year should be submitted each year.

9. Unspent balance and interest accrued at the end of each financial year should also be reported in SE & UC and permission may be sought to carry forward the unspent balance to the next financial year. Interest accrued in each financial year should be deposited to Consolidated Fund of India- Bharat Kosh and details should be mentioned in UC & SE.

10. Capital assets (consumables/equipment) available in GeM portal are to be procured online through GeM only. Capital assets/facilities to be created from project support should be recorded in a separate stock book/register

11. Capital assets created/deployed from project will be used by the intended beneficiaries during implementation period, and even after completion of the project support. GFR-2017 rules should be followed.

12. DST (SEED Division) will be immediately informed in case any member of the project team leaves the organization and replacement along should be reported within 3 months of vacancy.

13. All equipment and other field assets, PPTs, banners, boards, manuals, reports etc. will carry the credit as 'Catalyzed & Supported under S&T for women Programme of Science for Equity, Empowerment & Development Division, Dept. of Science & Technology, New Delhi'.

14. DST will be authorized to conduct audit and inspection of the project Support at any time and the project team will facilitate such audit or inspection.

15. An official of DST will be invited to attend the meetings of the executive body of the organization, wherein progress and expenditure details related to project activities are discussed. DST will nominate a suitable officer for this purpose.

16. DST will be kept informed about projects funded by other agencies. Accounts of such projects should be separately maintained.

17. Each training activity should be properly documented along with the subject matter, content of training, names of trainers and names of participants along with their address, place and date(s) of training.

18. Each member of the project team should maintain a log book recording the tasks performed by him/her on a day to day basis.

19. Proper documentation should be maintained in respect of activities taken up by the project support group as each new idea being pursued, expenses incurred in processing the idea, person involved, equipment proposed etc.

20. Benefits accrued to society / beneficiaries, directly or indirectly should be documented in story and video form.

21. Project implementing agency/organization will be responsible in case of any financial & legal administrative responsibility and dispute between the agency/organization and project staff. DST will not be liable for such legal cases of disputes.

22. Organizations are discouraged from simultaneously taking up/submitting several projects in different schemes of the SEED division, DST. Multiple proposals from the same institution for establishing different WTPs should be avoided.

23. In case of multi-institutional project, the Principal Investigator (PI) must furnish formal agreement from the collaborating institutions/ scientists.

We agree to the above terms and conditions.

Date: 7/11/2023

Place: Hyderabad

Head of the organization-1

Principal
Malla Reddy Engineering College
Maisammaguda, Dhulapally,
(Post Via Kompally), Sec'bad-500100.

Dr. A. Ramaswami Reddy

Malla Reddy Engg. College (A) Hyderabad 500 100

KHADI GRAMODYOGA MAHA VIDYALAYA

(Non-Departmental Training Centre of KVIC, Ministry of MSME, Govt. of India)
Departmental Training Institute of Khadi & Village Industries Board
For the State of Andhra Pradesh & Telangana
RAJENDRA NAGAR, HYDERABAD - 500 030
Tel: 040-2970 4618, 94408 14617 Email: principalkgmv@gmail.com

Memorandum of Understanding

Between

Khadi Gramodyoga Mahavidyalaya

Hyderabad, India

&

Malla Reddy Engineering College (Autonomous)
Hyderabad, Telanagana State, India

Context:

The Memorandum of Understanding (MoU) is made on **September,2022** between Khadi Gramodyoga Mahavidyalaya here in after referred to as "KGMV" represented by its authorized officer "Principal" and Malla Reddy Engineering College after referred to as "MREC(A)" represented by its authorized officer "Principal".

The parties hereto are desirous of recording the terms and conditions of their agreement in writing.

NOW THIS MEMORANDUM OF UNDERSTANDING WITNESSETH AS UNDER:

Objectives Of MOU:

To Collaborate with Malla Reddy Engineering College in following activates:

1. Facilitate Skill Development Programs, Innovation, Entrepreneurship, Industry- Institute Partnership and Incubation Programs.
2. To collaborate in research and development in Rural Industry science and technology subjects in villages
3. Facilitate student internship programmes/International Certification Programs at UG/PG/PhD levels at appropriate rates.
4. Disseminating Information through collaborative Seminars / Workshops /Conclaves at Hyderabad and other locations mutually agreed upon.
5. Financial terms and conditions shall be decided by KGMV on programme to programme basis.

A Project committee team consisting of two(2) members each from "KGMV" and "MREC" would have a digital exchange of Information at least every semester to decide, formulate and implement collaborative programmes in various domains to be chaired by the designated officials from each side alternately for a tenure of one year. Terms of partnership and techno-commercial conditions will be decided on project-to-project basis prior to initiation of such knowledge dissemination.

ABOUT KGMV:

Khadi Gramodyoga Mahavidyalaya (KGMV) is a Departmental Training Institute of Khadi and Village Industries for the States of Telangana State & Andhra Pradesh and it is Non-Departmental Training Institute functioning under Khadi and Village Industries Commission constituted by Ministry of Micro, Small and Medium Enterprises, Government of India.

KVIC & KVIB are charged with the planning, promotion, organization and implementation of programs for the development of in the rural areas in coordination with other agencies engaged in rural development wherever necessary. Its functions also comprise building up of a reserve of raw materials and implements for supply to producers, creation of common service
facilities for processing of raw materials as semi-finished goods and provisions of facilities for marketing of products apart from organization of training of artisans engaged in these industries and encouragement of co-operative efforts amongst them.

To promote the sale and marketing of Khadi & Village Industries Commission (KVIC) and/or products of village industries or handicrafts, the KVIC may forge linkages with established marketing agencies wherever feasible and necessary. KVIC is also charged with the responsibility of encouraging and promoting research in the production techniques and equipment employed in the Khadi and Village Industries sector and providing facilities for the study of the problems relating to it, including the use of non-conventional energy and electric power with a view to increasing productivity, eliminating drudgery and otherwise enhancing their competitive capacity and arranging for dissemination of salient results obtained from such research. Further, the KVIC is entrusted with the task of providing financial assistance to institutions and individuals for development and operation of Khadi and Village Industries and guiding them through supply of designs, prototypes and other technical information.

A. ABOUT MREC:

Malla Reddy Engineering College (Autonomous) – MREC, is one of the top notch and highly reputed engineering colleges in Hyderabad, Telangana. MREC is part of Malla Reddy Group of Institutions (MRGI), founded by Sri. Ch. Malla Reddy, currently Hon'ble Minister, Labor and Employment, Factories and Skill Development, Govt. of Telangana State. The college offers **12 UG programmes** , **7PG Programmes** and total sanctioned intake for all these **19 programmes** is **1620** (UG-1380 andPG-240).

The University Grants Commission (UGC) conferred **'Autonomous'** status upon the college till the year **2024 – 25** . The college is placed in 251 – 300 Band in Engineering category in **NIRF 2021** rankings. The college is accredited by **NAAC with 'A++' Grade (Cycle III).** It is the only engineering college in **Telangana & AP** and one among the 6 colleges in South India with **SEVEN years Accreditation** validity. **Five UG programmes** offered by the departments of CE, EEE, ME, ECE and CSE got accredited by **NBA** recently with a score of 700+ points each under **Tier – I** which is a first time ever feat in the state of Telangana.

B. GENERAL TERMS &CONDITIONS:

a) This MoU shall be effective from the date of signing of the parties and will remain in force for a period of two (2) years.

b) The organization of any programs with KGMV will be further coordinated by the deans of R&D, academics, and EDC.

c) This MoU will be reviewed by the partnership committee members from time to time and may be amended with the consent of both the parties and thereafter confirmed in writing.

d) The parties agree and acknowledge that no other rights are granted except as explicitly stated here in.

e) Neither party shall transfer or assign its interests, obligations or rights in this agreement without the written consent of the parties, provided that such consent will not be unreasonably with held.

f) Neither party shall be liable by reason of failure or delay in the performance of its obligation under this MoU, if such failure or delay is caused by the acts of God, Strikes, Lockouts or any other causes beyond its control and without its fault or negligence on mutual agreement.

g) Any other arrangements or activities or commitments shall be made on mutually agreed terms from time to time.

h) No amendments to the MoU shall be valid unless executed in writing and signed by both the parties.

C. TENURE AND TERMINATION:

This Agreement shall commence from the date of agreement and shall continue in force for one year and can be extendable to a maximum of two years on mutual agreement at the end of first year.

Either party may terminate this Agreement upon prior written notice to the other party, which will however be subject to compliance to completion of all commitments made. Notwithstanding any such termination, both parties shall ensure that all activities in progress are completed successfully.

For and on behalf of
Khadi Gramodyoga Mahavidyalaya
Hyderabad, India

(Shri N. Ravi Kumar)
Principal

PRINCIPAL
Khadi Gramodyoga Maha Vidyalaya
A.P. Khadi & Village Industries Board
Rajendranagar, Hyderabad-30

Witness:1

Witness:2

For and on behalf of
Malla Reddy Engineering College
Hyderabad

(Dr.A.Ramaswamay Reddy)
Principal

Principal
Malla Reddy Engineering College
Maisammaguda, Dhulapally,
(Post Via Kompally), Sec'bad-500100.

Witness:1

Witness:2

Malla Reddy Engg. College (A)
500 100
Hyderabad

MALLA REDDY ENGINEERING COLLEGE

(A UGC Autonomous Institution, Approved by AICTE, New Delhi & Affiliated to JNTUH, Hyderabad).
Accredited by **NAAC** with '**A++**' Grade (Cycle- III), **NIRF Innovation** Rank Band 101-150,
OBE Rank –Diamond Band, **NBA Tier-I** Accredited (B.Tech- CE, EEE, ME, ECE & CSE,
M.Tech- CSE, Electrical Power Systems, Thermal Engg)
Maisammaguda (H), Medchal-Malkajgiri District, Secunderabad– 500100, Telangana State. www.mrec.ac.in

Annual Report (2020-2023)

Malla Reddy Engineering College (Autonomous) – MREC, is one of the top notches and highly reputed engineering colleges in Hyderabad, Telangana. MREC is part of Malla Reddy Group of Institutions (MRGI) which is founded by Sri. Ch. Malla Reddy, who has invaluable insights into technical education of highest quality. He is currently Hon'ble Minister, Labor and Employment, Factories and Skill Development, Government of Telangana State, The college is situated in a serene, lush green environment on Kompally- Bahadurpally Road, opposite Forest Academy, Medchal-Malkajgiri District, Telangana State and adjacent to Telangana Urban Forest.

Established in the year **2002**, the college is approved by AICTE and affiliated to JNTUH. The college offers **13 UG programmes** for the students with intake in various specialisations– Computer Science and Engineering (480), Emerging Courses in Computer Science and Engineering such as Artificial Intelligence and Machine Learning(300), Cyber Security(180), Data Science (240) and Internet of Things (60), Information Technology(180), Artificial Intelligence and Machine Learning(60), Electronics and Communication Engineering(180), Civil Engineering(30), Electrical and Electronics Engineering(60), Mechanical Engineering(30), Mining Engineering(30), and **6PG programmes** for the students with intake in various specialisations – Computer Science and Engineering(12), Structural Engineering(30), Electrical Power Systems(18), VLSI & Embedded Systems(18), Thermal Engineering(12) and Master of Business Administration(240). The sanctioned intake for all these **19 programmes** is **1980** (UG-1650 and PG-330).

The University Grants Commission (UGC) conferred '**Autonomous**' status upon the college till the year **2024 – 25**. The college is placed in 101 – 150 Band in **NIRF Innovation 2023** rankings. The college is accredited by **NAAC with 'A++' Grade (Cycle III)**. It is the only engineering college in **Telangana** and **Andhra Pradesh.** And MREC is also one among the 6 colleges in South India with **SEVEN years Accreditation** validity. **Five UG programmes** offered by the departments of CE, EEE, ME, ECE and CSE got accredited by **NBA** recently with a score of **700+ points** each under **Tier – I** which is a first time ever feat in the state of Telangana. The PG programmes Computer Science and Engineering, Electric Power Systems and Thermal Engineering have been accredited by NBA for third time which is again a rare achievement. AICTE has granted **Rs. 50 Lakh** worth **'Margadarshan'** scheme to mentor 10 Engineering colleges for the NBA accreditation process.

The research potential of the college is duly recognized by various funding agencies both national and international. It is evident from the fact that the college got **Rs. 1 Crore** grant from the software giant **Microsoft** under **'AI for Earth'** scheme and **DST project** worth **Rs. 28.96 Lakhs**. The college research activities are magnificently driven by the various individual units, like IIIC, IIC, EDC, etc. The **Institute Innovation Council** (IIC) is a vibrant and bagged **4-star rating** recently awarded by the Ministry of Education's Innovation Council, one among the **10 HEIs** in **South Central region**.

MRECHUB, the **Incubation Centre** at MREC supports the entrepreneurial ideas of the students and encourages them to kick start their **Start-ups** within the campus. **MSME Development Institute** Hyderabad has recognized **Business Incubation Center** to MREC. Two idea has been selected and sanctioned under **MSME Champions scheme** worth **Rs. 30 Lakhs**. An idea titled **" Navigate2safety"** has been selected for **IDE BootCamp** at **IIT Guwahati**. **Skill Training Centre** accreditation for MREC under PMKVY 4.0 with job training allotment of 240.

The **Centre of Excellence** addresses the need of Skill Development training programs to the students. Students are trained in certification courses like, **Microsoft - Java, Python, Amazon Web Services (AWS), Database and CISCO - Introduction to Networks**. The phenomenal reforms were undertaken by MREC to excel in placements. Remarkable and noticeable improvements have been seen in placements since 2019 and witnessed as the highest placements offering college in Telangana. In the year 2022-23, **96% of the students** got placed. Well qualified, committed and dedicated Training and Placement officers at MREC TPO strived hard to bring nearly **156 companies** to the college for recruitment. Notable Companies visited are: **Microsoft, Amazon, Morgan Stanley, TCS, ADP, PayPal, Commvault, Qualcomm, Experian, Tabulera, Toshiba, Hyundai, Dassault Systems, Boeing**, etc.

MREC has four **statutory bodies** which are constituted as per the guidelines of UGC and AICTE. During framing of the course syllabus suggestions from **Academicians, Industry Experts, Corporate individuals and Alumni** are collected as per the Industry requirements. Besides the Value Added Courses, the students are trained in soft skills, quantitative aptitude, reasoning, interview skills, interpersonal skills, technical and coding skills etc. Likewise Hackathons, Idea contests and Project expos are usually conducted in the college to bring out the hidden talents among the students.

Further, the **Research and Development Cell** encourages both the faculty and students to take up quality research besides educating them regarding research ethics, quality publications and IPR related issues. The efforts put in by the **Entrepreneurship Development Cell** (EDC) in educating the students about the scope of entrepreneurship are lauded by the affiliating university JNTUH. **Career Guidance Cell** gives appropriate guidance to the students based on their strengths, weaknesses and their inclination.

The dynamic **Industry Institute Interaction Cell** (IIIC) has ventured the college into MoUs with the reputed academic institutes of higher learning in the region and renowned MNCs and other industries. MoUs with international organizations like **O-Pitblast** and **Strayos** are signed. The recent achievement is the **MoU with IIT Hyderabad, NAC, IEI and T- HUB**.

MREC is a recognized **IIRS / ISRO Nodal Center**. Also shortlisted by AICTE in **Distinguished Chair Professor Scheme** under which **Prof. M. L. Munjal,** INSA Honorary Scientist, Facility for Research in Technical Acoustics (FRITA), Department of Mechanical Engineering, Indian Institute of Science, Bengaluru is allocated as Mentor to MREC.

Besides the regular academic oriented laboratories, MREC has **5 Research & Development centres affiliated to JNTUH**, **2 Workshops** and **2 Data centres**. **IBM lab, TCS Internal Training Center, HP DevOps lab and CISCO lab** are established in association with the leading industry giants. The students are trained in the emerging technologies like Google cloud, Salesforce, RedHat Linux, Campus Connect, LabVIEW, STAAD Pro, CREO, ANSYS, HFSS Communication Design Suite

Software, CADENCE, O-PITBLAST, STRAYOS, etc., to fill the gap between the academics and the industry requirements.

The **state–of–the–art infrastructure** at MREC creates a conductive environment that supports progressive Teaching Learning Process. **100% ICT** enabled classrooms and laboratories go beyond the prescribed AICTE norms, to cater to the academic needs and research requirements of the students and the faculty members.

The total number of computers available for the student support activities on campus is **2967** which results in **2:1 student computer ratio**. **14 Digital Touch Screens** across the campus help the students present their content in an attractive style. **24x7 Wi-Fi** facility with 70+ access points covers the entire campus with high speed internet connectivity of about **1 Gbps**. **Two Auditoriums** with **2500 and 300 seating** capacity are available for actively conducting programmes related to students and faculty members.

The asset of MREC and the treasure house of information is the **'Knowledge Resource Centre'**, the Central Library of MREC. The well stacked library of MREC holds **61965 volumes** and **7980 titles**. **Remotlog** is an essential feature of the central library that helps the faculty and students to access the e-resources remotely throughout the clock. Also the central library has registered with various digital subscriptions like **Delnet, IEEE, Inflibnet** etc to access various e-journals and e–books. The mission of the library is to provide information services and access to full text digital and printed resources to support the scholarly and informational needs of the college community.

Besides academics the college believes in bringing out and building up the co-curricular and extra-curricular talents helps them to excel in multi opportunities. Various clubs like Literary club, Dance club, Music club, Social service club, Fine arts club, Technical club and Photography club under **Students' Associations Council** (SAC) are actively involved in nurturing the variety of talents in the students. MREC promotes sportsmanship among the engineering students as the institute believes in the concept of sound body and sound mind. Indoor game facilities with well-equipped, ventilated and spacious Gymnasium are available in the sports complex to help the students in maintaining their fitness. As a result around **120 students** got selected for the affiliating **University teams** in various games and sports.

The **NSS units I & II** of MREC are actively involved in taking up various **Social Service activities** that benefit the people residing in the villages around the college and in the five adopted villages. The College Received **Best Engineering** College by **Telangana State Governor** for highest Blood Donations through NSS. These efforts are duly recognised by the authorities and our NSS Program officer and few students received state level awards. The institute conducts Games and sports competitions are part of two day national level student techno cultural fest **Akshara** and in connection to college annual day **Resonanz**.

The college caters to a wide range of aspirations and goals of student communities by offering relevant courses and programs in various streams of Engineering & Technology and Management. It owns world-class infrastructure and well-equipped laboratories in all departments. **Dr. A. Ramaswami Reddy, Principal**, who has a rich mixed experience of research, teaching and industrial transformed MREC into Premium Engineering College in India.

Kindly visit our **website** for more details, our College Website: www.mrec.ac.in

Accomplishments of the Institution:

- **UGC** Autonomous Institution, Govt. of India.
- Eligible UG courses Accredited by **NBA in Tier-I** with **700+score**, AICTE, New Delhi.
- **NBA Tier – I** accreditation for the UG programmes of **CE, EEE, ME, ECE** and **CSE** with **700+ points** for each program.
- **NBA Tier – I** accreditation for the PG programmes of **CSE, SE, TE and EPS**.
- Accredited by **NAAC** with **'A++'** Grade (Cycle-III), UGC, Govt. of India, with **7 year of accreditation**.
- ISO 9001:2015 Certified Institution.
- 2(f) & 12(B) Recognition, UGC, Govt. of India.
- Placed in **Diamond band** in the **World OBE ranking** by **R World Institutional Ranking.**
- **NSS Units I & II** recognized by JNTUH, Hyderabad.
- Research Centre Status, JNTUH, Hyderabad.
- AICTE-MHRD Institution Innovation Council, Ministry of HRD, Govt. of India- **4 Star Rating**
- Secured **52nd rank** in **AICTE – Parakh** out of **4056** institutions.
- Industry Institute Interaction Cell (IIIC).
- Recognition of Indian Institute of Remote Sensing/ Indian Space Research Organisation- **Nodal Center**, Govt. of India.
- MGNCRE recognized member of **National Rural Entrepreneurship Mission** in Dec 2020.
- **CISCO** and **Microsoft** Certification Authorized Centre.
- Partnered with **Telangana Academy for Skills and Knowledge** (TASK).
- Approved to admit Foreign Students/PIOs.
- Business Incubation Centre – MSME, Govt. of India (No of startups: 17, Pre-Incubation: 68).
- MoU with **77+ Business Centers.**
- **256 patents** published- Govt. Of India.
- MGNCRE recognized member of National Rural Entrepreneurship Mission.
- MOUs with international organizations: O-Pitblast and Strayos.
-

Rankings & Ratings:

- Ranked **'AAA+'** among India's Best Engineering Colleges – 2018 - Careers360.
- Ranked **Top 100** Best Engineering Institutions in India - Outlook Magazine.
- Ranked by **NIRF Innovation** Ranking-2023,
- Ranked **30th** among the Top Private Engineering Institutions in India - Times of India.
- Ranked among the **Best Engineering Colleges** in India – The Week magazine.
- **Top 3** State wise Best Engineering Colleges.
- Received **Best Private Engineering College in Telangana** awarded by Better India Education Awards 2019 (BIEA).
- **Today Research and Rating Institutional transformation leadership** award by IUCEE in January 2018.
- Internshala **All India Ranking –145th** and **South Zone Rank – 44th** in 2021.
- **24th Position** in India under Researchers Category in Publons (WoS).
- Dr. S. Radhakrishnan Bharat Shiksha award for outstanding contribution in overall performance in **Mentoring, Teaching & Learning, Innovation & discoveries, Leadership and Extension** outreach programs in the year 2021 and **Outstanding Contribution in Leadership** in the year 2022.
- Recognized **e.Gov Campus** by Engineering Watch, Re-Engineering India.