



Threads of Tradition
**EXPLORING THE ART AND
SCIENCE OF KANNADIPPAYA**

A Festschrift in Honour of Dr. Syam Viswanath

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Along the humid tropical hills of the Western Ghats in Kerala, a traditional craft is kept alive by a group of indigenous communities. This unique hand-crafted product is called Kannadippaya which is a reed mat of exquisite qualities, woven with slivers obtained from a species of reed bamboo endemic to the Ghats. The product features an intricate design element called "kannadi", hence the name, Kannadippaya. Having learned and sustained over generations, the skills of intricate plaiting and interlacing with fine-quality reed slivers, Kannadippaya is a matter of pride for these communities. The mat is renowned for its intricate patterns, impressive craftsmanship and light-reflective properties giving it an otherworldly look when viewed from different angles. However, like many other traditional crafts, Kannadipaya weaving is on a decline as only a few from the younger generation volunteer to master the skill while the weavers are finding it difficult to access the resources needed to sustain the craft.

It is at this juncture that the Kerala Forest Research Institute (KFRI) stepped in, under the able leadership of Dr. Syam Viswanath, Dr. A. V. Raghu, Dr. V.B. Sreekumar and Dr. M. Amruth along with their colleagues Miss. N. Anjana and Mr. Paranev K. who studied the characteristics of bamboo reeds traditionally used for Kannadippaya weaving. A series of interventions to revive the craft was envisaged. The efforts

of the KFRI team is supported by Mr. Kannapan, Mr. Santhosh, and others from community who brought the ancient art of Kannadippaya to a wider attention. The team first visited Venmani in November 2020 and held discussions with some of the senior and most skilled practitioners of the craft. One of them, Ms. Ponmala, introduced the team to a particular species of reed bamboo, *Teinostachyum wightii*, which is used in weaving superior quality Kannadippaya which grows along the banks of rocky streams of high mountains.



The skills of the weavers and the cultural significance of craft moved the team deeply and instilled in them a conviction that the precious skill must be fostered and revived. Weavers faced many obstacles, including shortage of quality raw material and lack of access to a fair market to sell their products. In order to overcome these obstacles, the KFRI team thought out an action plan to ensure sustained supply of superior-quality raw materials for crafting Kannadippaya. This involved standardising the propagation technique for the *Teinostachyum wightii* and establishing a community nursery of the species, so that a large number of seedlings are raised to plant the seedlings in community land to make it a sustainable source of raw materials for the weavers. Furthermore, it was envisaged to build on the cooperative effort of the weavers to perpetuate and transfer the traditional skills and pool the resources to promote their cultural heritage. The cooperative could also be geared up to gain improved access to markets which would help the weavers secure a better price for their uniquely designed weaves.



During the documentation of the skills and diversity of Kannadippaya and cultural context of the handicraft, several hamlets were visited where weaving tradition is alive. These journeys took us to the homes of Kannadippaya weavers hailing from different communities such as **Muthuva, Mannan, Urali, Malayar, and Kadar**. Each visit provided an immersive experience, as we learned about the complexities and subtleties involved in various stages of the weaving process; from harvesting and preparing the reed, selecting the poles of right maturity and strength for slivering, the actual process and the unique styles of weaving followed by each community etc.



Depending on the type and number of repeating mirror patterns in the finished mat and their arrangement, each community has a unique signature design for Kannadippaya with an attributed name to each style such as ***ottakkannan or anachevidan, randuvari, moonnuvari, naluvari, and nandupaya***. Known for their durability and smoothness, these mats are often utilized as floor spreads for seating during cultural and religious occasions of the communities.





Our focus was initially on villages where Kannadippaya could be made on order for sale, including Venmani, Uppukunnu, and Adichiltotti. In Venmani and Uppukunnu, the Oorali community sold mats with Kannadi designs on an individual basis. However, the income earned by the weavers was meagre in proportion to the effort and drudgery involved in weaving mat. The Oorali community extensively used the species called *Teinostachyum wightii*, locally known as noonjilietta, for Kannadippaya weaving. This species produced longer, more flexible slivers with a particular greenish sheen ideal for crafting fine, durable Kannadippaya.



The mast flowering and subsequent death of the reed-brakes in the region had resulted in severe resource scarcity for the community. The weavers had to procure reed from distant and deep forests. Since this species is a straggler, the weavers had to climb trees to cut the culm from its top and bottom, and pull it out of the clump. Scarcity for this reed species in the Venamni area (Idukki District) forced the weavers to use available alternative reed species such as Muthur eetta and Chittoor eetta (*Ochlandra* sp.) to continue weaving Kannadippaya. As the slivers obtained from these species are thicker, the texture, sheen and the flexibility of the mats woven out of these are less impressive and were heavier. According to Ms. Ponnala, a veteran and active weaver, the rawmaterial base is fast depleting and if Muthur eetta and chittoor eetta are to be used, it would be difficult to produce mats of the original magical sheen and flexibility as with those woven with njoojil eetta.



To address the complex and interconnected issues ranging from raw material scarcity to marketing challenges, a proposal funding of a scheme titled "Kannadipaya special bamboo weaved mat product-Scientific, Technical and Marketing interventions for tribal empowerment" was made to the Department of Science and Technology (DST), Government of India, for financial assistance, which was subsequently approved for funding. The programme has a multipronged strategy:

- To ensure supply of the desired quality and quantity of raw materials to the community by imparting training in sustainable harvesting methods, propagation, and re-stocking of *Teinostachyum wightii*.
- To train handpicked younger members of the community under the supervision of their senior weavers on various aspects of processing and weaving the fine quality mats.
- To introduce mechanisation to reduce drudgery and production time
- To diversify the productline by introducing new products such as yoga mats, meditation mats, wallets, files, and more using the weaving and slivering technique followed in the making of kannadippaya.
- To introduce the concept of quality control in production and maketing of these products.
- To facilitate innovative marketing methods with wide reach for the product with porper qulity control and branding.

The project aims to make the crafting process more economical and less tedious by deploying tools and instruments for processing the raw materials, including splitting and slivering.







The team's search for skilled master craftspersons and weavers led them to the Muthuva community in Adichiltotti on the upstreams of Athiripally-Vazhachal area in Thrissur District. Here, the community was already exposed to the benefits of online marketing of their exquisite Kannadippaya and other handcrafted products mediated by a volunteer facilitator who provided additional design inputs to the community to enable them to cater to the current market demands; these include weaving smaller sized mats that could double as yoga mats, table mats, and like. Treating the slivers before weaving was yet another innovation for increasing the durability of mats besides use of Kareetta (*Ochlandra travancorica*) to weave Kannadippaya.



Though weavers prefer to work with *T. wightii*, as indicated earlier, the availability of the species after the recent event of mast flowering and death of *T. wightii* in the region was met with difficulty. So, the weavers from Adichiltotti use larger, thicker slivers than those used by the Oorali community. In addition to Kannadippaya, Muthuva community in Adichiltotti weaves a variety of mats, including *Sirappaya* and *Kasirappaya*.

Our search for Kannadippaya weavers in the region has taken us to remote and difficult to reach hamlets such as Variyam and Thera situated within the reserve forest area of the Kuttambuzha forest range in Ernakulam district. The Muthuva community members whom we met had live tradition of weaving Kannadippaya. During our visit to Variyam, we were thrilled to discover that some of these exquisitely woven mats were still carefully preserved as they were kept above the fireplace to protect them from pests and moisture. Sadly, the elders who wove them were no longer active in mat weaving. The mats preserved were actually gifted to the younger generation as part of the ceremonies.

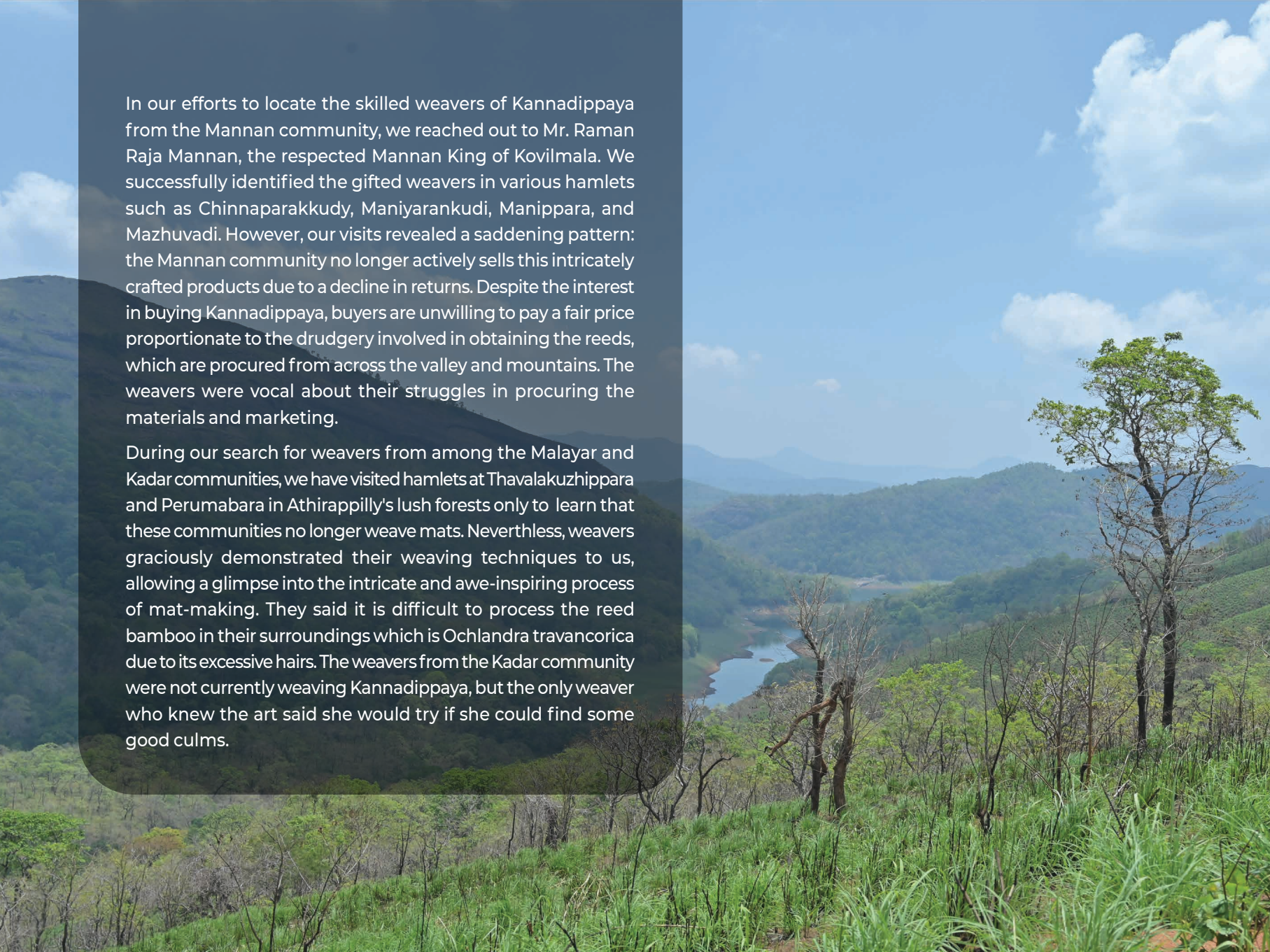


This serves as a poignant reminder of the importance of keeping the tradition and culture live not only by passing down the traditional knowledge to future generations but also by creating conducive environment for raw material supply, mechanisation and marketing. The older-generation weavers at Variyam were mainly using *Velleetta*, and they collected reeds from their immediate surroundings. During our visit to Thera, one of the hamlets, we have observed well-preserved Kannadippaya in most households. The head of the hamlet, Oorumooppa, opined that the weavers are willing to produce more mats if they offered a fair income for their labor. Unfortunately, there is a total lack of market linkage for direct marketing of their products. Oorumooppa added that, customers do travel a long distance to reach this remote hamlet to buy mats.



We sought the advice of the tribal department, Government of Kerala, who suggested exploring various tribal settlements of Oorali and Mannan communities in Idukki. We visited the tribal Oorali settlements located in the Upputhara panchayath of Idukki. The families in Memari, Kizhukanam and Kollathikkav located inside the Idukki Reserve Forest, shared fascinating tales of Kannadippaya. They fondly remembered Ms. Neeli, the eldest weaver who passed away the previous year, used to gift *Kannadipparambu* and *Kannadikidijam* to all visitors. She was over one hundred years old and an outstanding weaver. Mr. Raman, the only male weaver of Kannadippaya we came across so far, learned weaving under her tutelage. She had gifted a mat to Mr. M M Mani, the then Minister for Electricity when he visited the settlement. Mr. Raman had many handmade items of Kannadi design. However, weaving a Kannadi design took more time than making a regular mat, especially since the slivers for Kannadi design needed to be thin, he said. Weavers from Kollathikkavu and Kizhukam identified *T. wightii* as a better option for weaving since it smoothed easily. Nonetheless, it was difficult to obtain more slivers from *Teinostachyum wightii*, unlike *Ochlandra travancorica*. Since Kannadippaya requires great patience and a sharp mind to create the design perfectly, not all weavers are able to deliver a perfect product. Although an excellent Kannadippaya could be rolled into a small reed culm just like a paper, weavers lamented that Kannadippaya sales are low these days, and they do not earn money from their efforts.





In our efforts to locate the skilled weavers of Kannadippaya from the Mannan community, we reached out to Mr. Raman Raja Mannan, the respected Mannan King of Kovilmala. We successfully identified the gifted weavers in various hamlets such as Chinnaparakkudy, Maniyarankudi, Manippara, and Mazhuvadi. However, our visits revealed a saddening pattern: the Mannan community no longer actively sells this intricately crafted products due to a decline in returns. Despite the interest in buying Kannadippaya, buyers are unwilling to pay a fair price proportionate to the drudgery involved in obtaining the reeds, which are procured from across the valley and mountains. The weavers were vocal about their struggles in procuring the materials and marketing.

During our search for weavers from among the Malayar and Kadar communities, we have visited hamlets at Thavalakuzhippara and Perumabara in Athirappilly's lush forests only to learn that these communities no longer weave mats. Nevertheless, weavers graciously demonstrated their weaving techniques to us, allowing a glimpse into the intricate and awe-inspiring process of mat-making. They said it is difficult to process the reed bamboo in their surroundings which is *Ochlandra travancorica* due to its excessive hairs. The weavers from the Kadar community were not currently weaving Kannadippaya, but the only weaver who knew the art said she would try if she could find some good culms.

Our visits to the Kannadippaya weaving communities instilled in us with a deeper understanding of the traditional techniques and materials used by the weavers, challenges faced by the weavers and the importance of preserving this unique art form. It was also felt that efforts of promoting and preserving craft is closely linked with enhancing the economic opportunities for local communities. Kannadippaya weaving deserves recognition in our society, and we should celebrate the weavers and their intricate products. We also hope to provide the weavers with opportunities to continue practicing their art while earning a livelihood that respects their skills and cultural heritage. Creating awareness and interest in Kannadippaya weaving ensures continuity of the craft tradition for generations to come. Our visits continue to guide our future efforts to promote and preserve this traditional craft and the communities that practice it, giving Kannadippaya and its weavers the recognition they truly deserve.

Kannadipaya weaving would enter a new phase, thanks to the weavers' resilience and zeal of KFRI team. The plan to apply science, technology and innovation framework has potential to ensure better access to markets, resources, and technology to promote this craft. Ther Kannadipaya weavers would no longer be invisible or exploited but would be proud custodians of a craft that has been guarded for generations, and their tireless efforts, along with the KFRI's dedication, would ensure that the tradition continues to thrive.







EXPERIANCES FROM BARE LIFE

The Kannadippaya weaving tradition has been an integral part of the culture of the tribal communities of Kerala for centuries. Every aspect of this craft, from the availability of raw materials to the techniques used in weaving, has been shaped by the geography and landscape of the region.

In the words of **Mrs. Parukutty (Age 83)**, one of the artisans of the Uralli community, **"There were not many shops in Kanjikkuzhi and not this much crowd. The shops used to be small sheds made of palm thatch. Three of us left for Kanjikkuzhi with a Kannadippaya and other mats made up of bamboo. I was pregnant at that time. There were no buyers for mat that day. We had to sell out all the mats to a person named Mukrisamy for just 50 rupees and I got just 100 rupees for the Kannadippaya. With that money we bought rice, salt, and chili"**. This captures the struggles and hardships faced by the artisans in practicing their craft where marketing is part of their work.

One of the reasons that the Kannadippaya weaving tradition is unique is because of the rare bamboo that is used in the process. **Mr. K.K. Ramachandran (Age 77)** from the Mannan community explains, **"The bamboo we use for weaving kannadippaya is not available everywhere. It is found only in hilly places, where there is Chola (streams). This bamboo does not grow plain area. It seems yhis bamboo looks and grows towards the mountain. Its internode gains length like that. Each internode is long. It is xo long that we cannot hold it from one head to another"**. These words reflect the habitat

of the bamboo as well as its unique growth pattern and availability.

The laborious process of gathering raw materials for Kannadippaya is reflected in the narrative of **Mrs. Bhanumathy (Age 63)** from the Urali community... **"I was in the mountain and streams for two days. I came up to the mountain because I saw a group of tall bamboo reeds and wanted to collect them. It was too heavy, I can't carry it down. We ate A lot of wild fruits . And caught plenty of fish. Sumptuous wild honey was consumed. Met members from other communities. But when back home, pain and inflammation in both legs were unbearable somehow I managed to reach home. The joy of seeing the reed bamboo persists in my mind"**. The process of collecting reed is very hard, but the tribal artisans find fulfillment in the end product and they savour the memories of the process.

Bhanumathy's story of having inspired with bamboo weaving in her young age shows how the tradition is instilled down the generations, and how it is more than a means of livelihood. She says, **"I saw my father's mother weaving like this. I stood behind her and watched her weaving. It happened a long time back. Once I realized that I want to learn to weave. I have learned mostly by watching others weave"**.



The symbolism behind the tradition is also an important aspect. **Gangadharan (age 68)** from the Urali community recalls the story; "**once upon a time, the elderly woman among us was shown a mirror mat in a dream. When the wind blew on the water, the waves came back and forth from the other side. When both joined like a mirror, the wave spread. This is how the mirror mat was shown in the dream**". These dreams that are passed down from one generation to another add a spiritual and cultural dimension to the process of weaving.

The process of acquiring raw materials itself is a challenging and dangerous task. **Ponmala Gopalan (Age 86)** says, "**If we want to get bamboo, we have to go to the forest, elephants are there...in the forest...We have to cross the river. We can't harvest the bamboo as such, we have to climb on the tree and then the head would be cut straight off and pulled at the bottom. That is the harvesting method of this bamboo because the bamboo is too long and of climbing nature**". **Mundi aged 94** added "**The elephant would drive and chase, but we used to go to forests to collect bamboo for weaving**". These highlights the difficult and dangerous process of sourcing the materials needed for the craft.

Despite these challenges, the communities have continued to uphold the tradition of weaving, though the financial benefits were meagre. **Ammini (Age 55)** from the Urali community says, "**If we sell Kannadippaya, we don't even get paid for the effort**".



However, **K.K. Ramachandran** points out that things are changing, "**We would be happy if someone gave us something as a price if we weaved the mirror mat with such difficulty and sell it. We don't demand price because we don't have the right to tell the price. But now the situation is changing**".

Additionally, the bamboo variety that is used in the Kannadippaya weaving has a unique flowering cycle that poses a threat to its availability. **K.K. Ramachandran** explains, "**If the bamboo blossoms then the bamboo is no longer there. Life of the bamboo ends there. Sprouts would not come up again. After flowering, bamboo is gone**". The artisans, therefore, must ensure that the bamboo is used efficiently, and harvesting is

done in a sustainable manner to ensure the availability of the raw materials for future generations.

The Kannadippaya weaving tradition is not just a craft; it is a cultural heritage that has been passed down through generations of tribal communities in Kerala. The stories of the artisans highlight the hard work, dedication, and love that goes into every mat that they weave. The availability of raw materials and the difficulty of transportation add to the unique nature of this tradition. Despite the hardships, the artisans continue to pass down the tradition and find satisfaction in preserving their cultural heritage.







GI TAG FOR KANNADIPPAYA

KFRI has carried out extensive documentation on the history, techniques, and materials used in Kannadippaya weaving. This has provided all the important information handy, for filing an application for obtaining GI tag for the Kannadippaya by the communities weaving it.

One of the first steps in this process was to identify the geographical area where the craft is practiced. KFRI conducted a survey of the region and found that Kannadippaya weaving is primarily practiced by indigenous communities residing in the districts of Idukki, Pathanamthitta, Ernakulam Thrissur and Palakkad in Kerala.

The next step was to establish the unique characteristics of Kannadippaya mats. These mats are made from the particular species of bamboos called *Teinostachyum wightii* and *Ochlandra travancorica*, which grows in the forests of the Western Ghats in Kerala. The weaving technique used for making the mats is known as the 'latticework' technique, which involves weaving the bamboo slivers in a criss-cross pattern to create intricate designs and patterns. The finished mats are durable, lightweight, and have excellent thermal insulation properties.

KFRI worked closely with weavers and experts to develop the documentation required for the application for a GI tag. This included gathering information on the history of the craft, the techniques and materials used, and the cultural significance of the mats. KFRI also worked with the weavers to create a logo and marketing strategy for the mats.

The application for a GI tag for Kannadippaya mats was submitted In 2022 to the Geographical Indications Registry, Chennai. The

application was accepted, and the process of getting the GI is underway. Two of the tribal cooperative societies; Unarvu Pattikavarga Vividhodesha Sahakarana Sangham and Vanasree Bamboo craft and Vanavibhava Sekharana unit are the applicants with all the tribal communities weaving Kannadippaya as beneficiaries with KFRI being the facilitator. Dr C. R. Elsi, retired Professor, who has been heading the Intellectual Property Cell at Kerala Agriculture University had provided guidance in preparing the application of GI tag.

Weavers from the two societies who applied for the GI for Kannadippaya had participated in the 35th Kerala Science Congress by setting up a stall to showcase the craft. The stall had attracted many visitors who had no prior knowledge of Kannadippaya weaving. The weavers demonstrated and explained the weaving process, procurement and processing of bamboo, besides sharing their challenges in collecting bamboo reeds and weaving mats. Visitors appraised of the hard work and skill required to create such fine handcrafted products. Younger visitors were particularly interested in trying their hand at weaving the mat, and the stall received wide coverage in newspapers, highlighting the need to register the craft as a GI. Additionally, the extension and training division released two videos, one as a documentary teaser and another as a short video on Kannadippaya, screened at the Congress.

The benefits of obtaining a GI tag for Kannadippaya mats are significant. First and foremost, it will provide legal protection for the craft, preventing others from outside the communities from misusing the name or producing look alike products



(Proposed Logo for Kannadippaya)





that do not meet the specified criteria. This opens up possibilities of protecting the livelihoods of the weavers and their communities.

Secondly, the GI tag will provide recognition and prestige for Kannadippaya weaving, both within India and internationally. This could lead to increased demand for the mats, which in turn could create economic opportunities for the weavers and their communities.

Thirdly, the GI tag will promote the cultural heritage of Kerala, highlighting the unique skills and traditions of the region. This will help to preserve and promote the craft for future generations, ensuring that it remains an important part of Kerala's cultural identity.

Overall, the efforts made by KFRI to obtain a GI tag for Kannadippaya weaving were essential for the preservation and promotion of this unique craft. The benefits of obtaining the tag extend far beyond legal protection, providing recognition, economic opportunities, and cultural preservation. By supporting the weavers and their communities and promoting the craft, we can help to ensure that Kannadippaya weaving continues to thrive for generations to come.



**Vanasree Bamboo Craft and
Vanavibhava Sekharana unit,**
Uppukunnu, Idukki

**Unarvu Pattikavarga
Vividhodesha Sahakarana
Sangham,**
Venmony, Idukki



CONCLUSION

Over the past few decades, the indigenous communities of India have faced several challenges to preserve their cultural legacy and their livelihoods. Tribal communities from different parts of India have been practising ancient weaving traditions that are crucial to their survival. One such traditional craft form is Kannadippaya weaving practiced by indigenous communities in Kerala. Kannadippaya weaving is a unique skill that has been passed down through generations of the tribal community. They have been using bamboo to create intricate works of art for centuries, but over the years, the Kannadippaya weaving tradition has faced many challenges, from lack of recognition to poor working conditions.

The Kerala Forest Research Institute (KFRI) has been at the forefront of efforts to empower the indigenous people who are involved in the Kannadippaya weaving tradition. The KFRI's mission is to promote sustainable forest management and support the livelihoods of forest-dependent communities in Kerala. The institute has been working towards empowering the tribal people by providing training and support to enhance their skills and knowledge, joining hands with communities to access better markets, and earning fair wages for their craft.

One of the major milestones that the KFRI has achieved in its efforts to promote and empower the Kannadippaya weaving community is securing a Geographical Indication (GI) tag for the craft. The GI tag acknowledges the uniqueness of the craft and helps to promote the cultural heritage of the skill. This recognition would bring visibility to the weaving tradition and

help promote this craft on a larger platform. The GI tag may open new market opportunities in front of the tribal weavers and would help them fetch better prices for their products.

The Kerala State Council for Science, Technology and Environment (KSCSTE), Government of Kerala has also funded research projects that help to further promote the craft of Kannadippaya weaving. The research projects are aimed at conducting scientific studies on bamboo cultivation, processing, and weaving, among other things, are expected to create novel understanding of the craft. The findings of these research projects have helped to enhance the traditional techniques of Kannadippaya weaving by introducing newer and more sustainable methods.

The KFRI's initiatives are expected to bring about a significant impact on the lives of the tribal people involved in the Kannadippaya weaving tradition. By empowering these weavers, the KFRI is not only helping to preserve an important cultural heritage, but also support sustainable economic activity and environmental conservation. The tribal weavers would benefit from more substantial incomes, better working conditions, and access to modern equipment that will make their work more efficient.

Another initiative of the KFRI was the implementation of the Department of Science and Technology (DST), Government of India project, which aimed at experimenting with modernization of the the weaving. The machinery is intended to make the preparation and processing of reed for weaving more efficient

and reduce the time required for completion, thereby increasing the product output. The project would also help to create awareness among the weavers about the latest technology employed in weaving, improving their skills and expertise.

The empowerment of tribal people involved in the Kannadippaya weaving tradition has several prospects. By enhancing the skills and knowledge of the weavers, the KFRI will be helping them produce high-quality products that have access to new markets. The availability of better markets would help the weavers command higher prices for their products, increasing their income and improving their standard of living. The empowerment of the tribal weavers would help preserve an ancient weaving tradition that is an important part of Kerala's cultural heritage.

The KFRI's efforts to empower the Kannadippaya weavers can be seen as a microcosm of a more extensive challenge of promoting traditional knowledge and practices while integrating them into mainstream economic activities. The KFRI's approach of empowering communities through a participatory approach, knowledge building, and technology transfer has been successful in achieving this integration. The lessons learnt from the KFRI's approach can be applied to other traditional knowledge systems in other parts of the country, helping to empower the people involved in these crafts.

The Kannadippaya weaving tradition is a unique skill that is now recognised at the national level. The recognition of Kannadippaya weaving outside the state has brought new markets for the weavers, thus expanding their income sources.

Modernisation of the equipment used in weaving is expected to enhance productivity and helped create a bridge between the traditional and modern methods of weaving. The Kannadippaya weaving tradition has a promising future, and the efforts of the KFRI to promote it show that traditional techniques and modern tools can be integrated seamlessly. The collaboration between the KFRI and the tribal communities' weavers has created a link between indigenous knowledge and scientific knowledge, which is crucial in fostering sustainable development.

In conclusion, the efforts of the KFRI in empowering the Kannadippaya weavers show the importance of preserving traditional knowledge and practices while integrating them into mainstream economic activities. The KFRI's initiative to empower the Kannadippaya weaving community through training and support has helped in enhancing their skills and access to markets, thereby improving their standard of living. The recognition of the Kannadippaya weaving tradition at national level would bring new markets and opportunities for the weavers, and the modernisation of equipment has increased productivity while preserving the traditional techniques. The KFRI's mission to promote sustainable forest management and support the livelihoods of forest-dependent communities in Kerala would safeguard the cultural heritage of the state. The lessons learnt from the KFRI's initiative can be applied to preserve other traditional knowledge systems in India, empowering the people involved in these crafts and contributing to sustainable development.

'Kannadipaya' – role of geographical indication in brand-making and conservation

A. V. Raghu and Syam Viswanath

This note illustrates the unique characteristics of 'kannadipaya' (specially woven bamboo mirror mat), the importance of conserving the traditional knowledge and skill inherited by tribal communities of Idukki district, Kerala, India, and the significance of geographical indication tag for this heritage product.

For centuries, bamboo has been the species of choice for artisans and craftsmen, especially among indigenous communities in many parts of India, including the Western Ghats. Usually communities engaged in weaving mats from bamboo prefer thin-walled species, also known as 'reed bamboos' belonging to genus *Ochlandra*, of which ten species are endemic to Kerala, India. The Kerala State Bamboo Corporation, a Government of Kerala enterprise, since its inception in 1970 has been encouraging traditional bamboo weavers in using *Ochlandra travancorica*, a thin walled bamboo species available locally, for making value added products including bamboo mats¹. However, a special type of bamboo mat woven only by a few tribal communities in Venmani, Idukki district, Kerala, called 'kannadipaya' (roughly translated as mirror mat) has captured the imagination of bamboo lovers due to its unique design, light refractive properties and extreme flexibility. The name 'kannadi' means 'mirror' and 'paya' means 'mat' in Malayalam. Till recently, it was considered to have been made from a species of *Ochlandra*. However, following the visit of a team of scientists from Kerala Forest Research Institute (KFRI), Peechi, Thrissur, India and collection and close examination of the flowering branchlets, seeds, clump and culm properties of the species have helped identify it as *Teinostachyum wightii* (Munro) Bedd.

The ancient knowledge of kannadipaya weaving has been inherited by the Urali, Mannan and Muthuvan tribal communities of Idukki district. Anecdotes indicate that the tribal communities of Idukki district have been presenting this special shiny mat as a gift to kings and other state dignitaries on special occasions. The mat (0.75–1.0 m × 2 m) is so flexible that it can be rolled and placed inside a culm of bamboo of diameter less than 10 cm. These mats are considered as unique heritage products and also as traditional handicrafts.

The uniqueness of kannadipaya is because of its design, weaving method,

type of bamboo used and preference for the fourth peeling or sliver from the bamboo culm internode. The tribal communities have specialized in making these mats by taking inner slivers from the culm internode which is 1–2 mm thick and 4 mm wide, of a locally available bamboo called 'Njoonjiletta', which has been identified as *T. wightii*. This mat has a polished surface, which is smooth and reflects light like a mirror. Adjacent woven patterns of this mat are like a mirror reflection of each other (Figure 1). We consider this weaving as a traditional inherited knowledge of these communities. The other vernacular names of the locally available bamboo bioresource, e.g. 'Muthuretta', 'Pannimookan', 'Karietta' could possibly be variants or varieties of *T. wightii*.

Besides weaving mats, the tribal communities are also engaged in various works under the Mahatma Gandhi National Rural Employment Guarantee (MGNREG) scheme, which is the primary

source of income for them, since weaving mats does not provide a regular employment due to difficulties in access and collection of the bioresource year round. Despite the high demand for this special mat, the younger generation has shown a distinct lack of interest in the weaving process due to its time-consuming and laborious nature. It is possible that unless supported by innovative schemes, this traditional knowledge may die a natural death. There are reports of decline in traditional knowledge base due to lack of documentation and conservation measures to augment and protect the natural resource base of bamboos². Care has to be taken that kannadipaya also does not meet the same fate. For this, proper branding and geographical indication (GI) registration of the product is necessary. GI is an important tool for branding and conservation of traditional knowledge. The GI registration will also help prevent the misuse of traditional goods as well augment financial gains to

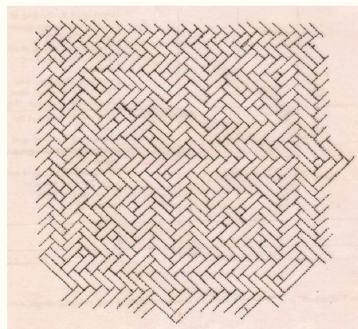


Figure 1. Illustration of 'kannadipaya' bamboo mat. Here in this four square pattern seen in mat, each square is a mirror image of the diametrically opposite one.

traditional weaving communities through marketing this unique product to other countries'. According to the Geographical Indications of Goods (Registration & Protection) Rules, 2002, kannadipaya falls under Class 20 with respect to handicrafts, mats, decorative and utilitarian items made with soft bamboo/reed. The primary aim of this note is to

emphasize the need for GI for this unique product, which is expected to preserve the traditional knowledge as well as recognition for it universally.

1. Pavithra, G. M. and Jacob, K. J., *J. Bamboo Rattan*, 2018, 17(2), 26–35.
2. Chandrashekar, U. M., Tikhile, P., Subbanna, S. and Viswanath, S., *J. Bamboo Rattan*, 2019, 18(4), 64–73.

3. Kangabam, R. D., Medhabati, K. and Govindaraju, M., *NeBio*, 2013, 4(2), 5–58.

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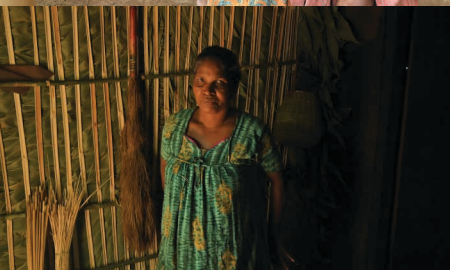
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