

# Entrepreneurship Development Through Preparation of Jute Diversified Products and Efficient Marketing

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## ABSTRACT

The output of any research trials or demonstration has no importance if the technology of the trial is not transferred to the grass root level of the community where the product development is done, may it be the large industry or small scale industry. As, Krishi Vigyan Kendra Burdwan under Central Research Institute for Jute and Allied Fibres working with the aim of transferring and refinement of technologies to the field level and to the rural communities, it has an important role to play in this context. Krishi Vigyan Kendra Burdwan is working with respect to transfer of technologies in the context of jute production, post harvest and diversified product preparation from jute fibre through field level demonstrations and training programmes. Initiative has been taken for cultivation of jute in Garamba-Bhasapur and Jurjutipara villages of Burdwan district, where farmers were made aware and then motivated towards the cultivation of jute in the year 2010-11 through the field level demonstration where they were not aware much. In the very next year fifty five farmers of the villages started cultivation of jute in an area of 45 ha and got production @ 27-32 q/ha. The jute fibre produced in the village was utilized for preparing different handicraft items. Two vocational training programmes for seven days for 30 trainees in each comprising of rural women and school drop-out girls were organized at different villages to prepare diversified handicrafts from jute fibre. Then most of the trainees formed four Self-Help Groups started preparing different items from fibre where they found good acceptance of their products in different agricultural fairs, exhibitions and shops. KVK, Burdwan facilitated establishment of six shops so far in different places of Burdwan district with the help of NABARD where their JDPs were sold. Most of them had no income before the intervention and now they are getting a good income of Rs. 2500-3000 per month. These interventions helped the rural women and youth earning an additional income and thereby empowering the weaker section of rural folk and increase the small scale industries in the particular area.

**Keywords:** Jute, Demonstration, Training, Handicrafts, Women Entrepreneurship

Jute is a truly versatile fibre gifted to man by nature. With the growing concern over the damage to environment that synthetic goods may cause in various fields jute has served to be the best alternative. Its abundant availability at very cheap price and inherent characteristics like good strength, moisture absorption and dimensional stability made it widely used. Other than the conventional usage as packaging material the diversification of jute has to be implemented with a much wider perspective. Along with the efforts for innovating new products, technology and aggressive marketing for them now a day's adequate attention has also been given towards upgradation of the technology for

conventional products to improve quality, reduce cost and make them more competitive.

Today jute is looked upon not only as a major textile fibre but also as a raw material for manufacturing different products, which may be proved to be useful to protect environment and to maintain ecological balance. While our age old jute industry is not flexible enough to undertake diversification programme in a big way. The decentralized sector can play a meaningful role in augmenting the process of diversification of jute in India. As a new hope for the future of jute all out efforts for diversification and intelligent attempts to develop more number of new jute products suitable for diverse application

are made by the different research and development sections. The jute diversified products that so far been produced by numbers of small and micro level entrepreneurs and production units in the decentralized sectors including SHGs, NGOs and rural area women groups have founded good acceptance in the market (De, 1995; Verma, 2007; Sinha and Chakraborty, 2007). Woven products, low cost blankets, value added household utility items produced by SHGs, NGOs and small entrepreneurs have not only attracted but also opened cheaper options for the poorer section of the society leaving in difficult terrain. Thus the effort for popularize jute cultivation and develop diversified products from the fibre in the grass root level would show a ray of hope to the farm families which may provide them a better livelihood.

Traditional jute products occupy a dominant share in both the production and exports. Over all it is seen that this marvelous fibre is cultivated almost exclusively in developing countries of East Asia and in some parts of Latin America. Bangladesh, India and Thailand account for over 90% of world production. The jute export scenario, India is the world's largest producer of raw jute as well as jute goods. It almost produces world's 50% of raw jute and 40% of finished jute products. It is found that employment of approximately 40 million farmers and 0.5 million factory workers in India depends upon this golden fibre. The Indian jute sector comprises organized jute industry as well as large numbers of cottage units. Approximately total number of jute mills in India is 73 out of which 59 of them are in West Bengal. West Bengal is the largest jute and jute goods producing state in the country accounting for 71% of the production.

Jute constitutes a low proportion of the value of world trade, but its cultivation and processing is labour intensive and therefore provides a livelihood and an important source of food security for many farmers and farm-families in India. After the synthetic goods came to market the demand of jute goods is slowly declining. Jute mills are also closing day by day leaving millions of farm families and factory workers in trouble. Assuming that weather conditions and yield of jute follow their normal patterns, world production of jute is projected at 2.4 million tonnes by 2012. India is projected to increase its dominance of global jute production,

accounting for 66% of the world production by 2012, compared to 58% in the past. Export trend as seen by experts reveals that USA, Belgium, Syria and UK, Turkey had been the 5 major importing countries for Indian jute goods which accounted for about 51% of total value of jute goods. Other many more countries like Japan, Egypt, Netherlands, Saudi Arabia, Germany and China are next major countries importing jute goods from India (Roy, 2008). So now it is the perfect time to increase the production of raw jute and to increase the diverse application of jute by motivating and providing the advance technologies starting from the farmers, rural people to the industrial level.

As jute is a versatile, eco-friendly and economical fibre, technological advancement and continuous research finding by the research institutions has changed the profile of jute. Jute fibre being a strong fibre, renewable and abundantly available provides ample scope for its application in the manufacture of products for diverse use. Utilization of jute for manufacture of market worthy products has open up large opportunity. In view of challenge faced from cheaper prices of synthetics substitutes, more thrust have been given on diversification of jute products. Now the thrust areas of value added diversified jute products are: Jute handlooms, jute handicrafts and novelties, non-woven and industrial applications, jute rigid packaging, and reinforced plastic, composite jute and decorative and Geo-jute etc. (Sur and Aditya, 2008).

In post partition years and during the early years of first five year plan, the objective was to extend the area under jute cultivation, since India shared only 2.64 lakh hectare of jute area of undivided India with production capacity of 7 lakh bales of raw fibre. Since then jute has seen remarkable advancements in both production and productivity, despite not-so-pronounced increase in area (Table 1).

It can be seen from table 1 that productivity has seen very significant improvements from 6<sup>th</sup> plan onwards, which can be basically attributed to the launching of Lab to Land Programme, *Intensive Jute District Programme*, *Operational Research Project*, *Frontline Demonstration* by CRIJAF etc. The process was also catalyzed by technological interventions like row cropping with seed drill, foliar spray of nitrogenous fertilizers, varietal replacement and

**Table 1:** Change in area, production and productivity of jute in plan periods

Plan period	Production	% increase	Productivity	% increase	Area	% increase
1 <sup>st</sup> plan '51-'56	39.29	--	10.96	--	6.45	--
2 <sup>nd</sup> plan '56-'61	44.41	13.03	11.35	3.56	7.04	9.15
3 <sup>rd</sup> plan '61-'66	56.84	27.99	12.08	6.43	8.47	20.31
Plan holiday '66-'69	48.7	-14.32	11.93	-1.24	7.35	-13.22
4 <sup>th</sup> plan '69-'74	54.95	12.83	12.93	8.38	7.65	4.08
5 <sup>th</sup> plan '74-'78	49.06	-10.72	12.69	-1.86	6.96	-9.02
Annual plan '78-'80	62.71	27.82	13.13	3.47	8.59	23.42
6 <sup>th</sup> plan '80-'85	64.2	2.38	14.12	7.54	8.19	-4.66
7 <sup>th</sup> plan '85-'90	75.63	17.80	16.96	20.11	8.03	-1.95
Annual plan '90-'92	84.27	11.42	18.35	8.20	8.27	2.99
8 <sup>th</sup> plan '92-'97	81.69	-3.06	19.18	4.52	7.67	-7.26
9 <sup>th</sup> plan '97-'02	96.19	17.75	20.12	4.90	8.61	12.26
10 <sup>th</sup> plan '02-'07'	100.16	4.13	22.09	9.79	8.25	-4.18

certified seed programme, mechanization and subsidized supply of seed and implements.

## METHODOLOGY

Initiative has been taken to strengthen the grass root level activities of jute production, post- harvest and product diversification by transferring and refinement of different technologies developed by the CRIJAF (ICAR) and BCKV working in this field. Technology related to jute production and post- harvest activities are provided to the farmers and farm labours by field level demonstrations and through different on farm trials whereas technology related to product diversification is provided through different training programmes (Agarwal, 2006).

### Field Demonstration on jute cultivation

Farmers of Keten and Garamba - Bhasapur villages Burdwan District were made them aware about the cultivation of jute and motivated for cultivation in the year of 2008-09 through the field level demonstration where they were not aware much. In the next two years 2009-10 and 2010-11 fifty five numbers of farmers, out of these 25 in Garamba-Bhasapur and 30 in Jurjutipara villages of Galsi 2 block of Burdwan district started cultivation of jute in total area of 45 ha. Jute was cultivated with improved management practices like line sowing by seed drill, balanced fertilizer and water management. In the Farmers' practice they broadcast the seeds without proper fertilizer and water management.

The jute cultivars JRO 524, JRO 8432, JBO 2003H and S19 were taken for conducting the demonstration.

### Training on jute handicrafts preparation

Jute fibre is conventionally used in making of Hessian, sacking, carpet backing cloths which contribute significantly to the national exchequer through import earnings (Table 2).

**Table 2:** Item-wise export of jute goods

Period	Hessian	C.B.C.	Sacking	Others	Total*	Value**
2001 - 02	36.8	12.2	4.4	13.7	146.1	567.50
2002 - 03	77.4	37.5	3.8	22.5	229.2	916.60
2003 - 04	157.1	33.4	5.2	24.1	310.4	1051.88
2004 - 05	153.7	31.2	1.5	15.0	321.8	1146.90
2005 - 06	171.6	33.2	0.9	11.0	285.8	1186.24
2006 - 07	122.2	31.6	0.1	10.6	242.8	1055.16
2007 - 08	67.8	30.0	N.A	14.4	204.3	1143.57
2008 - 09	53.0	53.2	N.A	10.7	199.8	1216.16
2009-10	31.3	26.5	N.A	8.3	110.5	859.46
2010-11	53.9	40.6	N.A	10.4	199.3	1363.29
<b>Total</b>	<b>924.8</b>	<b>329.4</b>	<b>—</b>	<b>140.7</b>	<b>2250.0</b>	<b>10506.76</b>

\* in '000 Mt, \*\* in Crores.

Of late emphasis has been given in manufacture of jute diversified product (JDPs). Being a bio-degradable and renewable natural fibre jute handicrafts and novelties are in great demand both in domestic and as well as foreign market. Keeping in priority of the felt need and affordability of the rural farm families of Garamba-Bhasapur and Jurjutipara six training programmes were conducted

for preparing beautiful handicrafts, novelties and gift items from jute fibre. Each training programme was of seven days for thirty trainees comprising of rural women, school drop out girls and rural youth. They were trained with different skills for the preparation of jute diversified products. The techniques used for jute handicrafts preparation were Braiding, Weaving, Knotting, Coiling, Plaiting, and Dyeing etc. For preparation of handicrafts products with jute fibre different combination of materials used which are Cane and Bamboo, Jute Stick, Local Wood, Fabrics/Yards, Glass etc. With the combination of different techniques and materials a good range of products were prepared by the trainees:

- ♦ Storage containers for food and domestic use: Fruit basket/tray, hanging containers, cylindrical containers, Newspaper containers.
- ♦ Kitchen products: Hand gloves, handle covers, dusters, cylindrical containers for spoons, fork, and knives.
- ♦ Furnishings: Rugs, floor coverings, door mat, curtain holders
- ♦ Small furniture items: Magazine rack, lampshades, hanging baskets for pot
- ♦ Office stationeries: Pen stand, pencil pouches, pin holder, waste paper basket.
- ♦ Bags and pouches: Hand bags, shoulder bags, shopping bags, hanging purses, mobile carrier, bottle carrier, purse, spectacle case, butwa.
- ♦ Table top accessories: Flower vase, table mat
- ♦ Decorates and novelties: Dolls, hanging dolls, key ring, wall hangings, gift items

## RESULTS AND DISCUSSION

The fibre yield obtained in both the villages *i.e.* Garamba-Bhasapur and Jurjutipara of Galsi 2 block of Burdwan district along with the economics has been presented as pooled data in the Table 3.

Results of the Table 2 showed that the jute fibre yield has been obtained 21.5 to 27.7 q/ha with an average of 24.9 q/ha in the improved agronomic practices against the average yield of 21.5 q/ha in the farmers' practice with local variety in the villages. The highest fibre yield and benefit cost ratio were found with the cultivar of JBO2003.

### Post Training Effect

After the trainings few groups as Shelf Help Groups (SHG) has been formed for the smooth running of the work and started prepare different items from the jute fibres. The SHGs have coordinated with NABARD and other banking sectors for getting funds and the rural women started their activities in preparing different jute handicrafts and selling in different agricultural fairs, exhibitions and shops.

Farm women often do not have access to the secondary and terminal market. They only have access to the primary market like village fairs, women fairs etc., but still have to bear some cost of giving stall, transportation etc.

Various marketing options has been explored for the marketability of the products through the different ways through NGOs working in nearby areas and through farmers Clubs of KVK and NABARD. Ten Mahila Mandals were formed comprising 150 members and most of them are actively engaged in preparing diversified products of jute. Few NGOs

**Table 3:** Results of the demonstration of the different jute cultivars in the villages (Pooled data)

Treatment/Variety	Plant height (cm)	Base diameter (cm)	Yield (q/ha)	Input cost (₹/ha)	Gross return (₹/ha)	B:C ratio
Farmers' Practice (Local variety)	210	1.72	21.5	32250	53750	1.66
JRO 524	218	1.68	24.5	32250	61250	1.89
JRO 8432	232	1.45	25.6	32250	64000	1.98
JBO 2003H	231	1.32	27.7	32250	69250	2.14
S-19	225	1.42	25.0	32250	62500	1.93
LSD at 5%	7.5	0.14	1.41	—	—	—



like *Meghdhoot Welfare Society Panagarh, Ujjiban Barddhaman* etc. and Farmers Clubs like *Sonar Bangla Farmers Club, Pragati Farmers Club* etc. have been involved in preparing and marketing for the jute diversified products.

Till date these groups attended twenty six agricultural fairs and exhibitions conducted locally in Budbud, Galsi, Durgapur and other places of Burdwan district and also in Kolkata. Most of them are regularly preparing different items and selling in local shops and found good response. Six shops/rural mart at Durgapur, Burdwan town have been opened so far with the help of NABARD where their product are being sold.

Most of the rural women of the SHGs or Mahila Mandals had negligible income even no income before the trainings. Now they are getting a good income ranging from ₹ 2500-3000 per month after this kind of intervention. This is showing a ray of hope to the farm families for the additional income.

## CONCLUSION

This attempt help the rural women and youth giving some additional income and empowering the weaker section of rural folk and increase the small scale industries in the particular area. Thus, the small entrepreneurs have not only attracted but have also opened cheaper options for the poorer section of the society living in difficult terrain.

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