

# TESTING AND SERVICE FESILITIES

YEAR	ACTIVITIES	ACHIEVEMENTS
<b>1990-91</b>	<p>Samples of centrifuged / creamed NR latex, latex backed coir mattings, natural / bleached / dyed coir fibre /yarn mattings, rubberised coir and coir needled felt totaling to 50 were analysed for pentachlorophenol content and formaldehyde and a seminar was organised to make an awareness among the manufacturers for the need to contain PCP within permissble limits.</p> <p>Analysed Pentachlorophenol and formaldehyde content in coir products and natural rubber latex for meeting the German norms for exports.</p> <p>On the spot technical guidance was extended to 69 coir-processing units</p>	
<b>1991-92</b>	<p>A total quantity of 327. 204 tonnes of yarn was dyed in the dye house. Supervised the fabrication and assisted installation of dye vat in setting up a modern Dye House by an export house.</p> <p>332 samples of rubberised coir were tested. The findings of the research project on utilisation of coir pith was highlighted in a seminar conducted at TNAU, Coimbarote in November 1991.</p>	<p>1. Conducted a seminar on utilisation of coir pith in association with the Tamil Nadu Agr-icultural Universiry.</p>
<b>1992-93</b>	<p>A new low cost bleaching process was evolved in which the quantity of hydrogen peroxide was reduced to 50%</p> <p>Organised demonstration of the new low cost bleaching at Alleppey.</p> <p>59 shades were matched</p> <p>Shades were evolved with reactive/direct dyes.</p>	<p>1.Developed a low cost bleaching receipe which reduced the bleaching cost by 50%.</p> <p>2.Effluentt reatment pl-ant was commissioned</p>

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	<p>A total quantity of 593 MT of coir yarn was dyed in different shades and 32.63 MT of coir yarn was bleached after realising Rs.17,27,655/70 as service charges.</p> <p>569 samples comprising of 490 rubberised coir, 25 mesh matting , 2 courld coir rope, 3 coir fabric and 49 coir yarn were tested and reports issued.</p> <p>Break load of 8 samples of coir yarn in dry condition were determined</p> <p>An effluent treatment plant for effluents from dyeing was commissioned.</p> <p>Organised a workshop on utilisation of coir pith by Coir Board in association with the Pollachi East Lion's Club.</p> <p>On the spot assistance was provided to study the departmental units of coir in the UT of Lakshadweep.</p> <p>Imparted training to 30 women artisans in spinning of coir yarn on motorised ratt for a period of three months at Kodungalloor.</p> <p>On the spot assistance was given to 1702 women spinners in spinning of coir yarn for improving the quality of coir yarn produced.</p> <p>14 numbers of rubberised coir, 24 nos. of curled coir rope and 5 nos. of mechanically extracted coir fibres were tested at CICT, Bangalore.</p>	<p>3. Organised a workshop on utilisation of coir pith at Pollachi.</p>
<b>1993-94</b>	<p>Demonstrated the new low cost bleaching process at a few manufacturing units in Alleppey, Cherthala and at the Institute for the benefit of exporters and small-scale manufacturers.</p> <p>100 shade matchings were taken and samples furnished by exporters were tested for light fastness</p> <p>A total quantity of 761.725 MT of coir fibre/yarn was dyed in different shades and realised Rs.22,37,422/30 as service charges.</p> <p>645 samples of coir products comprising of rubberised coir (596) coir yarn (8), dyestuff (39), curled coir rope (2) were tested at CICT and CCRI.</p> <p>Six samples of dyed yarn were tested for light fastness.</p> <p>Organised demonstrations relating to use of coir pith in agriculture/horticulture and composting of coir pith.</p> <p>Imparted training to 20 artisans on spinning coir yarn on automatic spinning machine, 72 women for weaving coir mats., 40 women on spinning coir yarn on treadle ratt and 30 in spinning coir on motorised ratt and 12 in weaving matting on semi-automatic loom.</p> <p>Assisted in organising a EDP in association with SISI,Trichur and the Directorate of Industries Lakshadweep.</p>	<p>5. Quality year was conducted for improving and maintaining the quality in coir sector and seminar was conducted at Alleppey on 1<sup>st</sup> October 1993.</p> <p>2. A low coast bleaching method was developed and demonstrated at few manufacturing units and at CCRI for the benefits of exporters and small scale manufactures.</p>

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<p><b>1994-95</b></p>	<p>117 shades were matched to meet the requirements of exporters.            Studies were undertaken on dyeing with vegetable dyes.            Mattings were woven with softened coir yarn by polymer emulsions.            Sulphuric acid was replaced with hydrochloric acid as dye bath assistant for easy handling..            A total quality of 808 MT of coir and jute yarn was dyed and a sum of Rs.2566619 was realised as dyeing charges.            530 numbers of rubberised coir, 20 numbers of coir yarn and one sample of curled coir was tested and realised Rs. 7800/- as service charges for testing.            An amount of Rs.4,23,827/-was realised from the sale of 26,433 sq.meters of coir needled felt.            An amount of Rs.1,62,409/- was realised towards service charges for converting dcoir fibre supplied by entrepreneurs in to coir needled felt.            Tested 19 sets of rubberised coir and 64 numbers of curled coir rope at CICT, Bangalore on realisation of Rs.11000/- as service charges towards testing.            157 trainees were given training on motorised ratt.            Imparted training to 45 members of Hellen Keller Institute in spinning of coir yarn on traditional ratt and weaving coir mats on corridor mat frames as part of providing employment opportunities to the blind men and women.            Training was given to personnel from coir co-operative societies and private sector on weaving matting on semi automatic loom, spinning of coir yarn, operation of bobbing winding and cops winding machines and setting of bobbins and drafting of coir yarn and automatic spinning machine.            Under the field extension programmes, on the spot technical advice in spinning of coir yarn was given to 1702 women spinners            Commenced a project on Improvement in Drying, Softening, Bleaching, Dyeing and Printing of Coir Floor Coverings with funding support of FAO at a total cost of the project at US \$ 9,66,000 and the Indian contribution in kind of US \$ 2,98,000 for a period of two years.</p>	<p>6. Commenced testing of coir pith for nutrients and issue of phytosa-nitary certification for coir pith.</p> <p>7.Field level demonstra-tions on the application of coir geotextiles in soil erosion control at Moovattupuzha and Trichur.</p>

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<p><b>1995-96</b></p>	<p>A combination of dyestuffs for yielding 10 reactive shades was evolved.</p> <p>A shade card consisting of 64 reactive shades with illustration of dyestuffs was prepared.</p> <p>A new bleaching process for coir fibre using a stabiliser in place of sodium silicate was developed.</p> <p>161 shades were matched to formulate recipe of pastel colours as per requirements of exporters.</p> <p>A total quantity of 678 MT of coir yarn was dyed in different shades to meet the dyed yarn requirements of Hindustan Coir.</p> <p>264 MT of Coir/jute yarn was dyed/bleached for exporters.</p> <p>An amount of Rs. 41,20,740.50/- was realised as service charges from the parties for bleaching/dyeing of jute/coir yarn.</p> <p>398 samples of rubberised coir products, 18 samples of coir yarn, 11 samples of coir products and 6 samples of curled coir rope were tested on realisation of Rs. 10,500/- as service charges.</p> <p>27 samples of dyestuffs were evaluated for tinctorial value and suitability in dyeing of coir.</p> <p>Trained 7 persons in weaving of matting on semi mechanised loom and one person in shade matching and dyeing.</p>	<p>1. Evolved a Shade Card of 64 shades from reactive dyes to coir.</p> <p>2. Bulk scale demonstration were carried out in Kerala and neighbouring states on composting of coir pith.</p>



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	<p>1,07,263 sq. meters of coir needled felt in different nominal densities were produced and an amount of Rs.7,53,482/- was realised as service charges.</p> <p>Composted 1500 tonnes of coir pith into organic manure through field demonstrations at 26 centres in Kerala, 2 in Tamil Nadu, one each in Karnataka and Orissa.</p> 	
<p><b>1996-97</b></p>	<p>284 copies of designs were prepared and sold to exporters on realisation of Rs.8265/- towards cost of design cards.</p> <p>Tested 46 sets of rubberised coir, 16 samples of coir yarn, 15 samples of coir geotextiles, 2 samples of curled coir rope and 17 samples of pith manure.</p> <p>Analysed yield of fibre content, break load etc. in husk of foreign origin and compared its properties with husk extracted from Indian Coconut husks.</p> <p>90 shades were matched and receipts of dyestuff furnished to the exporters. An amount of Rs.55985/- was realised towards service charges for testing. Bureau of Indian Standards recognised the Physical Testing Laboratories of CCRI /CICT, as centres for testing Coir and Coir Products in accordance with the BIS specification.</p> <p>A total quantity of 729.895 MT of coir/jute yarn was dyed in different shades to meet the requirements of exporters and Hindustan coir.</p> <p>36.021 MT of coir/jute yarn was dried and realised an amount of Rs.4011128.85 as service charges towards cost of drying/dyeing of coir / jute yarn.</p> 	<p>1. onducted two seminars on application of coir geotextiles at Alleppey and Coimbatore.</p> <p>2. Bureau of Indian Standards recognised the physical testing lab of CCRI/CICT as centres for testing coir and coir products.</p>

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	<p>A total quantity of 7524.80 kg.of PITHPLUS valued at Rs.1,35,446.40 was sold.</p> <p>Field demonstration in composting of coir pith using PITHPLUS was conducted at 12 centres of Kerala and Tamil Nadu. Training was extended to 36 personnel from coir co-operative societies on semi automatic loom.</p> <p>7 entrepreneurs were guided in setting up coir based industrial units. Conducted two seminars on coir geotextiles at Alleppey and Coimbatore as part of popularisation of application of coir geo-textiles in erosion control and soil stabilisation.</p> 	
<b>1997-98</b>	<p>108 designs were evolved suitable to incorporate on fibre mats/creel mats for weaving and stencilling.</p> <p>48 designs for coir products were published in Coir News.</p> <p>Copies of 56 design cards were supplied to coir firms for meeting their export orders.</p> <p>An amount of Rs.78,240/- was realised towards testing charges of 152 samples of coir materials. A total quantity of 615.96 MT of coir/jute yarn was dyed in different shades and 38.797 MT of dyed/bleached coir materials were dried after realising a service charge of Rs.27,142,94/-</p> <p>An International Workshop on Wet Processing of Coir was held on 8-9 December 1997 to disseminate the findings of the research investigations of the Common Fund for Commodities (CFC), The Netherlands, funded project on Softening, Bleaching, Dyeing and Printing of Coir. The project was executed by the Food and Agricultural Organisation.(FAO)</p>	



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	 <p style="text-align: center;"><b>pH METER</b></p> <p>An amount of Rs. 309 546/- was realised from the sale of 17197 kg Pithplus required for composting of coir pith into manure.</p> <p>31 samples of comoposted coir pith were analysed and realised Rs.11750/- as service charges for testing of NPK content, lignin, pH, salinity, electrical conductivity and microbiological parameters.</p> <p>Coir clinic was conducted at Pattukottai in Tamil Nadu to demonstrate the different methods of spinning. Conducted 24 field demonstrations in composting of coir pith into organic manure in the states of Kerala, Tamil Nadu, Karnataka and Orissa.</p> <p>235 shades were matched and dyestuff receipts furnished to the exporters</p>	
<p><b>1999-2000</b></p>	<p>10 new designs evolved in CAD were stencilled on mats.</p> <p>422 designs were evolved to incorporate on fibre / creel mats for weaving and stencilling.</p> <p>48 designs were published in Coir News. Copies of 48 design cards were supplied to exporters on realisation of Rs.29100/- as service charges.</p> <p>An amount of Rs.60200/- was realised towards testing of 110 nos. of coir products- rubberised coir products (45), coir yarn(19), wash fastness(6), curled coir rope(34), coir geotextiles(3), loop mat(1) and polypropylene yarn(2).</p> <p>A total quantity of 565.53 MT of coir yarn was dyed in different shades after realising a service charge of Rs.12,41,431/-.</p> <p>120 shades were matched and recipe of the dyestuffs were furnished to the parties after realising a service charge of Rs. 2,750/-.</p> <p>An amount of Rs. 2,68,041.60/-was realised from the sale of 13,244.80 kg. Pithplus.</p> <p>80 samples of composted coir pith was analysed for NPK, lignin content, pH, salinity EC, microbiological/phytosanitary on realisation of Rs. 65700/- as service charges.</p> <p>Field demonstrations in composting of 250 MT. coir pith into organic manure using PITHPLUS was carried out in 25 locations in brown fibre sector.</p>	<p>1.Super white bleaching process for coir.</p> <p>2. Coir geotextiles logo was registered as trade mark and it was demonstrated on the “World Earth Day”.</p>

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	<p>The technology for composting of coir pith using PITHPLUS disseminated among entrepreneurs through 4 seminars.</p> <p>A total quantity of 1500 sq.mtr. of density 1000 g/m<sup>2</sup> was produced after realising a service charge of Rs.1,03,371-.</p> <p>23 field demonstrations were carried out for the use of COIRRET for faster retting.</p> <p>Celebrated “World Earth day” on 22<sup>nd</sup> April 1999 for promoting coir Bhoovastra highlighting the message, “Save Soil – Save Earth and Use Coir Bhoovastra”.</p> <p>Celebrated the “World Environment Day” on 5<sup>th</sup> June 1999, highlighting the importance of protecting the environment by using Coir Bhoovastra.</p> <p>A seminar on Coir Bhoovastra was organised at Bangalore jointly by Coir Board and Govt.of Karnataka to popularise the use of Coir Bhoovastra and to identify possible areas of application.</p>	
<p><b>2000-01</b></p>	<p>The MOU was signed with Indian Institute of Technology, New Delhi on collaborative project on Application of Natural Dyes on coir.</p> <p>The softened coir fibre was tested at Shriram Institute for Industrial Research, New Delhi, for toxicological properties and observed that the repeated application of caustic soda and amino silicone treated fibre did not induce skin sensitization (allergies) in guinea pigs and it was non irritant to mucous membrane in rabbits.</p> <p>An amount of Rs.3,18,850/- was realised from the sale of 12754 kg. Pithplus in the Pilot Scale Laboratory. An amount of Rs.56800/-was realised from testing of 115 samples of coir pith for NPK content , EC,pH, salinity and phytosanitary parameters.</p> <p>Realised an amount of Rs.14401/- as service charges from Padma Mourzouk, Cherthala towards cost for supply of coir needled felt.</p> <p>Assistance was extended in conducting a 4 day seminar to upgrade the skill-cum-technology in coir Industry in association with the Kerala State Productivity Council and SIDBI.</p> <p>Two Scientists of CCRI deputed to participate in the Sunday-to-Sunday Design Workshop on Life style Textiles held at NID, Ahmedabad.</p> <p>88 shades were evolved on natural and bleached Anjengo coir yarn using 22 eco friendly direct dyes and a seminar was held to disseminate the findings to the trade.</p> <p>Assistance was extended to conduct an Intensive Training Programme on Capacity Building in Coir Bhoovastra Application.</p> <p>Application of COIRRET/PITHPLUS was demonstrated through seminars and training programme.</p>	

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	<p>Conducted 16 field demonstrations in composting of 800 MT coir pith using pithplus Retted 221000 husks using COIRRET. 7 field demonstrations of 50 MT each were conducted in composting of coir pith. A total quantity of 690.704 MT coir yarn was dyed in different shades in the dye house on realisation of Rs.40,25,932.50 as service charges. Tested 28 sets of rubberised coir, 39 samples curled coir rope, 7 samples of coir yarn, 12 samples of Coir Bhoovastra and 8 samples of coir products and 36 samples of Coir Bhoovastra for lignin content and realized Rs. 37,375/- as service charges.</p> <p>83 shades were matched against the requirements of different parties</p>  <p style="text-align: center;">Coir pith composting</p> <p>Extended assistance in bulk dyeing of 12 shades against the request of Kanti Floor Furnishers and Opson Works, Alappuzha.</p> <p>Extended assistance in conducting of Quality Improvement Programme.</p> <p>Organised a seminar on coir products at Shillong.</p>	
<p><b>2001-02</b></p>	<p><b>Established a laboratory for testing of coir geotextiles as per the standards stipulated by the American Standards for Testing Materials (ASTM).</b></p> <p>A total quantity of 20846.20 sq.mtrs. coir needled felts were manufactured in different densities after realizing a service charge of Rs.93,379/-</p> <p>A total quantity of 8034.60 kg. PITHPLUS was sold by fetching Rs. 2,00,865/- towards sales value.</p> <p>145 samples of coir pith were analysed for NPK content and phytosanitary and realised Rs.72,300/-as service charges.</p> <p>A total of 120 samples of coir products were tested and realised a service charge of Rs.56,525/-</p>	<p>1. Seminar-cum-demonstration to disseminate the findings of collaborative project with Agro Technological Research Institute and Triade BV, the Netherlands.</p>