

REPORT

EVALUATION STUDY

DIGITAL EMPOWERMENT FOUNDATION'S THE MUSIRI DIGITAL CLUSTER RESOURCE PROGRAMME

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HUMAN
CAPITAL

CONTRIBUTING RESEARCHERS

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EXECUTIVE SUMMARY

The Musiri Digital Cluster Resource Programme provides weavers access to digital knowhow, content and services. Also, it creates a supportive ecosystem by offering trainings in product diversification and allied livelihood skills, and tuitions for children. Running between January 2016 and September 2020, the programme's beneficiaries are weavers from five villages of the Musiri block in Tamil Nadu's Trichy district.

The beneficiaries appreciate the programme for being relevant and useful in its intent and implementation, find our survey and interviews. Attesting the programme's worth, 54 per cent of the survey respondents who are beneficiaries say they 'benefitted' from it; 46 per cent say they 'benefited a lot'. Asked how it benefitted them, close to half the respondents say the programme taught them 'ways to improve income'. The others are split near-equally between having learnt 'using computer and smartphone for work' and 'alternate livelihood skills'.

The programme equips weavers with digital proficiencies that stand to serve both their personal and work needs. A sizeable 74 per cent of the respondents select 'video calling on smartphone', 55 per cent 'messaging on WhatsApp and FB messenger', among digital skills acquired. The internet opens up new trends and markets, share weavers. The young who avail of digital trainings most say these give them ideas and tools to modernise traditional work. Seventy three per cent respondents say they now 'use the internet to send-receive money'.

Trainings in allied skills augment livelihood prospects for weavers, and the contemporaneity and saleability of their products. The technical expertise taught are product diversification, jacquard weaving and tailoring. The survey shows that 46 per cent and 25 per cent of the respondents learnt 'modern colour and new designs' and 'product diversification' respectively. Twelve among the respondents got trained in jacquard weaving. Weavers say, beyond the routine bordered-sarees, they now weave jacquards, dupattas, stoles and running fabric. These are faster moving items, more profitable. **Training in tailoring enables women relegated to 'helper' roles with no independent income in traditionally male-led family enterprises;** 36 per cent of respondents say they trained in tailoring and embroidery. These help provide additional income and tide the pandemic, state women.

Most weavers work for wages for master weavers and cooperative societies, the programme motivates and trains them to be entrepreneurs instead. 'Become bosses from labourers', encourage trainers. To enable which, weavers are trained in business skills including costing, finishing, product photography to e-marketing. The 10 per cent respondents who have serviced the programme's orders say it pays higher wages. Additionally, the programme exposes and links weavers to novel avenues of sales: e-stores, exhibitions, fashion shows and designers. **But evidence of entrepreneurial success in Musiri's weaver communities as affected by the programme is yet to emerge.**

The Community Information Resource Centres (CIRCs) set up as sites of programme delivery are popular hubs of activities and services for weavers. They are in-village venues for trainings, workshops, tuitions, study groups, counselling and digital facilities. All the 67 per cent respondents who send their children to the CIRC for free tuitions, find them 'useful'. Confirming the CIRCs' draw, 84 per cent say they visited their CIRC in the last three months.

CHALLENGES AND WAY FORWARD

The digital, technical and business competencies acquired through the programme are substantive and upskill weavers, but they are yet to be actualised into entrepreneurial successes in the community. In the almost five years since its inception, the programme redeployed its focus from installing digital infrastructure for Musiri's weavers to enabling improvement in the quality of their livelihood by harnessing the potential of digital connectivity and skills. Towards which, it facilitates weavers with relevant digital knowhow, content and services. It trains them in allied technical skills, business management and marketing. However, despite the programme's sincerity in imparting these skills and the weavers' eagerness in imbibing them, noteworthy entrepreneurial forays and ventures are yet to emerge. This is because the programme's new ideas have just about grown roots in Musiri's traditional weaver communities and need time to bear fruits, reason beneficiaries and field team.

The emergence of entrepreneurship in a traditional sector like handloom, which is already in distress, is dependent on institutional investment in technology and marketing. Presently the sector is hemmed in by near-absent investments in these. Also, further burdened by outmoded ways of transactions between master weavers and weavers and waning consumer demand. Weaving units are mostly unregistered micro enterprises with entire impoverished weaver families engaged in various production processes. Moreover, as the programme's experience shows, youth in weaving communities see little prospect in continuing in a sector in decline. Overcoming these daunting challenges for a sustainable transformation of the sector needs for institutional changes to work hand-in-hand with community capacity-building. **Affecting institutional change will need the programme to sharpen its focus on advocacy.**

The market linkages forged for Musiri's weaver communities are tenuous yet, and almost entirely reliant on the programme's existence. Developing greater capacities to create their own brand visibility on social media and the internet might enable these communities to move forward independently. Weavers in considerable numbers do indeed benefit from receiving orders from the programme, and they are paid higher wages for doing so. Also, unlike when they sell to master weavers and cooperative societies, weavers are now better aware of the modes and final ports of sale for their products. Which are e-stores, websites, exhibitions, fashion shows, designers and retail brands. But using these modes to promote and sell Musiri's woven products also bring to focus the need for enquiry into how the weavers can access them directly. Further investments of time, effort and funds are required to make this happen and leverage the considerable gains made by the programme. Concerted attention is now needed to engage multiple stakeholders and coordinate symbiotic alignments among them. This is crucial to build sustainable supply chains that weavers can themselves access.

The sustainability of CIRC's, which are the programme's core, relies on communities taking over their ownership to run them as successful enterprises. This transition largely failed to happen in Musiri and needs to be worked upon. The ownership changeover envisions a revenue-generating, sustainable ecosystem that caters to the digital needs of a locality. Other than the CIRC in Manamedu, none of the other four remain operational. This is so because locals, especially youth, did not come forward to take charge of these. The programme implementers forward two reasons for this. One, government delivery of schemes and entitlements is efficient in Tamil Nadu, so citizens feel little motive in investing time and effort in activities like running CIRC's which they see as unprofitable. Two, most young people in handloom weaving want to exit the sector and their villages for steady jobs in cities.

On the immediate front, assessments should be conducted into the communities' changing priorities post the pandemic, also on how factors contributing to their existing distress can be addressed. The information so gathered should be used to ensure that the Manamedu CIRC continues to function, and is indeed operationalised to maximum utility. This is imperative if the community is to retain the advantages that it has built over the programme period.

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1. INTRODUCTION

THE MUSIRI DIGITAL CLUSTER RESOURCE PROGRAMME is an initiative of Mphasis F1 Foundation and Digital Empowerment Foundation (DEF) to enable the handloom weavers of Musiri with digital literacy, upgraded technical skills and marketing knowhow.¹

Musiri, a Panchayat town in the Tiruchirappalli (Trichy) district of Tamil Nadu, is a cluster of weavers famous for weaving cotton sarees and veshtis.^{2,3,4} At Musiri, which is home to over 5000 weavers, mostly from low-income families, every family member is involved in the weaving process, routinely even children. Over the past ten years, however, the number of weavers in Musiri has been dwindling as most are unable to earn enough to survive. Media has, in fact, long been reporting that slackening market demand, uncertain employment prospects and severe competition from power looms is forcing many handloom weavers in and around Musiri to move to daily-wage labour.⁵

It is in this difficult context that the Musiri Digital Cluster Resource Programme (henceforth referred to as the ‘Musiri programme’) was started in January of 2016.⁶ It was scheduled to end in March 2020. However, because of the Covid-19 crisis and subsequent lockdowns and movement restrictions, the programme period was extended to September 2020.

By the end of the first year of its operations, the programme was being delivered through Community Information and Resource Centres (CIRCs) set up in four village-locations in the Musiri block, namely Natraj Nagar, C. Pet, Paithamparai and Mangalampudur.⁷ The fifth and last CIRC was added in the Manamedu village in January of 2017. Manamedu has since been the longest-running programme site, and currently the only active one. The **Table** below presents the history of the programme.

PROGRAMME HISTORY	
Programme location: CIRC in village	Period of operation
Natraj Nagar	January 2016 – July 2019
C. Pet	December 2016 – October 2018
Paithamparai	December 2016 – October 2018
Mangalampudur	December 2016 – July 2018
Manamedu	January 2017 – Continuing*

*Note: The Manamedu location remained operational through the study.

¹ Mphasis Limited is an IT services company based in Bangalore, India. It provides infrastructure technology and applications outsourcing services, as well as architecture guidance, application development and integration, and application management services. <https://www.mphasis.com/>

² <http://dcdpindia.org/>

³ A saree is an Indian woman’s unstitched garment typically wrapped around the waist with one end draped over a shoulder.

⁴ The veshti is a type lower garment for men in the Indian subcontinent. The veshti is fashioned out of a rectangular piece of unstitched cloth, wrapped around the waist and the legs and knotted either in the front or the back.

⁵ Musiri handloom weavers stare at a bleak future. May 27, 2019. *The Hindu*

<https://www.thehindu.com/news/cities/Tiruchirappalli/musiri-handloom-weavers-see-a-bleak-future/article27259456.ece>

⁶ The Musiri programme had a month long break between July and September of 2018 as it transitioned from the first to the second phase.

⁷ Community Information Resource Centres (CIRCs) aim at setting up digital data houses for communities across rural India. Using ICT (Information and Communication Technologies) tools, the CIRCs focus on livelihood generation, education and health improvement and rural development.

The Musiri programme targets the development of a traditional skills-based cluster into a digitally-enabled cluster to enhance employment prospects of weavers, and enable them to face competition from power looms. By primarily focusing on the digital enabling of communities, the programme assists handloom artisans to access domestic and international markets through product innovation and brand building. Also, the programme envisions a revenue-generating, sustainable ecosystem catering to the clusters' digital needs to be self-sustainable. Its beneficiaries are weavers of Musiri, their school-going children who are provided tuitions and other members who attend alternate livelihood skills training.

2. OBJECTIVE AND METHODOLOGY

2.1 OBJECTIVE

This report aims to:

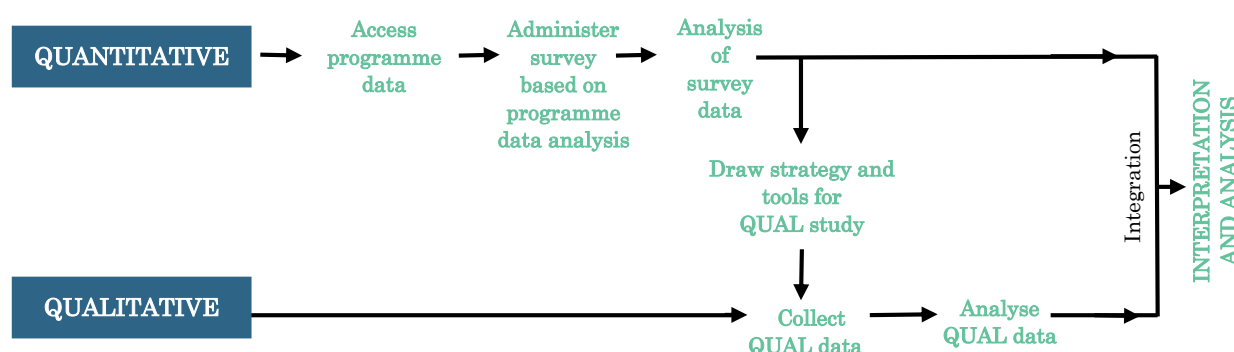
1. Draw up the programme's Theory of Change (ToC)
2. Study the role of the programme against this ToC, and assess how it has enabled the weavers of Musiri with digital literacy, upgraded technical skills and marketing knowhow
3. Identify the challenges the programme faces based on our findings. And recommend ways forward

2.2 METHODOLOGY

Mixed methods research design: The study follows a mixed methods research design to evaluate the Musiri programme against its output and outcome indicators. The mixed methods design consists of two parts. The first comprises collection and analysis of two types of quantitative data: i) programme input and output numbers available with the implementers to draw up a sampling typology to select respondents for a survey; ii) survey data collected from the respondents so sampled. The second part derives from these above-mentioned quantitative analyses. Based on the results of the survey the sampling strategy and research tools for the qualitative research are drawn up. The qualitative data collection, therefore, builds on the results of the quantitative analyses (Creswell, 2013).⁸ And deep dives into understanding it. Finally, and on the whole, the research design integrates both quantitative and qualitative data analyses to answer the study's research enquiries (Tashakkori and Teddlie, 2003).⁹ The **Figure** below is an illustration of the mixed methods design used for the Musiri study.

⁸ Creswell, J. W. *Qualitative Inquiry & Research Design*. 2013; Creswell, J. W. (2013). *Steps in conducting a Scholarly Mixed Methods Study*. Digitalcommons@ University of Nebraska-Lincoln.

⁹ Tashakkori, A., & Teddlie, C. (2003). The past and future of mixed methods research: From data triangulation to mixed model designs. *Handbook of mixed methods in social and behavioral research*.



This study comprises the following:

Drawing the programme’s Theory of Change (ToC): We begin by studying available programme monitoring and documentation information maintained by the DEF programme team to map its Theory of Change.^{10,11} The ToC provides us with a comprehensive illustration that explains the programme’s underlying logic, assumptions, activities, causal linkages and expected outputs and outcomes. Through an analysis of the survey and interview responses generated by the study, this change map can be tested for the expected versus actual outputs.¹² Also for the programme’s processes as planned versus as experienced by its various stakeholders. The Musiri ToC is validated by the Digital Empowerment Foundation (DEF) programme team at its headquarters and the field before it is finalised. (Refer *Theory of Change* in page 11).

Sampling: The programme under study has been running in the Musiri block of Tamil Nadu’s Trichy district for four years and nine months. The programme started in January 2016 and was scheduled to end in March 2020, with a month long break in between July and September of 2018 as it transitioned from the first to the second phase. However, because of the Covid-19 crisis and subsequent lockdowns and movement restrictions, the project period was extended to September 2020.

To begin with, programme delivery was provided through four village locations in the Musiri block in 2016. The Manamedu village was added as the fifth and last location in 2017. The **Table** below presents the duration of the programme.

PROGRAMME DURATION		
Location	Period of operation	Duration
Natraj Nagar	January 2016 – July 2019	3 year 6 months
C. Pet	December 2016 – October 2018	1 year 10 months
Paithamparai	December 2016 – October 2018	1 year 10 months
Mangalampudur	December 2016 – July 2018	1 year 9 months
Manamedu	January 2017 – Present	3 years 8 months and continuing*

*Note: The Manamedu location remained operational through the study duration.
Field work for the study was completed in September 2020.

¹⁰ Documents studied: Musiri Digital Development Plan: Concept Note and Proposal; MoU of Musiri Project; Baseline Survey report of Musiri Project and Project updates (October 2018- January 2020). Also, Manamedu training beneficiary list.

¹¹ ‘A Theory of Change is a road map that plots a journey from where we are to where we want to be while working on a development programme’— Centre for Development Innovations, Wageningen University, Netherlands.

¹² Jackson, Edward T. (2013). Interrogating the Theory of Change: Evaluating impact investing where it matters most. *Journal of Sustainable Finance & Investment*, 3 (2), 95– 110.

The programme team reports that the concurrent deployment of the programme across the first four locations in 2016 were based on demand and field knowledge. Programme delivery in these locations continued until the fulfilment of programme objectives. An associated objective was to achieve greater coverage of the weavers in Musiri through trainings. Thus, subsequently the programme was focussed on drawing from its learnings from the previous years and implementing these through Manamedu; which is the programme's longest-running site, and the only one that is currently active.

The numbers achieved against each of the outputs in the DEF-validated ToC for Manamedu have been provided by the programme team.¹³ Of which, the unique data available for the period between October 2018 and March 2020 is 99 beneficiaries. The rationale for the 99 unique data is that despite providing targeted training programmes for specific beneficiary groups, beneficiaries overlapped across groups because of the demand for certain trainings. The unique data removes the double counting and arrives at the homogeneous categories of beneficiary groups towards whom particular trainings were intended. Our sampling for the survey respondents and interviewees for this study, therefore, derive from the 99 unique beneficiaries of the various trainings provided at the Manamedu location.

The ToC bunches the Musiri programme's various training interventions under three broad enabling 'conditions' that the programme aims to affect in the weaver communities: digital enabling; technical skills upgrading; and business skills learning. Output and outcome indicators are assigned to assess performance of the training interventions under each of the three 'conditions'.

We categorise the data made available by DEF for the various training interventions as they fit best under the ToC's 'enabling conditions'. What emerges are four categories of training interventions that have distinct outcome potentials. Each of these four categories, in fact, comprise beneficiaries whose occupational status and gender composition are significantly different. For instance:

- Trainees for digital literacy are unemployed youth. The training seems designed to facilitate secure and salaried employment for them in the local textile industry, as also to enable such youth to provide modern services to the industry.
- All the trainees for the entrepreneurship training programme are weavers. The training seems to have been designed to skill and motivate them into developing new age entrepreneurial skills for wider marketing and outreach.

The four categories of training interventions aim to teach: i) Digital literacy; ii) Skills upgrade: Type 1 (embroidery and tailoring; tailoring on power sewing machines) iii) Skills upgrade: Type 2 (product diversification); and iv) Entrepreneurship skills

We identify unique beneficiaries for each of the four categories of training interventions.

Respondents for our survey comprise 15 unique beneficiaries from each of these four categories. (Other than 10 for a particular training category because there are only 10 beneficiaries listed against it). Our decision to keep to a compact respondent size of 15 for

¹³ Programme data were made available to India Development Foundation (IDF) by Digital Empowerment Foundation (DEF) between 23 March and 20 May, 2020. Some corrections in the names registered in the list of beneficiaries trained in entrepreneurship skills were made by DEF on September 2020. The data made available pertain only to the Manamedu location for the period October 1, 2018 to March 11, 2020.

each category is based on the following considerations: i) the universe of beneficiaries available for our survey is itself small, at only 99 trainees in total; ii) our training categories are homogenous, thus do not need large numbers to represent diversities — trainees in each category come from the same weaver community and are of similar occupational standing.

Also, we find, beyond the four categories of training listed above, there are data for two other distinct types of training offered: i) 22 weavers were trained in digital design; ii) 34 school-going children received tuitions. Since neither fits into any of the four training categories, they are treated as two separate categories. The DEF programme team says that the trainings and tuitions are the organic consequences of popular demand by the community. We group these under a category titled ‘ecosystem creation’ because they equip members of the weaver community, including children, with modern-day skills and education. We include 15 among the 22 weavers who have specifically been trained in digital design in our survey respondent sample.

Subsequent to the survey, we conduct in-depth interviews (IDIs) with one respondent from each of the four categories. As also with one from among the respondent category that has been trained in digital design; and with parents of school-going children who received tuitions under the programme. These IDIs are to understand the ancillary impact on the ecosystem.

The selection of our interview subjects is guided by the principles of purposive sampling. This is a sampling technique where the selection of units (e.g., individuals, groups of individuals, and institutions) is based on specific purposes associated with answering a study’s questions. And “particular settings, persons, events are deliberately selected for the important information they are able to provide” (Teddlie, Charles and Fen Yu, 2007).¹⁴ The **Table** below presents our sampling typology.

SAMPLING TYPOLOGY*						
ToC: Conditions to be achieved	DIGITAL ENABLING	TECHNICAL SKILLS UPGRADING		BUSINESS SKILLS LEARNING	ECOSYSTEM CREATION	
Key training category	Training in digital literacy	Training in skills upgrade (type 1)	Training in skills upgrade (type 2)	Training in entrepreneurship skills		
Name of training	Digital literacy	Embroidery and tailoring; Tailoring on power machines	Product diversification	Use of social media; Costing of products; Maintaining stock and inventory; Online orders; Sales; Basic photography; Product finishing and packaging	Digital design	Tuition for children

¹⁴ Teddlie, C., & Yu, F. (2007). Mixed methods sampling: A typology with examples. *Journal of mixed methods research*, 1(1), 77-100.

Total no. of beneficiaries in Manamedu	200	70	79 (product diversification, modern colours and new designs)	350	22	100
No. of unique beneficiaries ¹⁵	17	28	10	44	22	34
Occupation	Unemployed youth	Homemakers; college students	Weavers	Weavers	Weavers	School students
Sex	68% women	100% women	10% women	16% men	100% women	65% women 35% men
	32% men		90% men	84% women		
No. of survey respondents	15	15	10	15	15	Nil
No. of interviewees	1	1	1	1	1	2 (a couple)

**Note: The data for this table were made available by DEF. The table pertain only to the Manamedu location for the period October 1, 2018 to March 11, 2020.*

To summarise, the core of our data will come from the beneficiaries through:

1. A survey with respondents from each category of training interventions (70)¹⁶
2. IDIs with one respondent from each category of training interventions (5)
3. IDI with parents whose children received tuitions provided under the programme (2)

Identifying data sources: The study uses both primary and secondary data sources. We begin by examining the information and data made available to us by DEF. We speak to DEF personnel engaged with the programme at the headquarters and in the field for insights into its processes and expected outputs and outcomes. For an understanding of the study context, we use literature and media reports on the status of the traditional weaving industry in India and Tamil Nadu, especially in relation to the Covid-19 scenario. To comprehend the intervention's history, its more immediate setting, processes and progress, we identify key informants (KIs) who can provide us with relevant facts and perspectives. As also triangulate, both by corroborating and enriching, the facts and perspectives we source from beneficiaries. The KIs are:

1. Implementers at the strategy and management levels (present: 3; former: 1)
2. Trainers in Manamedu, Musiri (present: 3; former: 1)

Our data's core comes from the survey and IDIs with the programme's beneficiaries.

Data collection: We employ both quantitative and qualitative data collection tools for this study. These comprise:

- i. A survey: with beneficiaries. The survey consists of questions on beneficiary learnings and benefits from trainings on digital literacy, technical skills upgrades and business skills. It also asks beneficiaries questions requiring them to evaluate the programme¹⁷

¹⁵ Based on available data.

¹⁶ A list of the names of sampled survey respondents is provided to DEF. The list also contains names of 'replacement respondents', in case the first set of sampled respondents are unavailable for the survey.

¹⁷ Refer Appendix 1: Survey questionnaire (Tamil)

- ii. In-depth interviews (IDIs): with beneficiaries, and key informants including trainers and the programme's implementers at the strategy and field levels^{18,19,20}

All data collection for this evaluation is conducted digitally. The survey is administered online. The interviews are held through video and tele-conferencing. This is apt given that the Musiri programme aims at imparting digital literacy.

Drafting research tools: We are guided by the output and outcome indicators generated by the Musiri programme's ToC as we draw up an online survey questionnaire for the beneficiaries and interview guides for the beneficiaries, trainers and implementers. Before it is administered, the survey questionnaire is shared with the programme team in Musiri to ensure that the language and terms used are colloquial. The rationale for the questions drafted in the survey and interview guides are presented in **Tables** below.

MUSIRI SURVEY QUESTIONNAIRE: BENEFICIARY				
Sl. No		QUESTION	CHOICE	OPTIONS
1	Demographics	Name	Text	
2		Age	Text	
3		Sex	Radio button	Male Female
4		What is your highest educational qualification?	Radio button	i. Class 1- 5 ii. Class 6-10 iii. Class 11-12 iv. Graduation v. Post-graduation vi. No education
5		What is your current occupation?	Radio button	i. Weaving ii. Salaried job in weaving iii. Salaried job others iv. Business v. Unemployed vi. Student vii. Homemaker
	ToC: Conditions to be achieved			
6 a.	Digital enabling	Do you own a smartphone?	Radio button	Yes No
b.		Do you know how to use a smartphone?	Radio button	Yes No
7		Which of the following digital skills did you learn from the Musiri-Manamedu Centre?	Multiple options	i. Video calling on smartphone ii. Messaging on WhatsApp, FB messenger iii. Watching YouTube videos iv. Photographing products v. Uploading photographs online vi. Making product catalogue vii. Using E-mail viii. Searching new designs online

¹⁸ Refer Appendix 2: Interview guide: Beneficiary

¹⁹ Refer Appendix 3: FGD guide: Trainers

²⁰ Refer Appendix 4: Interview guide: Implementer

				ix. Searching information using Google x. Designing on computer using software (CAD/CAM) xi. Basic computer skills (like MS Word, Excel, PPT)
8	Technical skills upgrading	Which of the following technical skills did you learn from the Musiri-Manamedu Centre?	Multiple options	i. Using power sewing machines ii. Tailoring iii. Embroidery iv. Spoken English v. Jacquard weaving
9		Which of the following business skills did you learn from the Musiri-Manamedu Centre?	Multiple options	i. Product diversification (example from plain weaving to Jacquard weaving or saree to dupatta) ii. Costing of products iii. Maintaining stocks and inventories iv. Sale of products v. Modern colour and new designs vi. Product finishing and packaging
10 a.	Business skills learning	Did you receive anything from the Musiri-Manamedu Centre?	Radio button	Yes No
b.		(If yes) Which of the following did you get from the Musiri-Manamedu Centre?	Multiple options	i. Opportunity to sell in exhibition/fashion show ii. Chance to meet guest designers iii. Raw material like coloured yarn iv. New designs from Delhi for sarees and dupattas v. Wages for weaving
c.		If you received wages from the Musiri-Manamedu centre, how did they compare with the market wages?	Radio button	i. Centre wages are higher than market wages ii. Centre wages are lower than market wages iii. Centre wages are same as market wages
11 a.	Digital enabling + Business skills learning	Do you use the internet to send and receive money?	Radio button	Yes No
b.		If yes, which of the following do you use?	Multiple options	i. BHIM ii. Google pay iii. Paytm iv. PhonePe v. Others
12	Digital enabling + Technical skills upgrading + Business skills learning	What do you think the Musiri-Manamedu centre helped you learn most?	Radio button	i. To use computer and smartphone for my work ii. To use alternate livelihood skills like tailoring, embroidery etc. iii. Ways to improve my income
	Programme evaluation			

13 a.		Did children in your family attend tuitions at the Musiri-Manamedu Centre?	Radio button	Yes No
b.		If yes, do you think the tuitions are helpful?	Radio button	Yes No
14		Did you benefit from the Musiri-Manamedu Centre?	Radio button	i. Yes, I benefited a lot ii. Yes, I benefited iii. No, I did not benefit
15 a.		Have you visited the Musiri-Manamedu Centre in the past three months?	Radio button	Yes No
b.		Why do you visit the Musiri-Manamedu Centre?	Multiple options	i. To attend trainings ii. For online applications iii. To search online for information iv. To search online for information on government schemes v. For Xerox photocopying vi. For scanning vii. To take printouts viii. To take passport-size photographs ix. Aadhaar-related work x. Lamination of cards

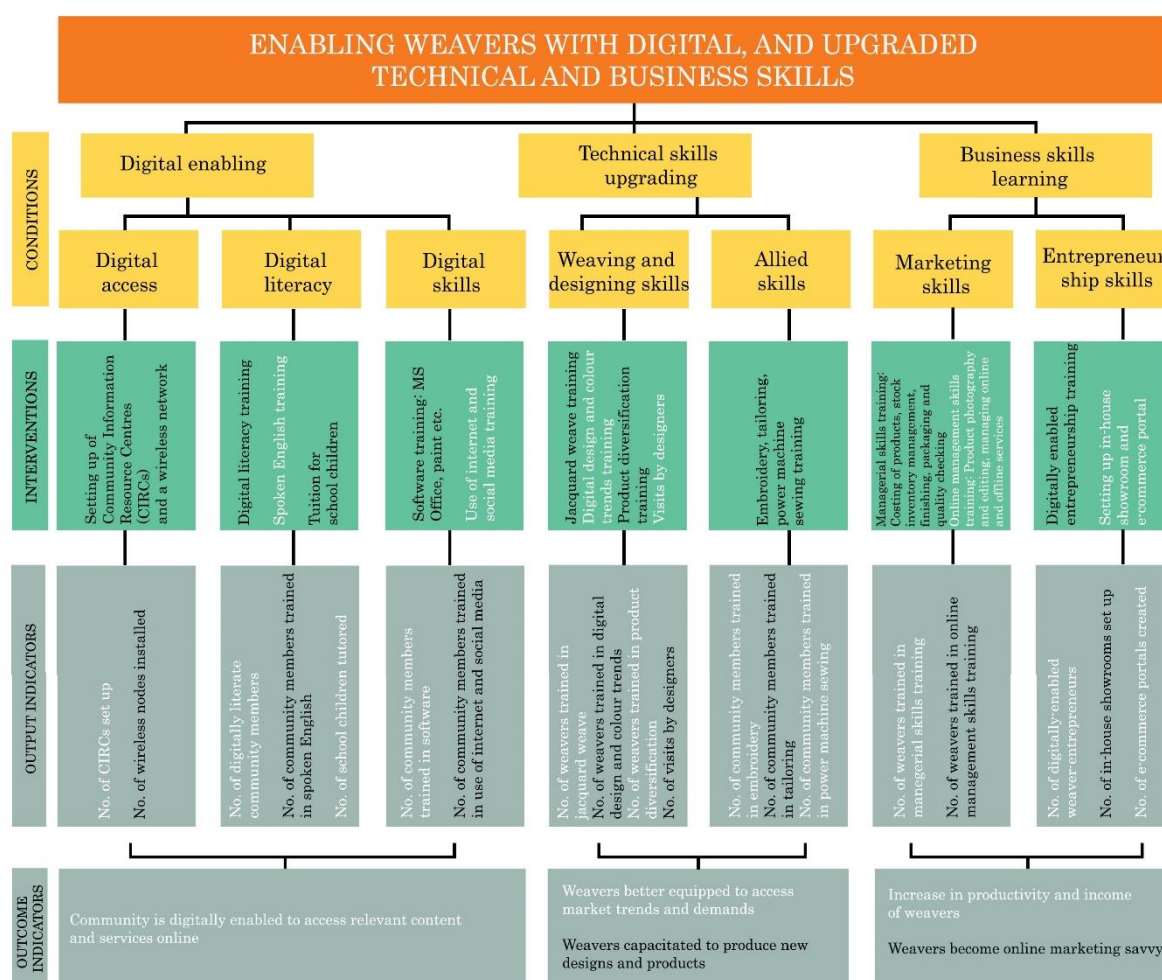
INTERVIEW GUIDE: BENEFICIARIES, TRAINERS, IMPLEMENTERS			
ToC: Conditions to be achieved	OUTCOME INDICATORS	SUB-INDICATORS	QUESTIONS
Digital enabling	Community able to access-use information online	- Access to digital infrastructure - Ability to use digital tools and content	Variously framed for Beneficiaries, Trainers and Implementers
	Improvement in academic attainments of children in community	Link between digital access and children's education - Tuitions - English proficiency classes	
Technical skills upgrading	Weavers capacitated to produce new designs and products	- Upgrade of technical skills, like new weaving techniques-designs and product diversification - Learning allied skills, like tailoring	
Business skills learning	Weavers better equipped to access market trends and demands	- Knowledge of market trends and demands - Awareness of need for innovative design and quality	
	Weavers become online marketing savvy	- Branding - Digital marketing	
	Increase in enterprises and income of weavers	Increase in income	

Identifying coding themes: We choose themes to service the information needs of our research objectives. They are: i) study the programme to assess how it has enabled the weavers of Musiri with digital literacy, upgraded technical skills and marketing knowhow; ii) identify the challenges the programme faces based on our findings.

Analysis and report writing: We code the primary and secondary data according to our study themes. The coded material is analysed to draw inferences such that we can identify and assess the impacts of the Musiri programme, especially with regard to the ambitions it had drawn up for itself in its Theory of Change (ToC). And forward recommendations on ways forward based on our findings.

3. THEORY OF CHANGE

We study and analyse programme monitoring information and data to draw up a change map that can be tested against the actual processes experienced by all Musiri programme's stakeholders and the results attained by the programme. This Theory of Change (ToC) is then shared with the implementers for feedback and validation. These incorporated, the finalised ToC that so emerges is presented in the **Figure** below. It provides this study with the output and outcome indicators that the Musiri programme is to be assessed against.

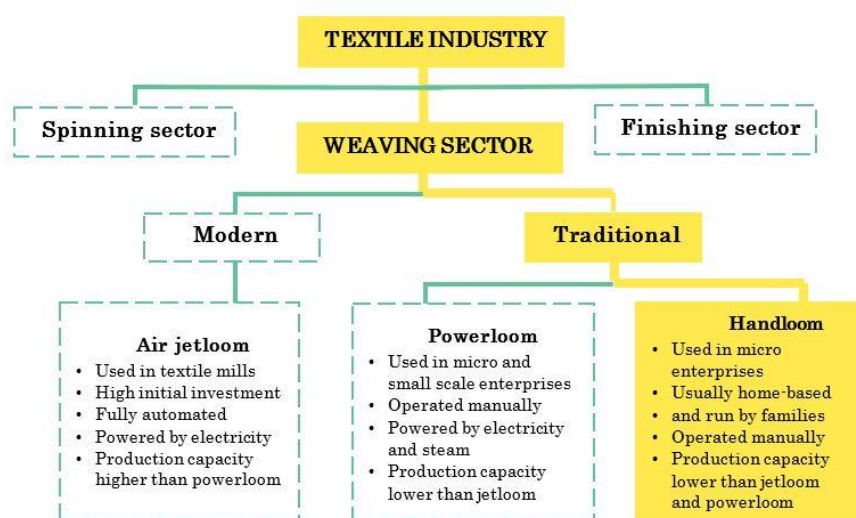


4. FINDINGS

4.1. CONTEXT: THE TEXTILE INDUSTRY AND HANDLOOM SECTOR IN INDIA, AND THE COVID-19 EFFECT

The textile industry in India is the country's largest employer after agriculture; it provides employment to 4.5 crores of workers including 35.22 lakh handloom workers all over the country.^{21,22} India, in fact, has the highest number of looms globally, including both modern and traditional looms — and 85 per cent of all handlooms in the world.²³ The textile industry, in fact, accounts for 14 per cent of India's overall Index of Industrial Production (IIP), five per cent of the GDP (Gross Domestic Production) and 12 per cent of total exports.²⁴

Figure below illustrates how the textile industry is broadly categorised into three sectors based on stages of manufacturing. Production begins with spinning, the output of which is blended yarns or fibers of cotton, silk, wool, jute, etc. These outputs are inputs for the next stage, which is weaving. The weaving sector's primary activity is processing of yarn to manufacture textiles. These fabrics are then further processed in the next stage, known as finishing of textiles, which includes activities like bleaching, dyeing and printing. While the spinning and finishing sectors are of equal importance to the textile industry, this study focuses on the weaving sector.



The weaving sector is further classified on the basis of technology used for production. Looms are used to weave yarns. And looms are both traditional and modern. Modern looms are electricity-powered air jet looms with heavy production capacities. They are generally used

²¹ Parts of this chapter are derived from IDF's analysis of the textile industry and handloom sector in India for a report on UNDP's Disha programme (September, 2019).

²² Indian Textiles and Apparel Industry Analysis, September 2020, India Brand Equity Foundation <https://www.ibef.org/archives/industry/indian-textiles-and-apparel-industry-analysis-reports/indian-textiles-and-apparel-industry-analysis-september-2020>

²³ Textiles and apparel market & opportunities, July 2008, India Brand Equity Foundation https://www.ibef.org/download/Textiles_Apparel_220708.pdf

²⁴ Textile industry & market growth in India, March 2017, India Brand Equity Foundation <https://www.ibef.org/archives/detail/b3ZlcnZpZXcmMzcxMTAmMTEy>

in large-sized manufacturing units, referred to as textile mills. Looms that use traditional technology can either be handlooms or powerlooms. Handlooms are operated manually, powerlooms run on steam or electricity.

There is decline, distress and death in the traditional weaving industry for two decades now.

As discussed above, the traditional weaving industry comprises powerloom and handloom manufacturing units. These units are mostly unregistered small and micro enterprises with low investments in technology and practices. It is common to find entire weaver families engaged in various production processes in these units — both as micro-entrepreneurs (owners) and as workers.

According to fourth All India Handloom Census 2019-2020, there are almost 3.5 million handloom workers.²⁵ Significantly, a majority of them at 2.3 million are women, mostly between ages 18 and 35 years. And herein lies another story of deprivation. Even as women participate equally in the back-breaking processes involved in handloom weaving, they are traditionally designated ‘helpers’, and more-recently ‘auxiliary workers’. Women are rarely, if ever, assigned market-facing roles. On the whole, meanwhile, most handloom workers are economically disadvantaged, with about 67 per cent of weaver households earning less than INR 5000 a month.

Over the past decade, weaver units and families have been facing particularly debilitating challenges. At the macro level, these challenges are said to be the consequences of liberalisation of international trade and reforms in the Indian economy. The union budget allocation for the handloom sector has, indeed, fallen from INR 710 crores in 2016-17 to INR 604 crores in 2017-18 and INR 286 crores in 2018-19. Varanasi, home to the renowned Benarasi weave and weavers, is a prime example of decline of the traditional weave. Varanasi had about 1,00,000 handlooms in 2007, estimates suggest a drop to 35,000 by 2016.²⁶

The host of factors add up to contribute to this fall of the traditional weavers, include:

- A shrinking appetite and market for handlooms
- Inability to innovate and keep pace with design and quality trends in demand
- Competition by cheaper textiles, from within India and imported (specifically from China)
- Increased mechanisation of the textile industry
- Rising costs of yarn
- Unaffordability of (non-chemical, safe) dyes
- A debt-repayment trap caused by lack of funds to manufacture and market produce

While the issues listed above are hurdles to both powerloom and handloom weavers, a competition between the two disadvantages the latter further. As per the Confederation of Handloom Weavers, the Handloom Reservation Act (HRA) of 1985 meant to protect their interests has been diluted and poorly implemented over time.²⁷ Under the Act, initially 22 textile articles were reserved for exclusive production through handlooms, but subsequently

²⁵ Fourth All India Handloom Census of India 2019-20: <http://handlooms.nic.in/writereaddata/3736.pdf>

²⁶ Singh P. and Mishra P. (2017, January 4). Over 50 weavers commit suicide in PM Modi's constituency [Video file]. Retrieved from <https://www.youtube.com/watch?v=7RXr5teeVXk>

²⁷ Borgohain A. (2018, January 16) Weaving out of trouble: Handloom industry looks at Budget 2018 to solve woes. *Economic Times*. <https://economictimes.indiatimes.com/small-biz/sme-sector/weaving-out-of-trouble-handloom-industry-looks-at-budget-2018-to-solve-woes/articleshow/62518039.cms?from=mdr>

these were reduced to 11 articles vide amendments in 1996.²⁸ Moreover, regardless of the reservation, the powerloom industry continues to produce these reserved products.

And even though the powerloom sector might be marginally better off than the handloom sector, it has also been in severe and persisting crisis for the past two decades.²⁹ Limited by traditional machinery, most powerloom weavers produce a single product. The demand for such single products is unsteady. But diversification requires investment in modernised looms, dyeing and sizing units. So, over time, powerloom weavers have gotten into debt traps to modernise and increase looms in the hope to earn more. The consequent increase in production, without the ability to find a market, has resulted in high debts and distress.

On an average, the debt burden in the powerloom sector for a hired worker's family is between INR 30,000 and INR 50,000, and that for job worker (weaver with own loom) is about INR 3,000,00.³⁰ Studies find weaver families afflicted by: food insecurities and malnutrition; anemia and other health problems such as asthma; homelessness; high dropout rate among school children; high incidence of alcoholism; and an increased dependence on microfinance institutions to meet daily consumption.

Over the years, traditional weavers have taken to alternate work like rickshaw and cart pulling, manual labour through NREGA, delivery agents for online food and e-commerce firms.³¹ Many others have been unable to cope.

Mainstream media has, in fact, been reporting on the weaver-crisis since the early 2000s. An investigative piece in the *Frontline* magazine's April 2001 issue had confirmed over 60 cases of weaver suicides in Varanasi in just that year.³² And the situation has not improved since. In 2016, news portal *The Wire* published an article about 50 weavers in Varanasi committing suicides due to indebtedness over a period of three years since 2014. Many more writings, and multiple other sources, have highlighted the duress in the traditional weaving industry, specifically in the areas of Sircilla, Nalgonda, Warangal and Nizamabad in Telangana (erstwhile Andhra Pradesh).^{33,34,35}

The Covid-19 crisis has dealt the already struggling handloom weavers yet another harsh blow. Weavers in Musiri, our study site, are also reeling under its severity.

Media reports that the ailing handloom sector as severely affected by the Covid-19 pandemic and subsequent lockdowns.³⁶ Plunging orders and debt traps due to an overall fall in demand

²⁸ Sidharth, A (2016, March 1). Brief History of Handloom Reservation Act. <http://ruralagrarianstudies.org/wp-content/uploads/2016/03/Paper.pdf>

²⁹ Sharma, S. (2019, April). Pochampalli Weaver Suicides: Looking Back on Strategic Interventions. *Indian Institute of Corporate Affairs*.

³⁰ Galab, S., & Revathi, E. (2009). Understanding powerloom weavers' suicides in Sircilla. *Economic and Political Weekly*.

³¹ National Rural Employment Guarantee Act (NREGA) is a labour law and social security measure that aims to guarantee the 'right to work'.

³² Krishnakumar A., (2001, April 14-27). Weavers in distress, *Frontline*, Volume 18 - Issue 08. <https://frontline.thehindu.com/static/html/fl1808/18080050.htm>

³³ Three commit suicide over debts in Nalgonda district. *Deccan chronicle*. 2015, September 8. <https://www.deccanchronicle.com/150908/nation-current-affairs/article/three-commit-suicide-over-debts-nalgonda-district>

³⁴ Dayashankar K.M., (2013, August 9) Weavers' suicides rock Sircilla, *The Hindu* <https://www.thehindu.com/news/national/andhra-pradesh/weavers-suicides-rock-sircilla/article5005180.ece>

³⁵ Rangarajan P. Suicidal Fever Wiping Dubbakk Community- A Case Study. *Review Journal Philosophy & Social Science*, 36 (Special issue), 245-254. <http://www.sphoorthitheatre.com/docs/suicidal%20fever%20wiping.pdf>

³⁶ With silent looms, crisis loom for handloom weavers and allied-workers. May 7, 2020. *DNA* <https://www.dnaindia.com/business/report-with-silent-looms-crisis-loom-for-handloom-weavers-and-allied-workers-2823912>

across the supply chain have weavers suffering unprecedented lows. Part of a vulnerable and unorganised workforce, the majority of handloom artisans and allied workers, including children, are unequipped to cope with a crisis of this magnitude. Specialists, in fact, predict that increasing safety precautions might see the market for handloom products shrink even further due to its hand-woven nature.³⁷ Also that supply-side disruptions are likely to push international business houses that buy handloom into reducing their reliance on distant and global suppliers.

The Musiri-based weavers, both men and women, interviewed for this study speak feelingly of novel Coronavirus causing cancelled orders, declining prices, shortage of funds to run businesses, even buy food. Though the lockdown is over now, weavers say that their livelihood opportunities in the present, as also its future prospects, continue to be dismal.

Experts envisage deepening of strife and starvation in the already poor weaver communities if governments do not play enabling roles in promoting local economies and consumption of local handloom products.

4.2. PRE AND POST INTERVENTION ACTIVITY MAPPING

We chart the livelihood related activities that weavers engage in pre and post programme implementation. Our inventory is informed by inputs from Manamedu-based weavers, trainers and programme team at the design and implementation levels. Also by programme monitoring information and data. A stakeholder-validated mapping of pre and post programme activities in the work lives of the beneficiaries is presented in the **Table** below.

MUSIRI PROGRAMME: ACTIVITY MAPPING			
Stage of work	PRE-PROGRAMME ACTIVITIES	POST-PROGRAMME ACTIVITIES	
		Additions in activities	Ecosystem creation
PRE-WEAVING	• Yarn and order from master weavers and cooperative societies • Eight colours used to dye yarn • Traditional designs	• Yarn and order obtained from CIRC • Forty colours used to dye yarn • Digital design. Use of CAD&CAM software	DIGITAL INTERVENTION • Digital infrastructure installation • Digital literacy tutorials · Basic computer skills · Microsoft Office (MS Paint, MS Word, MS Excel)

• India's handloom, handicraft sectors need calculated support to combat Covid-19 crisis setbacks. July 1, 2020. *Firstpost*. <https://www.firstpost.com/art-and-culture/indias-handloom-handicraft-sectors-have-resilience-to-combat-covid-19-crisis-setbacks-but-they-need-calculated-support-8544851.html>;

• 'Lockdown leaves handloom weavers hanging by a thread'. 29 June, 2020. *The Federal*. <https://thefederal.com/the-eighth-column/lockdown-leaves-handloom-weavers-hanging-by-a-thread/>;

• Varanasi: Covid-19 lockdown shatters the livelihoods of handloom weavers and traders. July 27, 2020. *Gaon Connection*. <https://en.gaonconnection.com/varanasi-covid-19-lockdown-shatters-the-livelihoods-of-handloom-weavers-and-traders/>

³⁷ This analysis is from an article by Sonmani Choudhary who is a technical expert at economic empowerment in the Centre for Catalyzing Change (C3), and part of initiatives that generate evidence to inform policy implementation. Sonmani provides technical support to the Bihar government.

WEAVING	• Plain weave with border • Products: · Saree · Veshti	• Jacquard weave · Set jacquard punching machine in loom · Use putta designs • Products: · Dupatta · Stole · Scarf · Bag · Running fabric · Masks (post Covid-19)	· Presentation (PowerPoint) · E-mail communication · Google search · Social media ALLIED SKILLS TRAINING · Tailoring · Tailoring on power sewing machines · Embroidery
POST-WEAVING	Wages for weaving given, and product procured by: · Master weavers · Co-operative societies	• Product costing • Stock and inventories management • Product photography and editing • Finishing, quality checking, packaging of products • Wages for weaving given and product procured by CIRC • New avenues for sales: · DigiKargha portal · Fashion shows · Independent designers · Exhibitions · Weaver-administered WhatsApp groups	SERVICES VIA CIRC • Tuitions for school students • English language training • Venue and assistance for: · Online applications · Online information on government schemes and jobs · Space for study groups · Photocopy · Scan · Printout · Passport-size photograph · Aadhaar-related work · Lamination of cards

4.3. IMPACT ON BENEFICIARIES

The Musiri programme under study has been implemented through Community Information and Resource Centres (CIRCs) in five villages in the Musiri block of Trichy district. The one in Manamedu village is presently the longest and only running CIRC.

We administer an online survey to 70 beneficiaries located in Manamedu. The survey respondents are sampled from among five beneficiary groups that have each undergone (at least) one among five separate categories of trainings. The five categories of trainings have been identified by our study of available programme monitoring data (Refer *Sampling in Page 3*). Post the survey, we conduct in-depth-interviews (IDIs) with one respondent from each of the five training categories identified; as also a set parents whose children avail of the tuitions provided at the Manamedu CIRC. All our beneficiary-interviewees belong to the weaver community and say they belong to the BC ('Backward Castes') social category. Of the seven beneficiaries, five are women and two are men. Two are weavers by profession, both men. The average age of the beneficiary-interviewees is 31 years, the youngest being 20 years old and the oldest 48 years old. Two of them are graduates, three have completed class 12 and the remaining two are middle school pass outs. We also conduct IDIs with all the trainers at the Manamedu CIRC, including a former trainer.³⁸ Our interviewees total up to seven

³⁸ The former trainer we interview worked at the Manamedu CIRC for a year between 2018 and 2019. A BSc (Computer Science) graduate, she was recruited to train beneficiaries in digital literacy.

beneficiaries and four trainers. Interviews are also conducted with four programme implementers, one among who is former programme staff.³⁹

The findings below are a composite of our online survey results, IDIs with beneficiaries, trainers and implementers. Also, our study of programme monitoring information and data on activities and outputs. Additionally, we have considered reports and expert commentaries in the media to place our findings in context.

4.3.1. Impact on beneficiaries through trainings

The survey finds 54 per cent of the beneficiaries have ‘benefitted’ from the programme, while 46 per cent say they ‘benefited a lot’. Close to half the respondents say the programme taught them ‘ways to improve income’. The remaining others are split near-equally between having learnt ‘using computer and smartphone for work’ and ‘alternate livelihood skills’.

DID YOU BENEFIT FROM THE PROGRAMME?*	
Options	No. of responses
Yes, I benefitted a lot	32
Yes, I benefitted	37
No, I did not benefit	00
Total	69

*Note: The online survey was administered to 70 beneficiaries, 69 responded.

WHAT DID YOU LEARN MOST FROM THE PROGRAMME?	
Options	No. of responses
To use computer and smartphone for my work	18
Alternate livelihood skills like tailoring, embroidery etc.	17
Ways to improve my income	34
Total	69

4.3.1.1. Digital literacy

Refer Appendix 5, Table 1: *Impact on beneficiaries: Through digital literacy trainings*

The programme built digital infrastructure by installing 100 wireless nodes in Musiri in its initial year. This equipped the area’s weaver communities with the digital preparedness needed to benefit from the many connectivity options available now. Implementers recall Musiri’s weavers as being largely deprived of digital connectivity when the programme began in 2016. A preliminary assessment then had found digital infrastructure to be one among the communities’ immediate needs. Responding to which, wireless nodes were set up; wherever possible these were installed in schools to aid learning. Initially, no charges were levied to weavers for net usage. Eventually ‘a basic payment model of about Rs. 100 per person’ was introduced. Some weavers paid to start with. Gradually no one did, report implementers. Because the advent of multiple connectivity sources, and cheap, even free, data recharge options had flooded the market. Connectivity was now a ‘low-key requirement’, making infrastructure maintenance and backhaul costs a liability for the programme.⁴⁰

³⁹ The former programme staff we interview was a senior project officer for DEF. In which capacity, he worked with the Musiri programme from 2016 to 2019.

⁴⁰ The backhaul portion of a network comprises the intermediate links between the core network, or backbone network, and the small sub-networks at the edge of the network. Backhaul, in technical and commercial definitions, usually refers to the side of

Expectedly then, the count of presently operational wireless nodes stands reduced to 49 from the initial 100.⁴¹ Yet, the programme's provision of digital infrastructure seems to have given beneficiaries the vital support and head start to connect with the digitised world that is still unaffordable for many among them. Which unaffordability shows up through the deficiency in computer and smartphone possession among the study's subjects. Of the study's seven beneficiary-interviewees four have laptops, of which three are state government rewards for completing class 12, and two have broken down. Smartphone ownership is similarly low. Only one among the interviewees owns a smartphone. There isn't a single smartphone in the families of two. Another says her family has been unable to buy data recharge since Covid-19 brought their earnings to a halt.

Significantly, however, all the interviewees say they can operate smartphones, beyond merely making calls. In fact, though 19 per cent of the respondents do not personally own smartphones, only nine per cent say they do not know how to use a smartphone. Also, that the online survey administered to beneficiaries has a 99 per cent response rate indicates they have had sufficient exposure to digital technology and are able to use it meaningfully.

The increase in availability of connectivity had the programme redeploy its focus — from installing digital infrastructure to ensuring that beneficiaries have access to contextually-connected digital content, services and knowhow.⁴² In keeping with which shift, the programme's efforts at imparting digital literacy expanded beyond

tutorials in 'basic computer skills' based on a DEF-designed curriculum and delivered via scheduled sessions over six months.⁴³ Lessons in digital skills particularly relevant for weavers have been incorporated. These are taught in workshops of various durations ranging from a day to two months. The subjects these workshops focus on include: MS Excel for accounting, product photography and their online uploads and display, use of social media for product promotion and sale, and CAD&CAM software to design weaves.⁴⁴

The survey results find that the programme has taught weavers a spectrum of digital skills which stand to service both their personal and work needs. The top two responses to what digital skills they have learnt, at 74 per cent and 55 per cent are 'video calling on smartphone' and 'messaging on WhatsApp and FB messenger' respectively. Given that the Musiri weavers' traditionally isolated existence has deprived them from profiting of the mainstream, these digital capacities to connect and communicate with others bear promising prospects. Further, survey responses reveal the programme's success in imparting digital skills aimed at enhancing the quality of weavers' production and business processes. A 54 per cent and 36 per cent respondents say they have learnt 'photographing products' and 'uploading

BENEFICIARY: Digital skills

I photographed and posted eight sarees woven by my father on the WhatsApp group I created. I got 15 responses. No sale yet. I need more saree pictures to make a sale.

the network that communicates with the global internet, paid for at wholesale commercial access rates to or at an internet exchange point or other core network access location.

⁴¹ Musiri Project Update, November 2019-January 2020. PPT by DEF: 'Out of 100 nodes 49 are active paid nodes at present. Balance 51 nodes slowly dropped out. Those 49 nodes are still continuing'.

⁴² Founder-Director DEF says his organisation has reduced its emphasis on providing connectivity to service the basic infrastructural requirement of communities it works with. Because connectivity is now available in some form or the other everywhere, except in very small villages and tribal areas.

⁴³ The Musiri programme's Basic Computer Literacy curriculum comprises teaching computer settings, using Google search, and Gmail, and MS Office.

⁴⁴ Computer-aided design and computer-aided manufacturing (CAD&CAM) software is used to design and produce prototypes, finished products, and production runs of products.

photographs online’ respectively. Forty-five percent now know how to ‘search new designs online’, and 54 per cent have learnt ‘watching YouTube videos’ of their choice. A 38 per cent have picked up ‘basic computer skills such as MS Word, Excel and PPT’.

A survey finding that showcases the weavers’ acquisition and use of digital skills is a substantial 74 per cent respondents ‘using internet to send and receive money’.

The younger in the weaver communities avail most of the digital literacy training, and say it skills them to modernise their traditional work. The programme found ready acceptance among early adolescents, also those between 25 and 30, says Founder-Director DEF. Initially the attraction was mostly about learning to work computers which are seen as modern and urban. When they were initially set-up, no one came into the CIRC thinking that the digital skills on offer would improve business. But over time, observes a former programme staff, the internet connected weavers to demand trends and supply realities outside their localities. This was supplemented by exposure visits to neighbouring markets, interaction with designers invited as guest lecturers, and trainings in skills upgrades. And the programme’s reception turned stronger as weavers realised the programme was designed to impact the quality of their livelihood.

Evidence of which finds echo in the voice of young beneficiaries. Had her father been digitally literate their family business would have had a better chance at surviving these Covid-19 times, shares one. With orders having hit an absolute slump, they would have sold their products on Flipkart. She is now focusing on learning to use social media to sell her family’s products online. A 32-year-old weaver whose children take tuitions at the CIRC, and who has attended a technical upgrade workshop, says he never gave digital trainings a try. Because he ‘did not think they would better my earnings’. But now, after consistent interactions with the CIRC, he ‘understand(s) that digital is a part of everything, it is unavoidable whether you live in villages or cities’. Given a chance, he will learn computers. Like him, another weaver who participated in CIRC-organised workshops unrelated to digital literacy, says that the Covid-19 crisis has made him realise the importance of digital skills. He too will partake of trainings if they resume, he insists. A sentiment older weavers seem to have come to share as they witness the young adopt technology. Seeing his college-going son undergoing the CIRC’s digital training has made him ‘curious and open to learning computers’, says one.

TRAINER: Digital skills

Two young beneficiaries found jobs in Trichy as data entry operators. Free computer training helps build careers for girls like them who come from poor families.

Learning to use the internet has introduced Musiri’s weavers to new trends, markets and marketing skills, observe implementers. Communities here were insular, isolated and in turn unable to bargain or transact profitably, recall former programme staff. The weavers’ sole source for orders, designs, yarn and wages were co-operative societies and local master weavers. Most of them did not know where and at what rate their products were finally sold. This changed for weavers who took to attending trainings and workshops and using the connectivity, computers and services available in the CIRC. A former programme staff remembers seeing young weavers beginning to use the net to inform themselves of textile brands, what these brands produced, bought and sold. In the three years he managed the programme since its inception, adds the former staff, the more ambitious weavers began using such information as benchmarks to assess their own products.

4.3.1.2. Technical upgrade

Refer Appendix 5, Table 2: *Impact on beneficiaries: Through technical skills upgrade*

With trainings in digital literacy at its centre, the programme extends to teach weavers allied technical skills — namely product diversification, jacquard weaving and tailoring — to augment their livelihood opportunities. The traditional weaving sector that is in decline offers infrequent, unsteady and meagre earnings to the weavers. Weavers observe that tedious work, low demand and skimpy returns are making many in the community turn to construction labour, or taking on jobs as cooks and delivery boys in cities. It is to help weavers combat this decline into menial jobs, that the programme offers training in skills that can supplement and increase their incomes. Strategically, the skills chosen are associated with weaving and fabrics. The programme also takes into account the particular needs of women in weaving. They face double marginalisation for being relegated to ancillary worker roles in the traditionally male-dominated handloom sector.

BENEFICIARY: Technical upgrade

I learnt jacquard weaving here. Shifting from traditional weaving is tough. But earnings for jacquard products are more for the same labour. The demand is more too.

Workshops and trainings in different product upgrade and diversification techniques include jacquard weaving, tracing and drawing new designs, using new colours, tailoring on regular and power sewing machines and embroidery. More than fifty per cent of the survey respondents say at least one of these trainings in technical skills has benefitted them.⁴⁵ Citing his own experience as typical for many beneficiaries, a weaver says his entire family has learnt skills at the CIRC. He attended a jacquard weaving workshop, his wife trained in tailoring and son joined the digital literacy classes.

With modern markets gradually outgrowing the traditional products they weave, the programme makes weavers aware of the need to diversify their product range to be contemporary. Limited by archaic machinery and lack of exposure to current trends, most weavers produce the same line of products that lack steady market demand. Orders from weaver cooperatives and master weavers are also largely limited to weaving products based on conventional designs and items — and might indeed be contributing to the dwindling appetite for handlooms. Responding to which, the programme attempts to facilitate for weavers an understanding of what is in fashion and the skills to weave products in keeping with it, says a programme team.

The CIRC's hold various long and short term trainings on product diversification and design. The mandate is to motivate and skill Musiri's weavers to create products beyond the routine plain bordered-sarees and veshtis. The new items weavers are taught to create include: jacquard design arrangements, putta designs in sarees, dupattas, stoles, scarves and running fabric.^{46,47} Twenty five per cent of the survey respondents say they benefitted from trainings in product diversification.

A weaver says he has woven dupattas for a CIRC order at INR 180 to INR 210 apiece, depending on its design. Another appreciates the programme for pointing him to the fact that

⁴⁵ Thirty four respondents, i.e. 49 per cent of the total survey respondents, say they did not learn any technical skills through the programme. This is perhaps best explained by the fact that trainings in technical skills were not the programme's primary offerings. The technical skills were mainly taught at CIRC's through workshops for targeted beneficiary categories.

⁴⁶ Putta designs are round flower-like images used in border designs of sarees and dupattas.

⁴⁷ A dupatta is a long scarf that is mostly paired with Indian outfits for women such as salwar-kurta and gharara-choli.

stoles and dupattas have large and fast-moving markets these days. Though a dupatta is one-third the size of a saree it pays double to weave it, he adds.

The programme introduced Musiri's weavers to jacquard weaving — an intricately designed fabric that opened up new markets for them. Traditionally famous for weaving cotton sarees and veshtis, Musiri has been losing market share because its products lack of modern themes and designs. In an effort to reverse this somewhat, the programme initiated weavers into learning the jacquard weave. Which, in a beneficiary's words, 'creates intricate designs like flowers while retaining the lightness of the Musiri weave.'

The CIRC in fact joined a central government initiative in November 2019 to popularise the use of the jacquard loom which can be used for brocade, tapestry and damask.⁴⁸ Twenty-five jacquard machines were to be handed by the government to Musiri's weavers at subsidised rates. But, recalls a trainer, the weavers in Musiri did not know jacquard weaving, and the government's initiative had no training component. That is when the programme, through its CIRC, stepped in and offered to provide training, raw material and designs to train 10 weavers in the jacquard weave.

BENEFICIARY: Technical upgrade

I joined the tailoring classes to be able to stitch my own clothes. My neighbours saw my work, and gave me tailoring jobs. Now I have steady work coming my way.

Weavers who have since undergone CIRC jacquard trainings describe these as motivating and effective. The Manamedu CIRC Coordinator, formerly a weaver-trainer at the central government's Weaver Service Society in Salem, teaches weavers jacquard weaving.⁴⁹ The trainings comprise discussions on the superiority of the jacquard weave, learning to set up jacquard machines into regular looms, and practical lessons in weaving.

A weaver who has participated in the training observes that shifting from traditional to jacquard weaving is tough to begin with, but mastering it is sure to increase income. Weaving a plain saree earns a weaver INR 350, while a jacquard saree fetches between INR 750 and INR 1500. The benefits to weaving jacquard are threefold says a trainer: i) learning a new weave for which there is more demand than supply; ii) increase in income; iii) the opportunity to become a trainer and teach others.

Handloom is a traditionally male dominated sector with men controlling market-facing activities and money; women are relegated to being ancillary workers in family enterprises without independent income. A study done by IDF on the weavers of ikat in Andhra Pradesh's Koyyalagudem village had found that women spend between three and seven hours participating in most pre and post weaving activities. But they consider themselves 'helpers', and never weavers. Thus women who 'assist' men in home-based handloom micro-enterprises are denied the opportunity to derive individual income from weaving.

Women in Musiri's weaver communities have benefitted from the programme's trainings in tailoring; it has provided them with an additional income source, and helped tide the pandemic. Over 52 per cent of the survey respondents say tailoring and using power sewing machines has been beneficial. Additionally, 23 per cent consider learning how to embroider a gain. Interviewees, both among beneficiaries and trainers, speak of the tailoring training

⁴⁸ A brocade is a rich fabric woven with a raised pattern, typically with gold or silver thread. Damask fabric is known for its intricate and reversible patterns. Traditionally, damask fabric was made from silk, cotton or wool. Tapestry is a piece of thick textile fabric with pictures or designs formed by weaving coloured weft threads or by embroidering on canvas that is used as a wall hanging or soft furnishing.

⁴⁹ Weavers Service Centre (WSC) is established and operated by the Development Commissioner for Handlooms, Ministry of Textiles, Government of India.

drawing substantial attendance. An interviewee who underwent tailoring course, says it was well-structured and taught over two-hour-long sessions three days in a week. She still goes to the CIRC to practice on sewing machines whenever one is free.

More than one interviewee says she is now tailoring salwar-suits, blouses and children's dresses for neighbours for a charge.⁵⁰ One says she derives a steady monthly income of INR 700 from tailoring assignments, and makes up to INR 2000 during festival seasons. The subject trainer confirms that tailoring has indeed enabled many women in weaver families to earn an income for the first time. She cites the example of a trainee who is in the process of setting up a small business by installing a sewing machine in her family's grocery shop.

This new and additional source of income has been particularly useful in buffering the business shock they have each suffered due to the present public health emergency, say beneficiaries. Covid-19 has 'devastated' weavers. Order volumes are down by 80 per cent, wages have hit a low, observes one. Adding that the small tailoring jobs she now gets are helping her family survive this tough period. She plans to start a tailoring business along with some women who were her co-trainees. But it is on hold due to the pandemic.

4.3.1.3. Business skills development

Refer Appendix 5, Table 3: *Impact on beneficiaries: Through business skills trainings*

With the already diminishing revenues in the handloom sector, impoverished weavers are increasingly dependent on master weavers (middlemen) for work. The master weavers have traditionally been the more accomplished and business savvy weavers in the communities. In leadership roles, they have linked bulk buyers to weavers, while mentoring the weavers' craft to create better products. They have been the small weavers' financial source and support for work in times of need. But adversities in the handloom business have gradually reduced most master weavers to becoming no more than middlemen, devoting all their time and energies to aggregating orders from wholesalers, large retailers and export houses in cities. Many master weavers now do not weave at all and some have never been weavers, a Koyyalagudem-based master weaver informed a prior study by IDF. The relationship between master weavers and weavers now is purely transactional: only to do with allocating work and collecting products, the master weaver observed.

BENEFICIARY: Business skills

Our association with the programme gives us hope that we do not need to remain working as wage labourers. That weavers can become entrepreneurs.

Weavers' co-operatives that are meant to eliminate middlemen struggle with unsold stock, low sales and lower profits. IDF had interviewed an accountant at the Koyyalagudem Handloom Weavers Cooperative Society for a study in September of 2019 to understand the local handloom economy in Koyyalagudem in Andhra Pradesh's East Godavari district. The accountant shared that his cooperative society had unsold stock worth lakhs of rupees lying with it. Overstocked cooperatives are usual, says the Manamedu CIRC Coordinator. And the situation is similar for the five cooperatives in and around Musiri, he observes.⁵¹

⁵⁰ Salwar-suit is a two-set Indian ethnic dress which includes a long or short tunic and a bottom wear. It is often paired with a dupatta.

⁵¹ Names of the five cooperatives in Manamedu are: Mariamman Handloom and Weavers Cooperative Society, Aringar Anna Handloom and Weavers Cooperative Society, Manamedu Saliyar Handloom and Weavers Cooperative Society,

Given that the bulk of weavers work for wages for cooperatives and master weavers, the programme team say their mandate is to impart such business skills that ‘weavers become bosses from being labourers’. Towards achieving which, workshops on various managerial and e-marketing related topics are facilitated. The managerial topics include: costing of products; stock and inventories management; and finishing, quality checking, packaging. E-marketing topics comprise basic product photography and the use of social media to promote and sell products. All of which, coupled with capacity building through digital literacy lessons on Microsoft Excel, Word and Paint, composing e-mails and making PPTs aim to enable weavers into turning entrepreneurs from wage workers.

TRAINER: Business skills

The handloom trade is entrenched in centuries-old practices and relations between weaver and master weaver. The programme needs more time to modernise it.

The programme focuses on impacting weavers directly by upgrading their products, market linkages and bettering their livelihood, emphasises Founder-Director DEF. A team member associated with the programme in its inception phase recalls how the CIRC had worked hard to ‘mobilise weavers interested in understanding the market for the marketing trainings’. Weavers were told they would be taught how to photograph, present and price their products, he adds. A beneficiary, meanwhile, asserts that weavers are hopeful that long-term association with the CIRC will enable them to become entrepreneurs.

Training in business skills has made the otherwise insular weavers of Musiri aware of market trends and demands; several have modified their products to respond to these. Responding to a question on what they had received from the programme, about 74 per cent of the survey respondents say it presented them with an ‘opportunity to meet designers’, 46 per cent say it taught ‘modern colours and new designs’. In the interviews too, weavers speak of being encouraged by the programme’s training and exposure, as also adding to the repertoire of traditional products they weave. Instead of weaving only sarees and veshtis, lessons in product diversification now has them making more-in-demand dupattas and stoles. Those trained in tailoring speak of stitching masks to supply the current demand generated by Covid-19.

The young in weaver communities have started putting their lessons in business skills to test, some say their experiments with online selling might see them through the Covid-times. A beneficiary who attended a workshop on costing of products says she has created a WhatsApp group to sell her father’s weaving products. Titled ‘Online shopping’, the group has 37 members, comprising friends, friends of friends, wives of her husband’s contacts, variously from Manamedu and Trichy. There have been 15 responses for one among the eight saree images that she has photographed and uploaded. There has been no sale yet, but the enquiries that have come in gives her confidence, she says. People have sent in photographs of designs and asked how much it would cost to make these. Meanwhile, another beneficiary who participated in a workshop on costing of products says she now has more clarity now on how to price her family’s weaves. How to calculate the cost of raw materials, weaving charges, and add 20 per cent to these.

Not only do weavers have a new and better-paying procurers in the CIRC, the programme has also exposed them to novel online and physical avenues of sales. Apart from being venues for training, the CIRC are also collection centres for weaver products. A studio cum showroom was set up at the Manamedu CIRC where the pre weaving products like yarn and post weaving products like saree, dupattas are stored.⁵² The transactions with the weaver is mostly initiated by the CIRC providing weavers with orders and raw materials, and then paying them weaving wages for the products supplied. Of the 69 survey respondents, seven say they received wages for turning in orders at the Manamedu CIRC. Significantly, all of them say that the CIRC wages are higher than local wages. Corroborating which, a weaver elaborates: weaving a plain saree with border pays INR 350 in the market, CIRC pays INR 100 more; for a jacquard design saree the market pays INR 700 to INR 850, CIRC pays INR 150 more. Unlike earlier when most weavers did not know where the master weaver sold their products, they are now aware: ‘The Centre sells our products via DigiKargha.’

DigiKargha is an e-store where DEF curates and sells products it sources from ‘digital artisans’ in the weaver communities which the organisation works with.⁵³ It also supports mainstream designers’ demand for handloom fabrics, which provide an additional source of income for weavers and exposes them to the latest market demands.

Further, a range of collections are digitally designed by craftsmen with the support from textile graduates to make their products fashionable and contemporary yet traditional. In doing so, DigiKargha becomes a platform that connects weavers, textile conservationists and fashion designers.

Musiri’s weavers have, thus, through DigiKargha, guest interactions at the CIRC and exposure visits come to know of independent designers, exhibitions, fashion shows and other buyers who are their potential market.⁵⁴ Additionally, they have now realised that weaver created and administered WhatsApp groups and e-commerce websites can be profitable ports of sale for them, especially so in the Covid-19 times.

BENEFICIARY: Ecosystem

Three other girls and I study at the Centre (CIRC) for exams to get into government jobs. Also, whenever sewing machines and computers are free I practice on them.

4.3.2. Impact on beneficiaries through ecosystem creation

Refer Appendix 5, Table 4: *Impact on beneficiaries: Through ecosystem creation*

With the CIRC at its core, the programme creates an ecosystem that supports and services weaver communities by building their capacities in allied skills, tutoring school-going children and providing digital facilities. A former programme staff who helmed the programme’s implementation in its initial phase recalls the challenges in mobilising weavers to come into the CIRC. Largely perceived as computer training institutes for their children, it took time and interaction with the team before weavers began asking whether the CIRC had something to offer them too. Thereafter began the creation of a supportive ecosystem.

⁵² The first floor of the CIRC is a studio that attracts tourists in Musiri that sells products sold to the CIRC by weavers. The products that are taken for exhibitions and DigiKargha are procured at the studio.

⁵³ DigiKargha: <https://digikargha.in/index.php/>

⁵⁴ The products made by weavers of Musiri have been presented in exhibitions in Bangalore, Delhi and Mumbai during the programme period. They have also been showcased in the Lakme Fashion Show in 2018.

Apart from the digital literacy trainings, most other CIRC offers emanated organically from indigenous demands. Tuitions for children started from the programme's first year on local requests, so also training in tailoring, says Founder-Director DEF.

The five CIRCs in Musiri were designed to become hubs of activities and services to attract adults and children from weaver communities, and especially the youth. The CIRCs provide: digital connectivity, devices and services; trainings and tuitions for adults and children; guidance and counselling for weavers and the community's youth. When a CIRC's operations matured, it would notch up between 50 and 70 footfalls on an average day, says a former programme staff. A variety of trainings were on offer. The longest were courses over six months on digital literacy and spoken English. They were held between 5 pm and 6.30 pm so that school and college students could attend. There were other shorter trainings too. Meanwhile, specialised skills were mostly taught in the workshop mode. On weekends and holidays, classes would start in the mornings, and children would stay on till late. Movie shows, drawing and painting competitions and craft workshops were organised routinely.

Confirming the CIRCs' draw, a substantial 84 per cent of survey respondents reply in the affirmative when asked if they visited their village CIRC in the past three months. Notably, the CIRC at Manamedu, the study site, enjoys such sizeable drop-ins despite the Covid-19 restrictions. 'Photocopying' and 'taking printouts' are among the three top reasons for visiting the CIRC at 27 and 17 per cent respectively; 20 per cent for 'Aadhar-related work'. Meanwhile, the results indicate that small yet noticeable numbers continue to come to the CIRC to work on its computers and browse the internet for information, especially related to government schemes and online applications for government entitlements and jobs.

BENEFICIARY: Ecosystem

Earlier my children took tuitions from school teachers. Rs. 150 per child per month. Now, they attend free tuitions at the Centre (CIRC). The tuitions have been helpful.

Free tuitions for school-children are a big pull for the CIRCs. Sixty seven per cent of the survey respondents say they send their children to attend these; and all of them say they find the tuitions 'useful'. A parent who has been sending her 10 and seven years old children for tuitions to the Manamedu CIRC since last Diwali (October 2019) corroborates. She says they were getting B grades in school, but after attending the CIRC tuitions they started getting As. Her husband shares some more of the tuitions' benefits. Earlier their children took tuitions from school teachers at INR 150 per head for 45 minutes to hour long sessions five days a week. At the CIRC, the tuitions are free, for an hour and a half or till the children complete their homework. Also, children from Manamedu have to travel to Musiri town for tuitions, about five to seven kilometers away. The village-based CIRC saves travel time. Additionally, there are essay writing and painting competitions, recitations of Tirukkural by Thiruvalluvar and also cultural functions during festivals and holidays.⁵⁵ These encourages children to be creative, the father appreciates.

A trainer who doubles as a tutor says that the tuitions are so popular that multiple batches have to be taught simultaneously. On weekends and holidays, children start coming in at morning. On Saturdays they are at the CIRC for the entire day, except for lunch break. Some evenings there are educational movie screenings. Also drawing, painting, craft classes and competitions are organised.

⁵⁵ The Tirukkural is a classic Tamil language text consisting of 1,330 short couplets of seven words each. The text is divided into three books, each with aphoristic teachings on virtue, wealth and love.

The CIRC's assist the community's youth become job-ready for non-weaving careers by providing them with study spaces, online and offline information, as also counsel. Two girls who trained at the Manamedu CIRC have found employment in Trichy as data entry operators, cites the CIRC's Coordinator. A young job aspirant preparing for the TNPSC Group 1 examinations appreciates the CIRC for being there 'for me and others like me so that we are able to study together'.⁵⁶ Trainers at the CIRC guide her and five other young women in her study group, and encourage them to use computers and the internet for exam revisions. Another graduate student says she has been a regular CIRC visitor over the past year and has picked up many digital skills for it. Skills that are basic to being employable, like composing e-mails, sourcing information online and via YouTube. She recalls attending a week-long workshop on MS Excel with about 20 others, of whom eight were students, mostly pursuing BSc, some unemployed youngsters and a few weavers. Yet another young woman, who runs a petty door-to-door beauty cum bridal make-up business, says she visits the CIRC routinely to browse the net for make-up tips and trending hair styles.

A digital literacy trainer confirms that the bulk of her trainees have been college students interested in bettering their job-worthiness. She teaches them in batches of five or six over two-hour-long sessions that extend up to six months. Among their popular teaching requests to her are lessons on how to type with ease on the keyboard, MS Word, Excel and Paint. Earlier the Manamedu CIRC (as also the other CIRC's) would subscribe to employment newspapers, but they do not any more, says its Coordinator. Now, unemployed youth and college students from around Manamedu come to use the CIRC's Wi-Fi to browse for job-related information, he says. They search and download books to prepare for job exams, and take printouts. Also, they download and print exam admission tickets and check for results.

The results of the survey are given in the **Tables** below:

Digital Skills

WHICH DIGITAL SKILLS DID YOU LEARN?	
Options	No. of responses
Video calling on smartphone	51
Messaging on WhatsApp, FB messenger	38
Watching YouTube videos	37
Photographing products	37
Uploading photographs online	25
Making product catalogue	0
Using E-mail	26
Searching new designs online	31
Searching information using Google	9
Designing on computer using software (CAD/CAM)	8
Basic computer skills (like MS Word, Excel, PPT)	26

⁵⁶ The Tamil Nadu Public Service Commission (TN-PSC) conducts exams to recruit for various posts under the state civil services.

DO YOU USE INTERNET TO SEND AND RECEIVE MONEY?	
Options	No. of responses
Yes	51
No	18

WHICH APP DO YOU USE TO SEND AND RECEIVE MONEY?	
Options	No. of responses
BHIM	8
Google pay	41
Paytm	5
PhonePe	12

Upgrade of technical skills: Weaving and allied

WHICH TECHNICAL SKILLS DID YOU LEARN?	
Options	No. of responses
Using power tailoring machines	15
Tailoring	21
Embroidery	16
Spoken English	1
Jacquard weaving	12
None of the above	34

Business skills development

WHICH BUSINESS SKILLS DID YOU LEARN?	
Options	No. of responses
Product diversification (eg: plain saree to jacquard saree or dupatta)	17
Costing of products	21
Maintaining stocks and inventories	12
Sale of products	14
Modern colour and new designs	32
Product finishing and packaging	26

DID YOU RECEIVE ANYTHING FROM THE PROGRAMME?	
Options	No. of responses
Yes	53
No	16

WHAT DID YOU RECEIVE FROM THE PROGRAMME?	
Options	No. of responses
Opportunity to sell in exhibition/fashion show	0
Chance to meet guest designers	51
Raw material like coloured yarn	10
New designs for sarees and dupattas	15
Wages for weaving	7

HOW DO THE PROGRAMME WAGES COMPARE WITH MARKET WAGES?	
Options	No. of responses
Centre wages are higher than market wages	7
Centre wages are lower than market wages	0
Centre wages are same as market wages	0

Ecosystem creation

DID YOUR CHILDREN ATTEND TUITIONS AT CIRC?	
Options	No. of responses
Yes	46
No	23

WERE TUITIONS HELPFUL?	
Options	No. of responses
Yes	46
No	0

WHY DO YOU VISIT THE CIRC?	
Options	No. of responses
To attend trainings	14
For online applications	12
To search online for information	18
To search online for information on government schemes	7
For photocopying	66
For scanning	24
To take printouts	42
To take passport-size photographs	5
Aadhaar-related work	48
Lamination of cards	6

DID YOU VISIT THE CIRC IN THE LAST THREE MONTHS?	
Options	No. of responses
Yes	58
No	11

5. CONCLUSION

The survey and interviews find that beneficiaries appreciate the programme for being relevant and useful in its intent and implementation. Fifty four per cent of the survey respondents who are beneficiaries say they ‘benefitted’ from the Musiri programme; 46 per cent say they ‘benefited a lot’. Close to half the respondents say the programme taught them ‘ways to improve income’.

Digital literacy trainings

- The programme built digital infrastructure by installing 100 wireless nodes in Musiri in its initial year. This has equipped the cluster’s weaving communities with the digital preparedness needed to benefit from the many connectivity options available now.
- The increase in availability of connectivity had the programme redeploy its focus — from installing digital infrastructure to ensuring that beneficiaries have access to contextually connected digital content, services and knowhow.
- The survey results find that the programme has taught weavers a spectrum of digital skills which stand to service both their personal and work needs. Asked how it benefitted them, the highest response at 74 per cent is ‘video calling on smartphone’.
- A survey finding that, perhaps, best showcases the weavers’ use of digital skills is that a substantial 73 per cent respondents say they ‘use internet to send and receive money’.

- The younger in the weaving communities avail of the digital literacy training most and say it skills them to modernise their traditional work.
- Learning to use the internet has introduced Musiri's weavers to new trends, markets and marketing skills, observe implementers.

Technical upgrade

- With trainings in digital literacy making for its centre, the programme extends to teach weavers allied technical skills — namely product diversification, jacquard weaving and tailoring — to augment their livelihood opportunities.
- With modern markets outgrowing the traditional products they weave, the programme makes weavers aware of the need to diversify their product range to be contemporary.
- The programme trains Musiri's weavers in jacquard weaving to create an intricately designed fabric that has opened up new markets for them.
- Women, who are relegated to ancillary worker roles in small family handloom enterprises with no independent income, have benefitted from the programme's tailoring training. It has provided many of them an additional income source, especially during the pandemic.

Business skills development

- With already diminishing revenues in the handloom sector, impoverished weavers are increasingly dependent on master weavers (middlemen) for work.
- Weavers' co-operatives that are meant to eliminate middlemen struggle with unsold stock, low sales and meagre profits.
- Given that the bulk of weavers work for wages for master weavers and cooperatives, the programme team say their mandate is to impart such business skills that 'weavers become bosses from being labourers'.
- Training in business skills has made the otherwise insular weavers of Musiri aware of market trends and demands; some have modified their products to respond to these.
- The young in weaver communities have started putting their lessons in business skills to test. Some say their experiments with online selling might see them through Covid-times.
- Not only do weavers have new and better-paying procurers in the Community Information Resource Centres (CIRCs), the programme has also exposed them to novel online and physical avenues for sales.

Ecosystem creation

- With the CIRCs at its core, the programme creates an ecosystem that supports and services weaver communities. By building their capacities in allied skills, tutoring their school-going children and providing them with digital facilities.
- The five CIRCs in set-up in Musiri were designed to become hubs of activities and services to attract adults and children from weaver communities, especially the youth.
- Confirming the CIRCs' draw, a substantial 84 per cent of survey respondents reply in the affirmative when asked if they visited their village CIRC in the past three months.
- Free tuitions for school-children are a big pull for the CIRC. Sixty seven per cent of the survey respondents say they send their children to attend these. And all of them say they find the tuitions 'useful'.
- The CIRCs make the weaver communities' youth job-ready for non-weaving careers by providing them with study spaces and online and offline information, as also counsel.

Challenges and way forward

- The digital, technical and business competencies acquired through the programme are substantive and upskill weavers, but they are yet to be actualised into entrepreneurial successes in the community.
- The market linkages forged for Musiri's weaver communities are tenuous yet, and almost entirely reliant on the programme's existence. Developing greater capacities to create a brand visibility on their own across social media and the internet is imperative to enabling the weaver communities to move forward independently.
- The sustainability of CIRC's, which are at the programme's core, relies on communities taking over their ownership to run them as successful enterprises. This transition has largely failed to happen in Musiri. Even so, concerted efforts should be made to keep the last-running CIRC located in Manamedu functioning. Towards this, assessments need to be conducted to understand the community's changing priorities, especially post the pandemic. The information so gathered should be used to ensure that the Manamendu CIRC is operationalised to maximum utility and is of utmost relevance to local weavers.
- The emergence of entrepreneurship in a traditional sector like handloom, which is already in distress, is dependent on institutional investment in technology and marketing. The implementers DEF have been drawing the attention of the state and central governments and other civil society organisations to invest in harnessing the potential of digital technology into making the handloom sector more efficient and profitable. Some of which campaigning has been run via newspaper articles and video films.⁵⁷ Affecting institutional change will need for such advocacy to be strengthened further.

⁵⁷ Newspaper articles:

- A ray of hope for Trichy's weavers. January 12, 2016. Livemint
<https://www.livemint.com/Opinion/M4zrF85WMaQKHKE9BrPVN/A-ray-of-hope-for-Trichys-weavers.html>
 - Mphasis partners with Digital Empowerment Foundation to spearhead Digital Transformation of India's rural masses, February 20, 2017, CIOReviewIndia
<https://www.cioreviewindia.com/news/mphasis-partners-with-digital-empowerment-foundation-to-spearhead-digital-transformation-of-india-s-rural-masses-nid-2662-cid-111.html>
 - This organisation is bringing weavers into the digital era. September 24, 2018. DNA
<https://www.dnaindia.com/just-before-monday/report-this-organisation-is-bringing-weavers-into-the-digital-era-2658035>
- Video film: Trichy's digital weavers. Jan 18, 2017. YouTube
<https://www.youtube.com/watch?v=3nGK9wHli-Y&feature=youtu.be>

6. APPENDIX

Appendix 1: Survey questionnaire in Tamil⁵⁸

MUSIRI SURVEY QUESTIONNAIRE			
1	Name / பெயர்	Text	
2	Age / வயது	Text	
3	Sex / செக்ஸ்	Radio button	1. Female / பெண் 2. Male / ஆண்
4	What is your highest educational qualification? / உங்கள் உயர்ந்த கல்வித் தகுதி என்ன?	Radio button	1. Class 1- 5 / வகுப்பு 1- 5 2. Class 6 -10 / வகுப்பு 6 - 10 3. Class 11-12 / வகுப்பு 11 - 12 4. Graduation / பட்டப்படிப்பு 5. Post-graduation / முதுகலை பட்டப்படிப்பு 6. No education / பள்ளி கல்வி இல்லை
5	What is your current occupation? / உங்கள் தற்போதைய தொழில் என்ன?	Radio button	1. Weaving / நெசவு 2. Salaried job in weaving / நெசவுகளில் சம்பள வேலை 3. Salaried job others / மற்ற துறையில் சம்பள வேலை 4. Business / பிஸினஸ்/சொந்தத் தொழில் 5. Unemployed / வேலையற்றோர் 6. Student / மாணவர் 7. Homemaker / ஹோஸ்டெஸ்/ஒயிஃப்/குடும்பப் பெண்
6 a.	Do you own a touch cell (smartphone)? / உங்களிடம் சொந்த டச் செல் (ஸ்மார்ட்போன்) வைத்திருக்கிறீர்களா?	Radio button	1. Yes / ஆம் 2. No / இல்லை
b	Do you know how to use a touch cell (smartphone)? / உங்களுக்கு டச் செல் (ஸ்மார்ட்போன்) எவ்வாறு பயன்படுத்துவது என்பது தெரியுமா?	Radio button	1. Yes / ஆம் 2. No / இல்லை
7	Which of the following digital skills did you learn from the Musiri-Manamedu Centre? / முசிறி-மனமேடு சென்ட்ரலிலிருந்து பின்வரும் டிஜிட்டல் திறன்களில் எது கற்றுக்கொண்டீர்கள்?	Multiple options	1. Video calling on touch cell(smartphone) / டச் செல் (ஸ்மார்ட்போன்) மூலம் வீடியோ கால் செய்தல் 2. Messaging on WhatsApp, FB messenger / வாட்ஸ்அப் , ஃபேஸ் புக் மூலம் செய்தி அனுப்புதல் 3. Watching YouTube videos / யூடியூப் வீடியோக்களைப் பார்ப்பது 4. Photographing products / தயாரிப்புகளை (சேலைகளை) படம் பிடிக்க

⁵⁸ The link to online surveys is:

https://docs.google.com/forms/d/10wYsitJ32vFPU6tayqxgyZ92h0FYh0mB_4m4R-WX2wk/edit

			5. Uploading photographs online / படம் பிடித்து ஆன்லைனில் அப்லோடு செய்தல் / 6. Making product catalogue / கேட்டலாக் உருவாக்குதல் 7. Using E-mail / இ-மெயில் பயன்படுத்துதல் 8. Searching new designs online / புதிய டிசைன்களை ஆன்லைனில் தேடுதல் 9. Searching information using Google / கூகுலைப் பயன்படுத்தி தகவல்களைத் தேடுதல் 10. Designing on computer using software (CAD/CAM) / சாப்ட்வேர் பயன்படுத்தி (CAD / CAM) 11. Basic computer skills (like MS Word, Excel, PPT) / கம்பியூட்டரில் டிசைன் செய்தல் / அடிப்படை கணினி திறன்கள் (MS Word, Excel, PPT போன்றவை)
8	Which of the following technical skills did you learn from the Musiri-Manamedu Centre? / முசிறி-மனமேடு சென்ட்ரலிலிருந்து பின்வரும் தொழில்நுட்ப திறன்களில் நீங்கள் கற்றுக்கொண்டது எது?	Multiple options	1. Using power tailoring machines / பவர் டைலரிங் இயந்திரங்களைப் பயன்படுத்துதல் 2. Tailoring / டைலரிங் இயந்திரங்களைப் பயன்படுத்துதல் 3. Embroidery / எம்பிராய்டரி 4. Spoken English / ஆங்கிலத்தில் பேசுதல் 5. Jacquard weaving / ஜாகார்ட் நெசவு செய்தல் 6. None / எதுவும் இல்லை
9	Which of the following business skills did you learn from the Musiri-Manamedu Centre? / முசிறி-மனமேடு சென்ட்ரலிலிருந்து பின்வரும் தொழில் திறன்களில் நீங்கள் கற்றுக்கொண்டது எது?	Multiple options	1. Product diversification (example from plain weaving to jacquard weaving or saree to dupatta) / தயாரிப்பு மேம்பாடு செய்தல் (பிளைன் நெசவிலிருந்து ஜாகார்ட் நெசவு அல்லது சேலை நெசவிலிருந்து துப்பட்டா நெசவு) 2. Costing of products / தயாரிப்புகளின் விலை நிர்ணயம் செய்தல் 3. Maintaining stocks and inventories / பங்குகள் மற்றும் சரக்குகளை பராமரித்தல் 4. Sale of products / தயாரிப்புகளை விற்பனை செய்தல் 5. Modern colour and new designs / நவீன நிறம் மற்றும் புதிய டிசைன் செய்தல் 6. Product finishing and packaging / தயாரிப்பு முடித்தல் மற்றும் பேக்கேஜிங் செய்தல்
10 a	Did you receive anything from the Musiri-Manamedu Centre? / முசிறி-மனமேடு சென்ட்ரலிலிருந்து ஏதாவது பெற்றீர்களா?	Radio button	1. Yes / ஆம் 2. No / இல்லை
b	(If yes), which of the following did you get from the Musiri-Manamedu Centre? / (ஆம் எனில்)	Multiple options	1. Opportunity to sell in exhibition/fashion show / எக்ஸிபிஷன் / பேஷன் ஷோவில் தயாரிப்புகளை விற்க வாய்ப்பு

	முசிறி-மனமேடு சென்ட்ரலிலிருந்து பின்வருவனவற்றில் எது கிடைத்தது?		2. Chance to meet guest designers / டிசைனர்களை சந்திக்க வாய்ப்பு 3. Raw material like coloured yarn / வண்ண நூல் போன்ற மூலப்பொருள் 4. New designs from Delhi for sarees and dupattas / டெல்லியில் இருந்து புடவைகள் மற்றும் துப்பட்டாக்களுக்கான புதிய டிசைன் 5. Wages for weaving / நெசவுக்கான ஊதியம்
c	If you received wages from the Musiri-Manamedu Centre, how did they compare with the market wages? / நீங்கள் முசிறி-மனமேடு சென்ட்ரலில் இருந்து ஊதியங்களைப் பெற்றிருந்தால், அவற்றை சந்தை ஊதியத்துடன் எவ்வாறு ஒப்பிடுவீர்கள்?	Radio button	1. Centre wages are higher than market wages / சந்தை ஊதியத்தை விட சென்ட்ரர் ஊதியங்கள் அதிகம் 2. Centre wages are lower than market wages / சந்தை ஊதியத்தை விட சென்ட்ரர் ஊதியங்கள் குறைவு 3. Centre wages are same as market wages / சென்ட்ரர் ஊதியங்கள் சந்தை ஊதியங்களுக்கு சமம்
11 a	Do you use the internet to send and receive money? / பணத்தை அனுப்பவும் பெறவும் இணையத்தைப் பயன்படுத்துகிறீர்களா?	Radio button	1. Yes / ஆம் 2. No / இல்லை
b	If yes, which of the following do you use? / ஆம் எனில், பின்வருவனவற்றில் எது பயன்படுத்துகிறீர்கள்?	Multiple options	1. BHIM / பீம் 2. Google pay / கூகுள் பே 3. Paytm / பே டிஎம் 4. PhonePe / போன் பே 5. Others / மற்றவைகள்
12	What do you think the Musiri-Manamedu Centre helped you learn most? / முசிறி மனமேடு சென்ட்ரலில் இருந்து நீங்கள் அதிகம் கற்றுக்கொண்டது என்ன என்று நினைக்கிறீர்கள்?	Radio button	1. To use computer and smartphone for my work எனது பணிக்கு கம்பியூட்டர் மற்றும் ஸ்மார்ட்போனைப் பயன்படுத்த கற்றுக்கொண்டது / 2. To use alternate livelihood skills like tailoring, embroidery etc. / தையல், எம்பிராய்டரி போன்ற மாற்று வாழ்வாதார திறன்களைப் பயன்படுத்த கற்றுக்கொண்டது / 3. Ways to improve my income / எனது வருமானத்தை அதிகரிப்பதற்கான வழிகள் கற்றுக்கொண்டது
13 a	Did children in your family attend tuitions at the Musiri-Manamedu Centre? / உங்கள் குடும்பத்தில் உள்ள குழந்தைகள் முசிறி-மனமேடு சென்ட்ரலில் கல்வி பயிற்சிகளில் கலந்து கொண்டார்களா?	Radio button	1. Yes / ஆம் 2. No / இல்லை
b	If yes, do you think the tuition as helpful? / ஆம்	Radio button	1. Yes / ஆம் 2. No / இல்லை

	எனில், கல்வி பயிற்சிகள் உதவியாக இருக்கும் என்று நினைக்கிறீர்களா?		
14	Did you benefit from the Musiri-Manamedu Centre? / முசிரி-மனமேடு சென்ட்ரலிலிருந்து நீங்கள் பயனடைந்தீர்களா?	Radio button	1. Yes, I benefited a lot / ஆம், நான் நிறைய பயனடைந்தேன் 2. Yes, I benefited / ஆம், நான் பயனடைந்தேன் 3. No, I did not benefit / இல்லை, நான் பயனடையவில்லை
15 a	Have you visited the Musiri-Manamedu Centre in the past three months? / கடந்த மூன்று மாதங்களில் நீங்கள் முசிரி-மனமேடு சென்ட்ரலுக்கு போயிருக்கிறீர்களா?	Radio button	1. Yes / ஆம் 2. No / இல்லை
b	Why did you go to the Musiri-Manamedu Centre? / நீங்கள் ஏன் முசிரி-மனமேடு சென்ட்ரலுக்கு போயிருக்கிறீர்கள்?	Multiple options	1. To attend trainings / பயிற்சிகளில் கலந்து கொள்ள 2. For online applications / ஆன்லைன் விண்ணப்பங்களைப் பயன்படுத்துவதற்கு 3. To search online for information / தகவல்களை ஆன்லைனில் தேட 4. To search online for information on government schemes / அரசாங்க திட்டங்கள் குறித்த தகவல்களை ஆன்லைனில் தேட 5. For Xerox / ஜெராக்ஸ் எடுக்க 6. For scanning / ஸ்கேனிங் செய்ய 7. To take printouts / பிரின்ட் எடுக்க 8. To take passport-size photographs / பாஸ்போர்ட் அளவு புகைப்படங்களை எடுக்க 9. Aadhaar-related work / ஆதார் தொடர்பான வேலை 10. Lamination of cards / அடையாள அட்டைகளை லேமினேஷன் செய்ய

Appendix 2: Interview guide: Beneficiary

THEME	OUTCOME INDICATORS	SUB-INDICATORS	QUESTIONS
DIGITAL ENABLING	Community able to access and use information online	- Access to digital infrastructure - Ability to use digital tools and content	- Was use of computers and smartphones common among weavers in Musiri even before the programme? If yes, for what? - How relevant is the digital literacy training for weavers/you? Are they/you using these newly acquired skills? Give examples. - How comfortable are the weavers/you with adopting new digital technologies and platforms? What were/are the challenges?
	Improvement in academic attainments of children in community	Link between digital access and children's education	Do you think the CIRC is affecting the children of your community in any way? With their education, leisure habits, lifestyle? If yes, how? If no, why?
		Tuitions	- Are tuitions and English speaking classes for children important for the community/you? Why? - Have children's school results improved? Have the tuitions impacted confidence?
	Weavers capacitated to produce new designs and products	- Upgrade of technical skills, like new weaving techniques-designs - Learning allied skills, like tailoring	- Do the traditional skills of weavers need to be updated to keep pace with new market trends and demands? - Has the programme been able to upgrade traditional weaving skills? - Were/are weavers/you open to learning new designs, techniques and skills? - Has learning allied skills (tailoring etc.) benefitted weavers/you? Give examples.
BUSINESS SKILLS LEARNING	Weavers better equipped to access market trends and demands	- Knowledge of market trends and demands - Awareness of need for innovative design and quality	- Are weavers/you skilled in the sales and marketing of products? - Have the trainings in product diversification helped? Give examples. - Will weavers/you be able to improve work practices and sales using the skills this programme has taught? If no, why? If yes, give examples.
	Weavers become online marketing savvy	- Branding - Digital marketing	- Will weavers continue with using digital technology for their business? Why? - Do you think the new e-commerce portal will increase the sale of products? - Does the community now understand the concept of branding? Elaborate.
	Increase in enterprises and income of weavers	- Weavers opting to set-up businesses over working for wages - Increase in income	- Are weavers accessing information on business to start their own enterprises? - Has the programme contributed to increasing the weavers'/your (monthly) income of? If yes, how? If no, why? - How has (and will) Covid-19 affected the weavers'/your income? Has the programme taught skills to cope better with the Covid-19 aftermath?

Appendix 3: Focus Group Discussion (FGD) guide: Trainers

THEME	OUTCOME INDICATORS	SUB-INDICATORS	QUESTIONS
DIGITAL ENABLING	Community able to access and use information online	- Access to digital infrastructure - Ability to use digital tools and content	a. Recount the programme's history and your association with it. b. Were weavers using digital technology before the programme? Elaborate. - Did you receive an orientation/briefing/training for the programme? - How relevant is digital literacy training for weavers? Are they accessing and using these newly acquired skills? Give examples. - Are weavers comfortable with adopting digital technologies? Explain challenges?
	Improvement in academic attainments of children in community	Link between digital access and children's education	Do you think the CIRC is affecting the children of this community? With their education, leisure habits, lifestyle? If yes, how? If no, why?
		Tuitions	- Are tuitions for children important for the community? Why? - Have school results improved? Have the tuitions impacted children's confidence?
TECHNICAL SKILLS UPGRADING	Weavers capacitated to produce new designs and products	- Upgrade of technical skills, like new weaving techniques-designs - Learning allied skills, like tailoring	- Do the traditional skills of weavers need to be updated to keep pace with new market trends and demands? a. Has the programme been able to upgrade traditional weaving skills? b. Were/are weavers open to learning new designs, techniques and skills? c. What are the challenges in getting them to deviate from traditions? - How did you decide on which allied skills (tailoring etc.) to teach the community?
BUSINESS SKILLS LEARNING	Weavers better equipped to access market trends and demands	- Knowledge of market trends and demands - Awareness of need for innovative design and quality	- Are weavers skilled in the sales and marketing of their products? Especially so, in relation with their new skills in product diversification. - Do you think that this programme has been able to teach weavers these skills? - Will the weavers be able to improve their work practices and sales using the skills that this programme has taught them? If no, why? If yes, give examples.
	Weavers become online marketing savvy	- Branding - Digital marketing	- Will weavers continue with using digital technology for their business? Why? - Do you think the new e-commerce portal will increase the sale of products? - Does the community now understand the concept of branding? Elaborate.
	Increase in enterprises and income of weavers	- Weavers opting to set-up businesses over working for wages - Increase in income	a. Are weavers accessing information on business to start their own enterprises? b. Has the programme contributed to increasing the (monthly) income of weavers? If yes, how? If no, why? c. How has (and will) Covid-19 affect the weavers' income? Has the programme taught them skills to cope better with the Covid-19 aftermath?

Appendix 4: Interview guide: Implementer

THEME	OUTCOME INDICATORS	SUB-INDICATORS	QUESTIONS
DIGITAL ENABLING	Community able to access and use information online	- Access to digital infrastructure - Ability to use digital tools and content	1. a. Recount the programme's history and your association with it. b. Was a needs assessment done for the beneficiary community? c. Were weavers using digital technology before the programme? Elaborate. 2. How relevant are digital literacy training for weavers? Are they accessing and using these newly acquired skills? Give examples. 3. Are weavers comfortable with adopting digital technologies? Explain challenges?
	Improvement in academic attainments of children in community	Link between digital access and children's education	4. Do you think the CIRC is affecting the children of this community? With their education, leisure habits, lifestyle? If yes, how? If no, why?
		Tuitions	5. Are tuitions for children important for the community? Why? 6. Have school results improved? Have the tuitions impacted children's confidence?
TECHNICAL SKILLS UPGRADING	Weavers capacitated to produce new designs and products	- Upgrade of technical skills, like new weaving techniques-designs - Learning allied skills, like tailoring	7. Do the traditional skills of weavers need to be updated to keep pace with new market trends and demands? 8. a. Has the programme been able to upgrade traditional weaving skills? b. Were/are weavers open to learning new designs, techniques and skills? c. What are the challenges in getting them to deviate from traditions? 9. How did you decide on which allied skills (tailoring etc.) to teach the community?
BUSINESS SKILLS LEARNING	Weavers better equipped to access market trends and demands	- Knowledge of market trends and demands - Awareness of need for innovative design and quality	10. Are weavers skilled in the sales and marketing of their products? Especially so, in relation with their new skills in product diversification. 11. Do you think that this programme has been able to teach weavers these skills? 12. Will the weavers be able to improve their work practices and sales using the skills that this programme has taught them? If no, why? If yes, give examples.
	Weavers become online marketing savvy	- Branding - Digital marketing	13. Will weavers continue with using digital technology for their business? Why? 14. Do you think the new e-commerce portal will increase the sale of products? 15. Does the community now understand the concept of branding? Elaborate.
	Increase in enterprises and income of weavers	- Weavers opting to set-up businesses over working for wages - Increase in income	16. a. Are weavers accessing information on business to start their own enterprises? b. Has the programme contributed to increasing the income of weavers? How? c. How has (and will) Covid-19 affect the weavers' income? Has the programme taught them skills to cope better with the Covid-19 aftermath?

Appendix 5: Interview themes

Table 1

IMPACT ON BENEFICIARIES: THROUGH DIGITAL LITERACY TRAININGS		
DESCRIPTION OF TRAININGS	BENEFICIARIES	- I visit the Community Information Resource Centre (CIRC) whenever I have time. To use the Wi-Fi there. I surf for information to make notes. I take printouts for college assignments and projects. - I attended a one-week-long structured training in digital literacy. They taught me to photocopy documents, compose e-mails and MS Excel. - There were 15 to 20 people in my class. There were some class 5 to class 8 students, some BSc students and people who do not have jobs. Also, some elderly people and weavers.
	TRAINERS	- When I joined the Centre there were about 60 students for digital literacy trainings. The trainings were conducted by one more trainer from the same locality. - I have taught 50 students how to work on computers. School students learn Paint etc. College students come and learn MS Word, Excel, typing on the computer keyboard. - In the last three months, I taught MS Excel to some 30 college students in batches of five to six. Each batch is taught over two hour long classes.
	IMPLEMENTER	Founder-Director, DEF: There was strong acceptance for our work among the community's early adolescent. Many came as soon as the Centres opened up. Also, those between 25 and 30 were very interested. The Centres attracted them. They were excited because they felt that their children will learn computers now. Not because they thought their businesses would improve because of the digital skills the Centres were teaching. Former programme staff: There were different types of trainings at the Centre daily. The longest were on digital literacy and spoken English for six months. Batches would start coming in at 4 pm, after school and college, and sessions would continue till 6:30pm.
USE OF TRAINING	BENEFICIARIES	- Had my father been digitally literate it would have helped us a lot. We could have used his skills to upload images of our products on Flipkart. Orders have completely stopped coming to us after Covid-19. We are now thinking about selling our products online. - I had thought learning to use the computer and touch cell (smartphone) have nothing to do with improving chances to earn. I did not attend the trainings. But now I understand. If I get another chance, I will learn. Computers are unavoidable, in villages and in cities. - I was not keen on digital literacy trainings earlier, I was occupied with other things. But post Covid-19 I realise how important digital skills are. If the trainings resume, I will join. - I do not know how it (digital literacy) will help me as a weaver. But I am curious. I see my son using the computer, but I do not know what he writes or sees. I am open to learning.
	TRAINERS	- We provide digital literacy training for college students and graduates. Many graduates do not know to use computers. But jobs in towns require them to know MS Word, Excel, how to use the internet and e-mail. So they come to the Centre to get trained. - Two girls who trained at the Centre found jobs in Trichy as data entry operators. Waiving training fee is important as most here are from poor families. It helps them build careers.

	IMPLEMENTERS	• Founder-Director, DEF: When we started in Musuri, connectivity was not very strong. We saw providing connectivity as an integral part of doing developmental work. But then Jio, and other options came, and we realised connectivity was no more a critical part of our programme. As an organisation, DEF has lessened its emphasis on providing connectivity. Because it is available in some form everywhere now. It is unavailable, or available at a distance, only in very small villages and tribal areas. • Programme team: Basic literacy training for us means assisting participants use a laptop or computer. We teach typing, playing music and movies, using the internet and social media, writing up a CV, Google search etc. • Earlier weavers would use smartphones only to make calls and use the camera. Now, they can share their product photographs through WhatsApp, download educational apps, and transfer money via apps. • Former programme staff: When we set-up the Centres, there was no resistance from the community. But the real reception happened only when they saw the programme was improving their livelihood. We said ‘deviate a bit from your traditional practices of production and business and your incomes will come up’. • The programme gave weavers the opportunity to know what they can do over and above what they are doing. To understand the markets outside their cluster via the net, and exposure visits to the nearest town. It helped them connect with modern markets.

Table 2

IMPACT ON BENEFICIARIES: THROUGH TECHNICAL SKILLS UPGRADE		
DESCRIPTION OF TRAININGS	BENEFICIARIES	• A neighbour told me about the programme. Initially the Centre (CIRC) team made calls to weavers they knew, and asked them to join the trainings that were being held. Later those who trained told others about the trainings. • We are a weaver community, we deal with cloth. Tailoring is connected. There is always a heavy rush for the sewing machines at the Centre. Though it is a structured course, I could learn only when there was a free machine. I have trained on the power sewing machine too. Even now I practice on it whenever it is free. • I trained in tailoring. For six months. Three weekly classes, Mondays, Tuesdays and Wednesdays. From 10 am to 12 noon. With 15 others; all have bought sewing machines. • I trained in jacquard weaving in August 2019. The training was for 15 days, I attended 10. I went to the Centre at about 9 am and spent the full day there. The Centre provided the training material. The trainer gave us a motivational talk about the benefits of jacquard weaving. He said it is not difficult. Think of designs first, and it will come to you automatically. He explained what we were to do first, and only then he taught us on the loom. We were also taught to set up the jacquard machine into our regular looms. • The design training was for 60 days. Classes were held in the mornings and afternoons. We could practice at the Centre or at home. We were taught basic jacquard design arrangements. And to draw and trace designs.
	TRAINERS	• The tailoring courses are six months long. • I was hired to teach tailoring. I have attended a government tailoring course for a year. I also know how to embroider.

USE OF TRAINING	IMPLEMENTERS	• Programme team: The CAD&CAM training is only for a selected few. They should be weavers, educated, already know how to use a computer and interested in upgrading their skills to improve income. The trainings run on and off for interested weavers. Most weavers train in digital design and product diversification. They learn to use the jacquard machine and create different designs. Many have adapted jacquard weaving. • Former programme staff: We told weavers that the programme wants them to be bosses not labourers. • During training the programme provides weavers with yarn. Subsequently we have been buying what many of them produce.
	BENEFICIARIES	Tailoring • I learnt to make churidar-sets and I get tailoring jobs now. After the training, I bought a sewing machine, my father paid for it. A month ago, I made two churidar sets at Rs. 200 each. That's a lot of money. I also did smaller tailoring jobs, like blouses at Rs. 50 and children's dresses. I have made three blouses till now, one for myself and two for money. • I joined the tailoring classes because I thought I could at least stitch my own clothes. But then my neighbours saw my work and started asking me to tailor clothes for them. Now I have steady work coming my way. • I bought a sewing machine after completing the training. It cost about Rs. 7000. I started tailoring for neighbours from November of 2019, after completing the training. I had never earned an independent income before. But after the training, I make about Rs 700, monthly, and during festival and wedding months I earn around Rs. 2000. Jacquard weaving • Because weaving is tough, and pays so little, many people from my community have become construction labourers or cooks. Learning jacquard has given me another chance. • About 20 people from Manamedu trained with me, 10 now have installed jacquard machines in their looms. The government gives jacquard machines to weavers to upgrade their skills. It lets you make intricate designs (like flowers) while retaining the lightness of the Musuri weave. • I would have never known about jacquard weaving but for the Centre. The plain sarees I wove got me Rs 350 per saree, the jacquard weave gets me Rs. 750 to Rs. 1500. • Shifting to jacquard weaving is a break from tradition, it is challenging. Initially it is tough. But once you master it, you get paid much more for weaving for the same amount of time. Also, plain sarees are boring, there is more demand for jacquard. Very few weavers can weave jacquard. Everyone here does the plain weave, the market is saturated with it. Product diversification: • I started weaving dupattas after the Centre's suggestion. For a dupatta with border I get Rs. 180, if there are checks in the design then I get Rs. 30 more. Dupattas are only one-third the size of a saree, but it pays much more to weave them. Also, they sell more.
	TRAINERS	• The government had 25 jacquard machines to distribute to weavers at subsidised rates but no funds to train them to use these. Our programme offered to provide the training. After the first batch of 10 weavers were trained, another 10 volunteered to join. A traditional weaver who attended the training is so good at jacquard weaving now that he trains others. He is like a freelance trainer, and works with different cooperative societies. So, he benefitted in three ways. One, he knows jacquard weaving. Two, his per saree earnings are up. Three, he is a trainer now and gets work as a technical person. • Those who have trained in tailoring can stitch their own clothes, and save money. Also, they earn by tailoring clothes for others. A woman who trained at the Centre, now keeps a sewing machine in her family grocery shop and has started a small tailoring business. Another is all set to open up a tailoring shop in Manamedu.

COVID-19	IMPLEMENTERS	• Founder-Director, DEF: The CIRC in Manamedu is the consolidation of the programme's learnings. The focus is on benefitting the weaver community and the weaver directly. Such that the weaver learns and adapts some new (allied) skills with which he can approach the market, and his productivity and orders increase. • Programme team: We have taken the Musiri weavers' products to exhibitions in Mumbai, Bangalore, also other places. And presented them in the Lakme Fashion Week. • We formed a group of 20 Manamedu weavers and gave them raw materials, designs and weaving charges. The last round of orders went to seven weavers, with raw material for 16 sarees and 36 stoles. The weaving wages were Rs. 350 per saree. We connected them to designer-buyers. But most weavers still sell to cooperative societies and master weavers. • The weavers benefit most from our product diversification trainings, and by learning to use social media. They now know how to promote their products online. • Former programme staff: The Musiri weavers make sarees, but people now use stoles. The weavers need to diversify their products. They need designers who can incorporate new themes and designs into what they weave. They need marketing. They need e-commerce. But all they have now are cooperative societies and master weavers. • More buyers have to join this programme to make it sustainable and to bring in continuous orders. There's a market for handloom products. But either the weavers have to go to the market or the market has to come to them. The programme is trying to get more orders and bring in more buyers. To do which the programme participates in fashion events like the Lakme Fashion Week. It has also been partaking in exhibitions across the country. The Musuri products are displayed and sold in these. DigiKargha, the DEF administered e-commerce portal, shoots images, authors descriptives and showcases the Musiri products. Plus, fashion designers have connected with us and bought Musuri products.
	BENEFICIARIES	• Covid-19 has devastated us. Earlier for weaving a pav (loom that is worth six to seven sarees) we got Rs. 1500. We got orders for four to five pavs a month. Now it is barely a pav. Also no one is ready to pay more than Rs. 1200 for a pav. Though orders have started coming over the last month or two, they have reduced by 80 per cent in volume. • My plan is to set up a small tailoring shop in Musiri along with some other girls who took the training with me. But my plans have had to be withheld because of Covid-19. • I joined the tailoring training thinking I would save the money I give tailors to stitch my clothes. But not just that, now I am also making money off my tailoring skills. This has really seen us through the tough Covid-19 times. • During Covid-19 when there were no orders, the Centre gave me work. I am getting duppatta and stole orders only from it. • The training has been a life-saver during this Covid-19 period. The cooperative societies have stopped giving yarn and orders. But the Centre has continued giving us work. It ordered 10 sarees from me, I got Rs. 8500. Our products will be sold through DigiKargha. • There have been no orders from traders. Cooperatives are already overflowing with old stock. I approached the Centre, and it bought some of my products. I was paid on time.
	TRAINERS	• The presence of the CIRC has given hope to weavers. During the Covid-19 crisis, the government and cooperative societies have not been able to give weavers any yarn or orders. But the Centre is giving them orders. • The demand for dupattas and stoles is up. Now that the weavers know how to make them, they will get orders even without the Centre.
	IMPLEMENTERS	• Founder-Director, DEF: The programme's effect on livelihood and businesses would have sustained if the youth of the community had taken over the CIRC's. But the youth of the area somehow showed no interest in the CIRC's. Maybe because they had already had some digital exposure. And most are looking for jobs outside their villages.

Table 3

IMPACT ON BENEFICIARIES: THROUGH BUSINESS SKILLS TRAINING		
DESCRIPTION OF TRAININGS	BENEFICIARIES	- I attended a day-long workshop on costing of products in March of 2020. I do not know when it began, I joined at around 11 am, and it ended at 5.30 pm. There were about 25 other attendees, all from our community. - We were taught about social media, WhatsApp, Instagram, to use apps, online marketing, netbanking, YouTube, photography and costing of products. - Since I have known of the Centre (CIRC), there have been many workshops on how to improve business. I haven't been able to attend these because my father-in-law is ailing.
	TRAINERS	Workshops on social media, online marketing, and cataloguing products online are usually two days long. We call in special resource people to conduct these. The regular trainers are for longer trainings that are held every day in the CIRC.
	IMPLEMENTER	Founder-Director, DEF: Our focus is on directly impacting the weavers and upgrading their products, designs, market linkages. We concentrate on bettering their livelihood. Former programme staff: Earlier, online marketing workshops were held over two days, and were repeated regularly for different sets of people. About four different trainers would be sourced to teach different topics from related organisations. - Trainings at the Centre were for different age groups. School children were trained in basic computer, internet and spoken English. Youth, final year students who were looking for jobs, were target beneficiaries for job-oriented trainings: like digital marketing, embroidery, tailoring, CAM&CAD and jacquard weaving. We managed to pull in people who were interested in knowing what is actually happening in the market for the marketing training. They were taught how to photograph, present and price products.
USE OF TRAINING	BENEFICIARIES	- Our association with the Centre gives us hope, weavers can become entrepreneurs. - I created a WhatsApp group after attending a workshop. To sell my father's weaving products. I have titled it 'Online shopping'. It has 37 members. They are my friends, friends of friends, my clients (I am beautician), and wives of some of my husband's friends and contacts. These people are from Manamedu and Trichy. - I have photographed eight sarees my father has woven and posted them on a WhatsApp group. I have had 15 responses for a saree, people like it. There's no sale yet. Eight sarees are not enough to expect sale. Trade enquiries have started coming in though. Also, people have sent in photographs of designs and asked how much it would cost to make them. - I got more clarity on costing of our products after attending the workshop. We have to calculate cost of raw materials and weaving and add 20 per cent to it to price our products. - The products I wove for the Centre were sold via DigiKargha. - The weaving wages at the Centre are more than what the market pays. For a saree with border, it is Rs 350 outside, the Centre pays Rs. 100 more. For a jacquard design saree, it is Rs 700 to 800 per saree outside, the Centre pays Rs. 150 more.
	TRAINERS	- Our main aim is to convert the weavers into digitally enabled entrepreneurs. Internet connectivity, computer education and product diversification are tools we use to achieve it. - The traditional market is strong, and centred around master weavers. It has been here for centuries. The programme cannot break this market in three years. No one can. Frankly, now is when the programme has just started, the conversions have begun. The programme and weavers need more time and handholding for these change to last.
	IMPLEMENTER	Founder-Director, DEF: One of our staff visited Chanderi (Madhya Pradesh) recently where we have been implementing a similar programme for weavers since 2009. Some young men approached our staff and told him they are selling their loom products online. They said 'we were just about 9 or 10 years old when your Centre started here, our learnings have paid dividends today.' Later we came to know about 50 to 60 youngsters are experimenting with e-marketing in the area. Exploring the possibilities of selling their goods online in the Covid-19 times.

Table 4

IMPACT ON BENEFICIARIES: THROUGH ECOSYSTEM CREATION	
DESCRIPTION OF TRAININGS	BENEFICIARIES
	TRAINERS
	IMPLEMENTERS

- The Centre has something for all of us in my family. I took the jacquard weaving training. My son has attended the digital literacy classes. My wife knows how to tailor simple clothes. But she joined the tailoring classes at the Centre to learn more.
- I am a graduate. I visit the Centre (CIRC) regularly. Since it opened after the (Covid-19) lockdown, I am in the Centre by 10 am, I go home for lunch, get back to the Centre, and stay till it closes. I spend about five to six hours at the Centre every day.
- Both my children have been going to the Centre for tuitions since last Diwali (October 2019). All week, barring Sundays. The tuitions begin at five in the evenings, after school. They last for an hour and a half, or till the children complete homework. On days that school is off, tuitions last for two hours. There have been no tuitions since the lockdown.
- Spoken English was an ongoing course. It followed a set syllabus. There were weekend batches for it, also daily classes along with digital literacy. The Centre coordinators and trainers taught it. It has not been on for more than a year now.
- Students from class 1 to 9 came for tuitions. The classes started at around 5 pm and went go on till 6:30 pm, sometimes 7 pm. The children do their homework, and we clear their doubts as they do so.
- School students without electricity at home stay back to study at the Centre.
- **Founder-Director, DEF:** Tuitions for children started from the first year on local demand. Those who came for digital literacy classes requested CIRC coordinators for tuitions.
- The condition of weavers at the time of programme inception was very poor. They had no access to information. Many didn't even know where their products were sold once the master weaver picked them up, nor did they know the market rates at which their products were sold. They were living in an insular and isolated world. This ignorance impacted their ability to sell, negotiate, transact, and to bargain.
- **Programme team:** After we opened up the Centre (at Manamedu) post the lockdown, we have been getting about 15 visitors per day. It was much more before... at least 50.
- We taught basic English in our Centre (at Manamedu). Now we don't.
- Our tuitions are for school students up to class 6. In the evening after school. The students from the neighbourhood attend the tuitions, the Centre Coordinator tutors them.
- **Former programme staff:** When a CIRC grew to establish a reputation in the community, it would get 50 to 70 footfalls a day on an average.
- The tuitions were for about an hour and a half. There were multiple batches. On weekends and holidays, they would start at morning. On Saturdays students were at the Centre for the whole day, except for lunch break. Some evenings there were educational movie screenings. Drawing, painting, craft classes and competitions are still organised.
- It was a challenge to bring people to the Centres. Initially, they saw these as computer training institutes for their kids. Slowly, as parents interacted with the team their interest grew. They asked if the Centres had something to offer them too. We said the Centres are for them. To skill them digitally, and turn them into bosses from labourers.

USE OF TRAINING	BENEFICIARIES	• I come to the Centre with friends for group study for the state government services exams. We are four girls. I also practice tailoring and typewriting in English and Tamil at the Centre, whenever the sewing machines and computers are free. • I am preparing for the state government job exams. It really helps that the Centre is there for me, and others like me. We prepare together, with computers, net, trainers to help us. • I go to the Centre for computer-related work. Like photocopying, scanning, browsing the net for work related things. I am a beautician, I search for make-up tips, new hair-dos. • (Co-operative) Societies do not let us create or sell our own products. They give us designs. The Centre encourages us to be entrepreneurs, to create, design and sell our own products. • Whenever I have doubts and need advice on my work, I visit the Centre and consult sir (CIRC Co-ordinator). He is very helpful. • Many activities are held at the Centre through the week and over weekends. Kids come for tuitions. When I have children, I will send them to the Centre, for exposure and to learn. • Women tailor at home without knowing what it means to do so in a group. Tailoring at the Centre is about doing something collectively. You feel it is useful, and can be a business. • Earlier our children took tuitions from their school teachers. It cost us a good Rs. 150 per kid for five days a week, two Saturdays, 45 minutes to an hour. Then, sir (CIRC Co-ordinator) told us that tuitions are free at the Centre. They help with homework. They also teach our children verses from Thirukural. The tuitions have been helpful. • The Centre organises essay writing competitions and cultural functions during festivals. These encourage children to be creative. My children were getting B grades in school, they are now getting As.
	TRAINERS	• All the Centre's activities are 100 per cent necessary for the community's empowerment. • One of our core skills development trainings, Spoken English, is not been taught in the past one year. As they are open for all, it and digital literacy were the most popular courses. • Children from Manamedu have to go to Musuri for tuitions, five to seven kms away. And it costs Rs. 150 to Rs. 200 per child. Coming to the Centre saves travel time, plus it's free. • Unemployed youth around Manamedu come to the Centre to use Wi-Fi, also to read employment newspapers we earlier subscribed. College students browse for job-related information. They search and download books to prepare for government job exams, and take printouts. Also, they download, print exam admission tickets, check results.
	IMPLEMENTERS	• Founder, DEF: As many options are available now digital infrastructure is not our focus. It is on ensuring that the access to digital content, services and knowhow we facilitate are contextually connected to the people we are working with. • Former programme staff: Everyone here knows the Centre as Manamedu is a small village. It holds weaving activities and is venue for many government events like trainings conducted by Salem-based Weavers Service Centre. • The exit strategy is to handover the CIRC to the community. The CIRC needs to sustain themselves and run profitably... by conducting trainings, providing digital services etc. • The weavers can find and reach out to the biggest buyers online. Know of brands, available designs and assess their own products against these.
COVID-19	BENEFICIARIES	• Only because we learnt tailoring at the Centre, we were able to make masks and handkerchiefs during Covid-19. The Centre paid Rs. 5 for tailoring two masks, the local payment is Rs 1.50 per mask. • During the Covid-19 period when there were no orders, DEF gave us work.
	TRAINERS	• The Centre was shut for 60 days during lockdown from 24 March to 24 May (2020). All trainings and activities were suspended except production. Tailoring and computer literacy classes has started again. But only 15 people come daily. We have still not resumed tuitions for school students. • To encourage online surfing the CIRC has stopped employment newspapers subscription.



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