BAMBOO CRAFT AT VIRNODA

Design and Skill Development Workshop Report

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South Asia Foundation

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Foreword

To work with women artisans of Virnoda was a great opportunity and a challenge too. While I could put my knowledge about bamboo craft to use and understand how small set ups work, the skill levels of all fifteen women were extremely varied. A few were skilled, but most of them were beginners. This made group-work difficult and each one had to be given different assignments according to the skill level suited to that person.

A bigger concern was the rainy weather which affected the bamboo to a great extent. Wet bamboo is prone to fungus and bore attack. Due to lack of knowledge and infrastructure about treatment, the bamboo used at the workshop was not best suited. Since bamboo craft at Virnoda is still relatively new, traditional knowledge is also limited.

The focus of the workshop was to develop products using the available skill set and locally available materials. Therefore whatever value additions and variations that were made to the existing products did not disturb work ecosystem. The intention was to keep the goals realistic and to encourage the artisans to continue working in this sector without having to worry about sourcing materials from far off cities.

ABOUT VIRNODA

Introduction

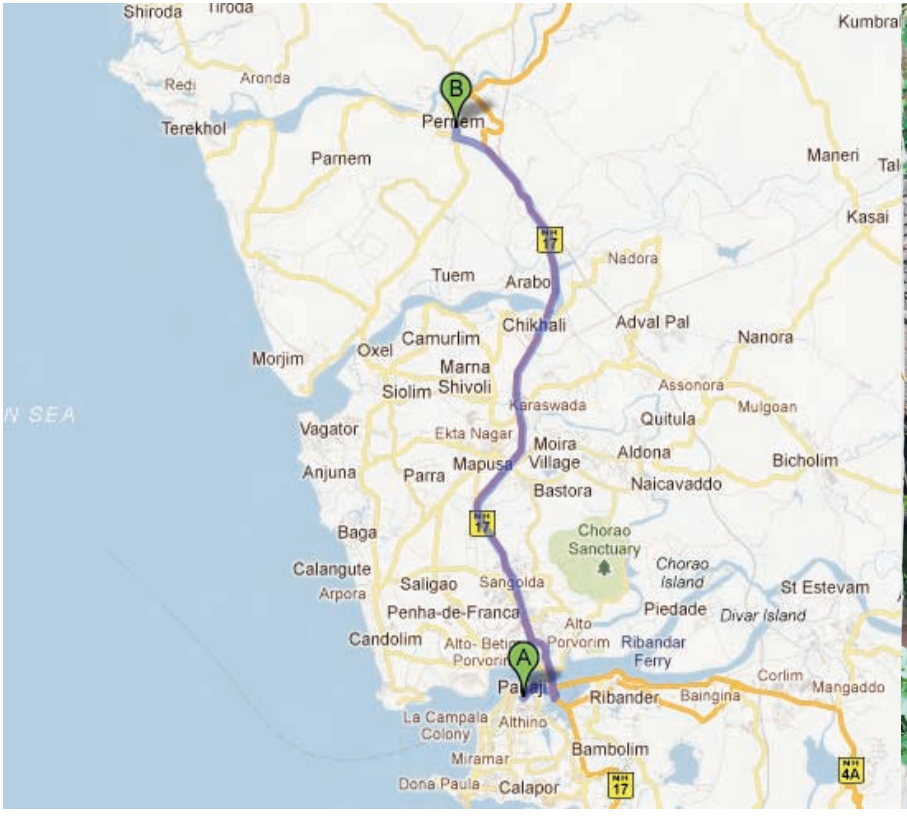
The workshop was an initiative of South Asia Foundation. It aimed at product development by involving designers and artisans to share their expertise on a common platform. The process followed at the Virnoda workshop was:

- Study the current skill levels and product categories that the artisans were comfortable working with
- Propose changes in the current product range
- Develop new designs
- Train the artisans in producing the new designs
- Impart know-how on new materials, sourcing and costing
- Share examples of good craft practices from across the country and world
- Awareness about importance of good finish, and introduce finishes and treatments.
- Exhibit the products and invite people to give inputs on the outcome.

The research at various stages revealed concerns towards functioning of self help groups, financing and coordination, lack of education, material procurement, issues concerning quality and finally lack of market links. These concerns make ground realities different from what we set out with.

Place

Virnoda is a small village with about only 30 houses and a population not more than 100. It is situated in the Pernem Taluka of North Goa District. The nearest market place is Pernem, and the nearest City is Mapusa which is around 10 km from here. It falls under the Harijan wadi area.



People

Virnoda is primarily a Goan Hindu village; the people of Virnoda are called *Virnodkars*. This has also been adopted by many people as their family name. The occupation of men folk in the village has seen changes from agriculture to jobs in the city. The women either engage themselves in house work or craft work like embroidery and stitching. Bamboo craft is mostly practiced for a living by older women who make large *dali* mats and baskets and sell them in Mapusa market. The craft does not seem to have trickled down the generations, and therefore only few middle aged women are adept at weaving. However, with interventions from the NGO sector and the government seems to be reviving.

EXISTING CRAFT

Material

The bamboo used at Virnoda is sourced from farms in Pernem *taluka*. The material is usually bought from the dealer on the farm itself. Clusters owned by dealers are booked and cut by requirement. It is difficult to determine the exact species of bamboo available here as it is referred as bamboo, without any specific local name. The properties of this bamboo are:

- Hollow core and straight length
- Thickness of wall: 10mm
- Node to node distance: 12” to 15”
- Outer diameter: 2.5” tapering to 1”
- Suitable uses: handicrafts, mat weaving, basketry

Each pole costs around Rs.100 as of July 2011.

Craft

The bamboo craft in this small village is fairly basic without much intricate work. Articles of everyday need include *soop* (winnowing tray) and a few baskets. Influence from the urban areas around is quite evident. However, a few old women in the age group of 60- mid 70s continue to make large mats called *dali* and *palli* or baskets. The mats are used to cover large spans of roof and also at construction sites and the baskets are used by fishermen and vegetable vendors. These craftswomen are fast and efficient at work. The younger women have also known the craft, but lost touch. Most generations have learnt the art of weaving by everyday observation and by helping the older ones at work.

The village has seen a few interventions towards skill development. They were trained to make lamps which are a common item seen in shops selling souvenirs to tourists in Goa. Some of the products already being made here are discussed later in this section.

Craft Practice

Craft at Virnoda is practised individually in most households. However, there are structured artisan groups and individuals may decide to be a part of them. There are two active Self Help Groups which were also a part of the conducted workshop. One of the groups is called *Kuldevta* and the other is called *Sateri* No.1. The formation of SHG's helps the artisans to collectively apply for funding, micro-finances and loans. It also helps in organising workshops and to have shared facilities. The SHGs are registered and therefore risk sharing becomes an advantage for a person to join in. A number of government schemes and development programmes are also reserved for SHGs that individuals may not be eligible for.

However, a downside of the formation of SHGs surfaced when it was revealed that young girls in the village were not allowed to be a part of such groups because they were expected to get married sooner or later and reside in a different village/taluka/ district etc. Therefore, there is a good chance that individuals who may have entrepreneurial bent may give up or lose touch with craft by the time they join SHG. There is also a likelihood that the village a girl is married in may not have active SHGs in the same craft.

Tools

The tools used by the artisans in this village are fairly basic and are limited to hand tools. Though this may prove to be a limitation in the way of efficient production, it lets the artisans work independently from their own houses. The tools used are:
Koita: This is a sickle shaped tool used to cut bamboo lengths in the absence of a saw. It is used to break the fibre by constant hammering. However, its prime use is to split bamboo.
Churi: This is used to finish splits. Also after the initial splitting of bamboo, thinning of splits is done with *churi*. The word literally translates to knife. A smaller version of this is also used to hold a split up when another needs to be inserted in the weave. Most of these are available in the market with a wooden handle, but a few without this could also be found. These are cast in the shape with a flat end which serves the purpose of a handle. However, these are less ergonomic since it does not give a good grip to the user.
Hacksaw: Used for lateral cutting across fibre length.

A tool kit recommended at the workshop includes the following items

- *Koita*
- *Churi (Suri)*
- Small churi
- Scissors
- Sand paper 120
- Needle set (used for wool)
- 12” steel scale
- Inch Tape
- Right Angle (small)
- File Set
- hard bristle brush for removing fungus
- Measuring Tape
- Hacksaw and blades
- Kerosene burner
- Grinding Stone
- Wire stripper and pliers
- Small screw driver (for fixing bulb holder)

Material Process

A few images here show the process followed by the artisans at Virnoda.

- The bamboo is first cut across the fibre for the required length. This is usually done using a hacksaw.
- Splits of bamboo are made using the *koita*. The *churi* can be used for splitting this further.
- Finishing of splits is done using *churi*. Also very fine splits are made with this tool.
- Splits are coloured by boiling colouring chemicals in water and dipping in it.
- These are then sun dried.

The process of preparation of material and then product making is usually shared between the people. Usually only one person is engaged in product making and the rest of the women in that group prepare material.

EXISTING PRODUCT RANGE

The species of bamboo locally available is suitable for basketry and weaving mats. It is hollow and therefore cannot be bent to make furniture. Also, the node to node distance is small and getting long lengths without nodes is rare. This explains why basketry is most widely practised bamboo craft in this region. Basketry has been practised in various forms in many craft communities for ages, and to innumerate would mean underestimating improvisation. Different forms of baskets are used for different purposes in everyday life in rural India.

Soop (Winnowing Tray):

This is a winnowing tray which can be found in almost all houses. Grain is winnowed and cleaned for cooking on this tray. The structure of the tray is woven differently in different parts of the country.

- The process of making *soop* in this village starts from carving a thick stick from a split of bamboo. The ends are made like hooks in order to contain the weave and prevent it from slipping away.
- Thin splits around o.5" wide are wrapped around diagonally on the stick and then interwoven.
- As the length of the stick gets completely covered with the weave, the splits are turned in to form a rim. The scoop like structure contains the grain while winnowing.
- The entire periphery may then be reinforced with either thinner splits or coconut fibre, and these days plastic rope has also penetrated its way through the craft. The coconut fibre is soft and easy to tie, bamboo splits often have to be dipped in water to make them soft.

A medium seize *soop* sells for around Rs. 100.

Palli (Square base basket)

This is a general purpose basket. It has a square base and does not use any reinforcement at the bottom. The walls are finished with the splits used for weaving. The simple construction makes the basket appropriate for good finish in the final product. However, the thin splits are inappropriate for heavy loads.

- The process of constructing *palli* starts from the base which is woven like a mat. The splits are woven perpendicular to each other, leaving the ends free from both sides.
- The weave is turned 45° and the free lengths of the splits are interwoven in the corners. This length determines the height of the wall.
- Extra length of splits is added when needed.
- The rim is made by turning the splits in.
- In a similar fashion a lid for this basket can also be woven by keeping the size slightly bigger than the basket itself.

A different form which also often termed *palli* is a purse like product. Unlike the basket, this *palli* has two corners instead of four. Also, in this case the mat itself is folded and then splits interwoven. The rim can be finished in two distinct ways as shown here.

Patlo/ Tokri (Basket)

The word *tokri* literally translates to basket. This basket is constructed to take bigger loads than a *palli*. The base is made with thick splits radiating from the centre. The base is flat and the weaving pattern may vary along the wall. The form at the base and along the walls is circular. The rim is also finished in different ways.

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    - The process of construction starts at the base. This can be made with two layers of radial splits. The thick splits are called *khame*. They are essentially the warp in this weave. The length of these members is the total of the radius of the base and the height of the wall.
    - Thinner flat splits are then woven in order to hold the *khame* together.
    - Once the desired size of base if achieved, the splits are bent inward in order to shape the basket. The base itself could be made concave for better stability.
    - The wall of the basket could be made with either flat thin splits or with round fine splits. These are called sari by the locals. These are nothing but the weft of the weave.
    - Sometimes two or more splits can be used simultaneously to give a braid like pattern on the surface. A single split gives a running stitch like finish which sits flat on the surface.
    - The rim is usually made by turning the extra length of *khame* in. If the thickness of these splits does not allow to be bent easily, then the split is made thinner by removing a layer of fibre only from this length.

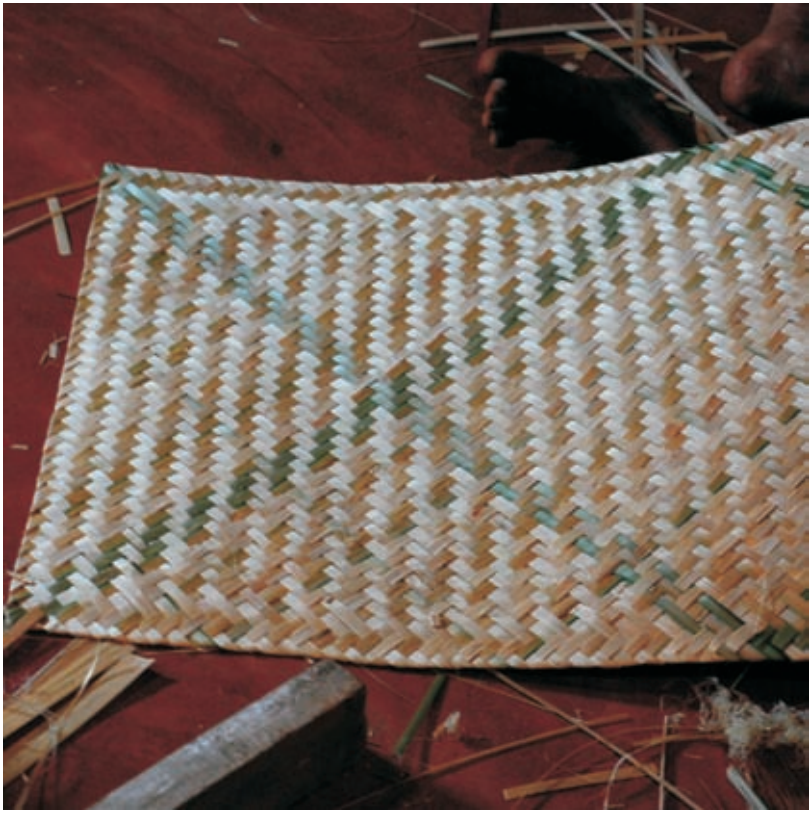


Dali (Mat)

These are mats usually woven in big sizes for construction sites or for covering big roofs. They are made for the construction industry and each mat of 22 *pau* x 11 *pau* measured by size of feet) takes about 15 days to weave. The construction of the mat goes from one edge to the next.

- The splits are made to similar width and thickness
- They are arranged parallel to each other and the lengths of alternate splits are placed in a jagged fashion.
- The first split is then turned in perpendicular and woven with the rest of the splits. In a similar fashion, one by one all the splits are turned in leaving a edge finished.
- The corner of the mat is usually given either a new green split or a coloured split which acts as a reference for the weaver.
- The adjacent edges are subsequently woven in a similar fashion.
- The finish of the mat depends on the consistency in the weaver's hands as much as the consistency of the width of splits.
- Surface finish is done by pulling out extra fibre using *churi*.





Pankho:

The fan is not a product made for selling. It is quick and simple to make. This can also be considered to be a derivative of the *dali* mat with a handle. The handle is made by splitting a stick partially and inserting the small mat into the split. It is then tied with thinner splits or coconut fibre.

Lamp

The lamp is a fairly new introduction which was made only a few months back in a workshop conducted at the village. It is made using *khame* and *sari*. However, unlike a basket, it does not have a flat base.

- The *khame* are prepared with around 0.25" wide splits. At half length they are bent in order to give shape to the lamp.
- These are arranged in a radial fashion.
- Flat thin splits are then interwoven to hold the radial splits together. Most of the times two splits are worked on simultaneously.
- Since a lamp does not hold much load other than the weight of itself, the base is not be strengthened as much as a basket. Therefore, a gap may be left between woven portions.
- After the base feels securely held, it is lifted off the ground and then shaped by pressing the walls inwards and weaving simultaneously. The weave now uses rounded fine splits called sari. This was woven loosely leaving gaps in the spiral like structure.
- The ends of the splits is held secure by applying adhesives.
- The last step is to cut the top in order to make place for the electrical fitting to pass through.

The lamp shade has more than one problem.

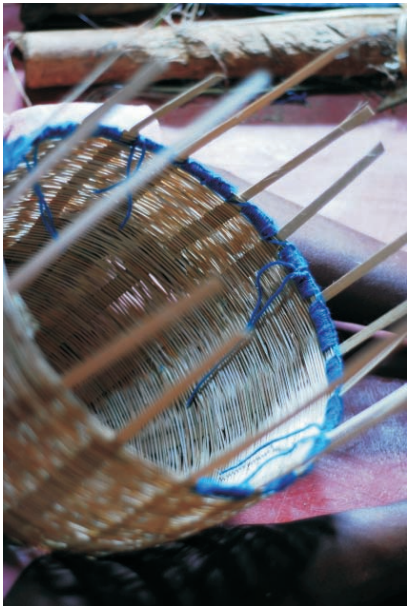
- The lamp or the incandescent bulb inside can be seen, and hurts the eye also keeping the viewer from looking at the form of the lamp itself.
- The hole cut on top does not look finished, since it is mostly made with a pair of scissors it also not precise.
- The ends are finished using adhesive which is makes it untidy.

PRODUCT DEVELOPMENT

LAMPS

The lamp shades developed during the workshop aimed at solving the above listed problems. Also, the existing craft techniques were always kept in mind. An attempt to retain the craft was made, and therefore a number of products were derived from existing product range.

Value addition as a concept was explained to the artisans. This was done by using additional materials which are easily available in the local markets. Also, wiring for bulb holders was introduced to the group along with hands-on learning in wiring, thus adding value to the product and saving the buyer the hassle of wiring.



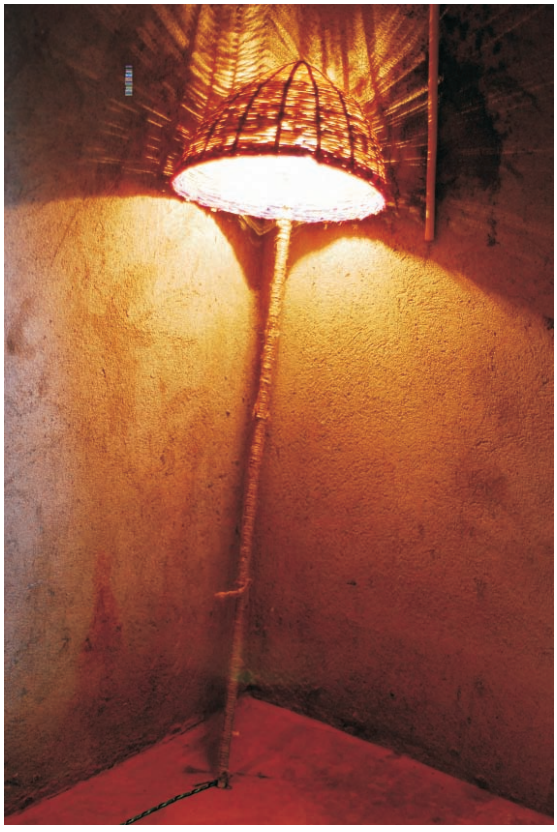
Pendant Light: inspired from *tokri*

- This lamp uses a weave which was newly introduced to the artisans.
- The process starts at the base using a hexagonal weave. This leaves a gap in the centre which is aptly suited for electrical fitting and easy wiring. It uses six splits initially, which run parallel in pairs thus creating 6 wider gaps
- Extra thick splits are put in these gaps
- Splits are held together with the use of sari for about 3" radius.
- The base is then held up and the *khame* are bent into shape.
- The rest of the form uses conventional weave using sari. However, the weave was made tighter in order to avoid the light source hurting the eye.
- In the end, the *khame* are turned inwards.
- To finish the rim, blanket stitch using thick bright coloured wool was introduced as the next added feature. This not only added colour but also made the otherwise unfinished rim softer to touch.
- The bulb holder is fixed in the hexagonal gap, and the cable was wrapped with jute rope which made the cable safe and took the weight of the lamp when hung.

Colours and forms can be explored using the same principle. At the workshop three options were tried.

Corner stand lamp

- Construction method: inspired by the old lamp.
- Unlike the old lamp, the weft is made of the rounded fine splits (sari). It does not use flat splits for weft.
- The weave is kept dense.
- Towards the end of the weave, a border is created by combining sari with wool. The two are intertwined before hand and two or three woven into the structure the way two saris would usually be used. This creates a well finished ending and added colour to the lamp.
- A thick split is fixed to the shade using the technique used for handles of fans.
- The cable was made to run along the stick, and wrapped in jute rope.

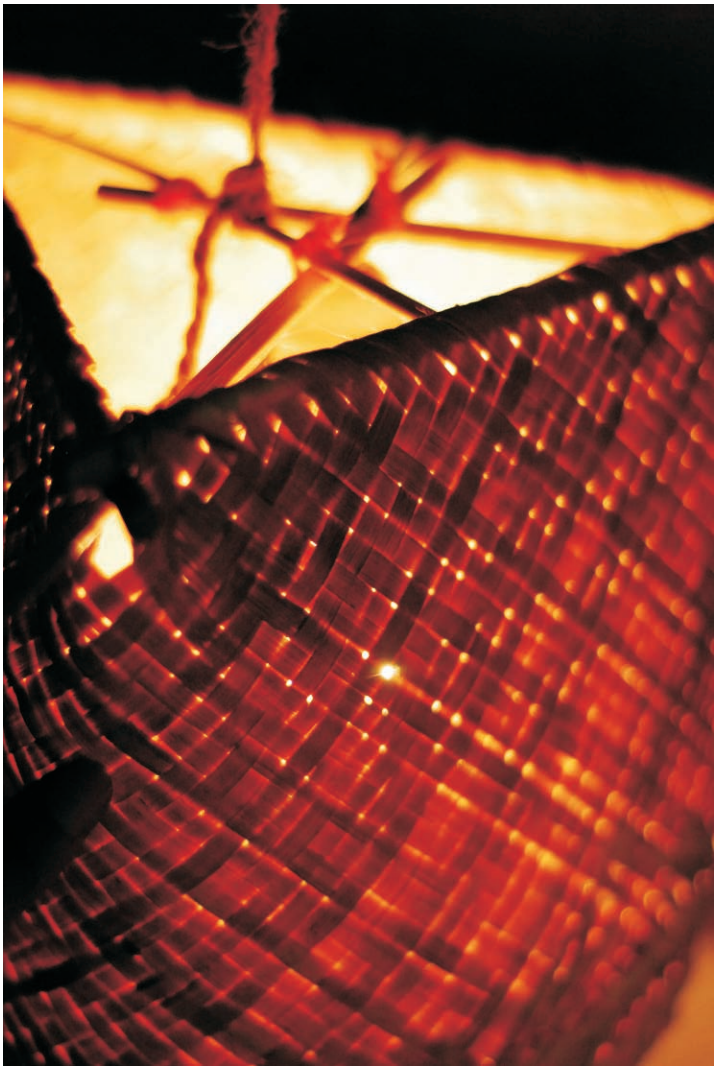


Tri lamp and basket

Construction technique: *soop*

The form of the lamp and the waste bag stand is inspired from the construction technique of the winnowing tray (*soop*). It has a triangular base owing to the three sticks which transforms into a circular end due to the inter-weave.

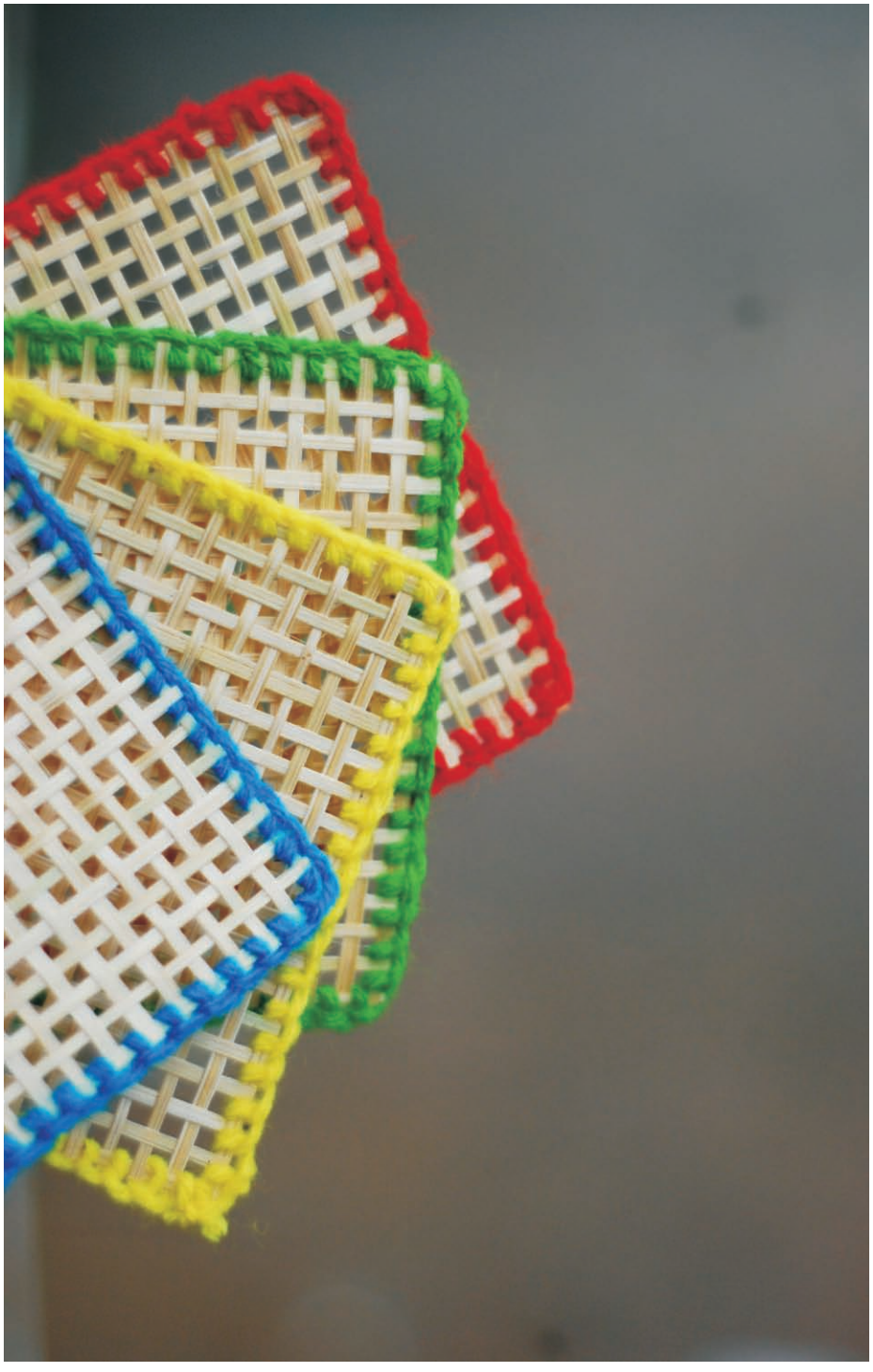
- Three panels are woven over three sticks and left at the point where the walls start to form in a winnowing tray.
- These are temporarily held together using strings.
- The splits from the three surfaces are then interwoven till the end forming a circular end.
- The three vertices are used to fix three sticks which in the center formed a triangular gap where the electrical fitting is provided.
- A bigger version of the same form can be used for a stand with a bag held on it. This could serve as a waste bag stand.

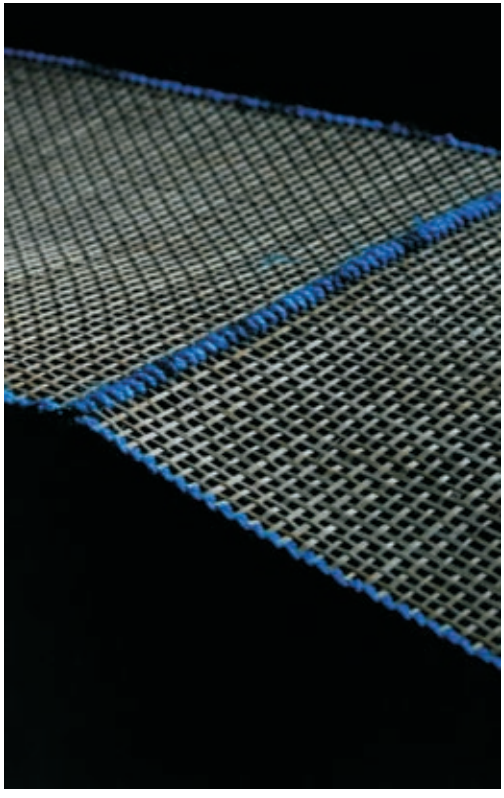


Tatta (Mat):

These are made by the younger girls in the group. The mat is woven using the length of bamboo between nodes. This ensures flat and straight splits. The two types of *tatta* include one with dense weave and a different one with loose weave. The latter was used to develop a range of table mats. This included coasters, dining mats and runner.

- The technique is fairly simple, but uses practice to keep the spacing equal and keeping the mat flat without warp. The size of the mat can be made bigger by inserting extra lengths, but the ideal situation for an artisan is to keep the maximum length same as the length of the split as additional length is tedious.
- Also the working platform which could be any plank of wood of about the size of an A3 paper is used to spread out the weave.
- The ends are first sealed with adhesive and dried.
- The extra lengths are then cut to size.
- Blanket stitch in different colours was introduced to the girls which made it look attractive and the ends looked better finished.
- Each table mat can be cut into 6 parts for 6 coasters and three mats can be put together for a runner. This ensures a flat pack if a set of mats, coasters and a runner is to be sold in the market.





Laundry baskets

The laundry baskets are made using *palli*. The *palli* is a neat looking product in itself. The proportions of this product were experimented with and the idea of nesting was introduced in which case one size can next inside a bigger one. A set of three baskets was made.

The new additions were:

· Nesting sizes
· Handles
· Colour using wool

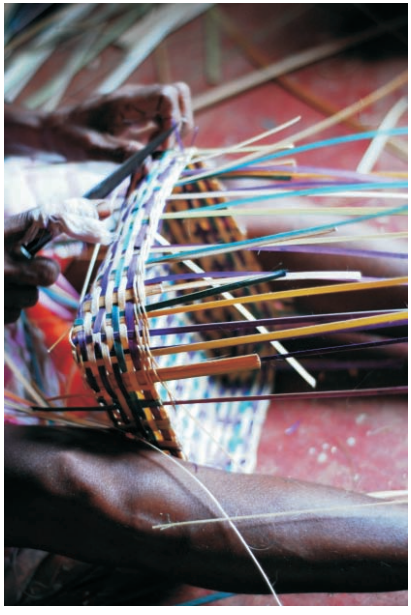
Fish chandelier and trinkets

Only a few women in the group could weave the simple looking fish which turned out to be far complicated than expected. The fish was woven as small trinkets coloured in different vibrant colours. It uses two similar sized splits. A number of these were made and put at the ends of a basket weave. The base was woven as in the case of *tukri* only the weave was left flat. The ends carried a fish each which made them bend slightly due to the weight. This gave enough curve for a bulb to sit inside and when this piece was put lower than the eye level and close to the floor it casts shadows on the walls in a small room and the floor in a larger space.

The trinkets also included the form of birds, which were used to finish ends of a lamp.

Trays

The trays are adaptation of basket weaving. The women of Virnoda wove these on their own. Colours were introduced and the importance of nesting was also explained. A set of two trays includes one which is 12” x 12’ and another of 11” x 11”. The base has four thick splits on the edges, along which the walls are woven. This helps in retaining the shape when loaded. The trays are only meant to take small loads like toilet rolls/ towels etc.



Bags

The bags were not new to the women. However, a correct sizing depending on modern needs; and colours were introduced. The bag can now accommodate a regular A4 size note pad, and anything smaller like wallet, phone etc.
The splits were died of one colour, and handles were added for ease of carrying. Weaving technique remains similar to *palli,* except that a *palli* has four point base, and the bag has two. A mat is first woven and the flat surface is folded to form the pocket. Splits are then interwoven to form the sides. The ends are finished by turning the ends of splits inside.

Conclusion

Bamboo craft at Virnoda is fairly new and therefore needs to be dealt with a great sense of responsibility. The craft can be influenced by a lot of factors which are not always desirable, for instance the introduction of synthetic materials in everyday life. Also since the craft is relatively new to this community, it does not have a strong foothold in material knowledge and production techniques. While that would make the craft identity much more strong, sometimes it also comes in the way of innovation. Since that is not the case at Virnoda, it could serve as a great opportunity to adapt the craft to current needs without much resistance.

The women are keen learners and if guided properly, they can set an example for other similar villages. Through this workshop I also realised that apart from skill development, the women also need to be introduced to marketing. Marketing link is the missing component that may help in closing the loop for definite positive results. Also, Goa is visited by a large number of national as well as international tourists, which may prove be advantageous. If interventions by government and NGO’s continue to provide support and make the best of the talented available human resource, the craft of this region will surely excel.

VASANTI

BINDIYA

RAJAL

RUKMINI

POONAM

RATAN

DEEPTI

BHAGIRATHI

GANGA BAI

LAKSHMI

SAVITA

AMRAVATI

RADHA BAI

RUPA

PRABHAVATI