

bamboo screen mesh, which is pressed, and left to drain water, leaves a bamboo imprint on the sheet. A heavy stone is placed on the pile for almost a day, to drain out the water. The sheets are then peeled off, and stuck on to mud walls of a hut, one by one. When the sheets are dry, they fall off the mud walls.

### 5.1.6. Bronze Casting

*Lugzo* is the art of casting statues, *sertog* (pinnacles on the roofs), and other ornaments to decorate the buildings of temples and monasteries. Bronze casting dates back to the 17th century. It is said that Zhabdrung Ngawang Namgyal invited Newari artisans from as far as Nepal to cast statues and many other religious items like bells, bowls for water offering, trumpets, cymbals, vase and so on. That is why there is a sense when historians say that Bhutan may have learnt the art of bronze casting from the visiting artisans. Availability of these items at cheaper rate has almost cast away the art, if it was not for the timely establishment of the Special Commission for Cultural Affairs (now Department of Culture) in 1985.

Bhutanese artisans employ two methods to cast bronze. The methods are:

#### 5.1.6.1. Wax Casting Technique

In wax casting technique, the required object is prefabricated with wax which is then covered with good quality clay from inside and outside. It is then dried several times in the sun. The object is then heated in the fire so that the wax melts away leaving a thin space between the hardened clay. Finally, melted copper, silver or gold is poured onto the figure until the cavity is filled up. It is then left to cool. Once cooled, the clay is broken and removed from both sides which produce the required shape of the object. This method is time consuming and needs greater effort as it takes one master copy for every new product.

#### 5.1.6.2. Sand Casting Technique

In this technique, a master copy of an object or a statue to be cast is made either out of clay, wood or any other materials. Clean sand is thoroughly sieved, allowing only fine particles to settle. The fine and powdery sand is thoroughly kneaded with the liquid extracted from sugarcane. The soft dough is applied to the master copy to form a duplicate copy/negative of the object. In case of a statue, different parts of the body are taken out and cast separately. On this shape of the object the melted materials (molten) is poured from outside. This method

is used more frequently in Bhutan as one master copy will work for many products.

The casting process generally includes the following stages:

1. Drawing – This involves drawing the object/master copy to be cast.
2. Casting – Casting involves pouring the molten materials onto the master-copy of the object, which is applied either with sand or wax.
3. Sculpting – Once the molten materials are poured on the master copy, it needs to be sculpted to right shapes.
4. Welding – In sand casting method, especially the statues, different body parts are cast separately. Once they are complete, the parts are joined together by welding.
5. Carving – Casting also involves carving of different shapes and patterns on the objects.
6. Polishing – Once everything is done, the object is then polished.

#### 5.1.6.3. Statues

Different statues of Buddha and Buddhist deities and saints are cast in the manner described above. The statues are gilded with gold.





#### 5.1.6.4. Sertog

Also known as pinnacles, sertog are hoisted on the rooftop of a temple or monastery and *dzongs*. They are gold-plated and are a prominent feature of Buddhist the temples. *Sertog* cannot be installed on residential houses or buildings.

#### 5.1.6.5. Ritual Objects

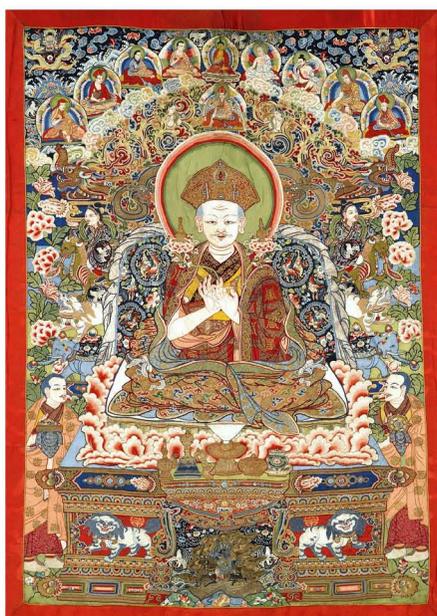
Rituals objects such as bell (*drilbu*), *dorje* (vajra), *karmikom*, (cup for butter lamps), *bumpa* (vase), etc. are also made.



#### 5.1.6.6. Water Offering Bowls

Lugzo also produces water-offering bowls. It comes in a set of seven bowls. In Bhutanese homes, temples and monasteries, a new day begins by making water offering in the morning.

#### 5.1.7. Tshemzo: The art of Tailoring, Embroidery and Appliqué



*Tshemzo* includes three forms of art - tailoring, embroidery and appliqué under one name. Tailoring involves stitching all kinds of garments while embroidery, which is called *tshemdrub*, and appliqué or *lhemdrub* are done for making *thangka* and *thongdroel*.

##### 5.1.7.1 The Art of Embroidery & Appliqué

According to Lam Nado (Druk Karpo, 1986), the art Embroidery called *tshemdrub* and appliqué was introduced in Bhutan by *Drung* Damcho Gyaltshen, secretary of Zhabdrung Ngawang Namgyal. He was not only a scholar but was also highly skilled in the art of *Tshemzo*. Later the art was widely spread by *Penlop* (Chieftain) Drakpa Jamtsho and *Choeje* (Nobility) Jamgon Ngawang Gyaltshen subsequently.

*Tshemdrub* involves working with thread and needle to produce designs while *lhemdrub* involves fixing the cut patches of either silk or brocade to produce bigger images. Monks normally practice the art of embroidery and appliqué. Monks produce large religious scrolls known as *Thangkas* that portray Buddhist deities and saints. Seven different kinds of embroidery are practiced:



- *Lhutschem*-light coloured embroidery
- *Sitschem*- the bold coloured embroidery
- *Nyitschem*- double-embroidery
- *Chagthagtschem*- Iron-chain embroidery
- *Zurtschem*- lining embroidery
- *Dongtschem*- front embroidery
- *Chedtschem*- outline embroidery

##### 5.1.7.2. Sewing Traditional Garments

Common practice among the people is *lagtschem/ thrultschem*. These tailors are skilled at sewing the traditional Bhutanese garments. They stitch *gho* and *kira*, the national attires for men and women respectively. They also design and stitch *tego* and *wonju* (blouse) worn by Bhutanese women. Traditionally, *lagtschem*- to stitch costumes with bare hands using the thread and needles- were practiced and were done mostly at home. Today, however, with the advancement in technologies, tailors use modern sewing machines, which are more effective and carried out with much ease.