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## ROLE OF ICT AND ITS USAGE AND THE PERCEPTION AMONG WEAVERS IN DHARAMAVARAM MANDAL (RURAL), ANANTHAPURAMU DISTRICT

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### Abstract

The Main Objective of the paper is to study and analyze how information and communication technology (ICT) Intervention can improve the livelihoods of the weavers by facilitating various activities like the procurement of raw material and selling their product online as well as improving their production systems through modern inputs. Linking the weavers involved in producing silk sarees in Dharmavaram mandal to the external world using the power of ICT and ICT enabled applications, These interventions can maximize their efficiency thus the profits Making a step towards realizing “Aatma Nirbhar Bharat”, Handloom Export Promotion Council has endeavored to virtually connect the Handloom Weavers and exporters from different corners of the country with the International Markets using ICT but its adoption, reach and use at the Dharmavaram mandal by silk saree weavers needs to be improved. They are faced by many productions marketing and socio economic and timely information problems including input availability and credit, among others.

This paper focus to understand the extent of initiative, awareness and usage of ICT and ICT enabled initiatives in Dharmavaram Rural areas, to assess the use of the ICT for marketing goods and procurement of raw material and give suggestions for betterment of their livelihoods.

Primary Data was collected using structured questionnaire, Participatory Rural techniques and Focus group discussions so as to enquire in to the issues and give it an empirically and a descriptive support. Likeart Analysis, Statistical and cross tabulations analysis using Statistical package for social sciences (SPSS) were used to condense information and draw conclusion.

Findings revealed that the weavers are yet to take the full benefits as there are hindrances barriers and bottle necks of using ICT. In Dharmavaram a renowned place for handloom business people said that they are doing buying raw materials online. Majority of weavers are using ICT with help of third party or some educated relative, friends or neighbors. Technical problems lack of power and assured connection is said to be hindrances for the usage of ICT sources of information and services. Most of them said that they do not have data or internet connection due to high charges. In the pre-loom processing (yarn preparation and dyeing), some degree of mechanization would be welcome. Appropriate usage needs to be worked out and link through ICT need to be created with technological institutions and popularizing indigenous technologies.

While cooperatives do help in maximizing the benefits for weavers in the in the sector, they are not able to cover all the issues. The Wages, Employment and Livelihood Issues still exist like Wages have not increased in the last 15years. Some sections of handloom weavers are living in hand-to-mouth conditions, with no house or assets for them, for years together. These issues need to be addressed. Given such a situation, government should introduce more Welfare Schemes in areas like Education and health which constitute a major concern for handloom weaver families. Government has to come forward to help the children, women and old people to overcome their health and education needs. ICT can play a major role in the above endeavour.

**Keywords:** Intervention, Rural Techniques, Barriers.

### Introduction

The Main Occupation of the Dharmavaram (Rural) areas is weaving. Dharmavaram is a town in Ananthapuram District of Indian State of Andhra Pradesh. It is a Mandal and divisional Headquarters of Dharmavaram Mandal. This Town is known for its Handloom silk sarees and especially for cotton, Silk weaving Industries and Leather Puppets. Dharmavaram is also called the silk City of Andhra Pradesh its rural economy is mainly dependent on Handloom silk sarees weaving and related activities.

The Objective of the paper is to study and analyze how ICT Intervention can facilitate weavers in procurement of raw material and selling their product online as well as improving their production systems through modern inputs in other words linking these silk sarees producing weavers to the external world, thus maximizing their profits.

The Government agencies like National Handloom Development Corporation (N.H.D.C) and others developed ICT apps like ‘E-Dhaga’ which will benefit Weavers. These kinds of apps are made to help weavers to transact their businesses anywhere any time online. They Weavers also can check the status of their dispatched material status through these kinds of ICT Applications. Thus, bringing in Digitalization in to their handloom sector.



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There are also Many Private Popular ICT applications like Flip kart, Amazon, Snap Deal, Mantra, Paytm etc. which can be helpful in procurement of Raw Material as well selling Products and making payments.

Making a step towards realizing “Aatma Nirbhar Bharat”, Handloom Export Promotion Council has endeavored to virtually connect the Handloom Weavers and exporters from different corners of the country with the International Market using ICT.

COVID-19 pandemic has impacted the world physically, psychologically and sociologically. The Livelihood of weavers has been impacted. Many of the people have been migrating to other professions or sending their children to near towns for job or businesses. various information sources including News articles, TV, Internet, Google, Twitter, WhatsApp are full of instructions, suggestions, opinions and directives how to prevent be safe and treat recognize symptoms of pandemic. During lock downs amid the COVID-19 pandemic. Financial insecurity, stress, and uncertainty have increased among the weaving community.

### Problems faced by Rural Weavers in Dharamavaram

As the handloom industry has not been competitive enough and hence were not doing well to sustain the weavers engaged in it, the weavers and the others engaged in traditional activity. Did not want their children to continue their profession as it was not dependable.

The Highly skilled weavers and common weavers both are finding difficult to compete with power loom weavers. The Major problem of Handloom industry is posed by power loom sector and the exploitation by the master weavers. The handloom Weavers make on average monthly five or weekly one saree. As compared to the Power loom Industries produce many sarees. It was also observed that many Debt-ridden weavers had suicided as they could not repay their debts and could not meet their daily needs to survive due to high completive market of power loom industries. They also face problems of marketing infrastructural constraints and rising yarn prices the collapse of their export market and the shrinking of their local markets which were flooded with cheap, imported material. Lack of continuous work, power holidays, lack of expansion and modernization and lack of government support, some of the issues could be overcome by ICT and ICT enabled applications.

### Types of Financial Problems

Handloom industry is one such traditional and conservative organization, which has been totally Financially-starved at all the time. The Government of India and State Governments should assist handloom weavers and the co-operative societies for their investment capital. They can also help them in management of societies and modernization of looms. Even though there exists many financial incentives and schemes, the Dharamvaram weavers are not in position to tap the resources due to lack of information. There is a need for new initiatives and other government, NGO, CSR supported programmes. Very less budget is allocated for handloom cooperatives. Such assistance will enable to create more rural employment. Adequate subsidies are also not available for the handloom sector. ICT needs to act as bridge between the policy forming body, the implementation authorities and Weavers for fast and timely intervention.

### Marketing Problems

The Marketing is also big issue. In the present modern and fashionable cloth industry it is but natural that handloom fabrics face difficulties in marketing and sales promotion. Marketing is the central problem that calls for the drawing up of a suitable strategy. Competition from Mills and power looms are a major issue. The power looms were able to pretend as handloom weaver and able to get the concession given to handlooms and function under the shadow of handlooms. The other benefits enjoyed by the power looms were low wages, Evasion of protective labour legislation, low taxes on yarn among the others. Handloom products require more visibility in market. This means wider publicity and thus a good advertisement and support program with and ICT based from various organisations is a need of the day for the handloom weavers.

Government has created a few research, training and input institutions to help the handloom sector but they are not utilised to full these institutions include weaver service centres, institutions of handloom technology, like NIFT, etc. Marketing environment is also affecting handloom industry. Handloom weavers are also facing production problems are scarcity of yarn, lack of technology development, raw material problems, design improvement, enhancement of value mainly due to lack of timely information.

The paper discusses the following two aspects in depth.

- 1) To understand the extent of initiative, awareness and usage of ICT in Dhramvaram Rural areas
- 2) To assess the use of the ICT for marketing goods and procurement of raw material and give suggestions for betterment of their livelihoods.



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### Research Methodology

- 1) Empirical Analysis was used to understand the basic issues of the weavers. Primary data was collected by canvassing schedules for selected beneficiaries rural areas of Dharmavaram mandal
- 2) Participatory Rural Appraisal (PRA) recently renamed Participatory Learning for Action (PLA), was used to probe and enable weavers to express their own situation and to develop a common perspective on their business management at micro level.
- 3) Focus Group Discussions (FGD) on important aspects was conducted to gather information by asking weavers to discuss the major problems they faced.

All the data so collected was analyzed using various techniques, Likert analysis was used on primary data collected to obtain various aspects of ICT usage specially the perception of weavers on factors like the nature and type of the ICT initiatives and its possible effective application. Perception Analysis was done on factors like ICT gives “Clear Information”, “Timely Information”, “Ensures Free Exchange of Information”, “Provides Practical and Adaptable Information” with agreement levels like strongly Dis-agree, Disagree, Neutral, Agree, Strongly agree, These have been cross tabulated across with modal values and standard deviations to give better insight. The special scaling techniques is used for like art analysis for tabulating the results using statistical package for social sciences (spss) is presented in table 1.

**Table 1 Scale for the modal value and Likert response**

Mean Range	Likert Response	Corresponding Modal Value Range
1 to 1.80	Strongly Disagree	1
1.81 to 2.60	Disagree	2
2.61 to 3.40	Neutral	3
3.41 to 4.20	Agree	4
4.21 to 5.00	Strongly Agree	5

### Primary Data Analysis and Findings

**Table 2 Averages and the Deviations for the Perception of the Sample Respondents ICT initiatives in selected sample villages of Dharmavaram Rural**

Mandal Name		Gives Clear Information	Timely Information	Ensures Free Exchange of Information	Provides Practical and Adaptable Information
Values	Mean	3.57	3.25	2.87	3.02
	N	80	80	80	80
	Std. Deviation	1.329	1.164	1.129	1.501

Source: Primary Data

Analysis of the same aspects using mean mode and standard deviations of respondents as discussed earlier for the Perception of positive like provides clear information has modal value 3.57 which means they agreed to it whereas for other perceptions like ICT provides “Timely Information”, “Ensures Free Exchange of Information”, “Provides Practical and Adaptable Information” the modal values is less than 3.4 which means respondents did not agree or been neutral to the perception. Most of the samples show on an average, trended towards to agreement or to be neutral. However, the modal value agrees to the statement. This indicates that the entire sample agreed to the perception that ICT generally provide clear information to their doubts and queries. But there is need for proper ICT initiatives utilization, awareness and trainings to respondents.

### Average Frequency of usage and the time taken for receiving Information by the Respondents across villages for Various Sector.

Mandal Name	Village name	Item	E- Governance		E- Health		E- Education		E-Banking, and Commerce	
			No Of times Used	No of Days to get Info / Service	No Of times Used	No of Days to get Info / Service	No Of times Used	No of Days to get Info / Service	No Of times Used	No of Days to get Info / Service
Dharmavaram	Chigicherla	Mean	5.55	2.25	1.7	1.2	3	1.55	4.9	1.6



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		SD	2.320	1.193	2.151	1.454	1.867	1.085	1.661	0.672
		Mean	4.7	2.6	1.45	0.5	2.5	2.65	4.7	1.85
	Kunuthuru	SD	2.681	1.549	2.183	0.679	1.485	2.424	2.681	0.975

Source: Primary Data

It is observed that for all the ICT applications in selected sectors which a weaver is concerned with, the usage levels in terms of number of times used was quite low however the number of days he took get the information or service was impressive. Indicating a need to strengthen and increase the frequency of the usage. Analysing the sectors wise data for Dharamavaram selected two villages for the weaver's community sample, the usage was high in e-governance and E-banking and commerce the number of times on average this facility used was ranging from 4.0 to 5.6 times people are benefiting well in these sectors whereas in sectors like education it is moderate with average 3 times. Whereas in the sectors like E-Health was lowest with average of 1.2 times to 1.9 times. This indicates a large scope for the application of ICT. Thus, attention for urgent need to help to improve these areas and needs to give more awareness and training programmes so as to increase the acceptance level of ICT has been felt.

**PRA and FGD Discussions and Findings are mentioned below.**

Respondents expressed following views like that ICT alone is not much useful for applying for subsidized bank loans etc. In Dharmavaram only a few weavers said that they are doing business buying raw materials online. These weavers were also better off than others. Majority of Weavers were using some of the ICT applications with help of third party or some educated relative, friends or neighbors. Technical problems lack of power and assured connection is said to be hindrances for the usage of ICT sources of information and services. Most of them said not having data or internet connection due to high charges is the main cause for underutilization and dependence on ICT.

Middle- and higher-income groups are trying to use ICT apps favorable to them. Rural users expressed that they want the simplification of the applications customizing to local needs. It's observed that availability of ICT application does not ensure its full complete utilization. Unless its tailor made and involves the user and makes it easy for him. Over all from broad picture angle analysis its observed in the field survey that overall, 85 % not using ICT directly weaving production and marketing systems. They are using ICT mostly through educated relatives, children, friends or neighbors. It is also found that most educated people like teachers and most of neo rich class are also aware of using ICT. Overall impression only children of the weavers who are B. Tech or MBA or some college educations are using ICT, mostly for chatting and other type of communications with friends and relatives. People also by now have become familiar with ICT apps like Paytm, Gpay and are using online shopping portals etc. This could be easily the point of entry for professional ICT enabled programmes for the weavers.

**Key Benefits of ICT apps like E-Dhaga app, Flip kart, Amazon etc.**

The app is useful to the weavers in following manner:

- Weavers can access the information anytime anywhere.
- Weavers can see their complete profile.
- Weavers can place their indents online and see the details of their earlier placed indents and their status.
- Weavers can make the payments by online digital payment system and see the details of their earlier payments.
- Weavers can access the shipment status.
- Weavers can view the unused quota at any point of time under 10% schemes.
- Weavers can view the yarn stock in NHDC's depots, Warehouses and CFCs.
- Weavers can see the product catalogue.
- Weavers can see the supplier list.

**Recommendations and Conclusions**

- There is a need for enhancing the value of handloom products through Utilization of, application of natural dyes and by increasing the productivity of the looms through research and innovation as well as using ICT for searching availability and giving publicity for this kind of production system.
- In the pre-loom processing (yarn preparation and dyeing), Some degree of mechanization would be welcome. Appropriate usage needs to be worked out and link through ICT need to be created with technological institutions and popularizing indigenous technologies.
- While cooperatives do help in maximizing the benefits for weavers in the in the sector, they are not able to cover all the issues. The Wages, Employment and Livelihood Issues still exist like Wages have not increased in the last 15years. Some sections of



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handloom weavers are living in hand-to-mouth conditions, with no house or assets for them, for years together. These issues need to be addressed. Given such a situation, government should introduce more Welfare Schemes in areas like Education and health which constitute a major concern for handloom weaver families. Government has to come forward to help the children, women and old people to overcome their health and education needs. ICT can play a major role in the above endeavour.

- The handloom sector remains a major source for self-employment and casual employment. Apart from the direct employment to about 3.5 million people, it provides indirect employment. So, collapse of handloom industry can also lead to high unemployment in the area. ICT and enabled programs need to work in this direction to assure more labour intensity and artisan based by providing information about successes elsewhere in such areas.
- The Government agencies like National Handloom Development Corporation (N.H.D.C) and others Developed ICT apps like ‘E-Dhaga’ which will benefit Weavers needs to be implemented in Dharamavaram manadal at a faster pace so that it reaches and covers all the weavers.
- The weavers need to be trained to use modern ICT based applications which help them help them to transact their businesses anywhere any time Online.
- The Weavers also can check the status of their Dispatched material status through these Kind of ICT Applications.
- Developing localized Clothes marketing information systems is an urgent requirement to connect retailers and whole salers with the weavers.
- Establishment of Digital market systems for weavers to sell and transact with analytical capabilities using Internet of things.
- Continuous support in capacity building establishing the modern techniques and training and monitoring their views application views. Establishing local language interface online.
- Should help weavers by giving ICT applications, with help of ICT the traditional weavers can market their products and get good price easily compared to selling locally. Thus, the fulfilling the prime minister’s idea of “make locally sell globally” under the make in India initiative.
- It is observed that nationally and internationally Handlooms products have high demand due to their aesthetic value too. So, this point should be taken into consideration while marketing handloom products of weavers and should encourage weavers to sell online by conducting ICT marketing programs world over.
- They can also procure raw material cheaper by comparing and researching about raw material online.
- They can also Sell and receive money through Online with help of ICT applications.
- Corporate Social Responsibility should be there in just not just giving funds for Developing ICT Initiatives but also for their implementation.
- There should be need for partnering Social Auditing of the ICT Apps with help of IT companies whether The ICT initiatives developed are in line with its utilization.
- Rather just developing ICT Apps IT Companies should take CSR Initiative in partnering with government in checking the Actual Problems of the Customers and downtailing their packages to local needs.
- There is no specific ICT Training and extensions. So, this gap should be filled by online training and education systems.

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