Research Paper :

Adoption feasibility of clothing related technologies

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ABSTRACT

An attempt has been made to empower women in clothing related technologies *i.e.* tie and dye, embroidery, crotchet, stitching, worth out of waste and hand knitting after studying the interest of rural women of Kaimari village in Hisar district of Haryana. The knowledge was disseminated through trainings, demonstrations, lecturers and the educational material was distributed to 30 women. Dissemination is of no use until and unless its adoption is studied, hence after a gap of eight months the selected women of phase-I were interviewed to assess the adoption feasibility of disseminated technologies. The adoption feasibility index of technologies on the basis of eight parameters studied on five point quantum scale were profitability, physical compatibility, cultural compatibility, simplicity, triability, usefulness confidence in use and adoption time. It was revealed that the AFI (%) of cultural compatibility was highest (85.4%) followed by profitability (83.6%), usefulness (82.6%), physical compatibility (81.6%) whereas AFI % of triability was lowest (62.0%). It clearly revealed that women were interested in earning using those techniques which have acceptance in their cultural environment and has the utility hence can be a profitable venture.

Key words : Clothing technology, Tie and dye, Stitching

Realizing the gravity of the unemployment, the programme designers oriented their programme to raise the status of women in society by exploring new avenues for their employments through income generating schemes. Inspite of the hectic steps taken to design developmental programmes women have not been able to avail the employment opportunities due to low educational level coupled with low technical skill. Empowering women to become economically self-reliant, a need to train them in different skills through different technical trainings is felt. The training can be more effective and successful if these are imparted to women in the field of their interest. It has been found that women possess an aptitude and liking for household activities like stitching of garments, embroidery, bead work, needle work etc. hence they should be motivated to take these activities for income generation. Training is the most important input for bringing desirable changes in human behaviour in term of knowledge, attitude and skill for which trainees are encouraged, motivated and assisted by trainers in a particular direction. They are helped to acquire these qualities which they don't possess but are needed for income generation. Disseminating knowledge only does not suffice the purpose of researchers hence it was felt important to know the adoption feasibility of the disseminated technologies. Efforts have been made in this direction in the present study.

EXPERIMENTAL PROCEDURE

Technologies were transferred through trainings, demonstrations, field days, campaign and lectures to the rural women in the identified areas *i.e.* tie and dye, embroidery, crochet, stitching, worth out of waste and hand knitting and after a gap of 8 months the women who received trainings were interviewed to assess the adoption feasibility of the disseminated technologies. The adoption feasibility index of the technologies on the basis of eight parameters studied on five point continuum scale were profitability, physical compatibility, cultural compatibility, simplicity/complexity, triability, usefulness, confidence in use and adoption time.

OBSERVATIONS AND ANALYSIS

The technologies disseminated were assessed and the adoption feasibility score of different technologies related to clothing and textiles was tested in six attributes. The general information is depicted in Table 1 and the data on adoption feasibility have been presented in Table 2.

Personal traits:

The data in Table 1 reveal that 70 per cent of the respondents were from the age group of below 30 years followed by 20 per cent of the respondents from 30-45 years age. 40 per cent respondents had education upto primary level whereas 30 per cent were illiterate 70 per cent respondents were married whereas 30 per cent were unmarried. As per the description of family size, 67 per cent of the respondents were from small family followed by 33 per cent from medium. The information related to the caste revealed that 70 per cent respondents were from medium class followed by 20 per cent from low class and only 10 per cent were from high class families.

The data indicated that 40 per cent respondents were from the agricultural family where as 20 per cent had family occupation as govt. service, labourer and 10 per

cent had family occupation as business and private service. Half of the respondents had Rs. 25,000-50,000 annual income whereas 30 per cent had Rs.50,000-1,00,000 annual income.

Adoption feasibility of clothing related technologies:

Adoption feasibility parameters to measure the extent of adoption level of technologies were profitability, physical and cultural compatibility, simplicity/complexity, triability, usefulness, confidence to use and adoption time which are presented in Table 2.

Profitability:

Data pertaining to profitability presented in Table 2 highlight that stitching was found to be most profitable (AFI-96%) while embroidery and crochet were least profitable (AFI-74%) however all other technologies were found highly profitable.

Physical compatibility:

With respect to physical compatibility (Table 2) stitching (AFI-96%) was found to be most compatible followed by worth out of waste (AFI-92.6%) and hand knitting (AFI-92.6%) while crochet (AFI-47.3%) had least physical compatibility but on an average clothing related technologies were found to be highly physically compatible (AFI-81.6%).

Cultural compatibility:

Data regarding cultural compatibility revealed that stitching, hand knitting, and worth out of waste were found culturally compatible with adoption feasible index was 98.6%, 96.6% and 94.6%, respectively. Crochet was found to have comparatively low cultural compatibility (AFI-50%). In totality, all the technologies were highly culturally compatible (85.4).

Simplicity/complexity:

Data pertaining to complexity/simplicity highlighted that worth out of waste was considered to be most simple (93.3%) while crochet had the lowest adoption feasibility index (34.6%) hence was found complex technology. However, in general clothing related technologies were found quite simple for adoption with AFI (74.6%).

Triability:

Data pertaining to triability attribute highlighted that stitching had maximum triability score (AFI-80%) followed by worth out of waste (AFI-78%) and hand knitting (AFI-74%). Crochet was found to have least triability score (AFI-36%). On an average triability score

Table 1: Personal traits of the respondents			(n=30)
Sr. No.	Personal attributes	Frequency	Percentages
1.	**Age (years)**		
	Below 30	21	70
	30 – 45	6	20
	Above 40	3	10
2.	**Education**		
	Illiterate	9	30
	Primary	12	40
	High School	6	20
	Graduate	3	10
3.	**Marital status**		
	Unmarried	9	30
	Married	21	70
4.	**Family size (No. of members)**	20	66.66
	0 – 5	10	33.33
	6 – 10		
5.	**Caste**		
	Low	6	20
	Medium	21	70
	High	3	10
6.	**Family occupation**		
	Govt. service	6	20
	Private service	3	10
	Businessman	3	10
	Agriculture	12	40
	Labourer	6	20
7.	**Income per annum (Rs.)**		
	25,000-50,000	15	50
	50000-1,00,000	9	30
	More than 1,00,000	6	20

Table 2: Adoption feasibility of clothing related technologies (n-**30**)

Attributes	Tie and dye		Embroidery		Crochet		Stitching		Hand knitting		Worth out of waste		Average	Rank
	AFS	AFI (%)	AFS	AFI (%)	AFS	AFI (%)	AFS	AFI (%)	AFS	AFI (%)	AFS	AFI (%)	AFI (%)	
Profitability	123	82.0	112	74.0	111	74.0	144	96.0	129	86.0	135	90.0	83.6	II
Physical compatibility	128	85.3	114	76.0	71	47.3	144	96.0	139	92.6	139	92.6	81.6	IV
Cultural compatibility	128	85.3	131	87.3	75	50.0	148	98.6	145	96.6	142	94.6	85.4	I
Simplicity/ complexity	117	78.1	121	80.6	52	34.6	117	78.0	125	83.3	140	93.3	74.6	VI
Triability	75	50.0	81	54.0	54	36.0	120	80.0	111	74.0	117	78.0	62.0	VIII
Usefulness	120	80.0	114	76.0	75	50.0	147	98.0	144	96.0	144	96.0	82.6	III
Confidence in use	120	80.0	96	64.0	78	52.0	135	90.0	123	82.0	129	86.0	75.7	V
Adoption time	120	80.0	102	68.0	69	46.0	117	74.6	117	74.6	120	80.0	70.5	VII
Commuted feasibility score		77.6		72.4		48.7		88.9		85.6		88.8	77.0	

AFS: Adoption feasibility score

AFI (%): Adoption feasibility index

was found to be moderate (AFI-62%) for clothing and textile related technologies.

Usefulness:

With regard to usefulness, stitching was assessed to be maximum useful (AFI-98%) while crochet was found to be least useful (AFI-50%). The commuted AFI (82.6%) indicated that these technologies were very useful.

Confidence in use:

Adoption feasibility score with respect to confidence in use component revealed that it was highest for stitching (AFI-90%) where as lowest for crochet (AFI-52%). The commuted AFI depicted that respondents achieved good confidence to adopt these activities.

Adoption time:

Adoption time feasibility score of tie and dye and worth out of waste (80% each) followed by stitching (74.6%) indicated that these can be adopted soon after the training while crochet would not be adopted (AFI-46%). The overall adoption feasibility index (70.5%) indicated that clothing related activities would be adopted in due course of time.

The data in Table 2 reveal that the average AFI (%) was highest for cultural compatibility which indicates that clothing and textiles activities were culturally acceptable

followed by profitability (83.6%) and usefulness (82.6%). However triability scored minimum (62%) highlighting that women might be hesitant in trying these activities as is evident from adoption time also because for few activities, adoption time required seems to be very high. Yadav *et al.* (2006) had addressed the same issue of adoption feasibility and arrived at a similar conclusion.

The commuted adoption feasibility score indicated that amongst clothing and textiles related activities, stitching had highest adoption level (AFI-88.9%) followed by worth out of waste (AFI-88.8%), hand knitting (85.6%), tie and Tie and dye (AFI-77.6%), embroidery (AFI-72.4%) and crochet (AFI-48.7%). It clearly depicts that garment construction is very popular technology which women found as a feasible activity to be adopted. Hence, if proper and regular training are imparted to rural masses, these activities can be adopted easily and would be beneficial. Panwar *et al.* (2006) suggested that clientele would go for adoption of a new technology only if they perceive its appropriateness and gets convinced with it.

Conclusion:

It is concluded that since rural women are little bit exposed to formal education, so skill oriented trainings would help them in improving quality of their work and create additional income and employment which act as a supplement to family income. Trainings need to be organized and oriented in the area of their interest and

acceptable in their environment. It is evident from the study that rural women found clothing and textile related activities profitable, useful, cultural and physical compatible as indicated by their high adoption feasibility scores.

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