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Livelihood Improvement of Marginal Bamboo Dependants: Artisans and Farmers of Thenkurussi Panchayath, Palakkad

(Final Report of the Research Project KFRI 468/05. January to December 2005)

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ABSTRACT OF THE PROPOSAL

Project No.	KFRI 468/05
Title	Livelihood Improvement of Marginal Bamboo Dependants: Artisans and Farmers of Thenkurussi Panchayath, Palakkad
Objectives	1. Livelihood improvement of artisans and farmers by enhancement of their per capita income through technology transfer for manufacture of new products and productivity improvement of existing bamboo clumps. 1. Enhancement of bamboo resources in the Panchayath area through additional planting of suitable commercial species.
Practical Utility	1. Livelihood improvement of farmers and artisans and enhancement of bamboo resources in the Panchayath 2. Eco-friendly bamboo products for the consumers
Date of commencement	January 2005
Schedule date of completion	December 2005
Funding agency	KCSTE – Plan funds (Under one-year programme)
Investigators	K. K. Seethalakshmi Sustainable Natural and Plantation Forest Management S. Sankar Forestry and Human Dimensions R. C. Pandalai Sustainable Natural and Plantation Forest Management
Study area	Thenkurussi Panchayath, Palakkad District, Kerala

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LIVELIHOOD IMPROVEMENT OF MARGINAL BAMBOO DEPENDANTS: ARTISANS AND FARMERS OF THENKURUSSI PANCHAYATH, PALAKKAD

1. SUMMARY

Production and value added utilization of bamboo were given high priority by Government of Kerala during the last five years for environment protection and employment generation for the rural poor, especially women. Bamboo cultivation and craft are two areas where there is tremendous potential for employment generation. A project was implemented by the Kerala Forest Research Institute (KFRI) as a part of one-year programme supported by Government of Kerala to set up model bamboo village by coordinating the production and utilization of bamboo in a selected Panchayath – Thenkurussi in Palakkad District during January to December 2005. The farmers, artisans, officials from Panchayath, District Industries Centre along with Resource persons from KFRI, National Institute of Design and URAVU, worked together for implementation of the programme. The artisans received training in the use of modern tools and in manufacture of value added products such as bamboo furniture, and decorative and house-hold items. They were also exposed to the development in this sector by participation in exhibitions and fares and visits to other units. For promoting artisans, a Bamboo Consortium was organized in one of the traditional artisans colony at Vakkathara.

The farmers in the area with bamboo in homesteads were trained in scientific management of bamboo culms such as removal of congestion, maturity marking and annual harvesting. Also farmers interested in bamboo cultivation were provided with suitable species for planting that are not currently grown in homesteads.

2. INTRODUCTION

The Planning Commission, Government of India, subsequent to the launching of National Mission on Bamboo Technology and Trade Development in the year 2002, developed an Action Plan to give maximum emphasis for promotion and development of bamboo during Tenth Five Year Plan (Planning Commission, 2003). Creation of 8.6 million jobs in the bamboo based development programmes with an intention to enable five million families to escape poverty on a sustainable basis, upgradation of skills of craftsperson, food and nutritional security through consumption of bamboo shoots, etc., were proposed. The Action Plan envisaged laying down a foundation for a modern bamboo economy with input from science and technology, people's participation, industrial application and strong linkage with market capable of meeting global competition.

While a national level attempt for integrated development of bamboo sector is made in a mission mode, the percolation of the benefits to the rural poor is very slow. There are two major reasons for this: constraints in procurement of the bamboo raw material and lack of marketing avenues for the conventional products manufactured by the traditional artisans. Focussed attention is required from all stakeholders involved in bamboo development programmes for improvement of the rural poor, especially traditional bamboo dependents.

Kerala is one of the potential States in India to implement the programmes for development of bamboo sector since the State has favourable conditions for bamboo resource development and wealth of skilled craft persons. Situated in the Western Ghats, one of the bamboo rich regions of the country, Kerala has about 27 bamboo species and suitable agro-climatic conditions to grow most of the priority species selected for cultivation. As a result of the previous programmes implemented by the KFRI, promoting bamboo cultivation in non-forest areas, especially in homesteads, farmers are now establishing bamboo plantations of species suitable for crafts and other industries. The traditional bamboo artisans are familiar with extraction and processing of bamboos from both forest and non-forest areas and they possess basic skill in weaving and craft. Nevertheless, due to the change in land use pattern, especially shifting of paddy cultivation to other crops such as banana and coconut in agricultural sector and introduction of a wide variety of household items made of

plastic, the demand for traditional products such as baskets, mats and other agricultural implements manufactured by these artisans diminished drastically. It was rather difficult for them to sustain their families with bamboo craft. When a preliminary assessment was done in some of the selected clusters of artisans in Palakkad and Thiruvananthapuram Districts by KFRI, it was found that daily income was less than Rs.20 per head. The younger generation has already shifted to other jobs in agriculture and construction sector. Interventions by experts with upgraded tools, technology, product design, manufacture of premium products and improved marketing are necessary for rejuvenating bamboo craft in Kerala and also for enhancement of the livelihood of bamboo dependants.

Traditionally, bamboo is predominantly grown in homesteads of Palakkad, Thrissur and Malappuram Districts of Kerala. *Bambusa bambos*, the thorny bamboo is the common species. The farmers are unaware of sustainable extraction and scientific management of bamboo clumps. Majority of the farmers also lack information about other potential bamboo species that can be grown along with other tree crops in homesteads with minimum management.

KFRI, with the success in implementation of network projects supported by various agencies such as the Development Commissioner (Handicrafts) in collaboration with National Institute of Design; Indian Institute of Technology; Cane and Bamboo Technology Centre; International Network for Bamboo and Rattan; National Institute of Fashion Technology and Export Promotion Council for Handicrafts, through transfer of technologies, initiated a project in Kerala to set up a model for bamboo production and utilization involving farmers and artisans to improve their livelihood.

3. OBJECTIVES

The project had two objectives as given below:

1. Livelihood improvement of artisans and farmers by enhancement of their per capita income through technology transfer for manufacture of new products and productivity improvement of existing bamboo clumps.

2. Enhancement of bamboo resources in the Panchayath area through additional planting of suitable commercial species.

4. METHODOLOGY

Thenkurussi Panchayath in Palakkad District was selected for implementation of the project since both farmers with bamboo in homesteads and clusters of traditional artisans in the vicinity were available in this Panchayath (Plate 1).

Kannadi, Erimayoor, Koduvayoor and Kuzhalmannam Panchayaths surround the Thenkurussi Panchayath. The Panchayath has an area of 29.1 km^2 consisting of two villages - Thenkurussi I and II and is divided into 14 wards. The population is about 27,316 of which 13,235 are males and 14081 are females. Literacy rate is about 86.5%. The Panchayath has 2,245 ha of agricultural land and consists of 1400 marginal farmers. There are about 115 neighborhood groups for women of which 56 are graded. The homesteads of many farmers contain bamboo and the prominent species is thorny bamboo (*Bambusa bambos*).

There are four clusters of bamboo artisans viz., Vakathara, Kurumankadu, Poolakunnu, Kunnakkad. Totally, 70 families consisting of about 350 members are available. Forty per cent continues traditional bamboo work of making baskets, winnows and household items. The average per capita daily income is Rs.16/-. The youngsters have turned to be agricultural labourers since traditional work is unattractive. The bamboo raw material is available from bamboo depots in the Panchayath and from homesteads and the cost of one bamboo is about Rs.75/-. Direct selling of the products is being done by visiting homesteads and also through local markets (*Chandhas*).

Of the four clusters, the training location was identified in the cluster at Vakkathara. Basic infra-structure, a building already available adjacent to the dwelling of artisans and farmers having bamboo in homesteads were identified around this colony.

5. RESULTS

Capacity Building for Artisans

Project Launching Workshop

Traditional artisans from all the clusters were invited for a project-launching workshop at Vakkathara on April 5, 2005. Seventy-two artisans consisting of 25 men and 47 women from different colonies such as Vakkathara, Karumankadu, Poolakkunnu and Vandithavalam participated in the Workshop. Sri. Krishnan representing the artisans welcomed the gathering. The President of Thenkurussi Panchayath Sri. Kuppan inaugurated the workshop followed by the felicitations by Vice President, Sri. Sethumadhavan and President of Bamboo Workers Union of Palakkad District, Sri. K. V. Vasudevan. The inaugural function was concluded with the vote of thanks by Sri. Velayudhan representing the artisans. Dr. K. K. Seethalakshmi, Dr. S. Sankar and Dr. R. C. Pandalai, resource persons from KFRI explained the objectives of the project and action programme for implementation. As a first step, 27 artisans were provisionally selected for the training in the use of modern tools and manufacture of value added products (Plate 2). The invitation for the workshop, programme, list of participants and details of selected artisans are given in Appendix –1. (Also see Table 1).

Table 1. Details of male and female and age class of provisionally selected artisans

Gender Classes	Males				Females			
Age Classes	20-30	31-40	41-50	51 above	20-30	31-40	41-50	51 above
Frequency	6	3	2	4	7	1	4	0

Training workshop on bamboo weaving and craft

In consultation with URAVU, an NGO on bamboo craft at Wyanad, curriculum and resource persons for conducting one-month training programme (June 8 - July 7 2005) for the selected traditional bamboo artisans in Thenkurussi Panchayath was finalized. Sri. Antony, Sri. Arun and Sri. Lenin, from URAVU, experts on bamboo weaving and craft, shouldered the responsibility of providing training for the artisans in bamboo processing, weaving and craft. Resource persons from KFRI, Dr. K. K. Seethalakshmi, Dr. S. Sankar and Dr. R. C. Pandalai gave general information about

the potential of bamboo craft, especially the recent developments in the bamboo sector in India and coordinated this training programme.

Curriculum

The following curriculum was fixed for the training programme during the discussions with resource persons from URAVU and KFRI.

Fundamentals (Theory)

General introduction about bamboo and bamboo industries - Socio-economics and Ecological Relevance.

Practical

Module - 1

Tools: Demonstration of different tools used in bamboo based products

Bamboo processing: Cutting – joining – finishing - treatment & seasoning - craft Skills

Module - 2

Product Based Training: Training in selected products
Progress Evaluation: Correction of identified mistakes, suggesting methods to improve the required skills
Revision – Reviewing the progress made

Module - 3

Production Group Setting
Orientation – Production work patterns and production Process Familiarization
Orientation – Production, management / marketing
Evaluation – Correcting the existing techniques, methods and tools operations
Production Planning and winding up ceremony

Development of skill

Bamboo cutting and sliver making: Training was provided on bamboo processing like cutting and making of slivers. Since the group was traditional bamboo artisans most of them were skilled in this work. Others developed the skill very quickly (Plate 3).

Familiarization of IDC tool kit: The participants were exposed to modern tools developed by Industrial Development Centre (IDC), Indian Institute of Technology, Mumbai for sawing (adjustable hack-saw, foldable pruning saw, mini hack saw, and key hole saw), scraping (half-round scraper and jig plane), strip making (Machate, IDC multipurpose knife, IDC fine splitting knife, IDC width sizer, and pruning scissors), measuring (IDC guage, inside calliper, outside calliper, steel rule and measuring tape), marking (template components), weaving (IDC weaving tool, propping knife, work board), binding (hand drill, hammer, IDC piercing tool, rim binding needle, fevicol and small box), finishing (sand paper pad, sand paper files, needle files, chisel edged rasp file), sharpening (emery stones) (Plate 4).

Flower baskets/vases production: Training on production of different kinds of flower baskets and vases was the first step in product development based on weaving skill, during 9-17 June 2005. Slivers from three species, *Bambusa bambos, Dendrocalamus strictus* and *Ochlandra travancorica* were tried for flower basket making. Colouring of slivers with chemical dyes and tying the edges with different materials were tried. The outer skin of the leaf stalk of palms (*Borasus* sp and *Cocos nucifera*) was found to be ideal materials for tying the edges of flower basket. Similar design of flower baskets without a handle was used for flower vases. The methods for polishing the products were also taught (Plate 5).

Woven moodahs (Bamboodah): Training on production of woven moodahs (Plate 6) was initiated from 18th June onwards. Different sizes and designs of the moodahs were tried. Also preservative treatments like smoking and immersion of the slivers in sodium chloride solution before weaving were introduced. Different designs of the moodahs and a set of five moodahs, one with glass top and the rest with cushions was developed as a drawing room furniture set. (Plate 6).

Table mats: The slivers derived from inner part of the culm were used for making table mats. For moodahs the slivers from the outer portions alone were only used. Table mats of different colour combinations along with borders stitched with lace and other materials like satin ribbon were evolved (Plate 7).

Scale flowers and Tea Trays: Products based on craft skill started on 1 July 2005. The first product made was scale flowers. Different designs using various sizes and types

of bamboo scales alone, combination of woven mat and scales, different colour combination of woven mats etc. were tried. The requirement of good quality and super finish of products was emphasized and the method for polishing was also taught (Plate 8).

Pen stand, soap dish and hangers: Different products using pieces of bamboo in round form were taught. Based on the diameter of bamboo various products like pen stand and pen cup could be produced. Using a combination of pieces with different length and diameter and woven mats desk organizers also could be produced. Spilt bamboo pieces (half round) were used to produce soap dish (Plate 9).

Lamp shades: Different types of lamp shades and trays were made using bamboo splints. Blow torch was used for bending the splints to give desired shapes. Cleaning and polishing techniques were used to improve the quality of the products (Plate 10).

Value addition to conventional products: With the upgradation of weaving and craft skills and knowledge about new tools, colouring and polishing technology, the artisans attempted for value addition to some of the conventional products like winnows and baskets they were already making. Adding colour and changing size of some of the products could improve the appearance and enhance marketability. Also the artisans improvised facilities for preservation methods like smoking the slivers and products (Plate 11 and 12).

Design workshop

For development of new products from the woven mats a design workshop was organized during 8 to 11th December 2005. Mr. Susanth, Faculty, National Institute of Design, Ahmedabad was invited as resource person. He concentrated on designing products based on weaving skills of the artisans. Different items like star, fruit basket, office basket, table mat, lamp shades and seminar folders were designed (Plate 13). Also, stitching the edges with cotton laces and satin ribbons to improve the presentation was tried. The artisans were provided with a sewing machine by KFRI.

Cluster Development – Artisans

Socio-economic status of artisans

The socio-economic details of 17 artisans were collected before the onset of training workshop using the proforma developed by URAVU (Appendix – 2). The training only provided them the know-how for production of items based on market demand and methods for value addition. The impact of it can be assessed only after a reasonable period – at least after one year after establishment of the Bamboo Consortium and associated Production unit.

Table 2. Socio-Economic details of artisans selected for training.

Sl No.	Name	Sex	Age	School Education	Above/Below poverty	Workdays/ month	Wage	Income
1	Karthika	Female	24	10	b	0	0	0
2	Krishnan	Male	28		b	0	0	0
3	Prema	Female	24		b	10	50	500
4	Rajan K	Male	35	9	b	10	110	1100
5	Devu	Female	38		b	10	50	500
6	Santa	Female	35	9	b	12	50	600
7	Girija	Female	16	10	b	0	0	0
8	Thankan	Male	52	4	b	0	0	0
9	Vijayakumari	Female	16	10	b	0	0	0
10	Chellan	Male	35	9	b	12	110	1320
11	Krishan	Male	46	4	b	12	100	1200
12	Vasanda	Female	14	10	b	0	0	0
13	Santa V	Female	40		b	10	60	600
14	Praveena	Female	14	7	b	0	0	0
15	Krishnan	Male	52	8	b	30	90	2700
16	Chellamma	Female	55		b	10	60	600
17	Velayudhan	Male	59	8	b	10	100	1000

Organization of the Bamboo Consortium

Twenty trained artisans got organized into a group and were registered as Thenkurussi Bamboo Consortium, under Central Literary, Science and Charitable Society Registration Act on 26 May 2005 (No. C. A. 208/05) (Appendix –3). The bye laws for Bamboo Consortium was prepared. An Executive Committee consisting of President (Sri. Krishnan), Secretary (Smt. Santha) and Treasurer (Sri. Velayudhan) was constituted for running the Consortium. As a part of the project activity a bank account was opened in the name of the Consortium. Permission to use the existing

building constructed by the Panchayath was obtained from the officials. Necessary additional infra-structure like security for the building by fixing additional grills and wiring was done. Also minimum daily wage of Rs.50/person along with raw materials and consumables were provided form the project funds for a period of six months from July to December 2005 to develop a production unit as a part of the Consortium.

Exposure to artisans

Visit to URAVU, Wyanad: During the implementation of the project the artisans along with their family members were taken to URAVU on 21 July 2005 to expose them to a developed craft unit and to familiarize with advance tools and technology. They could see a variety of bamboo products and videos on bamboo craft, processing machineries. Also training was provided on production of some of the cooking utensils and house hold items like *puttu kutty*, *thawas* for non-stick vessels and *pappadamkuthi*. They were also taken to one of the marketing outlets of URAVU, a curio shop near Pookkotu lake.

Visit to Poorbasree Exhibition: Sri. Krishnan, Smt. Santha and Sri. Velayudhan, President, Secretary and Treasurer of the Bamboo Consortium respectively were taken to Poorbasree exhibition at Thiruvananthapuram during November 2005 to expose them to the bamboo and cane products from North-Eastern region. The artisans visited the stalls and interacted with the artisans from North-East. They also visited the workshop where demonstration of the production of various craft items was going on. Some of the tea trays, wall hangings and lampshades were purchased as models.

Participation in Melas/fests

Participation in IRDP Mela: Including the new products developed during training and traditional products 28 items were exhibited in the IRDP mela during 10-13 September 2005 in connection with Onam festival at Palakkad. Also a particular brand of winnow called "*vattamuram"* was taken to IRDP mela at Calicut. The list of products presented along with price is given below.

Participation in Bamboo fest: The artisans participated in the bamboo fest organized by Kbip, Cochin during 20-22 December 2005 and presented 40 items (Plate 14). In

addition to the presentation of their own products to public, the participation in this fest enabled them to get an overall idea about the variety of products developed out of bamboo and the combinations of bamboo with other materials, quality consciousness and methods of better presentation of the products etc.

Table 2. The list of products exhibited and sold in IRDP Mela and Bamboo Fest

Sl. No.	Particulars	Price/Piece	No. Sold for IRDP Mela	Number sold for Bamboo Fest
1	Bag -Big	50		1
2	Bag - Small	30		1
3	Bathroom Stand	30		5
4	Basket - Small	10		
5	Basket - Big	150		5
6	Book file	30		2
7	Book rack	200		1
8	Box -Small	25		
9	Candle stand	200		
10	CD Rack	50		
11	Chapathi Basket	50		23
12	Fan	10		9
13	Fancy - Lamp	200		
14	Flower basket - Small	50	9	7
15	Flower basket - Big	60	1	26
16	Hanger	20		
17	Lamp Shade	250		2
18	Lamp Shade Round	250		
19	Lamp Shade Moda	300		
20	Muram Ordinary	30	13	43
21	Muram (Small)	20	16	31
22	Muram (square)	50		38
23	Pappadam Kutti	5	32	67
24	Pen Cup	10	7	22
25	Pen stand	25	0	3
26	Pen stand- 3	15	0	
27	Pen stand 6	25	0	
28	Scale flower - Big	35	14	11
29	Scale flower - Small	20	23	
30	Scale stand	15	0	
31	Soap box	25	1	
32	Star	150		5
33	Table lamp	500	0	
34	Table lamp - Small	75	0	
35	Table lamp woven	300	0	
36	Table mat	20	30	8
37	Thawa non stick	10	5	13
38	Tray Scale	200	1	2
39	Tray Woven	75	0	6
40	Woven Moodah	4	0	10

Evaluation of the performance of Bamboo Consortium

The Review Committee Members Dr. R. Gnanaharan, Research Coordiantor, Dr. K. Jayaraman, Dr. Jose Kallarackal and Dr. P.K. Muraleedharan, Programme Coordinators, KFRI evaluated the progress of implementation of the project periodically. They also visited the Bamboo Consortium to interact with artisans.

The Executive Vice-President of the Kerala State Council for Science and Technology and Environment Dr. A.E. Muthunayakam, Dr. J. K. Sharma, Director, and Dr. R. Gnanaharan, Research Coordinator, KFRI visited the Bamboo consortium on 8th September 2005 to evaluate the performance of the Bamboo Consortium (Plate 15). The interaction with the trainee artisans and resource persons provided guidelines for future development of Bamboo Consortium.

Exposure of Bamboo Consortium to trainees at KFRI

Trainees representing Vana Samrakshana Samithi and NGOs from Andhra Pradesh, and IFS officers who visited KFRI for various training programmes were taken to Bamboo Consortium to demonstrate the establishment of the production unit for value addition for bamboo craft and share their experience in respective places with artisans.

In addition, officials from District Industries Centre, Palakkad, Panchayath President, Ward Members and other officials visited the Consortium regularly to observe the developments.

Cluster Development - Farmers

Farmers' meeting

The farmers having bamboo clump in homestead was contacted in person with the help of the President of *Padasekhara Samithi*. A meeting of the farmers was organized on 10th May 2005 at community hall, Thenkurussi Panchayath. Eleven farmers attended the meeting (Appendix - 4).

Productivity improvement of bamboo clumps

Dr. R.C. Pandalai and Dr. S. Sankar, Resource Persons from KFRI explained the details of scientific management of bamboo culms, such as pruning and tending, fertilizer application and soil mounding, maturity marking, removal of congestion by horse shoe method of cutting and possibilities of subsequent annual harvesting in the workshop on 10th May 2005 (Plate 16).

The method for scientific harvesting of the clump and maturity marking was demonstrated in the bamboo clumps situated in the homestead of Sri. Balakrishnan, President, Padasekhara Samithi.

Enhancement of bamboo resources

An attempt was made for enhancement of bamboo resources through additional planting of suitable species in the area. *Ochlandra travancorica*, one of the species with long internodes, suitable for weaving was introduced in the area. About 185 seedlings were distributed to the artisans to be planted in their homestead. In addition, 1000 seedling of two common species *Bambusa bambos* and *Dendrocalamus strictus* were distributed to farmers (Plate 17).

6. Impact of project intervention

1. The implementation of the project helped to create awareness among the traditional bamboo artisans about the potential of bamboo craft, new development in the sector and to rejuvenate their interest.

2. A Bamboo Consortium was organized during the project period and this enabled the artisans to work in a coordinated manner and manage production and sale of the products.

3. The artisans were trained in production of a variety of products including furniture (woven moodahs, stands), decorative items (flower baskets, table mats, fruit baskets, scale flowers, star, table lamps, lamp shades, trays) and house-hold items (puttu kutty, pappadam kutti, chapathi baskets, waste paper/laundry baskets, thawas, hangers, tea trays).

4. The project facilitated participation in melas and fests thereby enabling the artisans to understand the level of their products in market and interact with artisans from other units. The farmers received training to manage bamboo clumps in a scientific way.

5. Planting stock of suitable species was provided to farmers interested in bamboo planting.
6. The activities of the project should be extended to a larger circle of traditional artisans and for a longer period especially in bamboo rich Districts of Kerala such as Palakkad, Malappuram and Trichur.

Constraints

1. As the duration of the project was too short, the increase in income of the artisans subsequent to implementation of the project could not be assessed.

2. Though it is difficult to convince the farmers for a change in traditional bamboo harvesting by clearfelling the clump (as this yields lump sum amount) concerted a long–term effort is necessary to bring about this desirable change.

3. Long-term observation and interaction with members of Bamboo Consortium is required to understand the problems and to evolve remedies for proper functioning of the craft units in a sustainable manner.

7. CONCLUSIONS AND RECOMMENDATIONS

1. Implementation of the project enabled traditional artisans to have a thorough understanding of the new developments in the bamboo sector, develop their capacity to produce new items based on market demand and improved the quality of traditional products.

2. A number of eco-friendly products including furniture (woven moodahs, stands), decorative items (flower baskets, table mats, fruit baskets, scale flowers, star, table lamps, lamp shades, trays) and house-hold items (puttu kutti, Pappadam kutti, Chapathi baskets, Waste paper/laundry baskets, Thawas, Hangers, Tea trays) became available in local markets.

3. Farmers having bamboo in homesteads were made to understand that bamboo can be managed like any other plantation crop in a profitable way.

4. Networking with other National Institutes such as IIT, NID and Cane and Bamboo Technology Centre, involved in value addition to bamboo products and development of new products should be done.

5. Necessary information and assistance should be provided in marketing the products developed by artisans and bamboo available in homestead.

6. The raw material availability for bamboo craft should be improved by cultivation of bamboo in forest and non-forest areas and facilitating extraction and transport of raw materials.

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Appendix –1

List of artisans attended the Project Launching Workshop

1. Krishnan, E., Karumankad.
2. V. Velayudhan, Vakathara
3. Thankam, Vakathara
4. Chellan, K. Karumankad
5. Jayadevan, T., Vakathara
6. Muthu Vakathara
7. Narayanan, Vakathara
8. Devu, Vakathara
9. Ammalu, Vakathara
10. Vellachi, Vakathara
11. Thalu , Vakathara
12. Vella, Vakathara
13. Chella, Vakathara
14. Vellachi, Vakathara
15. Kunchan, Vakathara
16. Rajan, Vakathara
17. Sivan, Karumankad
18. Valli, Vakathara
19. Parvathi, Vakathara
20. Girija, Vakathara
21. Meenakshi, Vakathara
22. Kunchi, Vakathara
23. Devi, Karumankad
24. Janaki, Karumankad
25. Shanthi, Karumankad
26. Bindu, Karumankad
27. Thatha, Karumankad
28. Chembakam, Karumankad
29. Veshu, Karumankad
30. Thatha, Karumankad
31. Radha, Karumankad
32. Prasad, Karumankad
33. Kalu, Karumankad
34. Kunchi, Karumankad
35. Balan, Karumankad
36. Swaminathan, Karumankad
37. Madhusuthanan Karumankas
38. Chellan, Karumankad
39. Chamy, Karumankad
40. Narayanan, Karumankad
41. Chinna, Karumankad
42. Thaya, Karumankad
43. Vellachi, Vakathara
44. Devu, Vakathara
45. Kunchi, Vakathara
46. Komalam, Vakathara
47. Parvathi, Vakathara
48. Thanka, Vakathara
49. Ammalu, Karumankad
50. Praveena, Karumankad
51. Chinna, Karumankad
52. Ammalu, Karumankad
53. Vellakutty, Karumankad
54. Radhakrishnan, Karumankad
55. Kaallu, Karumankad
56. Janaki, Vakathara
57. Chandran, Karumankad
58. Kunchu, Vakathara
59. Maalu, Vakathara
60. Kallyani, Vakathara
61. Satyabhama, Vakathara
62. Chella, Vakathara
63. Valli, Vakathara
64. Sitha, Vakathara
65. Ramakrishnan, Karumankad
66. Appukuttaan, Karumankad
67. Vellayan, Karumankad
68. Mayan, Karumankad
69. Chellan, Karumankad
70. Ganesan, Poolakunnu
71. Mathu, Vandithavalam
72. Kalyani, Vandithavalam

List of artisans provisionally selected for training workshop

Males		
Sl No	Name	Age
1	Krishnan, V, Karumankad	48
2	Thankan	52
3	Balan	34
4	Krishnan	52
5	Velayudhan	59
6	Ramakrishnan	32
7	Narayanan, S/o Kunchumundan	52
8	Kunchu , S/o Vella	25
9	Chellan, S/o Kunchumalayan	45
10	Chandran S/o Narayanan	40
11	Unnikannan, S/o Chamy	25
12	Prasad S/o Krishnan	18
13	Jayan, S/o Thankan	21
14	Swaminathan , S/o Kunchumalayan	30
Females		
1	Komalam, W/o Kunchu	26
2	Chinna W/o Chellan	47
3	Karthika	23
4	Devu, W/o Velu	46
5	Devu, W/o Rajappan	28
6	Devi W/o Appukuttan	42
7	Prema, W/o Sivan	23
8	Devu, W/o Narayanan	40
9	Rukmini, W/o Kittu	25
10	Vellakuty, W/o Late Chamiyar	45
11	Bindu, W/o Prakasan	23
12	Meenakshi, W/o Krishnan	42
13	Sakunthala, W/o Manikandan	21