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OFFICIAL NOTICES

Sub: Notice is given under Rule 41(1) of Geographical Indications of Goods (Registration & Protection) Rules, 2002.

1. As per the requirement of Rule 41(1) it is informed that the issue of Journal 100 of the Geographical Indications Journal dated 28th November, 2017 / Agrahayana 7th, Saka 1939 has been made available to the public from 28th November, 2017.
### NEW G.I APPLICATION DETAILS

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PUBLIC NOTICE

No.GIR/CG/JNL/2010

WHEREAS Rule 38(2) of Geographical Indications of Goods (Registration and Protection) Rules, 2002 provides as follows:

“The Registrar may after notification in the Journal put the published Geographical Indications Journal on the internet, website or any other electronic media.”

Now therefore, with effect from 1st April, 2010, The Geographical Indications Journal will be Published and hosted in the IPO official website www.ipindia.nic.in free of charge. Accordingly, sale of Hard Copy and CD-ROM of GI Journal will be discontinued with effect from 1st April, 2010.

Registrar of Geographical Indications

G.I. APPLICATION NUMBER – 453
Application Date: 23-09-2013

Application is made by Panchmura Mrit Shilpi Samabay Samity, Village & P.O. – Panchmura, District – Bankura - 722156, West Bengal, India for Registration in Part A of the Register of Bankura Panchmura Terracotta Craft under Application No. 453 in respect of Terracotta products not included in other classes and other related goods falling in Class – 21 is hereby advertised as accepted under Sub-section (1) of Section 13 of Geographical Indications of Goods (Registration and Protection) Act, 1999.

A) Name of the Applicant : Panchmura Mrit Shilpi Samabay Samity

B) Address : Panchmura Mrit Shilpi Samabay Samity
Village & P.O. – Panchmura, District – Bankura - 722156, West Bengal, India

Facilitated by:
O/o Development Commissioner (Handicrafts)
Eastern Regional Office, Kolkata and National Institute of Fashion Technology, Kolkata.

C) Types of Goods : Class 21 – Terracotta products

D) Specification:

"Bankura Panchmura Terracotta Craft" is a popular craftwork, in which locally available clay of brownish red colour is partially dried and cast, molded, or hand worked into different idols, figurines, decorative items and into desired shape and designs used as ornamental building material and in modeling. The products are excellent in workmanship, profoundly detailed and elaborately decorated.

The products are elaborately decorated and profoundly detailed and available in various shapes, designs for different end uses. Over the time, however, clay craft has grown more advanced with the use of new designs keeping in mind the utilitarian factor. The artifacts made are mainly:

Ritual Items
The ritual items include varieties of images of different deities. Their images are Manasachali or Jhar (goddess Manasa decorated with her snakes), Manasa-R Bari or Ghat, KalirGhat (pot for goddess Kali), pinched horse, elephant and other toys, Malsa (vessel) for ritual purpose, Tati (earthen cup), Ghat (earthen pot), Sara (earthen lid) Pradip (lamp) of various types, Dhupdani (incense stand), Sankha (shell) etc.

Household Utility Items
They prepare pitcher, various types of vessels such as Hadi / Hari (rice pot), Guji (pot to collect date palm juice), Khabri for frying of rice, Karai (frying pan), Malsa (vessel), Glass, Plates etc.
Decorative and Artistic Items
Terracotta horses and elephants in Bankura have been the creation of potters. Over the centuries they have moved away from a realistic presentation to a representational presentation. Potter-artists of different regions focused on different parts of the animal body in such a manner that representation of the same became more important than representation of the entire body of the animal.

Terracotta Figurines of a wide range in burnt clay are made by the Kumbhakars that are used as decorative items. The figures are powerful and pulsating with rhythmic vitality. Faces are in profile and limbs are beautifully oriented in the overall design.

Terracotta Ornaments, one of the oldest forms of jewellery which includes several items like earrings, ear studs, necklaces, pendants, bangles and bracelets. The designs are mostly inspired by nature and depicted animals, leaves, flowers and then moved on to traditional motifs and elaborate patterns.

E) Name of the Geographical Indication:

BANKURA PANCHMURA TERRACOTTA CRAFT

F) Description of the Goods:

"Bankura Panchmura Terracotta Craft" products are elaborately decorated and profoundly detailed and available in various shapes, designs for different end uses. Over the time, however, clay craft has grown more advanced with the use of new designs keeping in mind the utilitarian factor. Tableware and interior decoration is also fast gaining popularity among the clay craft of West Bengal. Terracotta jewelry made in Panchmura is also a favorite buy for many, not only in India but, across the world

The other artistic and utility items that are common among the production includes home decorative items and artifacts, figures and figurines, lamp shades, decorative plant pots, flower vases, tea and coffee sets, ashtrays, pen stands, jewelry, garden ware, sculpture and decorative tiles and panels. They are also making Conch shells molded in a way that they can actually be blown to sound just like an original shells, which are used while performing prayers. The potters of Panchmura have developed new techniques of molding lightweight pottery pieces which has functional as well as aesthetic appeal. Beautiful terracotta murals are also being made which are much liked by the people these days. All the traditional as well as the latest products have acquired a good export value. Terracotta products are comparatively cheaper than other artifacts and hence have attained greater popularity among the masses.
The *Panchmura* terracotta products are elaborately decorated and profoundly detailed and available in various shapes, designs for different end uses. Over the time, however, clay craft has grown more advanced with the use of new designs keeping in mind the utilitarian factor. Tableware and interior decoration is also fast gaining popularity among the clay craft of West Bengal. Terracotta jewelry made in *Panchmura* is also a favorite buy for many, not only in India but, across the world.

**Terracotta Products and their Possible Usage**
Terracotta can be broadly divided into three categories, the ritual use, aesthetic use and domestic use in play purpose.

**Ritual Items**
The ritual items include varieties of images of different deities. Their images are Manasachali or Jhar (goddess Manasa decorated with her snakes), Manasa-R Bari or Ghat, KalirGhat (pot for goddess Kali), pinched horse, elephant and other toys, Malsa (vessel) for ritual purpose, Tati (earthen cup), Ghat (earthen pot), Sara (earthen lid) Pradip (lamp) of various types, Dhupdani (incense stand), Sankha (shell) etc.

**Household Utility Items**
They prepare pitcher, various types of vessels such as Hadi / Hari (rice pot), Guji (pot to collect date palm juice), Khabri for frying of rice, Karai (frying pan), Malsa (vessel), Glass, Plates etc.

**Decorative and Artistic Items**
Terracotta horses and elephants in Bankura have been the creation of potters. Over the centuries they have moved away from a realistic presentation to a representational presentation. Potter-artists of different regions focused on different parts of the animal body in such a manner that representation of the same became more important than representation of the entire body of the animal.

Following table represents the use of different contemporary forms.

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<th>Sl.No.</th>
<th>Forms</th>
<th>Use of Terracotta Items</th>
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<tr>
<td>1</td>
<td>Horse and Elephant (simplistic)</td>
<td>1. Used as offerings to sacred groves like Manasa than, Garamdevata than, Jaherthan. 2. Horses have also been offered as tokens of thanks giving, on the tombs of Muslim pirs(saints). 3. Decorated varieties are now kept in urban dwellings for aesthetic purpose</td>
</tr>
<tr>
<td>2</td>
<td>Horse and Elephant (decorated)</td>
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<td>3</td>
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<td>5</td>
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<td>19</td>
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G) Geographical area of Production and Map as shown in page no:

Bankura Panchmura Terracotta Craft products are practiced by potter’s of Bankura, Nutangram, Danduria, Dhibajor, Banskopa, Kanaipur, Radhanagar, Amjor, Panchmura, Adhkara, Kukutia, Jaypur, Chakiambedia, Lalbandh, Deulbhira, Bhetuadanga, Jambedia, Rasiagara, Shyamsundarpur and Tatar and nearby adjoining villages in Bankura district of West Bengal. The District Bankura is bounded by latitude: 22° 38” N and Longitude : 86° 36” to 87° 47” East.

H) Proof of Origin (Historical Records)

Pottery in India is as ancient as the country itself. According to archeological evidence it was prevalent even in Indus valley Civilization. The exact time period when it came to Bengal is unknown; but what helped it grow and develop here was the fertile alluvial soil of the Ganges.

Clay based pottery is prevalent in almost all villages in Bengal. Kumbhakarsof all villages from ancient times had supplied the village folk the clay based utility goods and utensils for cooking. The clay based pottery had been turned into terracotta art work in two particular areas - Bankura Clay Pottery and KrishnanagarClay pottery. But Bankura art had flourished mainly due to two reasons. Firstly, Malla Kingdom who ruled Bankura with headquarters initially at Joypurand then at Bishnupur from 698 A.D. and continued for centuries had been the great connoisseurs of art and culture. Two great terracotta temples, one named Shyamaha temple and other known
as Jor Bangla temple were established in 1634 and 1655 A.D respectively. On their patronage terracotta figurines of animals and birds along with geometric panels and depictions of love between Radha and Krishna were the subject of architectural splendours.

Secondly, in the early part of history solid horses and other terracotta animal figurines had been used for worshipping for local god 'Dharmaraj' and other kinds of tribal, semi tribal and folk deities. Dharmaraj, the common god of whole of 'Rarh' area is another form of Sun God. Mythologically Dharmaraj is known as Sun God, the rider of horses. Thus, the horses became the symbol of all rituals while performing pujas. These solid form of terra cotta horse slowly transcendence into hollow form - finally generated the famous Bankura Horse. Once developed for religious rituals, the finely art form of horse took the place of the living room of Bengalis and other parts of the country and even to other countries of the world.

In course of time the pottery and terracotta work of Panchmura became beset with different problems - its growth became restricted and the skills would have been extinct had the migration of profession is not minimized. However, the Panchmura pottery still persists mainly because of Kumbhakar families’ deep inclinations and involvement in this art and they have minimum holdings of cultivable lands to take agriculture as means of earnings.

Over thousands of years, the potters of Bengal have been making pottery and other ceramic ware to meet the domestic, ceremonial and ritual needs of conservative communities almost imperceptibly to match the slow pace of evolution of life styles around them. The traditional potters of West Bengal belong to a specific caste, the Kumbhakars– Pot makers.

Traditional Indian pottery presents a number of beautiful shapes and forms, and also excellence of craftsmanship and technical competence. Its roots can be traced back to about two thousand years.

An area of terracotta work in which the Kumbhakars perhaps collaborated with the Sutradhars, the Carpenter carvers, is in the terracotta decoration of the temples. Most Hindu Temples built in Bengal over the 400 years ending with the first decades of the present century, were almost exclusively decorated with terracotta plaques of several unique styles.

The Sutradhars carved the plaques and tiles with small, thin chisels in semi hard blocks of plastic clay, specially prepared by the Kumbhakars for this purpose. These were then returned to the potters for drying and firing in kilns. For repetitive borders and other often repeated elements, the designs were carved by the Sutradhars in reverse on wood or semi – hard clay blocks (burnt by potters after drying). These were used as press-moulds, cast by ordinary helpers and finished by Sutradhars in a semi hard condition in a carving style to match the other carved panels used.

In the 14th and 15th Centuries during the rule of the Sultans, Muslims built a large number of mosques and mausoleums in which they adopted the local village architectural form of thatched house and used the art of terracotta to decorate their outer surfaces. The surviving brick temples of Bengal were mainly built during a
period when the region was witnessing a revival of Hinduism with particular focus on the cult of Krishna.

This was after prolonged exposure to Islam. As a result, the temples built during the 16th and 17th centuries and later. Under the Malla rulers, absorbed the monumental style of the traditional Muslim buildings, forms and techniques. Local materials, brick and terracotta and features like the curved “Bangla” roof blended with the Muslim domes and Islamic multi lobed arches. The best examples of that period can be seen at the temples of Shyam Rai(1642) and Jor-Bangla (1655) of Bishnupur.

The panels in the temples depicted scenes from the legendary lives of Krishna (Krishna Leela) or Rama (Rama Leela). The subject matter above the arch would be scenes from the great epics, the Ramayana and Mahabharata that would often include scenes of war. The ten incarnations, avatars of Vishnu, and figures of other gods and goddesses would be placed in smaller panels on both the sides, often illustrating some significant episodes relating to them. In the temporal area, there would be small plaques on the lives of saints and servants and scenes from contemporary social life. Often, large panels depicting devotees of Radha and Krishna, lustily dancing and singing to the rhythm of Khol, Drums, and Cymbals can be seen.

It is in these earlier temples that the acme of the strength of the terracotta art movement is seen in the rhythm, passion and throbbing vitality that permeate the diverse sculptural panels, which constitute the grand design for temple facade.

A scarcity of stone in the region led to the use of bricks for creating the temples which were then covered with ornate terracotta tiles that depict themes taken from Puranas, and the Ramayana and Mahabharata epics apart from those related to everyday life. The temples are a fine example of a marriage between traditional arts based on the ShilpaShastras and the imagination and expertise of the artists of the time.

**Temples of Bishnupur**

Bishnupur is a town located in the Bankura district of West Bengal. The town is famous for the terracotta temples made from the locally available laterite stones. The Malla rulers were Vaishnavites and built the famous terracotta temples during the 17th and 18th century at this place.

**Evolution of the Bankura Horse**

Bankura horse is the terracotta horse, produced in Panchmura village in Bankura district in the Indian state of West Bengal. It has been praised for “its elegant stance and unique abstraction of basic values.” Originally used for village rituals, it now adorns drawing rooms across the world as symbols of Indian folk-art.

The craft work of Panchmura had been continued for last 300 years and hereditary skill had been transferred from generations to generations. Bankura or Panchmura horses have gained further popularity among art lovers since it acquired a place in the works of renowned painter M. F. Hussain. Panchmura figurines became further renowned by constant support and sponsorship of central and state governments since 1960. Many of the potters have been awarded state and national level honors and some of them had received prizes from the hands of Honorable Rashtrapati.
*Panchmura* horse is world famous. Its neck portion is long. It has beautiful decoration on its neck and chest. It is one of the representatives of high artistic expression of India to the people throughout the world. This handcrafted *Panchmura* horse stands on its four legs are known for their symmetric shape and rounded curves with an erect neck and ears and is acclaimed for its striking elegance.

The scope of this terracotta art form got a shot when late Sri Rashbehari Kumbhakar got the President’s Award in 1969. As a result of this some initiatives were taken then for the revival of *Panchmura* crafts. Subsequently, the red-brown colour with glossy surface terracotta *Bankura* horse evolved as a crest motif of the Central Cottage Industries Emporium, and an item which now adorns drawing rooms across the world as symbols of Indian folk-art. These horses are not just decorative artifacts, but they also display skill and craftsmanship of Bengal. *Bankura* terracotta is an internationally appreciated art form.

The structure of *Bankura* horse has been so fashioned as to symbolize a mark of devotion. There are other legends about the origin of the horse and one of them was it being created to appease the gods in granting the boon of an offspring to a childless maharani of the *Malla* kings. The offering worked and since then the horse has gained a reputation as symbol of fertility, the reason why they are always made and sold in pairs.

**A Commemorative Postage Stamp on Bankura Horse**

India Post celebrates Children’s Day by releasing special postage stamp every year on 14th November. The stamp released in the year 1957 constitutes the nineteenth of the series of commemorative stamps issued since attainment of independence. The stamp carry the theme corresponds to the year’s program for the celebration of Children’s Day touching the Recreational Aspects of "Child Welfare Movement".

The new stamps were released for sale from November 14, 1957- Children’s Day. Stamps issued on this occasion are the only stamps which are not designed by professional stamp designers of India Post.

Details of the Commemorative Postage Stamp depicting *Bankura* Horse

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<th>On the occasion of Children’s Day, 1957</th>
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<td>Picture</td>
<td><em>Bankura</em> Horse (Recreation)</td>
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<tr>
<td>Denomination</td>
<td>90 nP (nayaPaise)</td>
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<tr>
<td>Colour</td>
<td>Orange Brown</td>
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<tr>
<td>Type</td>
<td>Postal Used Stamp</td>
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<tr>
<td>Watermark</td>
<td>Yes (Multiple Star)</td>
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<tr>
<td>Perforation</td>
<td>13½</td>
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<tr>
<td>Stamps Printed</td>
<td>10 Million in sheets of 42</td>
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<tr>
<td>Printing Process</td>
<td>Photogravure</td>
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<td>Printers</td>
<td>India Security Press</td>
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*Source : www.indiapost.gov.in*
I) **Methods of Production:**

A detailed study on the process of manufacturing of *Panchmura* terracotta are discussed below.

- Procurement of raw material
- Preparation of clay
- Mixing of clay
- Clay Modeling
- Drying
- Hand Work
- Detailed Motifs Work
- Final Drying
- Colouring and Coating
- Kiln Firing
- Testing and sorting

**Procurement of Raw Material**

The most important raw material for pottery is clay. The basic raw materials needed for making the *Bankura* horse and other similar crafts is mainly the terracotta clay, which is generally available in the region; the clay, *etelmatti* (*a type of clay*) is found from ponds or quarried from pits or ditches in the forest and fields.

Sometimes, they have to dig for about four feet within the soil to extract the clay. The clay is collected in the months starting from mid April to May and stored collectively. Often clays from two or three different places are mixed to get a better clay body. Maturing the mixed clay in an open pit throughout all the season makes it even more malleable for working. Otherwise the “*Kumbhakars*” get the clay from the other neighboring region of Bishnupur. The clay which they get is impure and the potters make the clay fit for the craft by removing the dust-particles - stones from it. The clay is generally ordered in bulk, and is kept outside of the house, and is covered during rainy season.

**Preparation of Clay**

The unprocessed clay which is brought from different sources has to be processed and prepared for the actual manufacturing. Firstly, the soil is cut into small pieces with the help of *Kodal* (spade). The preparation of the materials starts with removing the dust particles – small stones from the terracotta clay to make it pure and refine for the wheel work. The clay is generally impure and need to be refined, this is done by breaking the lump of clay and making it into more finer and powder grains. Roots, *Kankars* (pebbles) and other impurities of the clay are taken out by hand, using some wooden framed iron nets or with the help of a thin sheet of bamboo (sieve like) called *Chata* or *Chachna* in local term. This process is locally known as *Nekkara*. After the clay has been refined, the next step is to add the other raw materials such as sand, *Khar* (hay; dried paddy plants) and water.
Mixing of Clay

After the clay has been refined, the next step is to add the other raw materials such as sand, Khar (hay; dried paddy plants) and water. Mixing of the clay, after adding the other raw materials is an important step in the process of making the terracotta products.

The better is the mixing of clay with other ingredients, better is the outcome of the final product. Generally the mixing is done by hands if the quantity of the clay is less, but if the quantity is more than Kumbhakars prefers using their legs. The mixing of the clay takes about 5-6 hours and sometimes even 2-3 hours depending on the number of person doing the work, and the working conditions.

Two small Balti (buckets) of water is mixed with clay kept in Majhari Chubri (medium sized basket). On average 10-12 Chubri of clay are taken out for preparation at a time. The proportion varies according to the texture of the soil. In some cases there is no measurement as such, water is added as required. The soil is then mixed by feet for two hours or so. This levigation process is locally known as Tal kara. The preparation of clay is mostly done in the courtyard of the house or outside the house in an open space. Generally the other raw materials apart from terracotta clay is available locally. Sand is added and mixed with the entelmati in case sand content is very low. The reason of using sand is that sand contains silica that prevents the products from cracking or bursting at the time of firing. Also the use of sand depends on regional variation of soil and the nature of firing.

Tools and Equipment’s

The tools used for making Panchmura terracotta are:

a) Ucha which is a semi circular bamboo piece used for surface finishing,

b) Balya which is a stone tool of about 3.5 " (inches) by 3 " used as a beater of the inner surface of a pot.

c) Pitna which is a wooden beater of about 10 " by 4 " used for beating and shaping the outer surface of the pot.

d) Chiari made of bamboo of about 4.5" - 5 " used for decorating clay figures.

e) Other than these tools, there are potters wheel and kilns for firing.

f) The kilns are generally of circular or parabolic with enclosures on all sides with a permanent stoke-hole. It is locally known as Berasal Poan and the circular type is known as Sheuna Poan.

The basic tools needed for making the Bankura horse, is mainly the potters wheel, with a stick to rotate it manually. The wheel is used to make the basic shapes such as cone and cylinder, which are the main body parts of the horse. The wooden wheel of in diameter 3-4 feet is made locally.

The wheel is generally set outside adjacent to the house, as it needs some space to maneuver. The wheel is also cleaned after the wheel work is finished so that it is in good condition for the next use.

The slurry, which is diluted clay with water, is used during the wheel work, to give better finish to the products.
The tools that are used, after the basic wheel work is done are the mainly the scraps such as Bamboo Twig, Cutter’s Blade, small piece of wood pointed at ends. These tools are mainly used to do the motifs and detailed decoration work, on the body of the horse, mainly the head and neck.

In local language, these tools are called as *Chiari* made of bamboo of about 4.5 - 5 inches, used for decorating clay figures. These tools are mainly made by the artists only, and the shape and size varies. Each craftsman has his own tools to do the motifs work, and the tools are made according to the need of how motifs should look like, For example, if the motifs should be more detailed than the twig or blade with more sharper edges are used. These tools are just like pencils or pen to draw and design on to the clay figures.

The cloth is also an important tool. It is used to keep the lump of clay together, when motifs work is being carried out, so that the clay does not get dried too early and also to keep the clay away from dust.

The piece of wet cotton cloth *Naikra* is also used to rub on the surface of the clay figures, before putting the motifs, so that its get stuck well to the body of the product. A wooden plank is an important tool to carry out the detailed patterns and motifs, the plank is used to roll out long and thin rods of clay which are used to decorate the horse and other similar crafts product like clay elephants, fighting bull, etc., Also some ready-made moulds made of Plaster of Paris (PoP) is used for parts such as ear, and of snake-head to make the **ManasaJhar** which is the figure of the goddess Manasasurrounded by similar looking snakes head.

**ClayModeling**

It is commonly observed that the techniques of manufacturing terracotta objects depend on the nature of products and the amount of production. The manufacturing process can be divided broadly into three categories: 1) Handmade, 2) Dice or Mould made, 3) Wheel made. Often it is seen that terracotta makers employ a combination of different techniques. Their workplace is located inside the house, either the courtyard or in a separate room. Different techniques of terracotta manufacturing used at *Panchmura*:

- Hand Made
- Dice or Mould Made
- Wheel Made
- Partly Hand Made Partly Mould Made
- Partly Hand Made Partly Wheel Made

The details of the three processes of terracotta manufacturing are given below.

**Handmade**

The prepared clay is given desired shape and form by hand. Larger shapes are given with the help of thumb and palm while smaller shapes and fine retouching is added with the help of figures. Often they use sticks having sharp end for decorating the objects. While preparing large sized handmade terracotta objects the prepared clay is kept in 4-5 lumps. Each lump is given a flat and circular shape by a pestle (*Bole*) made out of stone. Then the flat rounded clay is modelled into desired forms by beating the clay with the
help of *Bole* for giving support to the clay and *Pitnam* made of wood for beating the clay and then by hand.

**Dice or Mould made**

Moulds or dices are used especially if a particular form is made in large scale, after that finishing is done by hand. There are moulds made clay, terracotta and plaster of Paris. Different type of mould is used for producing big globular *Ghats*. The base with body of these items is made with the help of moulds. In this case the moulds are made out of clay and these are placed permanently on the courtyard of their huts. The mould is first beaten with a wooden *Pitna*. Extra sand (larger grain sized) is sprinkled on it. Then a thick coating of the prepared clay is given according to the shape of the moulds and this is again beaten by the *Pitnato* get the desired shape. The base with body is prepared like this and the rim is prepared by hand and the final retouch is also done by hand. Small *Pradips* are often seen as mould made. Terracotta plaques are mostly made out of moulds of Plaster of Paris or terracotta. Firstly the designs are carved out on moulds (negative impression). Then the mould is filled up with clay and when dried the clay (plaque) receives the design of the mould as positive impression.

**Wheel made**

In *Punchmura* the basic frames of the horses and elephants such as cone, cylinder, are done by the wheel work which acts as the main body parts of the horse or the elephant. They are made part by part in wheel and are joined together by adding extra clay. The four legs are conical, the belly is a cylinder and the jaw of the horses is a cone; all are being made on wheel. The clay for the wheel work is much more refined and pure. The wheel work is done by the male person of the family, and its been done 2-3 times a week depending upon the demand of the products in the peak season. Wheel made terracotta objects always have hand retouching.

The wheel is a disc on the superior side on which the terracotta object is thrown and a pivot and socket helps revolving the wheel. It is turned anti-clockwise by means of hand or with the help of a stick. Both spoked and non-spoked wheels are used. The terracotta *Ghats* are wheel made. Some objects like *ManasaGhat* and *BastuPujarGhat* require both wheel and hand-modelling.

The *Kumbhakars* create wonderful shapes from clay either by hand or on a simple stone wheel, which revolves on a pivot made of very hard wood, fixed on another piece of stone, set in the ground clay. This is then mixed with sand and shaped by hands over the rim on the wheel. Sometimes, they use water to smoothen the surface of the various parts either made on the wheel or from moulds. At times, the artisans first make a sketch of the product they desire to make and then convert its exact replica in clay. The entire process of molding the clay is not so complicated. It is the deft and trained hands of the potter, which can create wonders from simple clay. Final unique shapes are given to the products by altering the pressure of hands.

**Drying**

The drying of the product which has been made on the wheel, is an important step. Although the drying is mainly a natural drying, and it takes around a day or two for the product become a bit tough, so that it is ready for the next step. Care is being taken to put the put the products in sunlight and also to protect it from rain. The clay model
after being molded is allowed to dry in shade either inside the house or outside the house until it dries completely. Sometimes drying takes around four to six days depending on the climate. In the rainy seasons, it takes more time to dry because of the humidity present in the air. Proper drying ensures good finished product as subsequent firing of the product with high moisture often leads to the development of crack in it. The drying process is usually carried out on the corridor and not directly in front of bright sunlight, also care is taken that only the products are being dried just a bit and not become very hardened. Also small products are also covered with clothes to protect from excess drying during hot and humid day.

**Hand Work**

After the wheeled products are dried a bit, the hand work is done, which is mainly the joining of the different parts made on the wheel and to assemble it together to give a basic structure and shape to the product. This step is primarily done by the male person of the family. Joining the basic shapes and filling the gaps are all being done by hand only. The filling of the gap, is an important and delicate step and needs a bit experience cum patience, and needs to be done carefully.

**Detailed Motifs Work**

Terracotta objects are decorated with the help of different tools like sticks, pointed iron rods locally known as *Boki*, knives and even the caps and nibs of pen. This is done just after the shaping of the objects when the clay remains soft. The designs are of three types: a) reliefs, b) engraved or incised or etched designs, and c) paintings. The first two categories of decorations are done before firing and the third category, i.e. paintings are executed after firing. It is seen that in case of handmade and wheel made objects reliefs are created by adding extra clay and minutely decorated by hand. Incised or etched designs are curved by using sticks, pointed iron rods, knives. Paintings are made by poster colours using brushes. The motifs vary greatly. The most common motifs are female figures, erotic scenes, floral and faunia motifs, motifs of trees, leafs, motifs of Hindu gods and goddesses, depiction of stories from Hindu epics, rituals, scenes from daily life, etc.

The detailed motifs work is done after the product has taken a basic shape, and have dried a bit to carry the designing work, also before this step, the surfaces are scraped to make it even and smoother using the small piece of semi-circular bamboo (*Chiari*), also additional clay are put where ever needed to bring the horse into a perfect shape. The motifs and patterns varies from one lot of horses / elephants to the other, and also from one artists to the other.

The upper and lower parts of the body are put together during the motif work, so that the design on both the parts looks similar. An application of wet cloth followed by little scraping is done so that the motifs sticks well to the surface. The motifs work is generally carried by the female member of the family, and is done by bare hand only, and the motifs/decoration can be simple or can be more elaborate, depending upon the demand from the client.

The decoration work takes about 30-45 minutes for a horse, of size around 3 feet, and more for bigger sizes and elaborate work.
Final Drying
After a little drying in the sun, holes are made on appropriate body parts. This is done before full drying, otherwise the inner and the outer surface of the body will not be equally dry. Cracks may develop in the body for unequal drying of the inner and the outer portions. The dehydration is slowly done in the normal temperature of a closed room for about 6-7 days.

Colouring and Coating
Two types of clay are used as natural colours: Gad (yellowish) and Banak (reddish). The colour from Gad and Banak are prepared by a precipitation process. Gad mati and Banakmati are brought from either nearby river side or they buy these at Rs. 5/- to 6/- per kg. from the local vendors. Gad and Banak are processed separately but in the similar way. Both are first liquefied by mixing with water in separate pots and then are kept for 10-15 days. After that the water from the top is carefully removed and the precipitated material is used as colour. In some villages Gad is called as Holud (yellow). Sometime Elamati which gives a reddish orange colour is used. It costs around Rs. 10/- per kg.

Colouring is done before firing. In Panchmura, objects are given three coatings or wash of colour before firing: two coatings of Gad (yellowish) and one coating of Banak (reddish). After firing the objects get a bright red colour. Some objects are burnished to increase their aesthetic beauty. A mixture of lac (gala) and spirit is given as a polish by a piece of cloth in that case after firing. In the villages where Gad is not used, only two coatings of Banak are given. Where Banakis not used only two coatings of Gad are given. Where Elamati is used as colouring agent, two coatings are given. In few occasions no colour is given, objects are directly burnt to get reddish brown (terracotta) colour. The terracotta objects which are black in colour are prepared with the help of a special firing technique. This involves firing in closed condition in which black colour is generated as a result of carbon accumulation in reducing condition. In Panchmura, while getting a black colour, one coating of Gad is given before firing. After drying, the model is coated with ‘gad’ two times consecutively and finally coated with ‘Bonok’.

After the final coating, it is allowed to dry for one to two days. Gadd and Bonok are two different varieties of clay, which are diluted with water for coating. Their main function is to impart shine as well as reddish brown colour to the object.

Final Drying
After final drying they are brought out of the room and heated in the sun. On the figures thus heated the colour coats are given and the main work of coloring is done before firing in the kiln. The whole work of coloring is done by women from natural colours prepared from clay. The natural earths (clay) are generally of three types.

1. Khadi gad, looks white like chalk
2. Bhalo gad, looks yellowish, glazy and oily

These earths produced from natural resources, are powdered and dissolved in water. The ingredients are placed in earthen vessels for about two or three months, while testing the water and sifting the sediment of sand from time to time. The residual portion is thickened into pigment under sun and preserved for coloring. The three kinds of pigments, Khadi gad, Bhalo gad and Banak are mixed with water and applied one
after another on the pot and animal figures. Firing is done after coloring.

**Kiln Firing**

Firing process commonly involves a proper arrangement of finished products, firing agents and creation of holes in the kiln to provide ventilation. Firing is done in closed kilns, locally termed as *Bhati*. Kiln is located outside the house in a separate place. Each family involved in terracotta making has either their own kiln or two or three families share a common kiln. Before firing the clay objects are sun dried.

These sun dried objects are then carefully arranged in layers inside the open-pit kilns made with red bricks, clay and cow dung kiln. The Kiln or *Bhati* used for baking has to be carefully constructed. The *bhattis* made by digging the ground in a circular shape. The old traditional village kilns are generally of circular or parabolic (*Kula* type or bamboo fan shaped) with enclosures on all sides with a permanent stoke-hole. It is locally known as *SheunaPoan* and the circular type is known as *BerasalPoan*.

At the bottom of the kiln, bricks are placed at certain distance, on the top of which terracotta materials are placed. The gap between bricks provides base ventilation and also helps in placing fire woods. Dry straw is given between each layer to provide buffer and aid to the fire. Depending on the size of kiln layers vary. On the top of the arrangements a layer of broken pots are given which gives the support to the outer layer of kiln. On the top of the broken pots a layer of straw is given which is then covered with mud. At intervals on the entire mud covering holes are made for ventilation. At the bottom of the kiln an opening is kept for setting the fire. A variation of the process is found for the objects which are aimed to get a black colour. These objects require a closed firing condition; hence, the holes here are closed by mud which results in their black colour through accumulation of carbon on the objects.

At *Panchmura* the terracotta objects are burnt in low heat for 2 days continuously and then up to 700° to 800°C temperature for 12 - 14 hours. Other villages follow more or less same pattern of firing. Then it is lined with bricks and filled with coal (by well to do artisans), cow dung cake or wood and *Bhusa* (by poorer artisans). The clay art pieces are arranged in layers adjacent to one another around the central fire chamber to form a mound. Between the layers of objects, a layer of leaves, twigs and cow dung cakes are sometimes added. The mound is then covered with a blanket of rice straw, which in turn is covered with a thin layer of loamy soil. The firing takes four to six hours. Generally, the firing takes about 10-15 days, or even a month sometimes depending upon the size of the kiln. The terracotta artifacts of *Bankura* are turned out in two different colours. The normal terracotta reddish – brown colour is obtained by letting out the smoke through the vents of the kiln after firing, and the deep black color, by sealing the vents and not letting out the smoke. The reddish – brown colour horses are more known and famous owing to the natural terracotta color.

**Testing &Sorting**

After the firing work is completed, the sorting and testing of the product is carried out, the damaged pieces are separated from the good ones, and are kept together, also there are few pieces which does not burn properly in the kiln and the outer colors does not comes good, so, those products are also removed. Finally the good ones are kept
together for display and the damaged ones are either repaired or sold at a lesser price otherwise thrown.

**Packaging & Transportation**
The packaging of the product is done by the Kumbhakars or by the family member if someone purchases the craft directly from them. The material used for packaging the delicate terracotta products is hay and generally its packed in a carton which is locally available. The hay acts as a shock-absorbing material and prevents damage. In local shops also hay and stuffed newspaper is used as packaging material. After stuffing the hay and newspaper the carton is tied with a rope and a handle is made from the rope for carrying. The transportation of the handicrafts products are carried by 3-wheeler pedal rickshaw for smaller distances and by buses for larger distance, such as to Bankura or Bishnupur, which are the nearest tourists spots of the district, and also to the yearly fair at Bishnupur and Kolkata.

J) **Uniqueness:**

*Bankura* is known as the heartland of the beautiful terracotta temples with heritage structures in themselves, which depicts about the adaptation and practice of burnt clay products by the society. Although the region was under influence of both Hindu and Muslim rulers, the local terracotta craft retained its identity without apparent influence and subsequent changes in its form. This has brought in the need to identify this special style which has withstood the onslaught of time on its form. The uniqueness of the craft can be classified under three heads: **raw materials, designs** and **human skills**.

(i) **Raw Materials**
The effect of the combination of the availability of raw materials and infrastructure is the main reason for the establishment of this industry. The source of their raw material is the rich, alluvial clay found in Bengal’s rivers. Bankura artisans do not compromise on the quality of mati or clay. They use the finest quality of clay available on the banks of the Ganges, commonly known as Ganga mati (clay from the Ganges) or from its tributary river. It is quite interesting that the artists even take care of the age of the mati. “The older the alluvial clay, the better the quality.”

The district presents a transitional zone in the overall landscape of the vast alluvial plain in the east and the denuded spurs of Chhotanagpur plateau in the west. Alluvium is loose, unconsolidated (not cemented together into a solid rock) soil or sediments, which has been eroded, reshaped by water in some form, and redeposited in a non-marine setting. Alluvium is typically made up of a variety of materials, including fine particles of silt and clay and larger particles of sand and gravel. When this loose alluvial material is deposited or cemented into a lithological unit, or lithified, it is called an alluvial deposit. The soils of the alluvial tract have originated from Ganga basin. The Bankura soils belong to the loamy-skeletal, mixed, hyperthermic family of Plinthustalfs. The soils, formed in old alluvium, are moderately fine textured, moderately deep to deep, well drained and very strongly acidic in nature. The available moisture capacity is medium. These soils are best for terracotta work.

(ii) **Design**
Amongst all pottery rich regions of West Bengal, *Bankura* stands out with its uniqueness. *Bankura* tradition of clay pottery dates back to the Neolithic age, and the
characteristic shapes and forms have evolved out of the ethnic races and their practices and thus is a representative of the heritage of the region. The terracotta horse is characterized by its typical shape. In particular, it has a long rounded neck with erect ear and tail. It also has its legs rounded and tapered. The specialty of the Bankura Terracotta Craft is the proper proportion of the figure and motifs used on product. They change the designs according to the generation and the consumer wants. They are known for minute works on the products. Sometime, the customer provide sketches or samples and the Kumbhakars make the product and do the modification according to the customers taste. One more important feature of this art is that they use only natural colours.

(iii) **Human Skill**

The conception of design and plotting it on the products require great skill and experience. The correct choice of design and intricacy of the work are given by the master craftsman based upon the consumers /market requirement. This process requires skill and experience to get perfection.

K) **Inspection Body**

The quality of Bankura Terracotta Crafts will be monitored by internal watchdog mechanism in order to maintained the original physical and chemical characteristics as per GI registration by the following committee members

i) Representative of Producer groups of Bankura Terracotta Crafts

ii) NIFT Faculty Expert on GI

iii) Representative Official from the O/o the Development Commissioner (Handicrafts)

This committee will also help to regulate the use of Geographical Indications for the welfare of local artisan community. The committee will frame the terms and conditions to use brand name of GI registered Bankura Terracotta Crafts. The logo of Bankura Terracotta Crafts will be used to create brand image of GI registered produce

To regulate the use of GI in the territory, the Inspection Structure is proposed to consist of the following members:

i) NIFT Faculty Expert in GI

ii) Representative Official from the O/o The Development Commissioner (Handicrafts) Eastern Region, Ministry of Textiles, Govt. of India

iii) Artisan Member

iv) Representative of Producer groups of Bankura Terracotta Crafts

v) Representative Official from Biswa Bangla Marketing Corporation, Govt. of West Bengal

vi) Representative Official from Department of Micro, Small and Medium Enterprises and Textiles of the Government of West Bengal
4.1 Maps of Bankura (Panchmura)
G.I. APPLICATION NUMBER – 519
Application Date: 19-01-2015

Application is made by M/s. Kumbhkar Hasthkala Vikas Samiti, Falsund Road, Near Police Chowki, Pokaran, District: Jaisalmer - 345201, Rajasthan, India for Registration in Part A of the Register of Pokaran Pottery under Application No. 519 in respect of Handicrafts – Pottery falling in Class – 21 is hereby advertised as accepted under Sub-section (1) of Section 13 of Geographical Indications of Goods (Registration and Protection) Act, 1999.

A) Name of the Applicant : M/s. Kumbhkar Hasthkala Vikas Samiti

B) Address :
M/s. Kumbhkar Hasthkala Vikas Samiti
Falsund Road, Near Police Chowki, Pokaran,
District: Jaisalmer - 345201, Rajasthan, India

Facilitated by:
RUDA - Rural Non Farm Development Agency,
and Social Action Forum for Manav Adhikar
(SAFMA)

C) Types of Goods : Class 21 – Handicrafts - Pottery

D) Specification:
The specific characteristic of Pokaran Pottery is its light pink, almost white colour, which is the result of a laborious process in which hard clay is beaten and ground to provide appropriate texture and then filtered through a sieve so that the clay powder passed through is of fine texture. The white/light pink clay of Pokaran possesses entirely different properties than the normal red terracotta used by potters all over the country. Human judgment and expertise are applied at every step. Once fired, the products become very tough and last for many years. Some of the ancient Pokaran Pottery grain silos are said to be lasting for over three generations and are still in use. Pokaran (also known as Pokharan), is a city and a municipality located in Jaisalmer district in the Indian state of Rajasthan, surrounded by rocky, sandy and five salt ranges. The soil is stony containing numerous rocky ridges, located in the remote Thar Desert region, it served as the test site for India's first underground nuclear weapon detonation, In summers, the temperature goes upto 50° celsius and in winters as low as 0° Celsius. It is the climate that gives the soil its salty hard uniqueness.

E) Name of the Geographical Indication:

POKARAN POTTERY
F) **Description of the Goods:**

The Pokaran Pottery is in continuous production with some of the ancient pottery grain silos being more than three generations old and are still in use. In Pokaran Pottery the village *kumbhar* (potter) produces simple household items, whereas the *kashigar* (skilled potter) makes more artistic varieties. Terracotta is traditional in Pokaran and the products have earned immense popularity across the globe. Earlier the potters of Pokaran used to make household products like matka, kulhars and with passage of time and expertise they moved to decorative items like vases, toys, pen stands etc.

Each and every Pokaran Pottery product depicts a particular theme and is capable to find a place anywhere, be it a garden or a home. Various items crafted out of terracotta include hand painted plant pots, large decorative vases, terracotta clay planters, handmade flower pots, statues etc. Similarly utility wares like cooking and serving pots, paraat, kulhars, chanti, gullak, tawa can be used for various purpose and have good market demand in rural as well as in urban area.

Products exhibiting exemplary skill include –

- Magic lamps
- Clay scrubber for body
- Lamps that float in water
- Diwali lamps
- Tortoise
- Fish
- Handicraft items of more than 100 animal shapes including snail. Elephant, giraffe, horse, camel, pig, bull owl, duck etc. and each animal face is available in 10 different varieties.
- Decorative pots, wall hanging pots etc.

*Dimensions* – The products sizes vary from a 2 inches diya to 1.5 meter grain silos.

G) **Geographical area of Production and Map as shown in page no: 29**

Pokaran Block is located in the district of Jaisalmer in Rajasthan, India. It is located at the extreme right of District Jaisalmer, having a common border with the Districts of Bikaner and Jodhpur both in Rajasthan. And on top it shares a common border with Pakistan. In the enclosed map Pokaran Block is shown at Latitude 26.92010° & 26.55120° North and Longitude 71.9163° & 71.5459° East.

H) **Proof of Origin (Historical records):**

Terracotta, Terra cotta or Terra-cotta (Italian: "baked earth", from the Latin terra caca) is a clay-based unglazed ceramic. Terracotta has been used throughout history for sculpture and pottery, as well as bricks and roof shingles. In ancient times, the first clay sculptures were dried (baked) in the sun after being formed. Later, they were placed in the ashes of open hearths to harden, and finally kilns were used, similar to those used for pottery today.

The art of Terracotta Pottery in Pokaran known as Pokaran Pottery is as ancient as history which can be borne by the fact that some of the ancient Pokaran Pottery grain silos said to be lasting for over three generations are over 100 years and still in use. The potter families earlier used to make household products like matka, kulhars and with the
time they moved to decorative items like vase, toys, pen stands etc. The village *kumbhar* (potter) produces only unglazed wares whereas the *kashigar* (skilled potter) makes the more artistic varieties that are often glazed, and historically, the persons involved in the terracotta craft have been the *kumbhars* (a caste in the Hindu hierarchy), who generally did not have any landholdings.

The soil of Pokaran is light pink in colour and is brought from an area 5 kms away called Rind. In this area spread over approximately 250 bigha, rain water collects as a result of which the soil takes a particular viscosity ideal for the pottery. Hence, it is the particular climate and soil of the area which distinguishes Pottery of Pokaran from other terracotta pottery.

Mention of Pokaran has been made in ancient texts like Puran and Pushkaranva; and ancient Pokaran pottery exhibits can be found in the popular tourist destination Pokaran Fort, also known as 'Balagarh', constructed in the 14th century belonging to the Chief of the Champawats. Kamaladevi Chattopadhyay, the doyen of Indian handicrafts, has made mention of Pokaran Pottery in book HANDICRAFTS OF INDIA BY KAMALADEVI CHATTOPADHYAY, First Published, 1975 by Director-General Indian Council for Cultural Relations, Azad Bhavan, Indraprastha Estate New Delhi; on page No. 8 - “Pokaran has very interesting pottery. Pieces in different shapes are made for varied used the decoration is by etching designs mostly in geometrical patterns…”

In the book POTTERY in Rajasthan : Ethnoarchaeology in Two Indian Cities by Carol Kramer by Smithsonian Institution, the world’s largest museum and research complex, based on research carried out among traditional potters in two urban centres in Rajasthan during the 1980s. This archaeologically oriented ethnographic field work work was designed to identify and characterize vessels sources, to examine the scale and diversity of ceramic assemblages in settlement of differing size, and to evaluate patterns of ceramic distribution in the context of sociological relationships linking producers and sellers. Reproduced is p. No. 129 Village-City Interactions: “Chapter 6 considers the external sources of earthenware found in Jodhpur and Udaipur, and reviews some scaler and distribution aspects of relationships between the two cities and the communities from which they import pottery. ..........A number of these vendors obtain pots from near kin in their villages, or make the pottery themselves: some also obtain portions of their inventory from relatives in neighbouring villages. For example, a Phalodi potter who is a vendor in Jodhpur takes delivery there of Pottery vessels from a relative in Pokaran”.

POKARAN is included IN MAP OF RAJASTHAN Craft Centres for Pottery in the book HANDICRAFTS OF RAJASTHAN by H. BHISHAM PAL, August 1984 published by the Director Publication Division, Ministry of Information and broadcasting, Govt. of India, Delhi. On Page No. 30 it is stated – Pottery, one of the old crafts, has it’s own long standing tradition in Rajasthan. Certain shapes are characteristic of Rajasthan.... Pokaran is known for its RED POTTERY. The famous item of this craft is water bottles having geometrical patterns and different shapes making them into attractive pieces. Various decoration designs are done on the surface.....
I) **Method of Production:**

**Raw material**
The only natural resource this trade uses is clay, which is available locally 5 km away from their habitat. The other materials required include dung cakes, grass straw, coal/firewood and ash.

**Production process**
Appropriate quantity of water is poured and hard soil beaten by hand to prepare the clay dough. Once the clay dough is made it is placed on the chok or potter's wheel and spun. As the wheel spins around, the potter uses his hands to shape the clay into pot or any other product. After it is shaped into a form, finer detailing and designing is done by the nimble fingers of the craftperson or fine small tools. Once a number of products are made, then they are put in the kiln for firing.

A large pit of 1.5' to 2' depth is dug and Ash is put as the first layer. Over that cow dung cakes, firewood, and cheaply available inflammable items are put as the second layer. Over these, pieces of broken & discarded earthen vessels/pots are put as the third layer, which acts as the support to the raw pottery products that are made. Once the raw products are placed, these are again covered by a layer of broken pieces of earthen vessels and another layer of ash and finally some water is sprinkled to add some moisture. Once the kiln is prepared, it is lit. The process takes about 5-7 hours depending on the number of products to be fired.

The kiln is left burning for one entire day and another day to cool down. The third day, the products are removed from the kiln. Firing turns the products from off-white to reddish and gives strength to last for years.

After cleaning the ash from the products, these are now ready to sell.

**Quality Control**
Raw material is checked thoroughly by the potters themselves to ensure that the clay (mithimatti), used for preparing pottery, contains the right mix of ingredients required. Kiln temperature must be carefully monitored. And each human involved in production uses their eyes to monitor against inferior products.

**Byproducts/Waste**
There are no harmful by-products resulting from the production of pottery. Clay scraps and imperfect pieces produced off the jiggering machine or from slip casting can be re-mixed and reused.

**Tools**
The main tools used for making terracotta are:
- *Kumbharkochorkha or chak* - potter's wheel;
- *Chonti* - wooden stick to rotate the wheel
- *Thepi* – hammer

J) **Uniqueness:**

The clay in Pokaran is light pink in colour and very fine in texture. Once fired, the products become very tough and last for years. Some of the ancient Pokaran Pottery grain silos are over 100 years old said to be lasting for over three generations and are still in use. Pokaran is a remote location in the Thar Desert region in summers, the
temperature goes up to 50° Celsius and in winters as low as 0° Celsius. It is the climate that gives the soil its salty hard uniqueness. The soil of Pokaran is light pink in colour and is brought from an area 5 kms away called Rind. In this area spread over approximately 250 bigha, rain water collects as a result of which the soil takes a particular viscosity, ideal for the pottery. Hence, it is the particular climate and soil of the area which differentiates Pottery of Pokaran and makes it unique.

*Difference between other styles of Pottery in Rajasthan* - The Craft of Pokaran Pottery is different from other styles in Rajasthan. The pottery of Pokaran has stylized forms with incised decorative patterns, which are distinctive and Geometrical etchings are used (as stated by Kamaladevi Chattopadhyay), while maintaining the traditional styles. The final product is very heavy. Whereas, in other district of Rajasthan, for example in Jalore district terracotta horses are made for religious offerings, in Bikaner artists work with lac and special rich effects are transferred through the use of gold; in Alwar District artists show their skills by making paper thin pottery, known as kagzi pottery and items made are very light weight.

**K) Inspection Body:**

- Executive Director- RUDA
- 2-3 representatives of National awardees/ State Merit Certificate holders for the Craft.
- Assistant Director, O/o DC (Handicrafts), New Delhi
- NGO SAFMA Representative

Also is an Internal Watch Dog mechanism comprising the 2 Pokaran pottery Kumbhar/Craftpersons and 1 representative of RUDA to assist producers to maintain quality and regulate the use of the GI Pokaran Pottery Craft.

**L) Others:**

**Facilitator RUDA - Rural Non Farm Development Agency** is a Government of Rajasthan independent agency, registered under the Societies Registration Act 1958, and perhaps the only agency of its kind, promoting rural micro enterprises on sub-sectoral basis including Stone, Ceramics and Pottery. RUDA works through a cluster based approach and it’s package of interventions include: Capacity audit of artisan clusters, Identifying operational constraints, Organizing artisans, Microfinance, Skill development training, Technology dissemination, Design support, Product development, Market facilitation etc. RUDA assists in regulating standards and specifications of Pokaran Pottery.
Geographical Area of Production of Pokaran Pottery Craft

Pokaran
Latitude 26.9205° N,
Longitude 71.9165° E
Advertised under Rule 41 (1) of Geographical Indications of Goods (Registration & Protection) Rules, 2002 in the Geographical Indications Journal 101 dated 28<sup>th</sup> November 2017

**G.I. APPLICATION NUMBER – 521**
Application Date: 06-03-2015

Application is made by Andhra Pradesh Handicrafts Development Corporation Limited, A State Government Undertaking, Hasthakala Bhavan, Opp: Telephone Exchange, Musheerabad, Hyderabad - 500020, Telangana, India for Registration in Part A of the Register of **Adilabad Dokra** under Application No. 521 in respect of Traditional and Decorative designs, Animal and Bird figures, falling in Class – 6 is hereby advertised as accepted under Sub-section (1) of Section 13 of Geographical Indications of Goods (Registration and Protection) Act, 1999.

A) **Name of the Applicant:**

Andhra Pradesh Handicrafts Development Corporation Limited

B) **Address:**


**Facilitated by:**
Confederation of Indian Industry - Andhra Pradesh Technology Development & Promotion Centre, (CII-APTDC)

C) **Types of Goods:**

Class – 6 – Handicrafts – Dokra products – Traditional and Decorative designs, Animal and Bird figures

D) **Specification:**

The Adilabad Dokra are metal crafts made of Brass by the tribal’s belonging to Woj community (called Wojaris and also called as Otaris) in the Telangana State. Each product of Adilabad Dokra is unique because mould is used only once and will be broken during the making process.

Adilabad Dokra is deftly created by hand and hence the objects have an individualistic touch. Artisans follow the natural traditional process of lost wax technique, so the objects look very fine and simple. The products have a core of clay preserved within the metal casting, unlike other metal work.

The Uniqueness of Adilabad Dokra is that no two pieces are alike in shape as well as in size and hence replica of the antique is nearly not possible. which the add-on speciality is.

This work is favoured both in the domestic and international market because of its aesthetic and primitive simplicity.

The work consists of idols of tribal god and goddess, bells, folk motifs, anklets, animal figures like elephants, peacocks, horses, bulls, tortoise, rabbits, and deer etc., measuring bowls, lamps and lamp caskets, figurines, drummers, peculiar shaped spoons, and other simple forms and traditional designs.
Wojaris make sacred bells which are among the symbols of the Persa Pen. The design and shape the bell is very unique. A peacock is placed above the bell results in aesthetic and traditional look, and the sound generated from each bell is also unique.

E) Name of the geographical indication:

ADILABAD DOKRA

F) Description of the goods:

Adilabad Dokra Metal craft is quite popular in the tribal regions of Telangana state. Dhokra/Dokra is also known as non-ferrous bell metal craft that combines metallurgical skills with traditional lost wax technique to create things of distinctive beauty.

The Dhokra craftsmen belong to the Woj community (called Wojaris and also called as Otaris) and make idols of local deities - Janghubhai, Bheemdev and Persa Pen using brass by an ancient casting technique called *cire perdue* (lost wax technique in French), wherein a clay model is made as the core over which wax threads are wrapped around to form a layer, bake the clay mould, allow the wax to flow-out and then pour the molten metal into the mould.

Wojaris are nomadic brass founders, a family unit of them arrives in a village, takes up temporary residence in an outbuilding, verandah, or under a tree, and makes cheap jewelry, cattle and cart ornaments, the mouthpieces and trumpet ends for Pardhan and Toti wind instruments, and most important the votive offerings and ritual objects used in the worships of various deities, this work is paid for in grain or other foodstuffs, and then they move on to the other village and so on. Their trade necessitates a great deal of wandering for only by moving from village to village can they peddle their wares and remain in touch with their customers.

Gonds manufacture the sacred bells, which are among the symbols of the Persa Pen, the small idols of brass placed in shrines of various gods. So important are these objects in Gond religion that even the myths tell of the Wojari, from whom the culture-hero Pahandi Kupar Lingal obtained their prototypes.

Adilabad Dhokra metal casting products mainly includes idols of local deities, bells, dancing figures, jewellery, statues and many other decorative items. Apart from all this, the craftsman also makes figures of animals and birds, santhal jewels like twinkly saltation bells, and measuring chitties. The decorative compositions like chains, stands, lamp holders and vases are also made through this craft. This art has boasts of the literal folk essence and is also cultural. There is so much demand of this craft in the foreign and domestic markets, because of the simplicity and different designs used by the craftsman. The one more add-on specialty of the craft is that replica of the antique is nearly not possible.
It is a very labour intensive product and therefore the artisans work only on orders on which they take some advance to procure raw material. The designs are traditional though they have made contemporary designs also on demand.

**Types of Products:**

Idols of local God and Goddess Tribal deities, Nagoba or snake deity figures, Bells, Nemali deepam lamps (diyas) Tribal ornaments; ankles Hangings; bird hangings, tortoise hangings Animal figures; horse, elephant, deer, bullock, lizard, insects, Bird figures; peacock, parrot, eagle, Decorative items, Lamps and lamp holders, Measuring jars (Chittis) Agriculture products; Jadga-holder to throw seeds in the fields, Sun plate figures, Hooks, Gungroo; Animal bells, Chang-cattle bells

**G) Geographical area of production and map:** as shown in page no. 37

Adilabad is a district of Telangana in the newly formed 29th state of India. Adilabad is located at a distance of 290 km from capital city of Hyderabad and records some of the extreme temperatures in South India.

Dhokra or Dokra also known as bell metal craft is a tribal metal craft mostly found in Jainoor/Jainur Mandal, Adilabad District of Telangana. This Jainoor/Jainur Mandal is 59 Kms from Adilabad.

The area of production of these Dokra metal craft is mainly concentrated to Janagaon and Ushegaon villages of Jainoor Mandal, Chittalbori village of rural Adilabad Mandal, Keslaguda village of Kerameri Mandal, and Belsari Rampur Village of Tamsi Mandal.

**H) Proof of origin [Historical records]:**

Dhokra metal craft is a tribal craft that combines metallurgical skills with lost wax technique to create things of distinctive beauty. The same technique had been used by the Mohenjo-Daro craftsman to cast the bronze figurine of a dancing girl some 4500 years ago.

The Dhokra craftsmen belong to the Tribal community especially belongs to Woj community (called Wojaris or Otaris). Woj community speak their local language called “Gondi” and hence the craftsmen are also called as “Gonds”.

Wojaris initially started making the sacred bells which are among the symbols of the Persa Pen, the small idols of brass placed in the shrines of various gods and parts of the trumpets of Pardhans and Totis. These objects are so important and religious that the Wojaris use during their festivals.

Wojaris frequently move from a village to a village and their trade necessities are a great deal of wandering, only by moving they can peddle their wares but remain in touch with their customers.

**I) Method of Production:**

The technique of Dhokra casting has been there in India since 4000 years ago and still being used by craftsmen. One of the best known pieces is in the form of the dancing girl found in the ruins of Mohenjo –daro.
The Production process is so traditional and artisans will only use hand tools for the casting and finishing. The production method is by combining metallurgical skills using the lost wax technique. The lost wax technique is a unique form in which the mould is only used once and broken, making the figure the only one of its kind in the world.

This lost wax technique was popular in the European countries during the 18th century, a technique that was in use during the Harappan era and is now lost to piece mould process, machines and moulds, where perfection was prime concern. The Dokra objects are timeless and create an antique look while being displayed.

The making of Adilabad Dokra Metal casting can be categorized in to two main components:

A) Raw Material
B) Production Process

RAW MATERIALS USED:

Dokra craftsmen use brass scrap as a main raw material for the metal casting, which will be available in surrounding markets i.e. Adilabad, Asifabad and Jainoor. Raw materials used are included below.

- Raw Brass scrap
- Bee-wax
- Erra mannu; Both soft and normal red clay
- Rice husk or paddy husk
- Fire wood exclusively two types used: Garada and Khair.
- Aluminium; Very little quantity of Aluminium is added with the brass scrap
- Mustard oil; Used for mix the wax for loosening.

TOOLS USED:

The following tools and implements are used in Adilabad Dokra Metal Casting.

- **Pichkani**: It is a Wax wire drawing instrument used to get the desired structures of wax depending on the requirements of the design.
- **Peeda**: It is a wooden flat stool used by the artisan to keep wax for structuring.
- **Chakkar Peetna**: It act like a blade to cut the wax on Peeda while structuring.
- **Hatta**: It is used to flatten the surfaces out of the wax on the Peeda.
- **Moond Katti**: It is used for cleaning the wax which is remained in Pichkani after drawing.
- **Katchni**: It is used for structuring and designing on the wax.
- **Chimta**: Small and big Chimta are tools used to hold and release the mould during casting.
- **Hathodi**: Hathodi is a tool used to beat the wax on Peeda for levelling.
- **Rod**: Rod is used while casting for adjusting the position of the mould.
Dhukni or Bhata: It is a blower used for accelerating the fire in the Batti.

Batti: It is a furnace to heat and melt the cast metal with the help of firewood.

Rethi (Canvas): It is a filer used for smooth finishing of the object.

Wire brush: It is a brush used to clean the outer surface of the metal cast

PRODUCTION PROCESS:

Production Process is broadly categorise into Making a mould and Casting

Step 1: The first task in the lost wax hollow casting process consists of developing a clay core which resembles the rough shape of the final cast object.

Step 2: Next, the upper layer of the clay core is covered by a layer of wax composed of pure bee’s wax, resin from the tree Damara orientalis, and mustard oil. Where the wax is shaped and carved in all its finer details of design and decorations.

Step 3: It is then covered with a layer of soft clay over the wax design, which takes the negative form of the wax on the inside, thus becoming a mould for the metal that can be poured inside it. Drain ducts are left for the wax, which melts away when the clay is cooked.

Step 4: Once the mould of desired product with the required design is ready, a crucible is taken with the brass scrap and is attached to the mould with the help of the clay. Then the mould is kept in the batti such a way that the brass containing side touches the batti and covered with the fire wood on all surfaces.

Step 5: With the help of the blower (Bhata), extreme fire to will be generated to melt the brass scrap. Once brass scrap is completely melted, casted mould will be taken away with the help of the chimta. As soon as casted mould is taken out, mould will be reversed so that the melted metal flows between the core and the inner surface of the mould. Here the Wax will be replaced with the molten metal which fills the mould and takes the same shape as the wax.

Step 6: Once they confirm that the metal is completely flown and think that the desired product is formed, mould will be kept in the water to cool the metal as well as to softness the clay of the mould so that the clay can be separated from the product. The outer layer of clay is then chipped off.

Step 7: Metal cast will be properly cleaned and craftsmen performs the finishing part of the desired product with the help of Reti (Canvas) and wire brush.

J) Uniqueness:

Geographical factor:

- Follow normal traditional process with the wax technique and follow the standard process reflecting the product aesthetic and simple.

- Only pure honeybee wax is used so because of the more strength and flexibility of the standard wax, designing is very easy and finishing of the products will be very fine.
• Only raw brass scrap raw material will be used, so because of the little presence of the other metals in the scrap, each object look unique in colour.

• Objects are primarily made from brass scrap; the objects also have a core of clay preserved within the metal casting, unlike other metal work.

• The Dokra metal crafts are made in brass and each product is unique in design, shape and size because mould is used only once for each product and will be broken.

• The replica of the antique is nearly not possible which the add-on speciality is.

• The Dokra objects do not have any joints.

• Deftly created by hand and hence the objects have an individualistic touch.

Human Skill:

• Follow normal traditional process with the wax technique and follow the standard process reflecting the product aesthetic and simple.

• Entire production process is mechanical and involves huge skillset and experiences are required for making fine metal casting.

• The same traditional production process and skillset are following from one generation to another generation.

Reputation:

• This work has good demand both in the domestic and international market due to its aesthetic look and primitive simplicity.

• Metal casting figures of bells, measuring Chittis and figures of elephant and peacock are in much demand in the current market.

K) Inspection Body:

Internal Quality Control:

The quality of the Metal casting is initially inspected by artisans themselves, as they are the best judge for the crafts. The artisans ensure that the quality is maintained from the stage of stone selection and at each of the stages till the finished product. Finally, below mentioned inspection body will check the crafted products with respect to fine finishing, design lines and shade variations.

GI Inspection Body:

An Inspection Body of Nine Members is proposed for ensuring the standards, quality and specification of the Adilabad Dokra Metal casting:

1. One (1) Member from Andhra Pradesh Handicrafts Development Corporation Limited, Hyderabad;
2. One (1) Member from The Adilabad Handicrafts Artisans Welfare Association;
3. One (1) Member from CII-APTDC;
4. One (1) Member from Local Office of Andhra Pradesh Handicrafts Development Corporation Limited;
5. One (1) Representative from Development Commissioner of Handicrafts;
6. Two (2) Producers of Dokra Metal Casting of Adilabad – National and State Awardees / Senior or Master Artisans
7. Two (2) Producers of Dokra Metal Casting of Adilabad;

L) Others:

There are more than 100 families involved in this metal craft in five villages around Adilabad. Artisans work daily 8 hours and overall production capacity is 8-10 hours a day. It is estimated that the turnover for the crafts is around 18-20 lakhs per annum. This work has good demand both in the domestic and international market due to its aesthetic look and primitive simplicity.

In order to protect the high labour skills of the Dhokra metal casting products and to meet with the current industry standards and new designs of the products, various training programs, visiting tours and workshops are being held. Skill up-gradation training program has been held by some NGOs and Development commissioner handicraft (DCH), Ministry of textile, Govt. of India.

Workshops and study tours are provided by Development commissioner handicraft (DCH), Ministry of textile, Govt. of India, to learn the new designs and techniques based on the present market demand.

Awareness program are conducted by Tribal federation (TRIFED) and Ministry of Tribal affairs, Govt. of India.

The role of Andhra Pradesh Handicraft Development Corporation is instrumental in receiving the orders for these products along with direct sales and business enquiry received and delivered by the Society.
GEOGRAPHICAL AREA OF PRODUCTION OF ADILABAD DOKRA

BAY OF BENGAL

Geographical Area of Production of Adilabad Dokra in parts of Adilabad District in the State of Telangana

BOUNDARIES:
STATE
DISTRICT
MANDAL

HEADQUARTERS:
STATE/U.T. ★
DISTRICT ◎

1. Numbers given within the Mandal boundaries indicate Mandal Numbers in each district.
2. The district headquarters of Rangareddy is located at Hyderabad.
3. Where the district name differs from its headquarters name, the latter is given within brackets.

G.I. APPLICATION NUMBER – 523
Application Date: 06-03-2015


A) Name of the Applicant : Andhra Pradesh Handicrafts Development Corporation Limited


Facilitated by:
Confederation of Indian Industry - Andhra Pradesh Technology Development & Promotion Centre, (CII-APTDC)

C) Type of goods : Class 27 – Handcraft - Durries

D) Specifications:

- Warangal Durries can be characterized as multi-colored durries woven using the weft interlocked technique.
- The designs that are characteristic of Warangal durries are geometric, angular motifs used in tapestry weave structures, colored horizontal stripes used in jamkhans and shatranjis and the mihrab motif in the jainamaaz.
- The colors used are distinct with reds and blues used in combination with neutral colors. The designs range also has flat weaves with raised or extra weft patterns.
- The weavers belong to the Padmasali community and weaving is a hereditary occupation. The Warangal Durries are woven on Pit looms and frame looms equipped with multi-treadles are prevalent. A wide variety of durries are woven in cotton and also some jute and wool based durries for export and the home market.
- Warangal durries are available in various sizes

E) Name of the geographical indication:
F) Description of the goods:

Warangal durries (also called as shatranjis) are of various designs like One-Two-Three, FullDil, Temple, Vanka, FeerDoshi, Surya, Keelam, Dilkush Interlock, Tie and Dye etc. Jainamaaz or prayer durries/rugs are also made in warangal using the same methods and materials. They have fringes or stitches at the border of the durries. Cost of durries ranges from Rs. 100 to 1500 rupees depending upon the size, design and quality of cotton of the durries. Warangal durries are of various sizes (in feet) ranging from 2X3 to 60X90.

The designs that are characteristic of Warangal durries are geometric, angular motifs used in tapestry weave structures, colored horizontal stripes used in jamkhans and shatranjis and the mihrab motif in the jainamaaz. The colors used are distinct with reds and blues used in combination with neutral colors. The designs range also has flat weaves with raised or extra weft patterns.

G) Geographical area of production and map: as shown in page no. 46

Warangal is a major city in Telangana and it is situated at a distance of 150 Km towards north-east from Hyderabad. Warangal has a long history and it was the capital of the Kakatiya dynasty of 12th century, a prominent telugu kingdom. Later it became part of Mughal Empire and then Hyderabad state of Nizam.

The production of the Warangal Cotton Durries is mainly carried out in Kothawada area of Warangal, Telangana. The other adjoining area of production includes the following villages:

1. Kanchanpally
2. Kareemabad
3. Venkateshwarapally
4. Rallakunta
5. Parkal
6. Rayaparthi
7. Parthipaka
The weavers are spread across the above mentioned places. The area of production of the Warangal cotton durries is 17°09’52”N and 79°06’08”E.

H) Proof of origin [Historical records]:

Durrie weaving is an established industry in Warangal with a large population of skilled weavers and facilities for dyeing. It is a traditional handicraft, passed down from one generation to the next for more than hundred years. It is highly labour intensive rural based cottage industry. Warangal has long been an important durrie-weaving centre with a strong local flavour. The industry was born when the Mughal army moved into the Deccan plateau carrying it with the camps. Durries and carpets were bound to thrive in this region, as it was great cotton growing and weaving area. Warangal had been a cultural centre under the old regimes and the soil was ready for any such transplantation. Warangal durrie weavers made their mark abroad with their fine work.

The Warangal weavers have also composed their own designs with some of the old flavour. For instance the Persian Lancelot leaf is here transformed into a flower. Carpet weavers are naturally conservative and as long as their patrons remain content with the classical patterns, the weavers prefer to repeat or to further refine earlier models. Warangal carpets made great impact on the European markets and had a large share in exports earlier. But, durries have replaced carpets due to high cost of carpets and lack of demand in the market.

The jainamaaz, also known as a musallah or prayer rug, is also woven here with same material. It traces its ancestry to the earliest example of a flat weave rug that was acquired on loan from Jama Masjid in Bijapur for an exhibition in Delhi in 1903, which was left behind in loan from Jama Masjid in Bijapur for an exhibition in Delhi in 1903, which was left behind in 1686 by emperor Aurangzeb, in the mosque in Bijapur (in erstwhile Deccan). The tradition of using the jainamaaz, rug with a single mihrab (prayer arch motif) and saf (multiple arches) still used in mosques to pray on, has warranted a regular supply of these from the durries weaving clusters in and around Warangal. Warangal has a thriving cottage industry producing the characteristic multi-colored durries using the weft interlocked technique. In recent years, ikat techniques of patterning yarn were adapted to Warangal durries, extending the range of products. The designs that are characteristic of Warangal durries are geometric, angular motifs used in tapestry weave structures, colored horizontal stripes used in jamkhans and shatranjis and the mihrab motif in the jainamaaz. The colors used are distinct with reds and blues used in combination with neutral colors. The designs range also has flat weaves with raised or extra weft patterns. The weavers belong to the Padmasali community and weaving is a hereditary occupation. Pit looms and frame looms equipped with multi-treadles are prevalent. A wide variety of durries are woven in cotton and also some jute and wool based durries for export and the home market. The weavers in Warangal are either organized in cooperatives or work independently.

Cotton and also jute or mixes of both are used to create these durable and colourful durries in a vast range of sizes, designs and hues. The durries, also made in the form of...
doormats, wall-hangings and seaters, are available in plain, jacquard, woven, ikat and interlock varieties. Nearly 2000 artisans in Warangal and its surroundings are involved in artistically creating an attractive assortment of decorative Durries. The Durrie making industry gained dominance in the recent past. Tie and Dye, interlock, Jacquard etc. are some of the commonly used designs in demand in both domestic markets as well as export market. One-Two-Three, FullDil, Temple, Vanka, FeerDoshi, Surya, Keelam, Dilkush Interlock, Tie and Dye etc., are some of the popular designs gained importance in the market in recent times. Durries of other materials like Jute, Wool, Silk, Synthetic, Lenin, and Shiny are also made by these weavers of Warangal.

One of the important contributions for the development of weaving community was the mills present here. The AzamJahi Mills was opened in 1934 at Warangal near Railway Station. About 4200 staff and workers have worked in the said mill. The National Textile Corporation Limited, Bangalore was incorporated in 1974 with 60 Mills transferred to NTC Ltd. which were located in Andhra Pradesh, Karnataka, Kerala and Maharashtra as they were nationalized under the provisions of the sick textiles under taking (Nationalization) Act 1974, and this mill was declared as Sick Industrial Company on 12-01-1993.

Cotton production in Warangal played a prominent role in the rise of the weaving industry in Warangal especially cotton products. Warangal is the highest cotton-growing district in present state Telangana as well as in the erstwhile undivided Andhra Pradesh State. Out of the 0.53 million hectare cultivated area, irrigated area is about 0.29 million hectare; cotton occupies 21.6% of the irrigated area. Agriculture is the main stay of this rural district. The rain is due to the southwest monsoon. Important irrigation sources in the district are Ramappa, Pakhal, Laknavaram, and Salivagu project. Other sources are rain fed tanks, wells and hill streams that require good rains in the monsoons. New irrigation systems are being constructed to bring Godavari waters to put more area under irrigation in the district. The Kakatiya Canal, SRSP Stage-II Canal and Flood Flow Canal from the Sriramsagar Project are under construction.

I) Method of Production:

The method of production of cotton durries include various steps from procurement of raw materials to the tools used for producing the final product. The production of cotton durries primarily includes cotton, dyes, charkha, pirns and loom. The weaver community mainly use pit-looms for making cotton durries.

Tools and Implements: Pitloom, Pirn, Charkha/Spinning wheel, Dyes, Starch etc.

Production Process:
It involves various steps like procurement of raw materials, dyeing of yarn, preparation of warp and weft and finally weaving. They are as follows

A. Procurement of Raw materials:
The weaving community procures cotton yarn mainly from local market. In addition, depending on requirement, the community also procure cotton yarn mainly from Tamil Nadu. A hank of cotton yarn of more than 800 yards long is procured by the weavers. The specifications of raw materials that are being used are
Base material: 2-Ply/5-Ply cotton yarn.
Warp: 3/6, 2/10, 2/20
Weft: 6s, 6-2s, 2-5s,
Depending up on the type of durrie, the weavers decide the warp and weft for weaving of that durrie. They use thinner warp and weft for the wall hanging type of durries. They use thicker warp and weft for durries which are used as mats.

B. Dyeing of Yarn:
Before dyeing the yarn, the weavers have the design with them which is to be woven. Based up on the design they dye the yarn. Earlier, these durries used to be called as shatranjis. It is because of the design pattern on durries which resembles the boxes shaped design as in the game shatranj or chess. Some standard designs are followed by all the weavers. They make dyeing and prepare warp, weft according to the design. These durries have either fringes or stitches at the border of the durries. There various types of designs or patterns that are being woven in Warangal,

Types of designs:
- Interlock
- Tie and Dye
- Jacquard
- Lahari
- Sitammajada
- Mogga
- Diamond Fish
- Kamal
- Dilkush
- Screen printing
- Kalamkari block prints

Dyeing is an important process before weaving any cloth. Weavers of Warangal cotton durries use many kinds of dyes like azo free, vat, direct dyeing etc. This dyeing applied to the weft only but not the warp. Generally warp is in white color. Both the warp and weft are allowed to bleaching before starting the process.

Dyeing process:
i. Soaking of thread: The cotton threads are soaked in the soap oil. The soap oil comprises of caustic soda, slurry, Urea and TSP powder. Later by squeezing, soap oil is removed from the hank yarn.
ii. Dyes depending on the desired colors are mixed in the water. It is made to boil more than 80°C and the yarn which is in the form of loose bundles is immersed in the tank. The colored yarn then dried in the open air but in shade.
Types of Dyes used:
The various kinds of dyes which are being used for dyeing are as direct dyes, Vat dyes, Azo free dyes and natural dyes etc. To meet the market demand of bright colors, especially greenish yellows, turquoise or greenish blue, scarlets and reds, reactive dyes are used, which offers bright hues along with good fastness qualities and ease of application process soon became a big commercial success and hugely impacted the textile industry throughout the world. The several dyes which are being used are:

a. Direct dyes: This is a dye class based on the method of application method. Direct dyes are known as hot water dyes. Here the fibre is immersed in a dye without the need for binding or exhaustive agents. Therefore direct dyes have high substantively, but bond weakly to fibres, and usually have poor color fastness and wash fastness.

b. Vat dyes: Vat means a vessel. Vat dyes derive their name from indigo vats used for fermenting the blue indigo dye. Vat dyes are water insoluble and need a special process to fix colour on the fibre. These dyes can be used effectively on natural plant material. Brilliant colours which are light and colour fast can be obtained in vat dyes. Indigo, the blue of blue jeans is a common vat dye.

c. Reactive dyes: This dye family contains no heavy extractable metals or other known toxic substances or pollutants, making them environmentally friendly or azo free chemical dyes. These dyes are low-impact synthetic dyes that directly form covalent bonds with cotton fibres rather than merely remaining as an independent chemical entity within the fibre, thus resulting in a long lasting, fast and bright color.

Azo free dye: It is type of chemical dye which replaced the local natural dyes many decades back. Today chemical dyes are available in different varieties. There are categories of dye stuff in chemical dyes which are azo free. Azo free dyes are environment friendly and do not harm the environment, dyer and user.

d. Natural Dyeing
Warangal cotton durries uses kalamkari printing which is a natural dye. This is done in Machilipatnam town of Andhra Pradesh state. Natural dyes are the dyes that are extracted from bark of trees, insects, flowers, minerals, rust and other natural materials. Vegetable dyes are a sub-category of natural dyes referring to those that come from plant matter only.

Cotton is less suitable for many natural dyes. There are some natural dyes that will work on cotton especially if mordanted with tannins. Among the better natural dyes for cotton are annato, cutch, logwood, madder, and indigo. All of these except for indigo require mordants, while indigo requires a special type of dye vat.

C. Warp and Weft Preparation:
 i. Weft Preparation:
Weft in a fabric is the yarn which passes across the fabric width. Weft yarn is passed through the warp yarn to create the fabric. Weft is available in multiple colors. From the
white or colored cotton yarn, the threads are wounded as small bundles. These bundles are woven into the warp of durries to make the weft, as per the desired design.

These pirns, which are wounded by cotton thread, are inserted into shuttle in weaving the weft of single color durrie. But in case of multi color durrie, shuttle is not used. Many small size bands of different color cotton threads are used in weaving a single line/row of the weft.
For 6s weft, they club six different threads and wounded them on to a pirn using charka. The weft which is used in Warangal cotton durries are 6s, 6-2s, 2-5s,

ii. Warp preparation:
Warping is a process, which converts the hank yarn into a linear form to give the length on the loom. From the hank yarn, the cotton threads are wound onto a pirn using charkha/spinning wheel. Warping is done with fixed a width and length and the desired quality of the product is decided at this stage. The warp generally used in Warangal durries are 3/6, 2/10, 2/20.

iii. Sizing
Sizing is a pre loom process, which is unique to handloom weaving. Sizing is done to give temporary strength to single count cotton yarn to withstand the rigor of weaving while keeping the characteristics and properties of cotton yarn intact.
After warping is done, the warp is stretched out and sizing material is applied to add strength and lubricate the yarn. Natural adhesives like rice, maize, wheat flour or potato starch are used depending upon the availability and region. In most handloom centers rice starch / gruel is mixed with coconut / groundnut oil and applied as sizing material. This activity of starching the yarn for weaving is known as sizing. The cotton fabric is applied with starch for the stiffness. Here the weavers use rice as a source for the purpose of starch. It is main element which gives strength and stiffness to the durries.

D. Weaving Techniques
For weaving, the warp longitudinally runs through a reed in two layers. Reed is comb like structure of metallic wire present in many hand looms. One end of the warp is at weavers end and the other at the opposite generally bound on to a log like structure which called as warp roller. In some cases warp is not wound on a roller but attached to fixed end and can be adjusted while weaving. As the treadles, which are present at the bottom and operated by legs, are pressed up and down, the two layers of the warp moves up and down alternatively allowing the weft run through them in interlocking manner.

Different technique is used for weaving on the handloom for durries. The weft which was wound onto pirn or simply made like a band, used to weave through the warp manually through hand. Depending on the design pattern and the length of the pattern, simultaneously two weavers work on the pit loom to weave the durrie.

The final cotton durries produced are available in various sizes (in feet) 2X8, 50X80, 60X90, 2X3, 2X4, 2X6, 4X5, 3X5, 5X8 etc.
J) **Uniqueness:**

Cotton is abundantly produced in Warangal for many decades and has a major pie in the cotton production in the state of Telangana. The then spinning mills like AzamJahi Mills helped as natural habitat for cotton based weaving industry especially durries and their development. Therefore art of weaving here is naturally developed and passed on to next generations.

Availability of skilled weavers, who have taken this profession hereditarily, is significant for the growth of cotton durries. Naturally developed weaving culture over the centuries and the skill of the Warangal weavers, specific designs authentic to this place have given a unique position to the Warangal cotton durries among all other durries.

Starch is used for the strength and toughness of durries. After warping is done, the warp is stretched out and starch is applied to add strength and lubricate the yarn. Natural adhesives like rice starch are used in Warangal durries.

K) **Inspection Body:**

**Internal Quality Control:**
The quality of the Warangal cotton durries is inspected by weavers themselves, as they are the best judge for the crafts. The weavers ensure that the quality is maintained from the stage of cotton selection to each stage of bleaching, dyeing, starching, warp & weft preparation and till weaving to obtain the final product.

It is proposed to create an Inspection body comprising of an official each of the following body:
1. The Andhra Pradesh Handicrafts Development Corporation Ltd.,
2. The Shatranji Hand-Loom Weaver's Co-operative Production & Sales Society Ltd.,
3. KakatiyaShatranji handloom Weavers Co-op. Production & Sales Society Ltd,
4. PoornanandaShatranji handloom Weavers Co-op. Production & Sales Society Ltd,
5. Master Weavers and Local NGOs for standard quality mechanism so as to regulate the standard quality and parameters of the durries from time to time.

L) **Others:**

1. **Community:** More than 98% of the weavers of the durries are from Padmashali who made Warangal as a base for weaving which is their caste base hereditary profession. Less than 2% of the weaving community belongs to Muslim community.
2. **Exports:** The Warangal cotton durries are exported to countries like Germany, the UK, France and other European countries, Japan, the US, Canada and African Countries.
1. Numbers given within the Mandal boundaries indicate Mandal Numbers in each district.
2. The district headquarters of Rangareddy is located at Hyderabad.
3. Where the district name differs from its headquarters name, the latter is given within brackets.

Geographical Area of Production of Warangal Cotton Durries in parts of Warangal District in the State of Telangana

**BOUNDARIES:**
- STATE
- DISTRICT
- MANDAL

**HEADQUARTERS:**
- STATE/U.T. ⭐
- DISTRICT 🌟

A) **Name of the Applicant**: Andhra Pradesh Handicrafts Development Corporation Limited

B) **Address**: Andhra Pradesh Handicrafts Development Corporation Limited, A State Government Undertaking, Hasthakala Bhavan, Opp: Telephone Exchange, Musheerabad, Hyderabad - 500020, Telangana, India.

Facilitated by:
Confederation of Indian Industry - Andhra Pradesh Technology Development & Promotion Centre, (CII-APTDC)

C) **Type of goods**: Class 19 – Handicraft - Statues, Idols, decorative and utilitarian articles made of Stone

D) **Specification**:
Allagadda Stone Carving is one of the important Stone Carving centres of Andhra Pradesh. Mythological figures and the Stone Carvings of the Gods and Goddesses in the temples in these regions are the typical illustrations of the Stonework.

In Allagadda Stone Carving, the sculptors widely use a Sand Stone called as *Isuka Rai* in local language and Krishna Shila Stone or Black Stone called as *Pesara Rai* in local language.

Sand Stone is typically in light browns, yellows and shades of red, semi hard in nature and more resistant to heat and hence it is more durable. Sand Stone is very suitable and easy for carving fine complex structures and hence widely used for carving idols of God and Goddess. This Stone is also used for carving landscapes as well as exterior wall claddings, panels, pillars, sculptures and arches.

Black Stone is very hard in nature and more resistant to extreme temperatures. This Stone is typically in thick grey colour which resembles the colour of Lord Krishna, hence the name *Krishna Shila*. Black Stone is available up to 4 feet thickness and up to 30 feet height. This black Stone is referred to as local Granite Stone.
Allagadda Sculptors strictly follow the ancient knowledge of Shilpa Sastra and in Vijayanagara style.

The Sculptors are following the Shilpa Sastras namely “Rupa Dhyana Ratnavali” and “Kashyapa Shilapa Sastram” pertaining to carving divine creations of God and Goddess. The Shilpa Sastras have been evolved from ancient Shilpa Sastras, and are promoted by Tirumala Tirupathi Devastanams(TTD).

The Allagadda Stone Carvings are mostly found in large Size. The Size of the Stone carving ranging from 3 feet to 40 feet height and presently 3 feet to 6 feet Stone carvings are in much demand.

Also this technique of Stone art involves usage of fine different number of chisels.

The products from Allagadda Stone Carving display the superb creativity and skillset of the artisans. Very fine structures of the carving and beautiful look of the products shows the efforts and careful attention given from craftsmen.

The Allagadda Stone Carving is different from other Carvings, being the fact that the Stones available in the local regions are unique and the fine art work is also unique. Some examples are Carving includes the design of clothes on the God and Goddess idols gives the aesthetic appearance, and the carving of eyes will not be so deep such that the eyes become natural & realistic look.

Largely temple related sculptures like Vigrahas or idols of God and Goddess, Buddhist Stupas, door frames for temples, and architectural elements such as lintels and pillars are carved in Allagadda clusters. They also make Dancing figures, human forms, animal figures, bird figures and Stone furniture like chairs, dining tables, sofas and benches for gardens, lawns and terraces.

E) Name of the geographical indication:

ALLAGADDA STONE CARVING

F) Description of the goods:

Allagadda is one of the important stone carving centres in Andhra Pradesh. Mythological figures and the stone carvings of the Gods and Goddesses in the temples in these regions are the typical illustrations of the stonework.

Allagadda sculptors widely use a Sand Stone called as Isuka Rai in local language and Krishna Shila Stone or Black Stone called as Pesara Rai in local language. Both the stones are available at Talamanchipatnam near Jammalamadugu in Kadapa District which is nearly 40 Kms from Allagadda.
Stone processing took place only for certain period of 3 months in a year especially after Ugadi festival. During this period the sculptors purchase the required stones in bulk amount.

Allagadda Sculptors strictly follow the ancient knowledge of Shilpa Sastra and in Vijayanagara style.

The Sculptors are following the Shilpa Sastras namely “Rupa Dhyana Ratnavali” and “Kashyapa Shilapa Sastram” pertaining to carving divine creations of God and Goddess. The Shilpa Sastras have been evolved from ancient Shilpa Sastras, and are promoted by Tirumala Tirupathi Devasthanams.

At present, there are a wide range of Stone crafts are deftly produced. Some of the products are:

**Statues:** Idols of God and Goddess, Buddha, Krishna and Ganesh are the fast selling carving products of Allagadda.

**Architectural elements:** Door frames and Gopurams for temples, lintels, arches and pillars.

**Decorative carvings:** Dancing figures, Human forms of freedom fighters, leaders and Politian Animal figures of elephant, lion, tiger, horse and rat, Bird figures of peacock, and Utilitarian products include chairs, dining tables, and sofas, benches for gardens, lawns, and terraces.

**G) Geographical area of production and map:** as shown in page no. 55

Allagadda is a Mandal in Kurnool district of Andhra Pradesh, India. It is located 120 km from Kurnool on NH 18 and is the border of districts Kurnool and Kadapa. It lies between 15° 8' North and 78° 31' East. Earlier, Allagadda was named as Avulagadda because once there were a large number of cows in the area. The river Kunderu passes through Allagadda and joins into the Penna River near kamalapuram of Kadapa District.

Allagadda is famous for sculptures in India. The traditional sculptors from this town are Mahasilpi Durugadda Balaveerachri (1926–1986), who won the award in First world Telugu conferences in 1975, and facilitated in Andhra Pradesh Rajatotsav celebrations in 1983. Another famous traditional sculptor was Durugadda Rama Krishmachari (1953–2008) who served as professor in Telugu University.

These famous sculptors moved to Allagadda exclusively for stone carving from a nearby village called “Gumpuramanu Dinne” during 1930s. Locally called name for the place of the carving is Sarada Shilpa Nagar. Currently more than 100 artisan’s families are making these stone carvings in Allagadda and numbers of artisans are more than 1000.

**H) Proof of origin [Historical records]:**

The stone carving traditional in Andhra Pradesh dates back to the 2nd century BC when Amravati was an important Buddhist center under the Satavahanas. Buddhists, Hindu and Islamic architecture in the region stand testimony to this craft. The state has a huge resource of stone where famous among them are the Cuddapah Sand Stone and Durgi stone.
The granite stone available in Andhra Pradesh is locally referred to as Krishna Shila which is the main material used for stone carving. Largely temple-related sculpture-vigraha or idols, and architectural elements such as lintels and pillars are carved in these clusters.

The traditional sculptors from Allagadda town are Mahasilpi Durugadda Balaveerachri (1926–1986), who won the award in First world Telugu conferences in 1975, and facilitated in Andhra Pradesh Rajatotsav celebrations in 1983. Another famous traditional sculptor was Durugadda RamaKrishnamachari (1953–2008) who served as professor in Telugu University.

The main contribution of Allagadda traditional sculptors are Mahanandi Ramalayam, the ceiling in the Mandapa and Garbhagriha, Srisailam Bhramarambha Gudi, Chagalamarry Ammavarisala, Ramalayam at Brahmangari Matam in Kadapa etc., are the exceptional work of art of them., Almost all these places we can find the portraits carved on the pillars in Vijayanagara style.

Sri Sarada Shilpa Kala Mandiram is dedicated to enriching the tradition of sculpture which was established by Mahasilpi Durugadda Balaveerachari on March 26, 1950 at Allagadda. Since then the Mandiram has been making sculptures using traditional skills and as well as modern technologies to produce great master pieces of monumental sculptures. Under the supervision and guidance of Sri Balaveerachari, the sculptural renovation works are held at Srisailam temple. His great works could be seen even today inside the premises of the Srisailam and Mahanandi temples. Several renowned personalities paid visits to the Mandiram. Nandamuri Taraka Rama Rao, who is considered to be the symbol of Telugu pride, visited the work place of Mandiram in 1984. Sri Balaveerachari was also grandly felicitated with Kanakabhishekam at his home town of Allagadda.

After the demise of the great master Sri Balaveerachari, his son Sri Durugadda Ravindra Achari took charge of Sri Sarada Shilpa Kala Mandiram. He inherited his father’s artistic remarkable talent and worked for the temples at Vittalaparam, Kanaganapalli, Santajuturu, Pittikunta, Mammuiddipalli, and Kolimigundla etc. In the footsteps of his father, he too has made marvelous statues for the Fourth World Telugu Conference held at Tirupathi on 27-29 Dec 2012.

They also made many beautiful wall murals, idols of gods and goddesses and door frames for temples. They also make stone furniture like chairs, dining tables, sofas and benches for gardens, lawns and terraces. They combine traditional craft techniques and modern style.

The current major project of Allagadda sculptors is Buddhavanam at Nagarjunasagar headed by Sri Durugadda Ravindra Achari. This project is based on Amaravati stupa and sculpture, the biggest project ever done from Allagadda Sculptors.

I) Method of Production:

Allagadda Stone carving is performed on Sand Stone and Black Stone in this area which depicts the theme of mythology and spiritualism, and ancient rules of Shilpa Sastra.

The making of Allagadda stone carvings can be categorized in to two main components:
A) Raw Material
B) Production

RAW MATERIALS USED:

The Sand Stone and Black Stone are the most important raw material used in Allagadda Stone carvings. It is only because of the semi hard nature of the stone, the crafts are easy to finish and can be made in variety of sizes and shapes.

The Sand Stone:

The main raw material in making of Allagadda stone carvings is the Sand Stone. It is locally known as the “Isuka Rai”. The Sand Stone is obtained from Talamanchipatnam near Jammalamadugu in Kadapa. The crafts men procure the Sand Stone from the quarry and mining is carried only during the months from March-May every year and especially after Ugadi festival.

The Sand Stone is typically in light browns, yellows and shades of red which is specific to this region only. The Sand Stone is semi hard in nature and more resistant to heat and hence it is more durable.

The Black Stone:

Another main raw material in making of Allagadda stone carvings is the Black Stone. It is locally known as the “Pesara Rai” because of the colour of the Pesara Pappu (Mung bean, Green gram). The Sand Stone is also obtained from Talamanchipatnam near Jammalamadugu in Kadapa.

This stone is typically in thick grey colour which resembles the colour of Lord Krishna; hence this Stone is also named as Krishna Shila. Black stone is available up to 4 feet thickness and up to 30 feet height. This black stone is referred to as local Granite stone.

TOOLS AND IMPLEMENTS:

The following tools and implements are used for carving the Allagadda stone crafts.

Moola Matam: It is a ruler used for measurements of the stone and drawings.
Sutti: It is a Hammer for carving the stone
Uli: These are Chisels used for the carving
Measuring tape: For measurements
Apellu: Used for cutting the stone
Arapasam (Nayam): Used for finishing the carving.
Grinding Stone: Used for hand polishing the stone
Geeyaraku: It is a leaf used for polishing the ornamental structure of the carving.
Electrical cutting machine: It is used for cutting the big stones
Finishing machine: This is an electrical tool used for initial finishing of the carving.

PRODUCTION PROCESS:

Allagadda Stone carving involves complete hand carving of a selected block of Sand Stone or Black Stone.
**First Step:** First and important step of the stone carving is selecting the stone by checking both the external and internal cracks and spots. Craftsmen hit the surface of the stone with the hammer and tests the stone based on the sound vibrations. Some of the Allagadda senior Sculptors select the stone just by looking and from small observations. This really shows the art skills of the Allagadda craftsmen.

**Second Step:** Once the stone is ready, the sculptors draw the initial marking with the help of the coal or colorant after smoothing the surface of the stone.

**Third Step:** In this stage, the Sculptors keep the exact figure in mind and do final marking which gives the actual structure of the figure. Moola matam will be used in this step to measure the actual design.

**Fourth Step:** Rough work of the carving will be performed now with the Sutti and Uli. In this step, superfluous portions of the stone are removed to get the rough figure which shall be reduced to match the product drawing.

**Fifth Step:** The Sculptors use different chisels (Arapasam) to work out the minute details for better finishing of the craft. Once the finishing is done, sculptors highlight the required portion of the design and then polish with the Grinding stone (Aku Rai). After polishing, sculptors use the leaf called “Geevaraku” for fine finishing of the carving and also to get the glittering effect.

**Sixth Step:** This is the last step where small chisels and hammers are used to give the final finishing and then given with the polishing to get the beauty and shining effect of the designs. Some Sculptors also use the Emery Paper to give the final touch of finishing before polishing.

**J) Uniqueness:**

**Geographical factor:**
Both Sand Stone and Black stones are widely available from Talamanchipatnam, Kadapa district, near to the Allagadda and both the stones have unique characteristics in nature.

The semi hard nature of the stone makes Allagadda stone carvings finishing friendly, flexible and gives the sculptors the ease to craft products of different sizes and shapes with very fine structures.

Idols of the Gods and Goddesses are carved by strictly following ancient knowledge of Shilpa Sastra and in Vijayanagara style.

The Sculptors are following the Shilpa Sastras namely “Rupa Dhyana Ratnavali” and “Kashyapa Shilpa Sastram” pertaining to carving divine creations of God and Goddess. The Shilpa Sastras have been evolved from ancient Shilpa Sastras, and are promoted by Tirumala Tirupathi Devastanam.

Art skills of the sculptors are very unique and Allagadda Stone Carving is named for carving the large size figures with very fine structuring.

Both Sand stone and Black stone are heat resistant and high durability due to the hardness, both the Stones are exclusively used for carving big figures and Moola Vighrahams of God and Goddess to be installed in Temples.
Allagadda Sculptors use single stone for carving with at most attention without having any damage to the whole piece. Craftsmanship of the traditional Allagadda Sculptors is exceptional and this remarkable skill has been acquired and passed on to generations.

**Human Skill:**

Allagadda Sculptors use single stone for carving with at most attention without having any damage to the whole piece. Craftsmanship of the traditional Allagadda Sculptors is exceptional and this remarkable skill has been acquired and passed on to the generations.

Use different type of chisels and craftsmen do not focus on another product until the carving of current product is completely finished.

**Reputation:**

Allagadda Stone carvings are greatly known in the local and international market due to the skill and creativity of the craftsman of the region. The uniqueness lies in the fact that the Allagadda has become a symbol of unique craftsmanship in making of large idols of Gods and Goddess which can be installed in the temples as Moola Vigrahams.

God and Goddess idols of Allagadda Stone carving are exported to USA, China and Srilanka as of now.

To promote and advance to the further level, creative stone products are being added up to meet with the current market trends.

**K) Inspection Body:**

The Quality of the Allagadda stone crafts is inspected by artisans themselves, as they are the best judge for the crafts. The artisans ensure that the quality is maintained from the stage of stone selection and at each of the stages till the finished product. Finished crafts are checked for its finish, design lines and shade variations.

**GI Inspection Body:**

An Inspection Body of Nine Members is proposed for ensuring the standards, quality and specification of the Allagadda Stone carving:

1. One (1) Member from Andhra Pradesh Handicrafts Development Corporation Limited, Hyderabad;
2. One (1) Member from Sri Lakshmi Narasimha Swamy Silpikala Samkshhema Sangham;
3. Two (2) Member from Local Office of Andhra Pradesh Handicrafts Development Corporation Limited;
4. One (1) Representative from Development Commissioner of Handicrafts;
5. Two (2) Producers of Allagadda Stone carving – National and State Awardees / Senior or Master Artisans
6. Two (2) Producers of Allagadda Stone carving;

**L) Others:**
Locally called name for the place of the carving is Sarada Shilpa Nagar. Currently more than 100 artisan’s families are making these stone carvings in Allagadda and numbers of artisans are more than 1000.

The size of the sculptures created in Allagadda ranges from 3 feet to 40 feet height.

Now, in addition to idols of God and Goddess, Modern art carving of benches and lawns used for Gardens are in much Demand.

The average time taken to make a stone statue of 3 feet height 5-8 Days and 10 Feet is 20 Days.

Stone carving is only the major source of income for Allagadda sculptors.

To promote and advance to the further level, creative stone products are being added up to meet with the current market trends.

The current major project of Allagadda sculptors is Buddhavanam at Nagarjunasagar headed by Sri Durugadda Ravindra Achari. This project is based on Amaravati stupa and sculpture, the biggest project ever done from Allagadda Sculptors.

Andhra Pradesh Handicrafts Development Corporation Limited established a training school in Allagadda during 1990 to educate the new techniques, designs and to promote the Allagadda stone carving across the world.

Tirumala Tirupathi Devasthanams (TTD) organised Training cum Workshop to educate the ancient rules of Shilpa Sastram to the new generation and TTD has published two Shilpa Sastras called “Rupa Dhyana Ratnavali” and “Kashyapa Shilapa Sastram”.
G.I. APPLICATION NUMBER – 551
Application Date: 20-06-2016

Application is made by Bhagalpuri Jardalu Aam Utpadak Sangh, Madhuban, Village: Maheshi, Post: Tilakpur, Block & Thana: Sultanganj, Bhagalpur - 813228, Bihar, India for Registration in Part A of the Register of Bhagalpuri Zardalu under Application No. 551 in respect of Horticulture Products (Fruits) - Mango falling in Class – 31 is hereby advertised as accepted under Sub-section (1) of Section 13 of Geographical Indications of Goods (Registration and Protection) Act, 1999.

A) Name of the Applicant : Bhagalpuri Jardalu Aam Utpadak Sangh

B) Address : Bhagalpuri Jardalu Aam Utpadak Sangh
Madhuban, Village: Maheshi, Post: Tilakpur,
Block & Thana: Sultanganj,
Bhagalpur - 813228, Bihar, India

Facilitated by:
Bihar Agricultural University

C) Types of Goods : Class 31 – Horticulture Products (Fruits) – Mango

D) Specification:

The Mango cultivar Zardalu is one of the choicest varieties of Bhagalpur, Bihar. It is a moderately vigorous with spreading tree habit, the trunk is slender in nature and shape of the tree is top rounded. The leaves are evergreen, alternate, simple, 15–35 cm long, and 6–16 cm broad; when young they are orange-pink, rapidly changing to a dark, glossy red, then dark green as they mature. The flowers are produced on terminal panicles 10–40 cm long; each flower is small and creamish to pinkish yellow in colour with five petals measuring 5–10 mm, having sweet flavour. The fruits are medium in size (186-265g) with golden yellow peel. Pulp is golden yellow in colour.

E) Name of the Geographical Indication:

BHAGALPURI ZARDALU

F) Description of the Goods:

Zardalu is an early to mid-season variety of mango. It is one of the most sought after mango variety form Bhagalpur and adjoining regions of Banka and Munger districts of Bihar. Its fruits are creamy yellow in colour having exceptional fruit quality and an
enticing aroma. The flesh is firm, sparingly fibrous. The stone of Zardalu mangoes is medium in size. Zardalu mango is fairly heavy bearing in nature. The keeping and peeling qualities is medium. Zardalu mango is moderately resistant to biotic and abiotic stresses.

Division: Magnoliophyta  
Class: Magnoliopsida  
Subclass: Rosidae  
Order: Sapindales  
Family: Anacardiaceae  
Genus: Mangifera  
Botanical Name: Mangifera indica L

Mango (Mangifera indica L.) belongs to the Family Anacardiaceae and Genus Mangifera. It is one of the most important fruit crop in India having a great cultural, socio economic and religious significance since the ancient times.

**The characteristics of Zardalu tree.**

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<thead>
<tr>
<th>S.No.</th>
<th>Characters</th>
<th>Observation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Tree habit</td>
<td>Tall</td>
</tr>
<tr>
<td>2</td>
<td>Compactness</td>
<td>Semi Open</td>
</tr>
<tr>
<td>3</td>
<td>Leaf Shape</td>
<td>Oblong lanceolate</td>
</tr>
<tr>
<td>4</td>
<td>No. Of leaves (apical 10cm)</td>
<td>11.6</td>
</tr>
<tr>
<td>5</td>
<td>Average leaf area (sq.cm)</td>
<td>72.49</td>
</tr>
<tr>
<td>6</td>
<td>Colour of young leaf</td>
<td>Light pink</td>
</tr>
<tr>
<td>7</td>
<td>Tip of leaf</td>
<td>Acuminate</td>
</tr>
<tr>
<td>8</td>
<td>Margin of Leaf</td>
<td>Flat</td>
</tr>
<tr>
<td>9</td>
<td>Leaf habit</td>
<td>Smooth</td>
</tr>
<tr>
<td>10</td>
<td>Orientation of Leaf</td>
<td>Intermediate</td>
</tr>
<tr>
<td>11</td>
<td>Date of panicle emergence</td>
<td>30\textsuperscript{th} January</td>
</tr>
<tr>
<td>12</td>
<td>Inflorescence shape</td>
<td>Cylindrical</td>
</tr>
<tr>
<td>13</td>
<td>Length of inflorescence. (cm)</td>
<td>25.5</td>
</tr>
<tr>
<td>14</td>
<td>Width of inflorescence. (cm)</td>
<td>20.0</td>
</tr>
<tr>
<td>15</td>
<td>Colour of inflorescence</td>
<td>Light green</td>
</tr>
<tr>
<td>16</td>
<td>Hairiness of rachis</td>
<td>Slightly hairy</td>
</tr>
<tr>
<td>17</td>
<td>Leafy bracts</td>
<td>Nil</td>
</tr>
<tr>
<td>18</td>
<td>Stalk insertion</td>
<td>Obliquely inserted</td>
</tr>
<tr>
<td>19</td>
<td>Base</td>
<td>Rounded</td>
</tr>
<tr>
<td>20</td>
<td>Basal Cavity</td>
<td>Shallow</td>
</tr>
<tr>
<td>21</td>
<td>Sinus</td>
<td>Shallow</td>
</tr>
<tr>
<td>22</td>
<td>Beak</td>
<td>Slightly Prominent</td>
</tr>
<tr>
<td>23</td>
<td>Ventral Shoulder</td>
<td>Rising then rounded</td>
</tr>
<tr>
<td>S.No.</td>
<td>Fruit Characters</td>
<td>Varieties</td>
</tr>
<tr>
<td>------</td>
<td>------------------------</td>
<td>---------------------------------------------------------------------------</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bhagalpuri Zardalu</td>
</tr>
<tr>
<td>1</td>
<td>Fruit maturity Days</td>
<td>104.67-106.33</td>
</tr>
<tr>
<td>2</td>
<td>Yield of fruit per plant (number)</td>
<td>368-1575.33</td>
</tr>
<tr>
<td>3</td>
<td>Yield of fruit per plant Kg</td>
<td>77.46-315.07</td>
</tr>
<tr>
<td>4</td>
<td>Pulp weight</td>
<td>53.09 - 215.51</td>
</tr>
<tr>
<td>5</td>
<td>Length of fruit (cm)</td>
<td>10.15-10.27</td>
</tr>
<tr>
<td>6</td>
<td>Breadth of fruit</td>
<td>6.42-6.55</td>
</tr>
<tr>
<td>7</td>
<td>Weight per fruit (g)</td>
<td>200-210.50</td>
</tr>
<tr>
<td>8</td>
<td>Volume per fruit(ml)</td>
<td>192.85-202.82</td>
</tr>
<tr>
<td>9</td>
<td>Specific gravity of fruit</td>
<td>1.037-1.038</td>
</tr>
<tr>
<td>10</td>
<td>Stone percentage</td>
<td>20.45-20.73</td>
</tr>
<tr>
<td>11</td>
<td>Pulp percentage</td>
<td>68.40-68.54</td>
</tr>
<tr>
<td>12</td>
<td>Edible non edible ratio</td>
<td>2.22-2.23</td>
</tr>
<tr>
<td>13</td>
<td>TSS of fruit juice O Brix</td>
<td>22.08-22.67</td>
</tr>
<tr>
<td>14</td>
<td>Acidity %</td>
<td>0.22-0.23</td>
</tr>
<tr>
<td>15</td>
<td>Ascorbic acid (mg/100g of juice)</td>
<td>19.42-20.75</td>
</tr>
<tr>
<td>16</td>
<td>Reducing Sugar %</td>
<td>4.35-5.05</td>
</tr>
<tr>
<td>17</td>
<td>Non Reducing Sugar %</td>
<td>10.85-11.28</td>
</tr>
<tr>
<td>18</td>
<td>Total Sugar</td>
<td>15.20-16.33</td>
</tr>
<tr>
<td>19</td>
<td>TSS/Acid ratio</td>
<td>99.38-99.79</td>
</tr>
</tbody>
</table>

Physico-chemical characteristics of Bhagalpur Zardalu Mango along with other commercial cultivars of the region (Laboratory analysis)
G) Geographical area of Production and Map as shown in page no: 62

The district of Bhagalpur is surrounded by Munger, Khagaria, Madhepura, Purnea, Katihar & Banka districts of Bihar and Godda & Sahebganj districts of Jharkhand. It lies between 24°30' and 25° 30' at North latitude and 86°30' and 87°30' East longitude at an elevation of around 55 Meter above the mean sea level (MSL). It is situated in the Plain of Ganga Basin. The district is known for growing varieties of Mango such as Zardalu, Gulabkhas, Langra.

On the basis of Agro-climatic Zonal Planning, agro-climatic features particularly soil type, temperature, rainfall, its variation and water resources, the district falls within the region, which can be geographically described as South Bihar Alluvial Plain. It is sub humid and has rainy season during summer subtropical climate ranging from sub-dry and sub-humid conditions with average annual rainfall of around 1350 mm.

Soil of Bhagalpur district is Greyish red in colour; medium to heavy in texture, slightly to moderately alkaline in reaction, cracks during summer (1cm to more than 5 cm wide and more than 50 cm deep) becomes shallow with onset of monsoon, with clay content nearly 40 per cent to 50 per cent throughout the profile. The rainfall under this zone is mainly influenced by the south-west monsoon which sets in the second week of June and continues up to end of September, Sometimes cyclonic rain also occurs. The rainfall distribution is marked seasonal in character. Greatly limiting water availability in certain times of the year and sometimes it requires disposal of excess water during monsoon.

H) Proof of Origin (Historical records):

Bhagalpur Zardalu mango is a unique variety of mango grown in Bhagalpur and adjoining districts of Bihar since long. As per the Bihar District Gazetteer, Bhagalpur, it is one of the important varieties of mango. Presently, it has been planted in this region and some nurseries have been established for its multiplication.

It is believed that Zardalu mango was first cultivated in this region by Maharaja Rahmat Ali Khan Bahadur of Khadakpur. It is said that Zardalu mango originated as a superior chance seedling (Singh 1967).

More than 200 year old Bhagalpur Zardalu tree is still alive in a village at Tagepur, P.O. & P.S. Jagdishpur under Bhagalpur district which acted as a mother plant/ source of further multiplication. A special programme on area expansion under Zardalu plantation in Bhagalpur district has been launched from last four years by State Horticulture Mission, Govt. of Bihar. B.A.U, Sabour have been assigned to produce a large number of Zardalu grafts every year to meet farmers’ requirement of Zardalu plants.

I) Method of Production:

Propagation:
True to type Zardalu mango plants can be propagated by veneer grafting. In this method the scion or bud stick are detached completely from the mother plant at the time of grafting. The scion should be a healthy 22-25cm long terminal or axillary shoots of the previous season’s growth (3-4 months old) with active buds. Leaf blades are cut off leaving petioles about 10 days earlier and the buds should be ready to sprout. The root stock is prepared by making a slanting cut of 5 cm long on one side of the stem and the bark along with wood is removed with an oblique cut. A slanting cut of the same size on one side of the scion base is made which will just fit with the notch of the stock. The scion
is then placed in position on the stock in such a way that the two cambium rings of both stock and scion come in close contact. It is then wrapped tightly with alkanthene film keeping the terminal end free. When the scion begins to grow at the top (after about 3 weeks), the upper part of the stock is removed, thus forcing the bud to grow more rapidly. The plastic wrap is removed after 2-3 months. Other vegetative propagation methods like inarching, side grafting and epicotyl grafting can be employed.

**Planting**

Land is be prepared by deep ploughing followed by harrowing and levelling with a gentle slope for good drainage. Planting is done at a spacing of 10-12m X 10-12 m. Then pits of 1m X 1m X 1m size are dug. Those are exposed to sun for about 30 days. The top soil is mixed with 20-25 kg well rotten farmyard manure, 2.5 kg single super phosphate and 1 kg muriate of potash. One year old healthy, straight growing grafts are planted at the centre of pits along with the ball of the earth intact during rainy season in such a way that the roots are not expanded and the graft union is above the ground level. Plants should be irrigated immediately afterplanting.

**Training and pruning:**

About one meter from the base on the main trunk should be kept free from branching and the mainstem can be allowed thereafter spaced at 20-25 cm apart in such a way that they grow in different directions. Branches which cross over/rub each other may be removed.

**Manure and fertilizers:**

A dose of 100 g N, 50gP₂O₅ and 70g K₂O/ year is given to a one year old Zardalu plant. The dose is increased every year so that at the tenth year and thereafter a dose of 1Kg N, 500gP₂O₅ and 700g K₂O should be applied in two split doses during June- July and October respectively. Besides 50 Kg FYM is given during the month of November-December.

**Maturity, Harvest, Yield and Post Harvest handling of fruits**

Zardalu mangoes are harvested when fruits attain its full size and shoulders of fruit raises above the point of attachment. The peel colour of mature fruit changes from dark green to light green. It should be harvested with 5-8 cm pedicel to avoid sap burn injury. Injury to the fruit during harvesting brings down their quality and also makes them prone to fungal attack. In Bhagalpur region Zardalu mangoes are harvested from last week of May to 2nd week of June. Average yield of Zardalu is 72Kg/plant. After harvesting, the mangoes are graded according to their size, weight, shape, colour and free from defects. To maintain their quality, proper packaging is a must. Perforated cardboard boxes are used for packaging. Paper shavings are used as cushioning materials in the boxes to protect from mechanical injury during handling and transport.

**J) Uniqueness:**

Bhagalpur Zardalu mango is a creamy yellow coloured fruit which possesses exceptional fruit quality and an enticing aroma. It is fairly heavy bearing in nature and derives its name from Zardalu, a dry fruit owing to similarity of shape and quality. The trees are moderately vigorous, spreading, top round, trunk slender; shoots thick. The leaves of Zardalu plant are spreading, inclined to be crinkled; margins entire; venation moderately prominent; tip sub acuminate; base acute; emerging and immature growing leaves deep chrysolite green. The inflorescence of Zardalu mango is large, conical, apricot buff, moderately puberulent; stamen unequal, smaller than pistil and oblique to it; staminoides poorly developed. The fruits are medium, oblong; base obliquely rounded; stalk inserted obliquely; cavity absent to slight; shoulders unequal, ventral higher and broader than
dorsal, ventral shoulder rising and then rounded, dorsal shoulder ending in a long curve; beak distinct to prominent; sinus slight; apex broad pointed; skin thin, smooth to inclined to be rough, golden yellow; dots small, moderately distinct. Flesh firm to soft, sparingly fibrous, close to the skin, capucine yellow; flavour very pleasant to delightful; taste sweet; juice moderately abundant. The stone is medium in size, oblong and covered all over with dense short and soft fibers; veins forked and slightly depressed. The fruit quality is very good; bearing medium to heavy; early to mid-season; moderately resistant to wind and hoppers, keeping and peeling qualities is medium.

K) **Inspection Body:**

The quality of Zardalu Mango will be monitored by the following departments/organizations in order to maintain the original physical and chemical characteristics as per GI registration by the following committee members:

I. Director Research, Bihar Agricultural University, Sabour, Bhagalpur-813210.
II. Chairman, Department of Horticulture (Fruit & Fruit Technology), Bihar Agricultural University, Sabour, Bhagalpur-813210.
III. Scientists, Mango Research Group, Department of Horticulture (Fruit & Fruit Technology), Bihar Agricultural University, Sabour, Bhagalpur-813210.

**Regulation of GI in the territory**

To regulate the use of GI in the territory, the Inspection Structure is proposed to consist the following members:

I. Director, ICAR Complex for Eastern Region, Patna, Bihar.
II. Directorate of Horticulture, Government of Bihar.
III. President, Bihar Mango Growers Federation, Bhagalpur, Bihar.

Zardalu mango in the geographical production area will be identified and will be allotted an identification number to ensure traceability and quality.

**G.I. APPLICATION NUMBER – 553**  
Application Date: 20-06-2016

Application is made by Bhagalpuri Katarni Dhan Utpadak Sangh, C/o Sri Raj Kumar Panjiara, Village & Post: Jagdishpur, Bhagalpur - 813105, Bihar, India for Registration in Part A of the Register of Katarni Rice under Application No. 553 in respect of Rice falling in Class – 30 is hereby advertised as accepted under Sub-section (1) of Section 13 of Geographical Indications of Goods (Registration and Protection) Act, 1999.

A) **Name of the Applicant**: Bhagalpuri Katarni Dhan Utpadak Sangh

B) **Address**: Bhagalpuri Katarni Dhan Utpadak Sangh  
C/o Sri Raj Kumar Panjiara, Village+Post: Jagdishpur, Bhagalpur - 813105, Bihar, India

**Facilitated by**:  
Bihar Agricultural University

C) **Types of Goods**: Class 30 – Rice

D) **Specification**:  

“Katarni Rice” is the most prevalent, ceremonial and finest quality scented rice of Bihar, India. The word “Katarni” literally means an *awl* with a hook at the end for sewing. Awl is a pointed tool for making holes, as in wood or leather.

The name “Katarni Rice” has been given its name due to the resemblance of the tip of its husk (apicull) with *awl* which also called ‘*takna*’ in South Bhagalpur and ‘*tipuni*’ in South Munger. “Katarni Rice” is famous for its aromatic flavour, palatability and *chura (beaten rice)* making qualities.

Grain quality characters of Katarni Rice

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Grain Traits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Kernel length</td>
<td>4.55-4.75mm</td>
</tr>
<tr>
<td>2</td>
<td>Kernel Breadth</td>
<td>1.65-1.80mm</td>
</tr>
<tr>
<td>3</td>
<td>L/B ratio</td>
<td>2.60-2.70</td>
</tr>
<tr>
<td>4</td>
<td>Grain Type</td>
<td>Medium Slender</td>
</tr>
<tr>
<td>6</td>
<td>1000 grain weight</td>
<td>11.00- 14.00gm</td>
</tr>
<tr>
<td>7</td>
<td>Hulling%</td>
<td>75-79%</td>
</tr>
<tr>
<td>8</td>
<td>Milling%</td>
<td>64-68%</td>
</tr>
<tr>
<td>9</td>
<td>Head Rice</td>
<td>60-63%</td>
</tr>
<tr>
<td>10</td>
<td>Alkali Value</td>
<td>3.8-4.0</td>
</tr>
<tr>
<td>11</td>
<td>Volume expansion</td>
<td>4.0-4.2</td>
</tr>
<tr>
<td>12</td>
<td>Gel consistency</td>
<td>65-68mm</td>
</tr>
<tr>
<td>13</td>
<td>Amylose Content</td>
<td>22-24%</td>
</tr>
<tr>
<td>14</td>
<td>Aroma in grain</td>
<td>Strongly Scented</td>
</tr>
</tbody>
</table>
E) Name of the Geographical Indication:

KATARNI RICE

F) Description of the Goods:

“Katarni Rice” is one of the famous fine grain quality scented landrace of Bihar, India. The name Katarni has been derived due to the shape of the apex of paddy which is similar to the tip of *avl*. It is famous for its taste, palatability and aroma.

The morpho-agronomic and grain quality characters of Katarni are as follows:

a. Morpho-agronomic traits of Katarni

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Traits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Tillering Ability</td>
<td>Medium (12-14 tiller/hill)</td>
</tr>
<tr>
<td>2</td>
<td>Days to 50% flowering</td>
<td>125-130 days (photo sensitive)</td>
</tr>
<tr>
<td>3</td>
<td>Days to maturity</td>
<td>155-160 days (photo sensitive)</td>
</tr>
<tr>
<td>4</td>
<td>Flag Leaf Length</td>
<td>28-30cm</td>
</tr>
<tr>
<td>5</td>
<td>Flag Leaf Width</td>
<td>1.00-1.03cm</td>
</tr>
<tr>
<td>6</td>
<td>Panicle length</td>
<td>22-26cm</td>
</tr>
<tr>
<td>7</td>
<td>Plant height</td>
<td>160-165 cm</td>
</tr>
<tr>
<td>8</td>
<td>Aroma in Plant</td>
<td>Scented</td>
</tr>
<tr>
<td>9</td>
<td>Panicle/m²</td>
<td>250-270</td>
</tr>
<tr>
<td>10</td>
<td>Awning</td>
<td>Absent</td>
</tr>
<tr>
<td>11</td>
<td>Lemma, palea colour</td>
<td>Golden Straw</td>
</tr>
</tbody>
</table>

b. Grain quality characters of Katarni

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Grain Traits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Kernel length</td>
<td>4.55-4.75mm</td>
</tr>
<tr>
<td>2</td>
<td>Kernel Breadth</td>
<td>1.65-1.80mm</td>
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<td>3</td>
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<tr>
<td>4</td>
<td>Grain Type</td>
<td>Medium Slender</td>
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<td>1000 grain weight</td>
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<tr>
<td>6</td>
<td>Hulling%</td>
<td>75-79%</td>
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<tr>
<td>7</td>
<td>Milling%</td>
<td>64-68%</td>
</tr>
<tr>
<td>8</td>
<td>Head Rice</td>
<td>60-63%</td>
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<tr>
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<td>Alkali Value</td>
<td>3.8-4.0</td>
</tr>
<tr>
<td>10</td>
<td>Volume expansion</td>
<td>4.0-4.2</td>
</tr>
</tbody>
</table>
12 Gel consistency  |  65-68mm
13 Amylose Content  |  22-24%
14 Aroma in grain   |  Strongly Scented

c. Cooking time: The cooked rice is fluffy, soft, non-sticky, sweet, and easily digestible with pop-corn like aroma.

G) Geographical area of Production and Map as shown in page no: 68

Geographical area of production of Katarni Rice includes three districts located under agroclimatic Zone IIIA in South Bihar which is comprised of south alluvial Gangetic plane of Munger, Banka and South Bhagalpur.

H) Proof of Origin (Historical records):

“Katarni Rice” is one of the famous fine grain quality scented landrace of Bihar, India. Few reports regarding the relatedness of Katarni Rice with Bhagalpur and its adjoining area are as follows:

Papers:
1. Katarni is one of the important traditional photo-sensitive rice cultivars popular in Bihar and reported to be adopted in the plains of Bhagalpur Region: In paper titled “Participatory breeding in Rice” By Dr. R. Thakur.
3. In the study entitled “Problems and prospects of Katarni Paddy production in Bihar” conducted by Ministry of Agriculture, Govt. of India (http://www.aercbhagalpur).

Books:
4. Races of rice in India, Govt. of India, Print House, M.D. Publication Pvt. Ltd., 1996.
5. Progress report 2013. Vol.1 Varietal improvement. All India Coordinated Rice Improvement programme. Directorate of Rice Research (ICAR), Rajendranagar, Hyderabad.

I) Method of Production:
Katarni rice is medium slender grained, tall and photosensitive landrace which flowers in the temperature range of 30-28°C (day) and 20-18°C (night) with 10-12 hrs day period and grain filling occurs in hazy sunshine in 8-10 hrs day period. It is tolerant to cold at but sensitive to rain at flowering. The various agronomical practices being followed by the farmers are as follows:

| a) Sustainability of variety for the area | – The variety have attainable yield of 25-28 Q/ha in medium irrigated ecology |
| b) Selection of field/ land preparation | – Loam to clay loam soil, land preparation with soil turning plough followed by harrowing  
– Puddle the field by tractor drawn rotavator if green manure crop like *dhaincha* or mung has been taken so that it can be incorporated well in soil.  
– Puddling should be followed by planking. |
| c) Seed rate | – 20 Kg/ha |
| d) Sowing time | – 10th-25th July |
| e) Seed rate/sowing method-line sowing with Row to row & Plant to Plant distance | – 20Kg/ha  
– Spacing: Plant to plant: 20 cm; Row to row: 20 cm |
| f) Fertilizer doses | – Recommended dose of NPK 40:30:20 kg/ha  
– Application of 0.5% ferrous sulphate if iron deficiency symptoms appear.  
– Apply FYM @ 6 t/acre and incorporate it into soil by ploughing before 25-30 days of transplanting  
– For green manuring, sowing of *Crotalaria juncea* in 1st first week of April, using 10-12 kg seed/acre in un-ploughed fields (after wheat harvest) by broadcasting method and ploughing with rotavator at the time of transplanting of rice to incorporate the *dhaicha* crop into the soil. |
| g) Harvesting | – Last week of November to Mid-December  
– Harvest the crop when the panicles are mature and the plants have turned considerably yellow. The crop can be harvested manually by sickles or by combine harvester.  
– After threshing, the grains should be sun dried for storage |

**J) Uniqueness:**

On Morphological Traits
a. The husk is dark brown.
b. Aroma of both cooked and uncooked rice is strongly scented.
c. The shape of the apex of Katarni paddy is similar to the tip of awl.
d. Newly milled rice is non-sticky, digestible and sweet and cooked rice is fluffy.
e. The beaten rice (*Poha* or *Chura*) of Katarni is scented, very soft and sweet.
f. The leaf and dehusked grains of Katarni in Zone IIIA (Munger, Banka and Bhagalpur) give strong aroma in 1.7% (w/v) KOH solution while aroma is very light or absent.
when it is grown in any other agro climatic zones. 1.7% (w/v) KOH sensory test for aroma is a standard method to know the aroma present in leaf and seed samples in rice varieties.

K) Inspection Body:

The association of Katarni rice growers will maintain the quality and regulate the use of Geographical Indications of Katarni rice while Bihar Agricultural University and Department of Agriculture, Govt. of Bihar will facilitate the association and act as a watchdog for maintaining the quality of Katarni rice.

GI Inspection Body:

An Inspection Body of Seven Members is proposed for ensuring the standards, quality and specification of the Katarni rice:

1. One (1) Member from Bihar Agricultural University;
2. One (1) Member from Department of Agriculture, Govt. of Bihar;
3. Two (2) Member from Bhagalpuri Katarni Dhan Utpadak Sangh;
4. One (1) Farmer from Munger
5. One (1) Farmer from Banka
6. One (1) Farmer from South Bhagalpur

**G.I. APPLICATION NUMBER – 554**

Application Date: 20-06-2016

Application is made by Magahi Paan Utpadak Kalyan Samiti, Village: Deuri, Post Office: Barhauna, District: Nawada - 805103, Bihar, India for Registration in Part A of the Register of **Magahi Paan** under Application No. 554 in respect of Horticultural crop (Betelvine) falling in Class – 31 is hereby advertised as accepted under Sub-section (1) of Section 13 of Geographical Indications of Goods (Registration and Protection) Act, 1999.

<table>
<thead>
<tr>
<th>A) Name of the Applicant</th>
<th>Magahi Paan Utpadak Kalyan Samiti</th>
</tr>
</thead>
<tbody>
<tr>
<td>B) Address</td>
<td>Magahi Paan Utpadak Kalyan Samiti, Village: Deuri, Post Office: Barhauna, District: Nawada - 805103, Bihar, India</td>
</tr>
<tr>
<td>Facilitated by:</td>
<td>Bihar Agricultural University</td>
</tr>
<tr>
<td>C) Types of Goods</td>
<td>Class 31 – Horticultural - Betelvine</td>
</tr>
<tr>
<td>D) Specification:</td>
<td>Green Heart shaped leaf of betelvine is known as “Paan”. Magahi paan is a local and traditional cultivar of betelvine that is grown commercially particularly in magadh region of Bihar by small and marginal farmers. It is cultivated under artificial conservatory (Locally known as Baroj or Baretha). Its leaf is very popular among pan chewers worldwide due to aroma (pungent) and less fibrous soft leaf.</td>
</tr>
<tr>
<td>E) Name of the Geographical Indication:</td>
<td></td>
</tr>
<tr>
<td><img src="image" alt="MAGAHI PAAN" /></td>
<td></td>
</tr>
<tr>
<td>F) Description of the Goods:</td>
<td>Magahi paan is a leading cultivar of Bihar origin, specially grown in the magadh regions of four districts-Aurangabad, Gaya, Nawada and Nalanda. Magahi paan growing in these areas are of excellent quality and it is an expensive among other betel leaf. Its betel quid is pungent, less fibrous, and easily soluble inside mouth. It is known for appearance, shiny dark green colour, typical taste, and excellent keeping quality.</td>
</tr>
</tbody>
</table>
Botanical description/Scientific classification of Magahi Paan

Kingdom: Plantae  
Family: Piperaceae  
Genus: Piper  
Species: *P. betle*  
Botanical name: *Piper betle* L.  
Cultivar: *Magahi*

Characteristics of the crop (Magahi Paan)

<table>
<thead>
<tr>
<th>Plant Type</th>
<th>Serpentine vine or creeper, perennial in nature (Commercially cultivated under conservatory are annual or biennial)</th>
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</thead>
<tbody>
<tr>
<td>Vine Colour</td>
<td>Rusty green</td>
</tr>
<tr>
<td>No of node</td>
<td>50-60 Per Year</td>
</tr>
<tr>
<td>Length of internode</td>
<td>3.5 to 9.5 cm</td>
</tr>
<tr>
<td>Colour of node</td>
<td>Purplish green</td>
</tr>
<tr>
<td>Length of vine</td>
<td>2-3 m/year</td>
</tr>
</tbody>
</table>

The morphological characters of leaf

<table>
<thead>
<tr>
<th>Morphological Traits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leaf colour</td>
<td>Dark green</td>
</tr>
<tr>
<td>No. of veins</td>
<td>Seven (three both side of mid rib)</td>
</tr>
<tr>
<td>Colour of leaf vein</td>
<td>Rusty green</td>
</tr>
<tr>
<td>Shape of leaf</td>
<td>Heart shaped</td>
</tr>
<tr>
<td>Length of leaf</td>
<td>8.0 cm – 15.0 cm</td>
</tr>
<tr>
<td>Width Leaf</td>
<td>6.4 cm – 12.0 cm</td>
</tr>
<tr>
<td>Leaf surface</td>
<td>Smooth and shining</td>
</tr>
<tr>
<td>Length and width ratio of leaf</td>
<td>1.20-1.25</td>
</tr>
<tr>
<td>Leaf apex</td>
<td>Acute</td>
</tr>
<tr>
<td>Leaf texture</td>
<td>Glossy</td>
</tr>
<tr>
<td>Arrangement of leaf</td>
<td>Alternate</td>
</tr>
<tr>
<td>Weight of 100 leaf</td>
<td>100-150g</td>
</tr>
<tr>
<td>Self life of leaf</td>
<td>15-20 days</td>
</tr>
<tr>
<td>Aroma or pungency of leaf is due to Present</td>
<td>Essential oil</td>
</tr>
<tr>
<td>Leaf harvesting Period</td>
<td>Started after August to April</td>
</tr>
<tr>
<td>Yield</td>
<td>50-60 Lakh leaf/ha/year</td>
</tr>
<tr>
<td>Grading of leaf</td>
<td>Based on leaf size and maturity</td>
</tr>
<tr>
<td>Yield per plant</td>
<td>40-60 leaf from each vine per year</td>
</tr>
<tr>
<td>Post-harvest utility</td>
<td>Suitable for bleaching</td>
</tr>
<tr>
<td>Self life of bleached leaf</td>
<td>30-35 days</td>
</tr>
</tbody>
</table>
Composition of essential oil of Magahi paan

<table>
<thead>
<tr>
<th>S. No</th>
<th>Compound</th>
<th>Retention time (min)</th>
<th>%</th>
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<tbody>
<tr>
<td>1</td>
<td>α-pinene</td>
<td>9.600</td>
<td>0.09</td>
</tr>
<tr>
<td>2</td>
<td>Camphene</td>
<td>10.150</td>
<td>0.09</td>
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<tr>
<td>3</td>
<td>β-myrcene</td>
<td>11.425</td>
<td>0.12</td>
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<tr>
<td>4</td>
<td>L-limonene</td>
<td>13.100</td>
<td>0.28</td>
</tr>
<tr>
<td>5</td>
<td>Cis-ocimene</td>
<td>13.300</td>
<td>0.20</td>
</tr>
<tr>
<td>6</td>
<td>Phenyl acetylaldehyde</td>
<td>13.650</td>
<td>0.13</td>
</tr>
<tr>
<td>7</td>
<td>t-ocimene</td>
<td>13.800</td>
<td>0.66</td>
</tr>
<tr>
<td>8</td>
<td>Linalyl acetate</td>
<td>16.050</td>
<td>0.20</td>
</tr>
<tr>
<td>9</td>
<td>Decanal</td>
<td>20.975</td>
<td>0.18</td>
</tr>
<tr>
<td>10</td>
<td>Chvicol</td>
<td>23.275</td>
<td>0.55</td>
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<tr>
<td>11</td>
<td>Cyclohexene,4-methyl</td>
<td>27.476</td>
<td>0.15</td>
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<tr>
<td>12</td>
<td>Chavibetol</td>
<td>27.701</td>
<td>0.55</td>
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<tr>
<td>13</td>
<td>Eugenol</td>
<td>28.851</td>
<td>63.39</td>
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<tr>
<td>14</td>
<td>β-elemene</td>
<td>30.176</td>
<td>0.24</td>
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<td>15</td>
<td>Methy-eugenol</td>
<td>30.426</td>
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<td>16</td>
<td>Undecanal</td>
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<tr>
<td>17</td>
<td>t-caryophyllene</td>
<td>31.501</td>
<td>4.22</td>
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<tr>
<td>18</td>
<td>Bicyclo(4.1.0) hept-3-en-</td>
<td>31.876</td>
<td>0.12</td>
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<tr>
<td>19</td>
<td>α-humulene</td>
<td>33.010</td>
<td>0.68</td>
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<tr>
<td>20</td>
<td>γ-muurulene</td>
<td>33.926</td>
<td>1.27</td>
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<tr>
<td>21</td>
<td>Germacrene D</td>
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<td>2.85</td>
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<td>22</td>
<td>Germacrene B</td>
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<td>23</td>
<td>Acetyleneugenol</td>
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<td>24</td>
<td>Almumini sulphate</td>
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<td>25</td>
<td>Ledene</td>
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<td>26</td>
<td>Globulol</td>
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<td>27</td>
<td>4-allyl-1,2-diacetoxybenzene</td>
<td>40.676</td>
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<tr>
<td>28</td>
<td>γ-carinene</td>
<td>40.926</td>
<td>3.85</td>
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<tr>
<td>29</td>
<td>γ-muurilene</td>
<td>41.426</td>
<td>0.15</td>
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<tr>
<td>30</td>
<td>t-caryophyllene</td>
<td>41.551</td>
<td>0.53</td>
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<tr>
<td>31</td>
<td>Aluminum sulphate</td>
<td>42.151</td>
<td>0.10</td>
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<tr>
<td>32</td>
<td>γ-ionene</td>
<td>42.751</td>
<td>0.13</td>
</tr>
</tbody>
</table>

Medicinal properties of Betelvine

Traditionally paste of betel’s leaf (Paan) or its essential oil is used as treatment of various human diseases and for nutritional purposes (Source: Ramamurthi and Rani, 2012 & Chandra Vikash, 2012).

1. Paste of betel leaves mixed with salt and hot water can be administered for filariasis.
2. For treating obesity, one betel leaf mixed with Piper nigrum is prescribed for two months.
3. Its juice along with honey or a liquid extract is useful to treat coughs, dyspnoea, and indigestion, among children.
4. When the leaves smeared with oil are applied on the breasts of lactating women, it is said to promote milk secretion.
5. A local application is recommended for inflammatory swellings such as orchitis, arthritis and mastitis.
6. For childhood and old people, leaves soaked in mustard oil and warmed are applied to the chest in order to relieve cough and dyspnoea.
7. Eliminates bad breath, body odour and prevents tooth decay.
8. Prevents and treats vaginal discharge, and reduces itching of the vagina.
9. Stops bleeding in the nose.
10. It contains vitamins such as thiamine, niacin, riboflavin and carotene. The juice of a few betel leaves with a teaspoon of honey will serve as a good tonic.
11. Betel leaf juice mixed with diluted milk and sweetened slightly help in easing urination.
12. Betel leaves are used as stimulant, an antiseptic and breath freshener.

G) Geographical area of Production and Map as shown in page no: 77

Recently, Magahi Paan is cultivated mainly in agro-climate Zone IIIB of Bihar by small and marginal farmers (belonging to chaurasia community) particularly in the magadh regions (in villages of four districts-Aurangabad, Gaya, Nawada and Nalanda) since time immemorial. The Area covered under magahi betelvine is about 439 ha

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</table>

**H) Proof of Origin (Historical records):**

**Magahi Pan**

- The betel leaf (Paan) grown in Bihar is considered to be very superior and is much liked by the exquisites Culcutta, Lucknow and Banaras (Shoshee Chunder Dutt, 1884).
- Magahi betel (paan) was popular during the ancient time and It is used by Prince Bijai Mal (G.A. Grierson, 1884)
- The Cultivation of the climbing vine called Paan (Piper betle), the leaves of which are used to wrape up the supari or areca-nut chewed by natives of all ranks and classes is carried onto considerable extent at Ketaki and some neighboring villages in Aurangabad sub-division and Tungi and Deodha in Nawada sub-division (L.S.S. O’Malley, 1906).
- Aryani (1965) writes that the word ‘Magadhi’ underwent phonological changes with the development of Prakrits and Apbhranshas from Sanskrit, and became the word ‘Magahi’ (Atrey et al. 2014).
- Betelvine is cultivated in north Bihar and Gaya district of Bihar. Magahi betel is well known over the country (Madan Mohan Singh, 1967).
- Kumar et al. (2005). The Magahi Paan grown in Magadh region of the state Bihar, mainly Gaya and Aurangabad district are major source of livelihood of chaurasia community.
- Different variety of betelvine are available in India Magahi variety is most expensive and connoisseur’s delight due to its tender nature (Banerjee and Chattopadhyay, 2008).
- The betel plant originated in Malaysia and now grows in India, Indonesia and Sri Lanka. The best betel leaf is the Magahi variety (literally from the Magadha regions) grown near Patna in Bihar, India. The betel leaf is cultivated in most of South and
South-East Asia. The betel vines (usually the male plants) are widely cultivated throughout India, except the dry northwestern parts (Ramamurthi and Rani, 2012)

- Betelvine is cultivated in Bihar by a single community, known as “Chaurasia”. They are generally small landholders or marginal farmers, expert in cultivation of betelvine since time immemorial. Magahi paan is cultivated in 4 districts of Bihar-Aurangabad, Gaya, Nalanda and Nawada. The Magahi paan sale by betel growers in paan mandis of Gaya and Varanasi (Kumar and Pandey, 2014).

I) **Method of Production:**

**Propagation through:** Vine cutting (from more than two years old mother plant) having three nodes

**Time of planting:** April to July (Best time of planting April-May)

**Selection of Site:** In the state of Bihar, the crop is generally grown in upland leveled oil with a gradual slope for better drainage of excess water.

**Land Preparation:** Generally, deep ploughing is done during early summer (end of March month). After ploughing, upper soil is left exposed in sun for two months (April-May) to reduce the soil borne pathogens. During the first week of June, two or three ploughing with harrowing is done. After that, sufficient quantity of organic manure (Vermi-compost 10 tonnes/ha) is mixed in the soil. The raised bed is prepared to facilitate drainage of excess water from the field.

**Bareja Construction:** ‘Baroj’ are generally rectangular in shape and its normal size is often 1000 Sq metre. It is made up of locally available materials such as bamboos, paddy straw, arhar stalks, coconut coir etc. Its height is about 2-3 metres. This is surrounded with thatched walls roof. The walls are strengthened with bamboo poles fixed at distance of about 2.0 metre each. The top roof is covered with thick straw with longitudinally divided bamboo pole. The distance from one horizontal pole to another is about 2 metres to 2.5 metres. Criss cross supporting poles are used instead of erected poles. The wall and the top are covered with bamboo sticks and paddy straw in order to protect the plants and soil surface from direct sun rays. Roof is thatched twice in a year, first at the time of construction of new baroj (before rainy season), and second during winter season (generally in month of November –December) Structure of the bareja is built strongly, so as to withstand strong winds and storms.

**Planting material:** Generally cuttings with two or three nodes along with attached leaves are used as the propagating materials. Before planting, furrows are constructed. The width of these furrows is about 30 cm. In the furrows ridges are constructed. In the ridges two rows of budded vine with a mother leaf is planted at 10 to 15 cm distance. For one hectare of planting about 1.5 lakh cuttings are required.

**Spacing:** Row to row spacing of 30 cm and plant to plant 10-15 cm are maintained for cultivation of Magahi Paan.

**Planting Method:** Normally, dibbling method is used for planting. Planting is done with the help of khurpi (a hand operated implement) on ridge of 50 cm width on both side of border. For planting, a hole is made with khurpi, so that the internodes below the bud point is dipped in soil and must be touching with surface soil. The hole is completely packed with the help of thumb finger. After that, planted material is covered with paddy straw. This planted betel vine plant needs to be watered twice a day with the help of watering cane or sprinkler. During irrigation special care is needed that after twenty days of continuous irrigation, cover on the plants needs to be removed. The newly planted bareja is maintained very carefully. Over irrigation is avoided.

**Fertilizer Application:** The nutritional requirement of vines depends on the variety, type of cultivation, soil, climatic condition, etc. In a year, about 200 kg Nitrogen, 100 kg P₂O₅ and 100 kg K₂O in the form of organic source (Vermi-compost and Mustard cake) plus
inorganic source (Chemical fertilizers) are applied in four splits. During the application of fertilizer, sufficient moisture in the field is maintained. Generally, half of the nutrient requirement is supplied through organic source and rest is supplied through inorganic fertilizer. Zinc sulphate @ 25-30 Kg/ha in zinc deficient soil once in three years.

**Irrigation:** During the summer season, irrigation is given almost every day in the new plant and weekly in the old plant. During winter season, irrigation is reduced to a fortnight interval. During rainy season, ordinarily no irrigation is done, unless there are water stress conditions.

**Inter-Culturing:** During the month of July and November, lowering of vines is done by earthing up. The main aim of this practice is to give earthing to the rejuvenation of new plants from the vines lying on the soil surface. Thereafter, staking is done with the help of supporting materials. Each vine is supported with bamboo sticks or sharkanda (like wooden sticks). Each supporting material is tied at the roof and inserted into the soil. When vine reaches to the roof of bareja, it starts lowering. Auxiliary branches are removed from the main vine regularly in monsoon season. During monsoon all the infected leaves, are removed to reduce the spread of disease. The growers follow proper sanitation process to keep the bareja always neat and clean.

**Integrated Pest and disease management:** The betel vine is attacked by a number of fungal and bacterial pathogens and they cause many types of diseases to the plant. The most common diseases are leaf rot and anthracnose affecting both leaves and vines. These diseases affect root, stem and leaf to a large extent. The affected plant dies suddenly. Among the bacterial diseases, bacterial leaf spot is more common in newly planted crop and bareja. The crop also suffers a lot with red spider mite. It causes turning of leaf lamina into brick red and it becomes unfit for consumption. For management of pests and diseases, recommended plant protection measure - the sanitation of bareja after onset of Monsoon + Drenching with Bordeaux mixture (1%) + soil application of bioagent (Formulation of *Trichoderma viride* inoculated in the 500 kg mustard oil cake/ha(@ 1.0kg Trichoderma /100kg mustard cake after 30 days of drenching + one more drenching with Bordeaux mixture after 60 days of first drenching use of neem based formulation for management of insect-pest as and when required, has been found highly effective, hence being adopted by most of the farmers.

**Harvesting:** It depends upon season and market conditions, financial needs of the growers and the condition of leaves. In the rainy season frequent harvesting is done. First harvesting of leaves is started after 3 months of planting. But the leaves are picked throughout the year when it is matured. Best quality of Magahi Paan is harvested after February to March (two month) of the year that fetches better market price. A fully mature leave is harvested at 3 month. The keeping quality of fully mature leaves is upto 3 month when leaf turning is done and moisture maintained. Average mahahi paan servied up to 1 month. Harvesting is done by hand twisting of pedunle. On an average 50-60 lakh marketable leaves are harvested annually from one hectare of land.

**Marketing of betel leaf:** Betel growers of Nalanda district sale ‘Magahi paan’ in local mandis (market) like Khudaganj on two days in a week (Monday and Thursday). Gaya (Bihar) and Varanasi (Uttar Pradesh) are major market of Magahi Paan where trading is done every day. Paan is generally sold in term of ‘Dholi’ which con tains 200 betel leaves per Dholi. The market price of betel leaves per dholi is varies from Rs. 50 to Rs. 200 depends on size and quality of leaves. The periods of October to February (five months) are considered favorable by betel growers in term of higher return and better keeping quality of leaves. From March to September, the crop leaves are sold at lowest rates due to poor quality of leaves.
J) **Uniqueness:**

1. Magahi paan is a traditional cultivar of Bihar which is grown only in magadh region (in four districts- Aurangabad, Nawada, Nalanda and Gaya) by small and marginal farmers (community-Chaurasia).
2. Region specific quality attributes are found in magahi paan like Softness, smooth and glossy leaves which is preferred by Paan chewers & traders.
3. Magahi Paan has long self-life (Keeping quality)- 15-20 days as compared to bangala Paan having 10-15 days.
4. Magahi Paan is pungent in nature due to presence of eugenol (63.39%) and acetyleneugenol (14.05%) as major components in its essential oil (Source: Bhanu *et al.* 2010).
5. The taste of magahi paan is sweeter than bangala Paan.
6. Leaf of Magahi paan is the smallest among the all other cultivars of Paan.
7. Magahi is suitable for bleaching (a type of leave processing, de-chlorophyllation) and which enhanced the shelf life up to 30-35 days.
8. Having medicinal value in Magahi Paan and generally used by common people as mouth freshener, antiseptics, stimulant and for cough relief.

K) **Inspection Body:**

To regulate the G.I. in geographical area, a committee is being formulated consisting of following members:-

1. One representative from National Agencies of Medicinal and Aromatic Plants;
2. One representative of state agency on Medicinal and aromatic plants/Horticultural discipline;
3. Two representatives from Educational Institutions related to horticultural crops.
4. Two farmers of grower association of “Magahi Paan”
5. One trader of “Magahi Paan”
6. One representative from a NGO of National or International repute.

L) **Others:**

**Linkage or relationship or impact between the geographical area/ environment (Climate, soil and water)**

Magahi paan growing area is comes under agro-climatic zone of III B of Bihar. It is generally grown in fertile clay loam soil. This type of soil is commonly found in agro-climatic zone III B. Heavy rainfall or water logging is dangerous for it survivality. So, Paan growers are bound to select upper land with proper drainage facility for cultivation of magahi Paan. Neutral to slightly alkaline soil (pH range 7-8) is suitable for cultivation of Magahi paan which is common features of soil of this zone. The agro-climatic zone IIIB of Bihar is generally received low range of total annual rainfall (990-1240 mm) in respect to other zone of Bihar. The temperature of this zone is varies from 7.8-37.1°C. However, Magahi Paan is very sensitive to low (<10°C) and high temperature (>30°C), therefore this crop is cultivated under artificial conservatory (Baroj) which provide shade conditions. Human interference is involved in construction of Baroj that affect leaf quality like soften of leaf or dark green colour of leaf. The Baroj structure is generally prepared by magahi paan growers are densely with bamboos or local available paddy straws in these areas. It helps in soften and dark green colour of magahi Paan (Betel leaf).

G.I. APPLICATION NUMBER – 555
Application Date: 25-07-2016

Application is made by Nisha Craft Vikas Samiti, Rasulpur, Kolwar, Dhuvarjun, Saidpur, Ghazipur - 233001, Uttar Pradesh, India for the registration in Part - A of the register of Ghazipur Wall Hanging under Application No. 555 in respect of Handicrafts - Wall Hanging falling in Class 27 is hereby advertised as accepted under Sub-section (1) of Section 13 of Geographical Indications of Goods (Registration and Protection) Act, 1999.

A) Name of the Applicant : Nisha Craft Vikas Samiti,

B) Address : Nisha Craft Vikas Samiti, Rasulpur, Kolwar, Dhuvarjun, Saidpur- 233001, Ghazipur, Uttar Pradesh, India

Facilitated by:
Human Welfare Association, S.15/116, 2-AC, Mawaiya, Saranath, Varanasi 221007, Uttar Pradesh, India

C) Types of Goods : Class 27 - Handicrafts - Wall Hanging

D) Specification:

Ghazipur Wall hangings holds a prominent position in the decentralized handicraft cluster of Ghazipur, where traditional handloom products (Wall hanging) are made on handlooms with blend of threads of jute yarn (predominantly) and other yarns in different colour and strength without using any use of jacquard wall hanging.

The Ghazipur Wall hangings are known for their naturalistic appeal with stylistic presentation, some of the prominent Ghazipur Wall hanging is figure of Hindu God and Goddess landscape design of houses, lawns, forest, traditional curtains, birds and animals.

Ghazipur Wall hangings are famous throughout India and other countries for their exquisite design, variety and craftsmanship of artisan in weaving.

E) Name of the Geographical Indication:

GHAZIPUR WALL HANGING
F) Description of the Goods:

Ghazipur Wall hangings are famous throughout India and other countries for their exquisite design, variety and craftsmanship of artisan in weaving.

Ghazipur Wall Hangings are characterised as unique handloom products that transformed from best combination of golden fiber i.e., jute yarn, fabric and other yarns of diverse colours, when displayed provides aesthetic pleasure & changes the decor of your drawing room, offices, commercial-hall, hotel-room, meeting hall etc.

Approx 2500 to 3000 families of artisans are engaged in this cluster of Ghazipur Wall Hanging.

The Ghazipur Wall hangings are known for their naturalistic appeal with stylistic presentation, some of the prominent Ghazipur Wall hanging is figure of Hindu God and Goddess landscape design of houses, lawns, forest, traditional curtains, birds and animals. The absorbing capacity of the artisans in this cluster is tremendous and without any Patta, Nakasa, Jacquard, they are making these exclusive product and they practice a very old technique of Banaras weaving which was called Naka-Jala-Taka technique. Now in the Banaras Saree weaving this technique has been detached after coming Jacquard in their looms, but the artisans in Jute/Cotton/Silk wall hanging are still using the same technique.

Some of the prominent Ghazipur Wall hanging is figure of Hindu God and Goddess landscape design of houses, lawns, forest, traditional curtains, birds and animals are also crafted by these artisans. They are experts in the making from low end to high end products for the Indian and domestic market for all consumers.

G) Geographical area of Production and Map as shown in page no: 83

The craft Ghazipur Wall Hanging is being predominantly practiced inthe following villages of Ghazipur i.e Saidpur, Paharpurkala, Bishunpurkala, Ishunpur Bhitri, Rasoolpur Kolwar, Sauri, Sadiyabad, Imilia, Samanpur, Pachra, Sawram and Dhuarjunend in the adjoining district of Mirzapur, Varanasi and Chandauli of Uttar Pradesh.

Ghazipur Wall Hanging cluster is mainly concentrated in Ghazipur district and scattered generally all parts of Varanasi, Mirzapur, Chandauli district.
• Ghazipur is situated 25.19° North Latitude & 83.04° East Longitude
• Varanasi is situated 25.20° North Latitude and 83.00° East Longitude
• Mirzapur is situated 25.15° North Latitude and 82.58° East Longitude.
• Chandauli is situated 26. 00° North Latitude and 83.16° East Longitude,

H) Proof of Origin (Historical records):

India is recognized as one of the most diverse nations in the world and also as one of the most artistically rich. This combination of diversity and skill has produced some breathtaking creations. Every region of India has a unique style of creative expressions. Indians have always been fond of adorning the walls of their home. Decorative Wall
Paintings have been created since the time of primitive man. At the same time wall art that is not created directly on the wall, but that adorns the room in the form of Wall Hangings, has also gained immense popularity.

Ghazipur Wall hangings are famous throughout India and other countries for their exquisite design, variety and craftsmanship of artisan in weaving. The District industrial profile of Ghazipur prepared by ministry of MSME Government of India, Official website of Ghazipur district U.P, Ghazipur.nic.in and Industries department, Govt. of U.P, Ghazipur, U.P have elaborates about the wall hanging cluster of Ghazipur.

Approx 2500 to 3000 families of artisans are engaged in this cluster of Ghazipur Wall Hanging. This craft is being predominantly practiced in the following villages of Ghazipur i.e Saidpur, Paharpurkala, Bishunpurkala, Ishunpur Bhitri, Rasoolpur Kolwar, Sauri, Sadiyabad, Imilia, Samanpur, Pachra, Sawram and Dhuarjun and in the adjoining district of Mirzapur, Varanasi and Chaudauli of Uttar Pradesh.

I) Method of Production:

As we know the Wall hanging of Ghazipur is traditional handloom products which are fully made by hand without using any jacquard with blend of threads of jute yarn (predominantly) and other yarn in different color and strength. The major advantage of this craft is that the traditional pattern which was followed decades back is presently being followed today; even the production process is carried out in traditional way.

The production process is very delicate, from bleaching of the yarn to final cutting; generally all the family members are fully involved in process of production.

The traditional production process of Ghazipur Wall hanging has been fully elaborated below:

1) Bleaching
   Natural Yarns are bleached using the traditional technique to get white and soft discoloured yarn.

2) Dying
   For dying of yarn old and traditional methods is practiced.
   Dyeing process is done in two ways i.e using hot and cold water, for domestic use the cold water dying and for international exports warm water dying is generally done, warm water is used for dyeing of dark color and cold for light colours. For dyeing natural colours and artificial colours are added to the yarn.

3) Tana Making
   After drying of the coloured yarn the Tana is prepared for weaving in Tana making Funni is used the threads count will be generally 1 inch = 8 thread counts, suppose 40 inch = 340 threads for tana put on roller.
4) **Design Pattern and Weaving**
Bana of different color is mixed according to the design pattern, the main USP of weaving is that there is no jacquard the weaver kept the design of graph on his mind and weaves accordingly, the Bana of different shade and colors are blended and mixed with tana so intricately by hands that motifs and designs is clearly transparent. Paddle and funny are only two external tools in weaving process and they are just used to adjust the threads and yarn according to design up and down. Weaving is done on old pit-looms of 5 feet, most of the looms are based on age old design.

5) **Cutting of Semi Finished good**
Cutting or clipping will be done for removal of extra threads and yarn and prepare it to go into next phase.

6) **Beet Fixation**
Beet will be fixed at lower and top level for hanging so that the products remain steady and beautiful; the size of beet depends on the size of jute wall hanging.

7) **Embroidery work**
Embroidery work is done after beet fixation; it is generally done to introduce new design and motifs which is generally not possible in weaving. This part is done by the women by the hands normally silk and jute is used for embroidery work. The branches of the trees, typical flower motifs and leaves is made in embroidery work.

8) **Rapping work**
Very typical design like Roof, Boat,Bridge and Cart is used in rapping work. Technical images like windows making is part of patching.

9) **Patching Work**
In Patching work Taka is done with needles and sides and extra threads is fixed with using gum (adhesives).

J) **Uniqueness:**

*Uniqueness and Traditional Trends:*
Wall hanging of Ghazipur is traditional handloom products which are fully made by hand without using any jacquard with blend of threads of jute yarn (predominantly) and other yarn in different color and strength. The major advantage of this craft is that the traditional pattern which was followed decades back is presently being followed today; even the production process is carried out in traditional way. Approx 2500 to 3000 families of artisans are engaged in this cluster of Ghazipur Wall Hanging.

Wall hanging of Ghazipur is practiced by members of different communities; the figure of Hindu God and Goddess are made by the Muslim artisans, this product shows the secular traits of our country,

*Human Skill:*
The Ghazipur Wall hangings are known for their naturalistic appeal with stylistic presentation. The absorbing capacity of the artisans in this cluster is tremendous and without any Patta, Nakasa, Jacquard, they are making these exclusive product and they practice a very old technique of called Naka-Jala-Taka technique. One of the major uniqueness of the Ghazipur Wall-Hanging is the use of design graph paper which is not only handmade but it is basically a rough sketch, the weavers kept the color in his mind and weave accordingly that whether two three how many colors are used.

These products are eco-friendly products and artisans are using natural Jutes, Dyeing in traditional manner.

K) Inspection Body:
1. One Representative from the Department of Industries, Government of U.P.
2. One Representative from O/o Development Commissioner (Handicraft), Govt. of India having office at Varanasi.
3. One Representative from Human Welfare Association,
4. One Representative from Nisha Craft Vikas Samiti
5. One craftsmen of Ghazipur Wall Hanging
6. Two Craftsmen National or State Awardees.

G.I. APPLICATION NUMBER – 556
Application Date: 25-07-2016


A) Name of the Applicant : Banaras Handicraft Development Society,

B) Address : Banaras Handicraft Development Society, C.2/111K, Opposite to Junior High School, Sahityanaka, Ramnagar, Varanasi - 221008, Uttar Pradesh, India

Facilitated by: Banaras Handicraft Development Industrial Cooperative Society Limited, Khojawa, Varanasi Uttar Pradesh and Human Welfare Association Sarnath,Varanasi,Uttar Pradesh, India

C) Types of Goods : Class 27 – Handicrafts - Soft Stone Jali Work

D) Specification:

The Varanasi Soft Stone Jali Crafts have shown their creative excellence through intricate architectural masterpieces. These are perfectly chiselled and are decorated with inlay work. Stone carving on sandstone carry the rich cultural heritage of royal fascination and the variety that had been explored by the artisans. These outstanding stone crafts are visible in the intricate curving on the forts and palaces. The statues of religious gods and goddesses with excellent carving, brilliantly created articles of inlay work, stone carvings with embedded inexpensive shells or semi-precious stones are some of the well-known stone crafts that are admired in all around the countries.

The stone craft of Varanasi include marble boxes, wall plates, table tops, coasters, and ashtrays, paperweights, and candleholders, of different sizes, are considered as the intricate craftsmanship of the artisans of Varanasi
E) Name of the Geographical Indication:

VARANASI SOFT STONE JALI WORK

F) Description of the Goods:

Varanasi, Chandauli, Mirzapur, and Sonebhadra of Uttar Pradesh are famous for its exclusive Soft Stone Jali Work since generations.

The Soft Stone Jali work of Varanasi has shown their creative excellence through intricate architectural masterpieces. These are perfectly chiseled and are decorated with inlay work. Stone carving on sandstone carry the rich cultural heritage of royal fascination and the variety that had been explored by the artisans. These outstanding stone crafts are visible in the intricate curving on the forts and palaces. The statues of religious gods and goddesses with excellent carving, brilliantly created articles of inlay work, stone carvings with embedded inexpensive shells or semi precious stones are some of the well known stone crafts that are admired in all around the countries.

It is interesting to note, there is no homogeneity of color, tint and texture in soft stone. Two pieces taken out, even from the same block of soft stone, are never alike. Thus, it is virtually impossible to get two carved pieces of soft stone of identical color or design. The popular work of Soft Stone Jali work of Varanasi can be classified as:

- Decorative product
- Traditional items

The stone craft of Varanasi include marble boxes, wall plates, table tops, coasters, and ashtrays.

G) Geographical area of Production and Map as shown in page no: 91

The Varanasi Soft Stone jail work cluster in Uttar Pradesh represents the largest concentration of the soft Stone jail work in India.

Varanasi Soft Stone jail work cluster is mainly concentrated in Varanasi district and scattered generally all parts of Mirzapur, Sonbhadra, Chandauli district.

- Varanasi is situated 25.20° North Latitude and 83.00° East Longitude
- Mirzapur is situated 25.15° North Latitude and 82.58° East Longitude.
- Chandauli is situated 26.00° North Latitude and 83.16° East Longitude,
- Sonbhadhra is situated 25.32° North Latitude & 82.72° East Longitude
H) Proof of Origin (Historical records):

The tradition of soft stone Jali craft in Varanasi is obsolete since dawn of civilization. It has been the capital of art and culture and now it has the specific space and identification in the world. In Indian art and culture the tradition of soft stone craft has been coming from ancient time. The rich tradition of the artisans has been carried forward though generations to the present day. Using the simplest of tools coupled with expertise, patience and perseverance, these artisans create works of splendour, which have few parallels anywhere in the world. Of late stone working is not only restricted to ornate carvings on temples or sculptures of deities, but also used in making items like carved panels, tiles, paper weights, pen stands, models of historical buildings, sculptures of animals and humans etc. Indian artisans now produce a blend of the modern with ancient and are capable of reproducing music in stones. Many production units with latest stone processing technology are also operational in the country. Different types of stones like, marble, soapstone and sand stone are used by craftsmen in India.

- **Varanasi is the place where the great examples of stone craft have been seen.** Sonia and Kalimohal areas of Varanasi are the places to where the instances of excellent artistry of soft stone craft are to be found. Most people of the areas, mainly the artisans of these areas, earn their livelihood by creating outstanding artifacts with stones. Apart from creating different articles that catch the fancy of the local people and the tourists as well, the artisans create exclusive items that are placed in the trendy house to suit the decorative purpose.

- **Soft Stone is an auspicious craft of Varanasi and is famous for the creating designs with the natural veins of the stone.** These stone are made without any joints. It is obviously an ancient craft called soft stone craft.

- **Varanasi, said to be the oldest living city in the world, is inhabited on the left bank of the Ganges and is world famous for its Ghats.** This holy city has been the seat of Aryan religion and philosophy it was also a centre of arts, crafts, music and dances. It also flourished as a commercial and industrial centre famous for its muslin and silk fabrics, perfumes, ivory works, and sculpture as well as for wooden toys, bangles made of glass and beads.

- **Traditional and Modern:** Some kinds of toys are not affected by time and generation and they remain the basic toy that everyone as a kid, wants to play with. The best example is the kitchen set for girls. Though a lots of modern toys are present in the market. All the girls play with and imagine themselves cooking and doing other activities with these traditional toys. Such toys take us back to the earliest and the simplest kind of toys that our ancestors used to play with. They also show us the glimpse of our present and past culture and tradition. These soft stone craft dolls, figuring mythological characters, were meant to delight and inculcate traditional values as well. Culled from the trove of Indian culture, these auspicious handcrafted toys are a collector’s delight.

- **According to the book Monograph on Stone carving in united province by H.S. CROSTHWAITTE published in 1905 a vivid detail has been elaborated about the soft stone carving which is most important part of soft stone craft.**

- Gazetteer of British period.
Benares.-With the exception of Agra and Muttra; there is more good stone carving to be seen at Benares than in any other district of these Provinces. The following are the most important of the old buildings in Benares hand afford good examples of the earlier Hindu style.

I) **Method of Production:**

Soft Stone is the most appealing of the kinds of lime stones found in the country. While Marble is the hardest form of limestone, Soap Stone is the softest and is easy to work on. For this specific property of it, any kind of carving can be done by hand on soft stone.

It is interesting to note, there is no homogeneity of color, tint and texture in soft stone. Two pieces taken out, even from the same block of soft stone, are never alike. Thus, it is virtually impossible to get two carved pieces of soft stone of identical color or design. You may say soft stone is blessed by nature. They are like free hand sketches by a small child.

Soft Stones/Soap Stone are excavated from open mines. Large sized boulders are carried to the workshops where they are given desired shapes and sizes by skilled and seasoned craftsmen. The articles thus crafted, are buff shed for smoothness. Some are also lacquered to impart sheen and glow.

Soapstone is relatively soft because of its high talc content, talc having a definitional value of 1 on the Mohs hardness scale. Softer grades may feel soapy when touched, hence the name. There is no fixed hardness for soapstone because the amount of talc it contains varies widely, from as little as 30% for architectural grades such as those used on countertops, to as much as 80% for carving grades. Common, non-architectural grades of soapstone can just barely be scratched with a fingernail and are thus considered to have a hardness of 2.5 on the Mohs scale. If a candidate rock cannot be scratched with a knife blade (hardness of 5.5), it is not soapstone.

The stone crafts of Varanasi Soft Stone Craft have shown their creative excellence through intricate architectural masterpieces. These are perfectly chiselled and are decorated with inlay work. Stone carving on sandstone carry the rich cultural heritage of royal fascination and the variety that had been explored by the artisans. These outstanding stone crafts are visible in the intricate curving on the forts and palaces. The statues of religious gods and goddesses with excellent carving, brilliantly created articles of inlay work, stone carvings with embedded inexpensive shells or semi-precious stones are some of the well-known stone crafts that are admired in all around the countries.

The main techniques are following below:

1. Cutting
2. Turning
3. Jali Making
4. Carving
5. Buffing
6. Polishing

**Tools used:**
- Different size of Chisel, stone rasps(rifflers), sandbags and for personal protection Goggles or safety glasses
- Dust masks and gloves

**Method of production: Raw materials:**

The base material of stone craft in Varanasi is soapstone and occasionally marble and gorara. In some places the craftsmen still use chisel and hammer to bring out curved patterns and designs followed by grinding and polishing.

**Process:**
The crafts person while working on the sajjar pathar first studies the natural design contains in the stone selected to work upon. The shaping is done thereafter very carefully with chisel and hammers. Water is sprinkled repeatedly to avoid heat generation. The stone is smoothened by rubbing with sand papers or file.

Dimensions of the figure to be manufactured are marked on a stone slab. Extra edges are removed from the slab by beating with a hammer. Big pieces of stone are cut vertically into smaller slabs, and rough sketches are made on it. The article is taken out from the slab with the aid of a saw. This slab is now converted in the form of the desired figure with a hammer and a chisel. After that with the support of very fine iron tools, Jali making process has started and making the various very small holes in the various places of the craft, then the artisan start inserting the iron Tili inside and removing the extra stone pieces from first cut step and the same process has repeated several times from various angles and then after that only a small piece of stone will available in the inside of the craft, then the artisan start the shaping and carving work within the inside figure. This is the first Jali making process by one cut. In Varanasi, the artisans are making up to 3 cuts; means 3 different steps of Jali making like – Elephant – within elephant – within elephant is a example of 3 cut Jali work of a elephant piece as a craft. The same type of process has adopted in Jali work in Glob, Birds figure, Lion, various type of animal figures including decorative items. Making the Jali within Jali in a single piece of stone is a unique feature with exclusive way of working with the support of small tools is much popular across the world. Different type of Minor carvings is done by pointed chisel. A hammer and chisel do further smoothening. Before carving the stone is kept in boiling water overnight and treated chemically.

This smoothens and whitens the surface of the stone. Polishing is done for the final finishing with sand or carborundum pieces. Several of the carved artifacts are painted. Others are fitted with the looking glasses, brass fittings etc.

In carving an image, the stone carver sketches a rough outline of the sculpture on the stone - block. The craftsmen, sprinkle water on the stone during the course of their work because of the friction generated due to the constant chiseling away of the unwanted
material results in the tools heating up. Finishing is accomplished in a variety of ways from sand-papering, polishing with multani-mitti or clay, oil and cloth.

An outline is drawn on hard or soft stone which is already cut to the appropriate size. Once the outline is incised indicating the shape, the final figure is brought out by removing the unwanted portions. While for the harder stones this is done by chiseling out the extra material, with softer stones. This is done by scraping out the same with a sharp flat-edged iron tool.

J) Uniqueness:

The rich tradition of the artisans of Varanasi engaged in soft stone jali craft has been carried forward though generations to the present day. Using the simplest of tools coupled with expertise, patience and perseverance, these artisans create works of splendour, which have few parallels anywhere in the world. Of soft stone working is not only restricted to ornate carvings on temples or sculptures of deities, but also used in making items like carved panels, tiles, paper weights, pen stands, models of historical buildings, sculptures of animals and humans etc. Indian artisans now produce a blend of the modern with ancient and are capable of reproducing music in stones.

A cluster is defined as a geographic concentration (a city/town/few adjacent villages and their adjoining areas)of units producing near similar products and facing common opportunities and threats. An artisan cluster is defined as geographically concentrated (mostly in villages/townships) household units producing handicraft/handloom products. In a typical cluster, such producers often belong to a traditional community, producing the long-established products for generations. Indeed, many artisan clusters are centuries old Artisan. Varanasi is the one of the oldest clusters of various crafts and soft stone being one of the oldest cluster present in Varanasi. Ramnagar, Sonia and Kalimohal areas of Varanasi, is the places to where the instances of excellent artistry of stone craft are found. Most people of the areas, mainly the artisans of these areas, earn their livelihood by creating outstanding artifacts with stones. Apart from creating different articles that catch the fancy of the local people and the tourists as well, the artisans create exclusive items that are placed in the trendy house to suit the decorative purpose.

The soft stone crafts of Varanasi Soft Stone Craft have shown their creative excellence through intricate architectural masterpieces in Jali work which is very much prominent here with the exclusive human skill and with the support of small traditional tools, the artisans are making this jali work in a delicate manner in one cut, two cut and up to three cut, then after that a fine carving work is also reflected in their crafts. These are perfectly chiselled and are decorated with inlay work. Stone carving on sandstone carry the rich cultural heritage of royal fascination and the variety that had been explored by the artisans. These outstanding stone crafts are visible in the intricate curving on the forts and palaces. The statues of religious gods and goddesses with excellent carving, brilliantly created articles of inlay work, stone carvings with embedded inexpensive shells or semi-precious stones are some of the well-known stone crafts that are admired in all around the countries.
K) **Inspection Body:**

To regulate the use of GI in the territory, it is proposed that the Inspection Committee shall consist of the following members:

1. One representative from The Department of Industries, Government of Uttar Pradesh;
2. One representative from O/o Development Commissioner (Handicraft), Govt. of India having office at Varanasi;
3. Two representatives - National/State Award winner - Varanasi Soft Stone Jali Work
4. One representative from Human Welfare Association;
5. One Varanasi Soft Stone Jali Work – Master craftsman;
7. One representative from Banaras Handicraft Development Industrial Cooperative Society Limited

L) **Others:**

G.I. APPLICATION NUMBER – 563
Application Date: 17-08-2016


A) Name of the Applicant :
1. Bankura Bikna Dokra Hastajata Kutir Shilpa Kalyan Samity
2. Dariyapur Dhokra Artisans Co-operatives Industrials Society Limited

B) Address :
1. Bankura Bikna Dokra Hastajata Kutir Shilpa Kalyan Samity, Shilp Danga, Bikna, District: Bankura - 723152, West Bengal, India
2. Dariyapur Dhokra Artisans Co-operatives Industrials Society Limited, Dokrapara, Dariyapur, Bardhaman - 713128, West Bengal, India

Facilitated by:
West Bengal Khadi & Village Industry Board, Government of West Bengal and Patent Information Centre, WBSCST – DHESTBT, Government of West Bengal

C) Types of Goods :
Class 6, 14 & 21 – Handicrafts – Dokra products

D) Specification:

Bengal Dokra
a. Structural definition: Dokra is made by the “Cire-perdue” or the “lost Wax” process of metal casting which is one of the oldest traditional ways of metal casting in India. Dokra artists of Bikna, Rampur and Dariyapur use “Hollow Casting” process. Hence the Dokra craft that has been formed is of lighter weight. The Dokra workers of West Bengal mainly produce different kind of animals and natural art items, statuettes of gods and goddesses, jewellery, objects of daily use and decorative items.

b. Material used: Brass scrap, beewax, clay, coal, mustard oil, ‘Dhuna’ (a kind of resin extracted from the Sal tree), Red clay soil obtained from local river or pond.

c. Technical specification of some types/samples: The Bengal Dokra is made from artists create different types of items like
i. Animals and natural art items: Elephant, horse, goat, frog, bull, cow, bullock, elephant with five head, fish, crocodile, owl, different types of birds etc. Décor items like horse / bullock drawn carts, man riding a horse, royal elephant with adornments etc. are also crafted.

ii. Votive of gods and goddesses: Radha – Krishna, Durga, Ganesh, Saraswati, Lakshmi, Shiva and Parvati etc.

iii. Jewellery: Bangles, necklace, pendants, buttons etc.

iv. Objects of daily use: Initially crafts persons used to make brass vessels to measure rice, bells of different kinds, anklets, lamps (diya) etc. At present the artists make decorative jewellery boxes, containers, towel rings, napkin holders, candle stands, pen stands etc.

v. Decorative items: Decorative items mainly comprise of tribal figures and ornamental animals. They make mini sculptural figures representing their daily activities and take inspiration from the surroundings. Mainly they make frames for decoration, Wall panels, door handles, incense stick holders, lamps, water jugs, coasters, soap case, ashtray, mobile holders, bells, key holders, cutlery items, and lampshades and so on.

The entire piece of art is made from a single mould without any assembly or soldering. The design, embellishment on the figures is reflection of local culture. They bear a typical muted yellow colour. The Dhuna wires used to make the modeling is drawn as fine as 1/150th of an inch and wound around the core in an interwoven pattern giving a distinctive corrugated appearance on the finished product.

E) Name of the Geographical Indication:

BENGAL DOKRA

F) Description of the Goods:

The Bengal Dokra is made by using the technique of Cire- Perdue or the lost –wax process of metals casting. Besides wax the Dokra workers in West Bengal also use resin extracted from Sal tree. Different types of idols of deities, and puja accessories, different votives are made by the Dokra artists. In Bengal the groups are found in the tribal regions of Bankura, Bardhaman and Purulia. The traditional themes of these cast metal sculptures include images of Hindu or 'tribal' gods and goddesses (like Goddess Durga, Laxmi, Saraswati and Lord Sri Krishna, Shiva, Kartik, Ganesh etc.), bowls, figures of people or deities riding elephants, musicians, man riding horse figures, men rowing boat, elephants, cattle and other figures of people, animals, and birds, tribal jewellery, tribal doll, lamp, chains, caskets, etc.

G) Geographical area of Production and Map as shown in page no: 103

Geographical Location:
Geographical Location of Dariyapur (Guskara, Bardhaman) is described as follows:-
Geographical location of Bardhaman district:-
<table>
<thead>
<tr>
<th>Name of the district(s)</th>
<th>Bardhaman</th>
</tr>
</thead>
<tbody>
<tr>
<td>latitude-longitude &amp; Time Zone</td>
<td>The Latitude: 23.259977, [DMS (Lat) 23°15’35.9172”N] Longitude: 87.876320, [DMS(Long) 87°52’34.7520”E] IST(UTC+5:30)</td>
</tr>
<tr>
<td>Area in sq km</td>
<td>7,024 sq km</td>
</tr>
<tr>
<td>Population</td>
<td>Population (2011) 7,717,563</td>
</tr>
<tr>
<td>Neighboring districts/state</td>
<td>The Neighboring state is Jharkhand, and the neighboring districts are Birbhum, Bankura, Hugli, Murshidabad, Nadia</td>
</tr>
</tbody>
</table>

Geographical location of Dariyapur:-

<table>
<thead>
<tr>
<th>Country</th>
<th>India</th>
</tr>
</thead>
<tbody>
<tr>
<td>State</td>
<td>West Bengal</td>
</tr>
<tr>
<td>District</td>
<td>Bardhaman</td>
</tr>
<tr>
<td>Sub-division</td>
<td>Bardhaman sadar North subdivision.</td>
</tr>
<tr>
<td>Block</td>
<td>Ausgram-I</td>
</tr>
<tr>
<td>Coordinates</td>
<td>23°31’04”N 87°39’37”E</td>
</tr>
</tbody>
</table>

Geographical location of Bikna and Rampur (Bankura) is described as follows:-

Geographical location of Bankura:-

<table>
<thead>
<tr>
<th>Name of the district(s)</th>
<th>Bankura</th>
</tr>
</thead>
<tbody>
<tr>
<td>latitude-longitude &amp; Time Zone</td>
<td>It is situated between 22° 38’ and 23° 38’ north latitude and between 86°36’ and 87° 46’ east longitude. IST(UTC+5:30)</td>
</tr>
<tr>
<td>area in sq km</td>
<td>6,882 Sq Km</td>
</tr>
<tr>
<td>Population</td>
<td>3,596,292</td>
</tr>
<tr>
<td>Neighboring districts/state</td>
<td>The neighboring districts of Bankura are Bardhaman, Hooghly district, Paschim Medinipur district, Purulia district.</td>
</tr>
</tbody>
</table>

Geographical location of Bikna and Rampur:-

<table>
<thead>
<tr>
<th>Country</th>
<th>India</th>
</tr>
</thead>
<tbody>
<tr>
<td>State</td>
<td>West Bengal</td>
</tr>
<tr>
<td>District</td>
<td>Bankura</td>
</tr>
<tr>
<td>Sub-division</td>
<td>Bankura sadar.</td>
</tr>
</tbody>
</table>
Geographical location of Manbazar in Purulia district is described as follows:-

Geographical location of Purulia district:-

<table>
<thead>
<tr>
<th>Name of the district(s)</th>
<th>Purulia</th>
</tr>
</thead>
</table>
| Latitude-longitude & Time Zone | Latitude 23°43′(N) - 23°42′(S)  
Longitude 86°54′(E)-85°49′(W), IST (UTC+5:30) |
| Area in sq km | 6,259 sq.km |
| Population | 2,930,115 |
| Neighboring districts/state | This district is bordered on the east by Bankura, Paschim Medinipur districts, on the north by Bardhaman district of West Bengal state and Dhanbad district of Jharkhand state, on the west by Bokaro and Ranchi districts of Jharkhand state and on the south by West Singhbhum and East Singhbhum districts of Jharkhand state. |

Geographical location of Manbazar:-

<table>
<thead>
<tr>
<th>Country</th>
<th>Indian</th>
</tr>
</thead>
<tbody>
<tr>
<td>State</td>
<td>West Bengal</td>
</tr>
<tr>
<td>District</td>
<td>Purulia</td>
</tr>
<tr>
<td>Sub-division</td>
<td>Puruliya sadar East</td>
</tr>
<tr>
<td>Block</td>
<td>Manbazar-II</td>
</tr>
<tr>
<td>Coordinates</td>
<td>23°03′41″N -86°39′51″E</td>
</tr>
</tbody>
</table>

**H) Proof of Origin (Historical records):**

**History of Bardhaman, Bankura and Purulia Districts.**

Bardhaman, Bankura and Purulia have a long history and have a strong cultural impact on the tradition of West Bengal. Bardhaman also called Burdwan, or Barddhaman is a major communications centre located on the banks of the Damodar River. The town of Barddhaman is the district headquarters. It was named after the 24th Jain monk, Tirthankar Mahavir Bardhaman. During the Mughal rule, its name used to be Sharifabad. In the 17th -18th century, Krishnaram Ray, belonging to a merchant family
from Punjab, established the zamindari of Bardhaman on a farman issued by the Mughal Emperor Aurangzeb. The Rays went on to rule Bardhaman till 1955.

Bankura district was part of Rarh in ancient times. In the old Jain book Acaranga Sutra (around 4th century) there is mention of Sumha and Ladha and there too the reference is to an area inhabited by uncivilized and barbaric people. In the fourth century, Susunia edicts record in Prakrit and Sanskrit that Chandravarman, son of Simhavarman, was the ruler of Puskarana (modern Pokhanna in Bankura district). According to the inscription on the Allahabad pillar, Chandravarman was defeated by Samudragupta and the area became a part of the Gupta Empire. The area was for many years part of Dandabhukti and Bardhamanbhukti.

Jaina Bhagavati-Sutra of 5th century AD mentions that Purulia was one of the sixteen mahajanapadas and was a part of the kingdom known as Vajra-bhumi in ancient times. In 1833, Manbhum district was carved out of Jungle Mahal district, with headquarters at Manbazar. In 1838, the headquarters was transferred to Purulia. In 1956, Manbhum district was partitioned between Bihar and West Bengal under the States Reorganization Act and the Bihar and West Bengal (Transfer of Territories) Act 1956.

History of Dokra:

- The Cire Perdue or lost wax method of casting different shapes in Bronze, Gold or Silver evolved in the 4th millennium BC. The earliest examples are from the Nahal Mishmar hoard in Palastine. Dokra metal casting is one of the oldest traditional techniques of metal casting in India that uses the lost wax casting method. One of the earliest known Indian lost wax artifacts is the dancing girl of Mohenjor-daro in the Indus valley, which dates to 2500 B.C. Dokra metal casting has been practiced in India for over 4,000 years and is still used today.

- The ancient craft of Dokra [(Cire Perdue, or lost wax) N.B Cire Perdue is a French term meaning lost Wax] metal casting was once widespread throughout India, but is now restricted to a small number of groups of traditional artisans in widely dispersed locations. One significant nucleus of the craft exists among related groups of families in Bikna (Bankura), Rampur (Bankura) and Dariyapur (nearby Gushkara, Bardhaman), in West Bengal.

- The name 'Dokra' or 'Dhokra' was formerly used to indicate a group of nomadic craftsmen, scattered over Bengal, it is now generically applied to a variety of beautifully shaped and decorated brassware products created by the Cire Perdue or 'lost wax' process. The first detailed study of Cire Perdue work in the Bankura District was carried out in the early 1960s by Ruth Reeves (1962).

- According to Sen (1994) "Perhaps the poorest craft group of West Bengal, the Dokras is the most interesting and creative”. Sen describes the traditional Dokra craft in West Bengal and its typical products: "...They [The Dokra makers] used to move from village to village in the south western districts, repairing old and broken utensils and selling small images of Lakshmi, her mount, the owl, Lakshmi Narayan riding on an elephant, Radha and Krishna in different attitudes, all made in a very strong and primitive folk style. These images were installed in the household shrines of newly married Hindu couples to bring prosperity and happiness. They also made and sold decorative caskets in different shapes and sizes, purchased by housewives for various purposes. They made and sold measuring bowls in different sizes. These were considered symbols of Lakshmi and were therefore highly prized by those villagers who could afford them. Ritual lamps in different designs were also popular items. Their other products included small models of animals and birds and a variety of trinkets and bells...”
Risley's monumental 'Tribes and Castes of Bengal' (1891) must be seen as reflecting both the anthropological fashions of their era. Risley defines 'Dokra' as: "A sub-caste of Kamars or blacksmiths in Western Bengal, who make brass idols".

By the middle years of the twentieth century, the Bankura Dokra makers were being described as 'Mal' or 'Malars'. Ruth Reeves (1962) refers to the Bankura Dokra as 'Kainkuya Mal' (which possibly derives from association with the traditional measuring vessels known in Bengali as 'kunke'). In doing so, Reeves is following SK Ray's contribution to A. Mitra's ethnological analysis of the 1951 Census of India. In his treatment of 'The Tribal Group of Craftsmen', Ray asserts that: "...We can divide the Mals readily into two groups: (i) the Sanakar Mals or painters and (ii) the Kaikuya [NB it is possible that this variant of the name is simply a typographic error] Mals or brass workers. As a matter of fact, the form of caste system that prevails among the aboriginal and backward classes of West Bengal can be called the Mala-system." Reeves refers to the Bankura Dokra makers as 'Dhokras' or 'Dheppos' described by Ray as: "...wandering artisans belonging to aboriginal stock [who] maintain a tradition of metal craft in a primitive manner...". Despite its stability over many centuries, the Dokra craft has not remained entirely static. Ruth Reeves in this book named “Cire Perdue Casting in India” described the techniques as followed by the KainKuya Mal, Bankura, and West Bengal.

Historian “Binay Ghosh” when explain the Dokra worker of West Bengal he says “at historical time during civilization the Dokra workers also civilized in parallel way. They placed at the lower part of the society. In this way the people those are placed at the lower part of the society are called Dokra Kamar”

According to the Report of Crafts Council of West Bengal during 985 - 86 documented at'Mohamaya’, “Dokra are one of the traditionally nomadic adivasi tribes who have been engaged in the craft of metal casting for centuries”.

Lee Horne (Research Associate in the Museum Applied Science Centre for Archaeology, MASCA) in her report “The Brass casters of Dariapur, West Bengal” says that “The Dokra artisans of Dariyapur of West Bengal are brass casters by occupation, working with simple indigenous decorated wax models into traditional eastern Indian versions of brass items such as rich measuring bowls, oil lamps, fish containers, horses, elephants, tribal and Hindu deities. Their small settlement lies directly on the paved road from Gush Kara to Dariyapur since the village was built in the early 1960s. Until 1940s most of them were itinerant, perhaps settling now and then in small groups outside the agricultural villages, but always remaining highly mobile and quick to pick up and move on with the demand of the market . They are members of one of a similarly isolated group that can be found scattered through parts of Madhya Pradesh, Bihar, Orissa, and West Bengal. Many of those groups call themselves by the variants of the same name such as Mal,Malar,Maral,Malhor or Mahuli, all are through to share the common origin in the tribal area of Chotanagpur, where they have spread over the past several hundred years”.

In the “West Bengal district Gazetteers, Bardhaman”, March 1994, it is reported that “Dariyapur Dhokra Artisans Co-operatives Industrials Society Ltd located at Dariyapur, has been established to help development of dokra metal craft. It has been one of the traditional tribal crafts of West Bengal. The artisans are chiefly concentrated in the western part of the State and produce a variety of metal castings which are appreciated by art-loving people. The process involves replacement of wax-coated clay cores with metal by traditional hollow casting method”.

Some of the Dokra items of Bankura are stored in the Museum of Anthropology, Mizzou North, Columbia.
• Sri Haradhan Karmakar a well known artist of Dariyapur West Bengal went to Philadelphia in 1988 to participate in the festival of Indian exhibit, Mahamaya, at the port of history Museum. During his stay, he came twice to cast his moulds in the courtyard of the university Museum as a demonstrator for the Museum’s international class room program. Haradhan Karmakar has not only been to Philadelphia, he also went to London, Chicago and Japan. Harendra Nath Rana participated in Gannat festival in France in June 2015 and Subhash Mondol of Dariyapur attended the NABC in Houston USA in July 2015.

• Dokra artists like Late “Shumvo Karmakar” received prize from President of India at 1966. Another Dokra artist of Dariyapur “Haradhan Karmakar” received prize from President of India in 1988. Juddha Karmakar of Bikna in Bankura won prize from President of India in 1988. Ramu Karmakar of Dariyapur won the National award in 2009.

• In Bikna artists like Amar Karmakar, Dhiren Karmakar, Buddhadeb Karmakar, Nitai Karmakar are state awardees. Besides there are experienced artists like Putul Karmakar, Rekha Karmakar, Sudhir Karmakar, Gopen Karmakar and Sadhan Karmakar. In Dariyapur there are young promising artists like Subho Karmakar, Ashok Karmakar, Ganga Karmakar etc.

I) Method of Production:

Dokra artists use a very interesting method to cast metal into the craft, the technique is known as “Cire perdue” or 'lost wax' process. This technique is almost as old as settled civilization. There are two main processes of lost wax casting: solid casting, and hollow casting. Solid casting does not use a clay core. Instead a solid piece of wax is used to create the mould; hollow casting is the more traditional method and uses the clay core. Artisans of Bikna, Rampur and Dariyapur use hollow casting method.

Materials used: The brass metal, wax, clay, bees-wax threads, coal, mustard oil, ‘dhuna’ (extracted from the Sal tree), is used as the materials to make Dokra.

Tools used: They use different types of tools like Furnace (bhatti), sulka (to give impressions), Small chisel (nihan), big chisel (batani), hammer, and Graphite container to melt brass (kui), tongs (chimta).

The Technique involves six stages:-

1. **Core-making:** A clay core is made which is slightly smaller than the final intended size of the artifact. Core may be hardened by firing or sun-drying. Normally bele mati is used which is available from the local river bed.

2. **Modelling:** The fine detail of the object to be created is built onto the core using wax. The Bikna, Rampur and Dariyapur’s Karmakars prefer to use ‘dhuna’ mixed with mustard oil as modelling medium. Dhuna is a natural plant resin extracted from the Sal tree (Shorea robusta). Dhuna becomes very plastic when warmed, but holds its shape very well, even in high ambient temperatures. This Modeling process carried out in two parts: preparing wax and then creating objects in wax.’ The Dhuna wires used to make the modeling is drawn as fine as 1/16th of an inch. It’s wound around the core in fine interwoven pattern.

3. **Moulding:** The completed model that takes an impression of all its surface details is covered in a layer of very fine clay. This layer is then sun-dried. When the first layer is dry, a second layer is applied onto it. The clay used for the second mould coat is usually mixed with sand. A hopper (cup shaped structure) id built on the model for holding the brass pieces. Reinforcement wire provides extra protection
from cracking due to thermal shock when the metal is melted. The mould is dried under sun or alternatively baked in a low burning fire.

4. **De-waxing:** There are two types of furnace - one for heating the clay models and another for melting the brass. The mould is pre-heated to melt the wax, and the molten wax is poured out (it may be recovered for subsequent re-use). This leaves a cavity which has the exact size, shape and surface contours of the intended artifact. The process of de-waxing goes through the successive steps like pre-heating the artifacts, and then placing them in the furnace. Before that loading the *Bhatti* or furnace which is built for each item depending on the size and number of articles. There is a small opening beneath the models to allow the outflow of molten wax. A crude furnace is built in a convenient open space, using loose bricks, as in the case of Dariyapur. There are fixed furnace in Bikna. The fire is made using cow dung and charcoal. Completed moulds are laid in the fire, with the cup downwards. Wax is melt by less intense fire mostly fuelled by using cow dung. Melting the wax quickly can cause mould to crack as the heat quickly increase the volume of the wax. The Dokra workers control the heat of the fire by controlling the feeding of fuel.

5. **Pouring:** Once the worker decides that the mould is ready for pouring metal, the red hot mould is taken out of furnace. Another worker is ready with bucket of water and some very moist clay to seal any crack that may appear on the surface of the mould. If the crack appears the moisture clay hardens the molten metal and sealed the lick. The molten brass is taken out from the fire place and then the brass is poured in the clay structure. As the mould is upraised the molten brass enters the hole filling the empty space which the wax figure occupied previously.

6. **Fishing:** The mould is taken out of the furnace and the dipped in water to cool it. After cooling the product becomes hard. At this stage the brass around the core is hardened and can tolerate below from hammer to remove the clay. After the cray is removed, the final product comes out of it.

**Flowchart of production process:**

Step / Process 1 - A clay core is made which is slightly smaller than the final intended size of the artifact.

Step / Process 2 - Creation of the object is done by the wax. The molten extracted wax and dhuna mixture is then dried and rubbed by hand to form shape. The wax ropes are then draped around the dried clay mold. By this process very fine structure is made. The core clay is fully covered by the Wax.

Step / Process 3 - Moulding is done as a layer of sand clay is coated when the wax solidifies over the model. Reinforcement wire is used. Higher layers of clay of the mould are rounded by the wire. Next layers are place over the previous layer of clay which is rounded by the wire.

Step / Process 4 - De waxing is done by heating mould for about 30-40 min to melt the Wax. The molten wax is allow flow out.

Step / Process 5 - The molten brass is taken out from the fire place and then brass drained inside the clay structure.
Step / Process 6 - Finishing is done as the investment is taken out of the furnace and then dipped in water to cool it. Then hammered it to remove the clay and the Dokra figure is brushed.

J) **Uniqueness:**

The uniqueness of the Dokra art of Bengal is mainly in its process of production, craftsmanship i.e human skill associated with it and the different materials that is used:

A. Unique feature of ‘Dokra’ art lies in unique concept in each model. Thus each piece shows distinct identity. The reason behind the fact is that each piece is hand-made and hence, is distinct.

B. The artists of Bikna, Rampur and Dariapur use hollow casting method. The Cire Perdue hollow casting technique of the Rampur, Bikna and Dariapur dokra artists do not involve them in the sculptural activities of modelling a replica in the round except for the clay core, hence the only means by which they achieve the modelling of the features of their brass deities and ritual animals is by superimposing on the plain Dhuna surface of the replica what might be called three dimensional Dhuna wire drawing. The making of the clay core is therefore, the first craft activity undertaken.

C. The Dokra workers of West Bengal use household scrap of Brass utensils as the raw material. This gives the artifacts its muted yellow colour.

**Impact of Environment:**

The role of forest and its products on the economy and culture of any region is too obvious to warrant any elucidation. Bankura and central-western part of Bardhaman and Purulia district is fortunate in having extensive forest area and it plays a crucial role in imparting a distinct identity to those district in terms of its forest resources and the cultural fabric of people living in close proximity to the forest areas in those districts. This forest is the easy source of wax and wood. Sal tree is one of the most abundant trees of those areas. “Dhuna” a kind of resin extracted from those Sal tree (*Shorea robusta*) is a replacement of wax which is used in modeling in the Dokra making process.

The main hallmark of Dokra craft is enchanting folk motif, primitive simplicity, a rustic beauty and imaginative designs and patterns which finds influence from life and surrounding environment of the artisans. Brass elephant is one of the abundant animal idols of Bikna, Rampur and Dariapur Dokra. “Devi Durga” the most important and major festival of Bengal and it impacts heavily on the tradition and culture of Bengal and also on the Dokra art of West Bengal.

Red clay soil obtained from local river or pond that is used to make the mould has unique property which make it resistant to crack during heating in furnace.

**Human Skill:**

The Dokra works of Bengal (Dariyapur, Bikna) have some specific difference from that of the other Dokra making parts of India in there process of production, metal used to make the Dokra and also other materials that are used. The Dokra art of Bengal is also different from that of others in its colour and structure.

- During the process of production of Dokra in the successive steps of core making, wax preparation, creating object in the wax, moulding followed by de-waxing and pouring and then finally polishing a high amount of human skill is required. The size and the shape of the final product largely depend upon the clay
core; hence it has to be perfect. Similarly in the modeling process the fine structure is made by using wax ropes. The core clay is fully covered by the Wax, so the perfect preparation of wax is of high importance. Moulding is done as a layer of sand clay is coated when the wax solidifies over the model, the mould have to be strong otherwise it will not be capable to resist the heat of furnace during the de-waxing and pouring process, for that it is first dried under sun and also rounded by wire. Even if crack appears moisture clay is used to harden the molten metal and seal the lick. Finally the figure is brushed to have the final product. All those steps are of equal and high importance as if any one of it goes wrong then it will cause a complete failure. Due to the high level of human skill of the Dokra workers of Bikna and Dariyapur and the knowledge that they carry from their forefathers generation by generation help them to make perfect and delightful Dokra craft.

- The Dokra artist of Bengal [Bikna, Rampur and Dariapur] use Brass metal scrap [alloy of Copper (Cu) and Zinc (Zn)]. Because of that Bengal Dokra have a unique muted yellow colour.
- Dokra artist of Bikna and Dariapur are highly influenced by the local culture and also by the nature, and that reflect on their art. As a result of this “Durga”, one of the foremost goddess has high abundance in the works.

K) Inspection Body:

1. The Chief Executive Officer, West Bengal Khadi & Village Industry Board (WBKVIB), West Bengal
2. The Joint Director, Directorate of MSME, West Bengal & Officer-in-Charge of Technology Facilitation Centre
3. The District Officer of WBKVIB of the concerned district
4. The Scientist C & Nodal Officer of Patent Information Centre, West Bengal State Council of Science and Technology, Government of West Bengal
5. One representative of Banglanatok.com

L) Others:

a. Socio-economic Profile:

Bengal Dokra art form is widely appreciated and is wooing art lovers across the globe. The products have a world wide appeal owing to their primitive simplicity, enchanting folk motifs and forceful form. Dokra art is used for figurines and statues while Dokra art jewelers is also very famous and becoming popular among younger generation. The distinctive appearance of Dokra craft is due to its antique and stark finish and rustic look - both of which are widely coveted in domestic markets and in global international art markets. United States and UK are emerging markets. The fashion stores of Milan, Paris, and London are looking for these unique Dokra articles. With changing times, e-marketing has become very effective. A number of e-commerce sites have Dokra products on sale. The Dokra Karmakras used to suffer from poverty. Since the last two years, due to intense intervention by Department of MSME&T, Govt. of West Bengal and UNESCO, the situation has taken a turn towards improvement. The skill building trainings and exposures provided to the artists have spurred their innovation and new ranges of products are now being fabricated by the artists. Direct market linkage with craft businesses across India along with participation in fairs and festivals have resulted in improvement in income. Previously the artisans of Bikna used to take loans from money lenders at a very high rate of interest, which has currently stopped due to their increase...
in income. Still there is instance of liquor addiction among the artists. Illiteracy is also prevalent.

b. Action taken by the state government/government of India for its development (mention the name of the scheme and budget involved)

DIC, Bankura, DCH organise fairs and festivals at Kolkata, Delhi, Surajkund. (Haryana), Siliguri, Jaipur etc where substantial sale takes place. Since 2013 Department of MSME&T, Govt of West Bengal and UNESCO have undertaken the initiative of developing 10 Rural Craft Hubs in West Bengal and Dokra of Bikna is one of them. banglanatak dot com is the implementation partner in the project. As part of the project, design skill development workshops, direct market linkage is being carried out. The artists are participating in fairs and festivals across the country and also on international platforms. Harendra Nath Rana an eminent crafts person travelled to France in June 2015 to attend the Gannat festival and displayed his art work at UNESCO head quarter in Paris. Subhas Mondol of Dariyapur travelled to Houston in USA to attend the fair at NABC in July 2015. These communities have been the subject of an action research project initiated and coordinated by the National Institute for Science, Technology and Development Studies NISTADS within the Indian Council for Scientific and Industrial Research CSIR. DCS MSME’S Design clinic and NID made documentation on the Dariyapur Dokra artist. New and efficient furnaces have been installed at Bikna and Dariyapur in collaboration with NML Jamshedpur. WBKVIB has constructed resource centre at both the locations and equipped them with tools and appliances. They have also given a working capital support of Rs. 5 Lakhs to each of the hubs. With the increase in income the life style of the artists have also changed. The artists of Bikna and Dariyapur celebrate their annual festival “Dokra Mela” during Sep-Oct timeframe.
Application is made by Chitrataru, Village: Naya, GP: Maligram, Block: Pingla, District: Paschim Medinipur – 721140, West Bengal, India for Registration in Part A of the Register of Bengal Patachitra under Application No. 564 in respect of Painting and Artists material & Textile material used falling in Class – 16 & 24 is hereby advertised as accepted under Sub-section (1) of Section 13 of Geographical Indications of Goods (Registration and Protection) Act, 1999.

A) Name of the Applicant : Chitrataru

B) Address : Chitrataru,
Village: Naya, GP: Maligram, Block: Pingla, District: Paschim Medinipur – 721140, West Bengal, India
Facilitated by:
West Bengal Khadi & Village Industry Board, Government of West Bengal and Patent Information Centre, WBSCST – DHESTBT, Government of West Bengal

C) Types of Goods : Class 16 – Painting and Artists material
Class 24 – Textile material used

D) Specification:

Patachitra style of painting is one of the oldest and most popular art forms. The name Patachitra has evolved from the Sanskrit words patta, meaning canvas, and chitra, meaning picture. The traditions of Patachitra paintings are more than thousand years old. Bengal Patachitra is painting done on paper or fabric, and is manifested by rich colourful application, creative motifs and designs, and portrayal of simple themes, mostly mythological in depiction.

Bengal Patachitra is practiced mainly in village Naya of district Paschim Medinipur under the block of Pingla. However there are concentrations of Patachitra artists at Chandipur, Narajol in Paschim Medinipur and Daspur in Purba Medinipur. Artists are also there in the districts of Purulia, Bankura and Birbhum, but in smaller concentrations.

Following presents the characteristic feature and unique material used for the preparation of Patachitra of Bengal:

a. Material used
Handmade paper, coarse cotton fabric or tussar silk were traditionally used as canvas for Patachitra paintings. The paper scrolls generally have a stick on both ends used for unrolling. Apart from paper and cloth, sometimes palm-leaf manuscripts were made to paint the scrolls, however, in recent years, this has been substituted completely by the use of paper, dexterously stuck on cloth to give it more stability and then used as a canvas for drawing.
• Five basic pigments – White (Sankha), Yellow (Hingula), Black (Kala), Brown (Khayeri), Indigo (Neela) and their combinations are used for colouring.

b. Structural definition:
The size of a ‘Pata’ generally varies from one to one and half feet in width and three to twenty five feet in length. The ‘pata’ are generally of two types. The ‘Jarano’ or ‘Gutano’ pata are scrolls depicting a story serially in picture frames. The ‘Chauka Pata’ is smaller in size and square in dimension. The Chauka canvas is used for painting one particular deity or a mythical or social subject.

Features of Patachitra of West Bengal
• There are big eyes of the character in the Patachitra
• The perspective used is limited.
• It is imaginative, simple.
• Inspiration obtained from surrounding and traditional stories.
• There are less hand movements
• The whole set of male character look alike and the whole set of female character as well, differentiation of sex and individual can be made on the basis of skin, clothes, hair styles etc.
• There are no eyelashes, no nails and mouths are closed.
• Use of borders on all 4 sides and between the divisions of panel

c. Technical specification
Pata can be painted in two different styles- Jarano Pata and Chouko Pata. There are various length and duration of pata: those with 10 to 15 rectangular panels are known as latai pata, those of 6 to 8 oblong panels are the Arelatai pata and there are also smaller square chaukhosh pata.
Different varieties of samples of Patachitra are available these days keeping in mind the commercial purposes. Here are some examples
• Shape: Large, Medium, Small
• Size: Large- 7ft * 2.5 ft, Medium- 4ft * 1.5 ft, Small- 1.5 ft * 1ft
• Weight –Large-2 kg, Medium-500g, Small-100g
• Colour: Multi-colour

E) Name of the Geographical Indication:

BENGAL PATACHITRA

F) Description of the Goods:
The Bengal Patachitra when painted on cloth follows a traditional process of preparation of the canvas. First the base is prepared by coating the cloth with the soft, white, stone powder of chalk and glue made from tamarind seeds. This gives the cloth tensile strength and a smooth, semi- absorbent surface, allowing it to accept the paint. The artist does not use a pencil or charcoal for the preliminary drawings. It is a tradition to complete the
borders of the painting first. The painter then starts making a rough sketch directly with
the brush using light red and yellow. The main flat colours are applied next; the colours
used are normally white, red, yellow, and black. The painter then finishes the painting
with fine stokes of black brush lines, giving the effect of pen work. When the painting
is completed it is held over a charcoal fire and lacquer is applied to the surface. This
makes the painting water resistant and durable, besides giving it a shining finish.

The materials used in the paint are from vegetable, earth, and mineral sources. The subject
matter of the patachitras includes religious, mythological, and folk themes. Krishna leela
and Lord Jagannath are important motifs.

*Patachitra* paintings are done usually on long scrolls of paper and are depiction of
mythological stories. The finished paintings are affixed to reused cloth to give flexibility in
folding and unfolding. There are 3 kinds of Patas. They are ‘*Dighal Pata*’, ‘*Latai Pata*’
and ‘*Chouko Pata*’.

The *Patachitra* was painted both for religious and entertainment purposes. *Patachitra*
are painted narrative scrolls executed by a class of itinerant singing scroll painters
variously known as Patuas, Chitrakars, Patikars or Patidars. These paintings are
caracterised by religious, social motifs and images painted on cloth. Their art appealed to
everyone and could be understood by even a child. For his efforts, the Patua would receive
a little money but mostly payment in kind. *Patachitra* are made in two formats: the
vertically scrolled paintings, the horizontally scrolled ones, both referred to as Jodano or
Gutano Pata.

The three original formats of painting a patachitra in Purulia, Bankura, Bribhum and West
Mednipur are:
- *Jadano pata* or the scroll- showing episode sequences in a vertically placed manner- all
  illuminated along the picture frame one above the other- with commonly ten to fifteen
  frames in all.
- *Arelatai pata* - here the picture frames are horizontal in nature- bound in two ends by
two wooden sticks to enable the patua to unroll the pat as he gradually displayed it in
front of an audience. This contained primarily six to eight frames.
- *Choukosh pata* or the square pat is a single sheet of rectangular paper which commonly
  used to eulogise a deity or an incident.

**Themes:**
There are two types of Pata- religious and secular. Religious pata encompass the story
of Hindu epics like, Purana, Ramayana, Mahabharata narrating stories of Hindu gods and
goddesses like, Krishna, Chaitanya, Kali, Shiva and the indigenous Bengali folklore of
Manasha and Chandi, Behula and Lakshinder being the most popular. Secular pata depicts
important news events, scandals accidents etc such as bus accidents at Narayangarh, rural
elections, the rationing system, family planning, evils of the dowry system etc. Every
Patachitra has a song related to it, which the artists sing while unfurling the Patachitra.

G) **Geographical area of Production and Map as shown in page no:** 113

The Naya village of Paschim Medinipur is the face of the *Patachitra* of West Bengal
till recent times. Some other areas of production are Purulia, Bankura and Birbhum district
of West Bengal where the ancient Bengal *Patachitra* is produced to some extent till date.
Here are the concise geographical descriptions of those districts and area therein.
The district of Paschim Medinipur lies in the South Western corner of the State of West Bengal. It is bounded by East Singhbhum (Jamshedpur) district of Jharkhand in the West and by the Mayurbhanj and Balasore District of Orissa in the south. To its eastern side is the Purba Medinipur, while the district Bankura lies to its North. The district’s Head quarter is at Medinipur town. In recent times the main area of Patachitra production is the Naya Village of Paschim Medinipur. It is the face of Patachitra of West Bengal.

Naya is a large village located in Pingla of Paschim Medinipur district, West Bengal with total of 70 households of artists. The total number of artists is 230 out of which 110 are female.

The Purulia district lies between 22°43 and 23°42 North latitude and between 85° 49 and 86° 54 East longitude. The Western part of district of West Bengal, Purulia is surrounded on its three sides by the State of Jharkhand and also On the North by Hazaribagh and Dhanbad, on the South by Singbhum and in the West by Ranchi. On the Eastern side the district of West Bengal namely Bankura, Burdwan and Medinipur covers the flank.

Bankura district is situated between 22°38’ and 23°38’ north latitude and between 86°36’ and 87°46’ east longitude. With a triangle shaped contour, the district lies in the Burdwan Division of West Bengal. The Damodar River separates Bankura from Burdwan district in the north. The district of Medinipur and Purulia share its southern and western boundaries respectively with Bankura. The south-eastern part of the district is bounded to a certain extent by Hooghly district.

The Birbhum district lies between 23°32’ to 24°35’ North latitude and 87°5’ to 88°1’ East longitude. The district is well drained by a number of rivers and rivulets running in nearly every case from west to east with a slight southerly inclination. The climate of the district is generally dry, mild and healthy. Summer lasts from the middle of March to the middle of June, monsoon from the middle of June to the middle of October and winter lasts from the middle of October to the middle of March.

H) Proof of Origin (Historical records):

**History of the Districts (Paschim Medinipur, Purulia, Bankura, Birbhum)**

**Medinipur:** Medinipur district (undivided) is rich with ancient history of royal dynasty and their royal activities. The kingdom of Swashanka, Harshabardhan was the part of undivided Medinipur. One of the archaeological sites was the port at Tmaralipto which is present day Tamluk in the divided Purba Medinipur district. After the fall of last independent Hindu dynasty of Kalinga the region came under one of the five Sarkars of Mughalbandi Odisha which was ruled by the Subehdar of Odisha. Bahadur Khan was the ruler of Jaleshwar Sarkar or Hijli (including Medinipur) during the time of Shah Jehan. He was defeated by Shah Suja, the second son of Shah Jehan, then the subhadar of Bengal. Latter on the region comes under the control of Nawab Alivardi Khan.

**Purulia:** Jaina Bhagavati-Sutra of circa 5th century A.D. mentions that Purulia District was one of the 16 Mahajananapadas and was a part of the country known as Vajra-bhumi in ancient times. However, little is known about Purulia before the East-India Company obtained the 'Diwani' of Bengal, Bihar, and Orissa in 1765. By Regulation XVIII of 1805, a Jungle Mahal district composed of 23 Parganas and mahals including the present Purulia was formed.
Bankura: The history of the district of Bankura from the 7th century AD right until the advent of British rule is dominated by the Hindu Rajas of Bishnupur. The area around Bishnupur was called Mallabhum

Birbhum: Birbhum district was dominated by different dynasties for centuries. It was once a part of Mauryas and the majestic Guptas. The name Birbhum came to be recognized as an administrative unit only after the Santhal rebellion of 1855-56, which was overwhelmed with the martyrdom of Sidhu and Kanu.

History of Patachitra:

Patachitra known for its brilliant play of colour is a traditional folk art form of rural Bengal that has been in existence for many centuries. It is world’s first attempt to create motion pictures. There are varying opinions about the dates of ancient Patas but it has been suggested on the basis of historical themes connected with the accompanying songs. It dates back to the Pre- Pala period from the days of Mohenjodaro to the 9th century A.D. It is still tucked away with small villages of Medinipur, Bankura, Purulia, Howrah, Hooghly and 24 Parganas. In Buddhist literature there is reference of pata in 1st century A.D.; in Haribansha in 2nd century, in Abhijnynasakuntalam and Malabikagnimitra in 4th century; in Kaya Khondasanjukta in 6th century, Harashacharit and Uttaramcharit 6th and 7th – 8th centuries. These literatures speak about certain types of Pata which were exhibited to educate and to entertain the people.

Author Ajitcoomar Mookerjee in his book Folk Art of Bengal has mentioned that some mural paintings in the style of Jadu-Patuas can be seen in the temples of Bankura District. As Bankura district was not disturbed by the foreign influence its cultural integrity remained uninfluenced and the places like Mallbhum which is also called ‘Land Of Wrestler’ still hoards in its bosom. In the paintings of Bankura, line drawing of greater efficiency has been shown. The salient features of the paintings are - The lines are distinctly bold swift and attractive. The techniques which are used is bold and simple. The dignified attitude and novelty of form of the figures reveals the traditional hands of artists.

In the book of D.P. Ghosh titled “Folk Art of Bengal”, variation of the style of Patachitra painting in respect of the district of West Bengal has been mentioned.

The Patachitra of different districts of West Bengal are characterized by many peculiarities in colour and design. The products of Manbhum (now known as Purulia) can easily be distinguished by their preference for one particular shade of burnt sienna relieved by white and yellow patches and densely packed composition. The seated figures of Dasratha and Chand Sadagar of Medinipur crowning the Ramayana and Kamale-Kamini scrolls are impressive and monumental. In the scrolls of Birbhum, Bankura and Burdwan preference for Indian red background usually found while Hooghly preferred a dark brown. The abstract linear treatment of the Hooghly and Manbhum ‘pats’ are peculiar and definitely modernistic. The technique of meandering river of Mahakapi Jatka at Sanchi also survives in the undulating Yamuna in Krishnalila pat from Medinipur dividing at the same time connecting the exploits of young Krishna in a typical Indian manner.

The most celebrated illustrated manuscript so far known from any part of Bengal is a copy of the Ramayana by Tulsidas from Medinipur district dated 1772. It is currently preserved in the Asutosh museum. The paintings about 150 in number (some of them are shown in figure) are undoubtedly the finest we know of the transitional period between the late mediaeval classical Indian style and the folk idiom.
These days the *chittrakaras* (painters) of Medinipur and Purulia districts are the only ones involved with *pata* making. The *patuas*, painters, also serve as priests for the *Santhal* community, and make *patas* with *Santhal* folklore. The craft has been affected by the onslaught of lithography, oleography and bazaar pictures. The mythical narratives, contemporary tales and folklore painted on scrolls are carried from village to village, and narration is accompanied by folk songs.

I) **Method of Production:**

**Tools:**
- **Brushes:** Previously the brushes used were made of fur obtained from the shoulder of goats or buffalo and classified according to age of the animals which gives hardness or softness. A piece of cloth tied at the end of the brush also served as a substitute to it sometimes in order to draw thicker lines or applying dots for decoration. For fine painting rat hairs were used. At present brushes available in the market are used.
- **Kiya plant:** The stem of Kiya plant was used for drawing thick lines.
- **Coconut shell (Sadhei):** It is used for mixing colours and gum obtained from wood apple (*Bel*).
- **Scissor:** For cutting of canvas in accordance of requirement to complete the selected motif of *Patachitra*.
- **Oven:** For drying and providing stiffness to finished *patachitra*
- **Others:** Ghasa pathar (peeble stone), grinding stone, pestel stones are also used for different purpose

Here are the five steps which are followed to prepare a complete Patachitra of West Bengal

**Preparation of canvas:**
The canvas is prepared by the artists themselves. The cloth on which the painting will be done is coated with chalk stone powder and glue. Glue is made from tamarind seeds. The chalk powder and glue mixed in equal proportion generally but it may also vary according to the atmosphere keeping in mind the humidity. After the coating it is rubbed with stone to make the surface polished. The rice powders are added also to make it stiff. It is then left for few days to develop strength and semi absorbent surface. The prepared canvas is cut in respect of required sizes by scissor.

**Preparation of colour:**
The colours are mixed in empty shells of broken coconuts (which serve as a palette) with the help of water and home-made glue. The following are the most important natural colours used by the *patuas*-
- **White:** White colours are made by grinding the conch shell (*Sankha*). The grinded fine powder is mixed with water in an earthen pot. It is allowed to sediments particles. The sedimented particles are removed. The rest of the portion filtered and dried to have thick white colour.

In preparation of other pigments the raw materials are grinded with stone first then mixed with other in accordance of thickness of the colour needed.

- **Yellow:** Yellow is made from turmeric or soil
- **Green:** Green is made from leaves of hyacinth bean plant or the leaves of wood apple
- **Purple:** Purple is from black plum or blackberry, Conch-shell powder or white mud gives the white colour, Brown colour is obtained from limestone mixed with black catechu,
- **Red**: Red is made from vermillion, *alta* (a reddish or scarlet ink or dye solution used for coloring feet), or terracotta soil,
- **Grey**: Grey is obtained from the soot from earthen ovens,
- **Blue**: Blue is obtained from Aparajita flower
- **Black**: Black is obtained from scrapping the soot off from the outside bottoms of clay pots or even burning rice and pounding it to a powder to which is added home-made glue for required consistency or by burning the roots of the velvet apple trees

**Selection of Rasa/Themes:**
The *pata* depictions of social leaders generally drawn only from the pure rasa of the inspired memory of chitrakar’s mind, they can never be copied from the photograph.

**Drawing and colouring:**
After having the canvas, the borders are drawn first. It is notable that charcoal or pencils are not used for the preliminary drawing. The background colour selection and filling is known as “Pahili rang bhara” in which red background are mostly used. Then the figures are completed and decorated.

**Protection:**
Completed paintings are held over charcoal fire and lacquered which makes it water resistant, durable and gives a glazed varnished look.

**J) Uniqueness:**
A single piece of cloth 12” × 2” long tied by two small bamboo sticks on both ends and pasted with paper there on is used by the scroll painters for drawing the scenes. Sometimes hard sheets of such length and size are alone used. It is really a wonder to see how dexterously the painters depict all events or episodes of the Ramayana or the Mahabharata or the stories of Manasa - Mangala or Chandi-Mangala. They sing simple narrative songs or ballads relating to these stories and show the public their scrolls while singing from door to door. To make the colours steadfast, each is mixed within the broken shells of coconut with gum made from grinding the seeds of the wood-apple tree and mixing with required quantities of water. Sometimes, the seeds of wood-apple are substituted with the seeds of tamarind, sap from the margossa tree or egg-yolk.

There are three types of formats in *Patachitra* - the vertical scroll, horizontal scroll and a single quadrangular sheet. The width of the paintings may be from one to two feet, while the length can be up to 25 feet. There are different stylistic characteristics such as the distinct tribal style of the Santhal patas, those from Birbhum, show an over indulgence of emotion and sentiment and the Bengali style in the Kalighat bazaar patas. Although Bankura and Birbhum are neighbouring area, yet there is a good deal of difference between the two local varieties. Linear reduction into straight pleat like folds of drapery, often floriated is a characteristic of Bankura present from the early times. Moreover the head is seldom represented other than in a sharp and angular profile. A unique Ramayan ‘Pat’ from Bankura shows in the upper panel Durga being worshipped by Rama and his retinues and in the lower part the animated and vigorous fight between Vanaras and Rakshasas. Birbhum on the other hand favours a three quarter view. This will be evident from this remarkable Bastraharana ‘Pat’ from Bratachari Museum (also known as Gurusaday Museum, Bratacharigram, Joka, and Kolkata, India) remarkable alike for the grouping of compact figures of the Gopies as well as the soft plasticity of their bodies. The conventional double eye brow is another unique feature.
invariably employed by the Birbhum Patua. These are some of the traits and stylistic elements that would help us in identifying the products of many districts.

In addition of aforementioned descriptions here are the salient features of West Bengal Patachitra which is mainly famous for the Patachitra of Naya village.

- The figures of the Patachitra looks like the classical Egyptian or Messopotemian style. Most figures depicted with frontal chest, profile head and limbs. No strict human proportions are there that means the size of the figure and limbs varies in respect of the space available for the Patachitra.
- Artists uses different colour in respect of the characters and suitable rendition of the themes so that it can be catchy and easily understandable to all kinds of peoples. Except borders organic shapes are painted in Patachitra. The paintings are two dimensional without shadings.
- The subjects or themes are chosen from story of ancient god and goddesses and also modern trends of civilization or social problems of society.
- The human figures are drawn with very strong facial expression so that the situation can be easily understood by the emotion. Use of contrasting colours helps the audience to view it quite clearly.
- The main characters are placed at the centre of the Patachitra and the emphases are given on principle figures.
- The Patachitra are narrative in style. Specific songs are accompanied with the Patachitra. The songs are composed by the artist who has made the Patachitra.
- In respect of thematic analysis- (i) In Ramayana Pata Karmayoga and ancient life styles are expressed. (ii) Spiritual and Philosophical truths are conveyed by Shkatiptapa (iii) Spiritual loves are expressed by Krishnaleela.

**Impact of the environment:**
Patachitra artists use natural colours from flowers, leaves, fruits, roots etc. All these are locally available. The scandals, accidents, mythological stories, regional folklore, social problems, and other local issues are depicted in the form of Patachitra which is entertaining as well as used as a media to educate peoples and spread awareness.

**Human skill:**
The pata depictions are drawn only from the pure rasa of the inspired memory of chitrakar’s mind, they can never be copied from the photograph.

**K) Inspection Body:**

1. Director, Directorate of Micro, Small and Medium Enterprises, Government of West Bengal
2. The Chief Executive Officer, West Bengal Khadi & Village Industry Board
3. Director, MSME - Development Institute, Government of West Bengal
4. Director, District Industries Centre of concern region
5. Representative of Patent Information Centre, West Bengal State Council of Science and Technology, Government of West Bengal
6. Director, West Bengal State Export Promotion Society
7. Representative of Banglanatak.com

**L) Others:**

**Socio-economic Profile:**
Prior to the 1980s, Patuas were mainly men. Since then after training was offered to them, women too began to paint and sell. Interestingly many of the woman Patuas of
the villages as indeed other female folk artists also double as the local midwife – using this traditional training as a supplement to their incomes. Times have changed for the Patuas of Medinipur and especially for most at Naya. The socio economic conditions of these artists have gradually improved in the last couple of years with some of them gaining international recognition. Since 2004, banglanatak dot com is working with 230 Patuas in Pingla to rejuvenate the dying art form. The Patuas have learned to make diverse products using their painting skills through series of workshops and trainings. They are also using their art from as tool for social communication. The art form has become a means of livelihood. This has led to reduction of poverty and most importantly empowerment of the women in the community. Today young people are learning the art from their living Gurus. Pater Gaan which was almost extinct has been revived.

Well Known artists at Pingla
Dukhushyam Chitrakar is the living legend in Pingla. Gurupada Chitrakar who has travelled to UK, USA, Italy, Scotland and Anwar Chitrakar who has travelled to Japan and Germany won the National award. The other leading crafts persons are Swarna Chitrakar (travelled to France, USA, Australia, UK) Manu Chitrakar (travelled to France and Sweden), Monimala Chitrakar (travelled to USA, New Zealand, Germany, Thailand), Rahim Chitrakar (travelled to Japan and Germany), Moyna Chitrakar (travelled to Australia, China, Bangladesh), Jaba Chitrakar (travelled to France), Montu Chitrakar etc.

Action taken by the state government in association with the government of India for its development
DIC, Paschim Medinipur, DCH organize fairs and festivals at Kolkata, Delhi, Surajkund. (Haryana), Siliguri, Jaipur etc where substantial sale takes place. Since 2013, Department of MSME&T, Govt of West Bengal and UNESCO have undertaken the initiative of developing 10 Rural Craft Hubs in West Bengal. banglanatak dot com is the implementation partner in the project. Patachitra of Pingla is one of the hubs. banglanatak dot com is the implementing partner in the project and is supporting the community with skill development trainings, direct market linkage and exchange collaborations. West Bengal Khadi and Village Industries Board is constructing a Common Facility Centre in the village and has also provided the cluster with a working capital support of Rs. 5 Lakhs. The artists celebrate their annual festival “PotMaya” in November since the year 2010. Manu Chitrakar an eminent painter travelled to France in June 2015 to attend the Gannat festival and displayed his art work at UNESCO head quarter in Paris. Sushama Chitrakar participated in New Year festival in Taiwan in February 2015 and Mamoni Chitrakar visited Baharain to attend Handicrafts Fair in November 2014. Suman Chitrakar has attended the London Craft Week in May 2016 and has also displayed his works in Edinburg
Application is made by Chow Mukosh Silpi Sangha, Village: Charida, GP-Sindri, Block–Baghmundi, District: Purulia - 723152, West Bengal, India for Registration in Part A of the Register of **Purulia Chau Mask** under Application No. 565 in respect of Handicrafts – Masks falling in Class –27 is hereby advertised as accepted under Sub-section (1) of Section 13 of Geographical Indications of Goods (Registration and Protection) Act, 1999.

A) **Name of the Applicant** : Chow Mukosh Silpi Sangha  
B) **Address** : Chow Mukosh Silpi Sangha, Village: Charida, GP-Sindri, Block- Baghmundi, District: Purulia - 723152, West Bengal, India  
**Facilitated by:** West Bengal Khadi & Village Industry Board, Government of West Bengal and Patent Information Centre, WBSCST – DHESTBT, Government of West Bengal  
C) **Types of Goods** : Class 27 – Handicrafts - Masks  
D) **Specification:**

*Chau* masks are famous all over the world. Masks of Charida village of Purulia are mainly used for *Chau* dance and for decoration too. The masks portray different characters of Gods, demons and animals. The masks are made of paper pulp, mud and clay subsequently dried in the sun to make it hard. The masks are then colourfully painted. The eye and nose areas have holes to enable vision and breathing. Finally the masks are decorated with zari, and other adornments.

**Structural Definition:**
The masks from Purulia are elaborate and ornamental. They show much exaggerated emotions since the masks cover the dancers face. The faces on the masks are geometric and the colours are bright. The eyes are often very large. The faces on the masks are symmetrical.

**Materials and accessories**

1. Kather Pata (Short wooden Plank)  
2. Loam and clay  
3. Containers  
4. Old cotton clothes  
5. Papers except newspapers for making paper pulp  
6. Tamarind seed powder  
7. Flour gum  
8. Iron piece (Bhromor)  
9. Fine ash of charcoal  
10. Colours red, yellow, white (Khorimati)
11. Paint brush- No 1, 2, 3 and 20)/ or Kora Tuli
12. Varnish (Kopal Varnish)
13. Embellishments (leaf, wooden / Shola bead, peacock feather etc)

Technical Specification:
The masks have feathers and other ornaments that surround the face part of the mask. These can extend off about 2 feet from the mask itself. Dark yellow or bright orange are the colours often used to portray Gods and Goddesses like Devi Durga, Lakshmi, and Kartik. White is generally used for Lord Shiva, Ganesha and Goddess Saraswati. Black or blue are generally used for masks portraying Goddess Kali. A talisman or a tilak is generally applied on the forehead of Lord Rama and Krishna and the Asuras are painted in black or deep green with thick moustaches and protruding teeth and large eyes. The masks are made of paper pulp, mud and clay, painted with natural colours and decorated with bird feathers, Sholapith/ wooden beads, clothes etc.

Purulia Chau mask comes in various sizes
- Shape:Large, Medium, Small
- Height:Large-45”x50”, Medium:18”x12”, Small-5”x6”
- Weight–Large-6kg, Medium-3kg, Small-25g
- Colour:Multi-colour

E) Name of the Geographical Indication:

PURULIA CHAU MASK

F) Description of the Goods:

Chau masks are famous all over the world. Masks of Charida village of Purulia are mainly used for Chau dance and for decoration too. About 308 artisans of Charida are involved in this craft. The masks are made of paper pulp, mud and clay subsequently dried in the sun to make it hard. The masks are then colorfully painted. The eye and nose areas have holes to enable vision and breathing. Finally the masks are decorated with zari, and other adornments. A full sized decorated mask costs around Rs3000-Rs3500.

The masks portray different characters. There are masks depicting particular Gods and Goddesses, demons and monsters. There are also interesting masks for different animals like the lion, tiger, bear, monkey and so on. These finely-crafted masks are made by the painter artists of Charida. With the face covered by a mask, it is left to the dancers to emote using their bodies. Movements and postures therefore serve both to portray emotions and make the dance lively.
**G) Geographical area of Production and Map as shown in page no:** 121

Charida village of Bagmundi block of Purulia is the main area of fabrication of Chau Mask. The district of Purulia was carved out of the former Manbhum district of Bihar and was merged with the State of West Bengal in November, 1956. The district occupies 5th position in the State in respect of its size with an area of 6259 sq. km. Situated at the western part of district of West Bengal, Purulia is surrounded by the State of Jharkhand in the north and west and Odisha in the south. The districts of Bankura, Bardhaman and Paschim Medinipur cover the eastern and south eastern side of the district.

**a. Geographical Location:**

<table>
<thead>
<tr>
<th>1. Name of the District(s)</th>
<th>Purulia</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Latitude – Longitude</td>
<td>23.3400°N, 86.3600°E</td>
</tr>
<tr>
<td>3. Area in Sq km</td>
<td>6,259</td>
</tr>
<tr>
<td>4. Neighboring Districts / state</td>
<td>Jharkhand in the north and west, Odisha in the south, the districts of Bardhaman, Bankura and Paschim Medinipur in the east and south eastern part</td>
</tr>
</tbody>
</table>

**H) Proof of Origin (Historical records):**

Purulia is one of the oldest districts of West Bengal which is enriched with culture and heritage. The district has gone through many changes over the time. Purulia was part of the erstwhile Manbhum district. According to the Jaina Bhagavati-Sutra, the place existed as early as 5th century and was one of the 16 Mahajanapadas of its time. It was during the British rule in India that Purulia gained importance. Just when British East-India Company acquired the 'Diwani' of Bengal, Bihar and Odisha, in the year 1765, Purulia achieved significance. In 1805, by the Regulation XVIII, a Jungle Mahal district, comprising of 23 parganas and mahals- including the present Purulia, was formed. However, years later, in 1833, the Jungle Mahal district was ruled out and a new district, by the name of Manbhum, was constituted with headquarters at Manbazar. Manbhum was extremely large in size and constituted of Bankura and Bardhaman (in the present West Bengal), apart from Dhanbad, Dhalbhum, Saraikela and Kharswan (in the present Jharkhand and Odisha). In the year 1838, the district headquarters was shifted from Manbazar to Purulia (as it is known today). With this, Purulia was withdrawn from regular administration and placed under an officer called Principal Assistant (better known as Deputy Commissioner today) to the agent of the Governor-General for South-Western Frontier. It was in 1956, nine years after India received its independence, the district of Manbhum was partitioned and the states of West Bengal and Bihar were formed, under the States Reorganization Act and Transfer of Territories Act. In the November of 1956, Purulia was formed as one of the districts in West Bengal. Located at the western most side of the state, Purulia boasts of a tropical location. It acts as a funnel, transferring tropical monsoon current from the Bay of Bengal to the subtropical parts of
north west India. Purulia also acts as a gateway to reach the industrial belts of West Bengal and the hinterlands in Odisha, Jharkhand, Madhya Pradesh and Uttar Pradesh.

**History of the Purulia Chau Mask**

Around 150 years back during the rule of king Madan Mohan Singh Deo of Baghmundi the tradition of making Chau masks started. Chau Dance is an acrobatic martial dance form of Purulia. The Chau Mask is traditionally associated with this age old dance form of Purulia, where the performers wear masks of various mythological characters and also different animals. In Purulia Chau dancers wear large stylized masks while performing and hence the evolved the art of Chau Mask making.

The king of Bagmundi and bhumiji chieftains who had acquired the status of Kshatriya had a striking influence on the Chau dance. The present day themes of the mask and the narrative styles are passing by generation to generation from that time. The tradition of Chau dance with the Chau mask is going on over the century in Purulia.

Due to lack of sustained patron age and guidance, Purulia Chau show very little evolvement since its hunting or warfare origin, performed by the early in habitants of this arid region. Till the early decades of this century these dancers and the form were patronized by the Bagmundi ruler, but due to unproductive land and ever failing rains the ruler could hardly provide necessary support. The performers too were forced to migrate to nearby urban city like Calcutta in search of living. Since 1961, when this form was first witnessed by an anthropologist in a remote village of Purulia district and their subsequent visits in major cities world over, the local shave formed their own parties in anticipation of a sponsored trip abroad. They have added more exciting combat scenes with more skillfull pirouettes and summersault. The costumes specially the head gears have acquired enormous size and jazzy decorations. Influenced by the more respected Hindu culture the natives adopted the epical themes but they naturally opted for the warfare scenes that would reflect their life of perpetual hardships and conflict with nature itself. Even the noble and heroic characters like Rama and Sita are depicted with forceful gestures. During the festival time a special flask shaped dancing arena is prepared where several dancing 'parties' assemble to perform.

**Method of Production**

**Tools**

a) Flat wooden stick locally called "Thapi"

b) Bamboo plank(Basher chiari)

c) Tong

d) Scissor

e) Cutter

f) A flat iron piece called Bhromor to shape the eyes, nose, ear

g) Knife

h) Needle

i) Small ironrod

j) Pliers
The making of Chau mask is completed in three basic stages - Mathamathi, Colouration and Decoration. The first stage is again divided into four sub stages. Details of the processes are as follows:

**Mathamathi:**

The process of Mathamathi involves rubbing of thapi on the face of the mask made of solid clay. The sub processes are:

i) **Matir Muha:** Loam is prepared and given a globular shape. Thereafter it is hand moulded to portray the initial structure of the face including ear, eye, nose, mouth. This process is called Matir Muha. The Matir Muha is dried in the sun before taking to the next substage.

ii) **Paper coated Mask:** Charcoal ash is spread over the Matirmuha with the help of old cloth. Flour is mixed with copper sulphate to make a turbid liquid and papers are dipped into it and rubbed slightly to evenly distribute the mixture on it. This process renders stiffness to the papers so that the curve and the design of the mask can be easily visible. There after the stiff paper is coated on the mask. This is called papercoating. The paper coated mask then is allowed to dry under sun for two hours. On drying the mask is then taken over to the next sub process.

iii) **Kabis Lepon:** Thin paste of fine clay is made. This mixture is called Kabis which is applied on the mask wrapped with paper to give finite shape of a face. Different expressions of the face are minutely portrayed by the magic figures of the artist. The next step is Mathamathi.

iv) **Kapor satae and Mathamathi**

A piece of cotton cloth is dipped in the kabis and stuck on the mask. The facial expressions are made prominent with the help of fingers and wooden thapi. Then it is kept under sun for 10 mins and polished with the help of wooden thapi. Again it is kept under the sun for 10 mins and repolished with the help of wooden thapi. The mask is then sundried for few hours and thereafter the clay soil is separated from the back of the mask. Normally, this process is done next day.

**Second step – Colouring:**

The clay mask is now ready for painting. After applying a layer of zinc oxide, the mask is painted and decorated according to the character. Generally powdered colours available in the market are used. These are dissolved in water along with grinded tamarind seeds which acts as adhesive. Red coloured stones are also collected from the river Marangburu from which red colour is extracted. Previously fruits and leaves were also used for colouring the masks. As a practice, artists first colour the masks in white with the help of kharimati.

The eyes of the mask are made by inserting a hot iron rod. These holes help the Chau dancers to see while performing. Different characters are painted with different colours: For Durga the colour is yellow, for Shiva the colour is white, for Kartick the colour is mild red, for Bhut mukhosh (Ghost Mask), it is black, a distinct type of coloured clay is used for santhals. According to the expression of the face, the forehead, medium shaped crown, chin, the postures of the nose and eyes are also coloured. After colouring, varnish is done to make it glossy.

**Third step – Decoration**

The prepared mask is finally decorated by the women of the family or the children after their school. Glass beads, wooden beads or shola (pith of Aeschynomene aspera) beads and bird feathers are used for decoration. Decoration is the most important part
of the mask. Decorations give fulfillment to the mask thus helps to impart perfection to the performance. Finally, traditional gurjan oil (Oleoresins from *Dipterocarpus*) is applied on the mask for a fine shiny finish.

**Flowchart for Production Process**

- **Steps / Process – 1** – First a clay model of the mask is made and ash is smeared on it.
- **Steps / Process – 2** – Then a mixture of paper, water, and gum is applied on the model.
- **Steps / Process – 3** – Then a thin layer of clay is applied to the paper and gum mixture and a piece of old cloth is pasted down. With a tool called a batali the artisans carve in the features of the face.
- **Steps / Process – 4** – Next clay and water are added to the mask which helps the setting to the clay, paper, and cloth used in making the mask.
- **Steps / Process – 5** – After the model is dry it is covered in zinc oxide.
- **Steps / Process – 6** – Masks are then painted and other decorations (foil, beads, colored paper, and feathers) are added to the mask.
- **Steps / Process – 7** – The mask is then beautifully decorated using jari (tinsel threads), sparkles and colored foils, string of beads, pith works, colored flowers made from shola (*Aeschymene aspera*) and coloured feathers.

I) **Uniqueness:**

Purulia Chau is the most robust and virile form of dance. With great gusto the dancer plant their feet forcefully on the ground and freeze in postures of encounter and challenge, bent knee foot stamping, short vertical jumps and full circle spins characterize this style as does the violent juggling of shoulders and shivering of the upper torso.

The purulia masks are painted in vivid colour. The pattern of them symbolizes the rank and temperament of the character. The masks have a glossy finish. In terms of colour the masks of heroes and heroine are white and delicate in designs, with blue and green painted along the jawline and the forehead. The mask of Lord Rama is green whereas Lord Krishna’s mask is blue with white designs. All heroic characters wear elaborate head dress that form part of the mask. The crown is completed with feathers, beads and yarn. In contrast the masks of the demons in Purulia Chau are in vivid red or green colours. They have ferocious facial expressions, blood shot eyes, wide dilated nostrils, wrinkled skin and open mouth from which fangs come out. They also sport unkempt black hair and black beard.

**Impact of Environment:**

Clay is locally available from river Marangburu, which is just right for the robustness and durability of masks. The hot and arid climate of Purulia helps in baking the mask. The mask makers also used to adorn the masks with leaves and flowers collected from the nearby village.

**Human Skill:**

The facial expression of the mask is the reflection of the local culture and perception of the artist. The making of Chau mask is a delicate piece of work from the preparation of mould to rendition of the face and the decoration thereafter each of the steps required distinctive skills. These skills acquired by the artist traditionally from their ancestors.
J) Inspection Body:

1. The Chief Executive Officer, West Bengal Khadi & Village Industry Board
2. The Joint Director, Directorate of MSME, West Bengal & Officer-In-Charge of Technology Facilitation Centre
3. The Scientist ‘C’ & Nodal Officer of Patent Information Centre, West Bengal State Council of Science and Technology, Government of West Bengal
4. One Representative of Banglanatak.com
5. The District Officer of WBKVIB of the district concerned
6. The Secretary of the Society of RCH project, Chau Mask

K) Others:

a. Socio-economic Profile:

The mask makers belong to Sutradhar community. Most of them live in mud houses. There is electricity in every house. Sanitation coverage is 71%. Most of the artists have low level of education and literacy.

Jeepa Singh and Babulal Mistri were the pioneers in introducing the present form of Purulia Chau. Jeepa Singh’s son, Gambhir Singh Mura went onto contribute immensely in representing Chau to the world arena. He was awarded the prestigious Padmashri award by the Government of India in 1981, as was Nepal Mahato in 1983. But no other artist has been recognized since. Chau dance was inscribed in the UNESCO representative list of Intangible Cultural Heritage of humanity in 2010.

b. Action taken by the state government in association with the government of India for its development

Chau dance troupes in Purulia and adjoining locations are the main buyers of Chau mask. Moreover, District Industries Centre, Department of MSME&T, Governmental of West Bengal and DC Handicrafts provide opportunities to sell through different fairs and festivals in and outside West Bengal. Recently Biswa Bangla has started procuring Chau Masks. Since 2013 Department of MSME&T, Govt. of West Bengal and UNESCO signed an MOU to develop 10 Rural Craft Hubs in West Bengal. Banglanatak dot com is the implementation partner in the project. Chau Mask of Charida is one of the prominent Craft Hubs. During the course of the project, direct market linkage has been done across India through a number of fairs, festivals and exhibitions. Linkage has been established with retail outlets and business houses. The artists celebrate their annual festival “Chau Mukhosh Mela” since 2014.

Different spelling like Chau, Chhau, Chhow, Chhou have been encountered during the course of documentation all for the same craft ‘Chau Mask’.
Application is made by Mahisbathan Hastashilpa Samabay Samiti Limited, Village: Mahisbathan, Post: Manikar, P.S-Kushmandi Block – Kushmandi, District: Dakshin Dinajpur - 733132, West Bengal, India for Registration in Part A of the Register of Wooden Mask of Kushmandi under Application No. 566 in respect of Handicraft. falling in Class – 20 is hereby advertised as accepted under Sub-section (1) of Section 13 of Geographical Indications of Goods (Registration and Protection) Act, 1999.

A) Name of the Applicant : Mahisbathan Hastashilpa Samabay Samiti Limited

B) Address Limited, 
Village: Mahisbathan, Post: Manikar, P.S Kushmandi Block – Kushmandi, District: Dakshin Dinajpur - 733132, West Bengal, India

Facilitated by: 
West Bengal Khadi & Village Industry Board, Government of West Bengal and Patent Information Centre, WBSCST – DHESTBT, Government of West Bengal

C) Types of Goods : Class 20 – Handicraft

D) Specification:

The wooden mask of Kushmandi is mainly of two types, one that is used in house hold for the decoration purposes and the one that is used in the traditional Gomira dance. The two types of masks are made by the same process and materials, with some difference between them. If the mask is to be used for the purpose of dancing, only then the eyes, mouth, etc are hollowed out. The masks that are crafted for the decoration purposes are also bulkier and heavier than the mask used in Gomira dance. Recently the artists are making diversified products in the form of small fridge magnets, lamp shades etc.

Structural definition: Kushmandi of Dakshin Dinajpur is home to crafts persons who are involved in making wooden masks locally called as “Mukha,” It is inexorably linked with the Gomira dance performed by various ethnic groups of Dinajpur, where the performers wear the masks. Bold demonic look is the characteristic feature of the masks. The wood crafted Gomira masks represent the characters of the two distinct forms of dance – the Gomira and the Ram-Vanwas. Most Gomira face masks have subsidiary characters crafted along the periphery of the main character.

a. Material used: Initially the masks were made from ‘pure woods’ such as wood from Neem tree, as per Hindu mythology. Mostly the artists use wood from “gamar tree” (Gmelina arborea). Locally available and cheaper wood such as mango, pakur, kadam, gamhar and teak are also used. Although the masks used for dance are brightly
painted, decorative masks are made without paint. In some cases a black hue is used which comes from the fruits of the tree called ‘Basatbot’. Gomira masks were painted with natural dyes. Red dye was made from segun (Teak), green from seem (a form of bean), violet from jamun (Syzygium cumini), and black from Jia tree (Lannea coromandelica). The mask gets a coat or two of natural varnish, which provides smoothness to the mask and ensures durability. Terpenes are mostly used for this purpose which is collected from the locally available Pine tree.

E) Name of the Geographical Indication:

WOODEN MASK OF KUSHMANDI

F) Description of the Goods:

A mask is an important part of theatre craft that is worn normally for performance in dramas or plays, or for amusement. Masks have been used since antiquity for both ceremonial and practical purposes. The culture and tradition of West Bengal allows the artists to wear masks made of various materials among which wood plays an important role. Wooden Masks in West Bengal are the creations of the artisans who with their exclusive use of carving and colours give the masks a touch of their originality. Locally available wood from Gamar trees are used to make these masks. Wood pieces are kept submerged in large reservoirs containing water for seasoning and then the pieces are taken out after a week and sun-dried. The basic form emerges first with the use of the adze, followed by emphasis on facial features. It easily hangs on the wall using a single nail or screw via the attached hanger on the back. A wonderful and colourful addition to any room, and a great housewarming gift for both friends and family.

G) Geographical area of Production and Map as shown in page no: 129

Geographical Location:
The geographical location and the demography of the production area are described as follows by 2011 census report.

<table>
<thead>
<tr>
<th>Name of the district(s)</th>
<th>Dakshin Dinajpur (South Dinajpur)</th>
</tr>
</thead>
<tbody>
<tr>
<td>latitude-longitude</td>
<td>25.52236° N 88.357269° E Latitude</td>
</tr>
<tr>
<td></td>
<td>26°35’ 15” N 25°10’ 55” N Longitude</td>
</tr>
<tr>
<td></td>
<td>89°00’30” E</td>
</tr>
<tr>
<td></td>
<td>87°48’37” E</td>
</tr>
<tr>
<td>area in sq km</td>
<td>2,219 sq. km</td>
</tr>
<tr>
<td>Neighboring districts/state</td>
<td>On the north, east and southeast direction of the district, there is Bangladesh, Uttar Dinajpur is at the west and Maldah at the south.</td>
</tr>
</tbody>
</table>
Geographical location of Kushmandi:-

<table>
<thead>
<tr>
<th>Country</th>
<th>Indian</th>
</tr>
</thead>
<tbody>
<tr>
<td>State</td>
<td>West Bengal</td>
</tr>
<tr>
<td>District</td>
<td>Dakshin Dinajpur (South Dinajpur)</td>
</tr>
<tr>
<td>Sub-division</td>
<td>Gangarampur subdivision</td>
</tr>
<tr>
<td>Block</td>
<td>Kushmandi</td>
</tr>
<tr>
<td>Coordinates</td>
<td>25°31′20″N 88°21′26″E</td>
</tr>
</tbody>
</table>

H) Proof of Origin (Historical records):

History of South Dinajpur Districts:
The erstwhile Dinajpur District, at the time of the partition of India, was split up into West Dinajpur district and East Dinajpur. The East Dinajpur district, now called Dinajpur, became part of East Pakistan (now Bangladesh). The West Dinajpur district was enlarged in 1956, when States Reorganization Act recommendations were implemented, with the addition of some areas of Bihar. The district was bifurcated into Uttar Dinajpur and Dakshin Dinajpur on 1 April 1992. It is commonly believed that the Rajbansi population forms a major detribalized group. Rajbansi people are converted from Buddhism to Hinduism. However, it is not known from which time the process of conversion started. It is viewed that major part of conversion took place following the preaching of Vaishnavite cult by Srimanta Sankardeva, a socio-cultural reformer and a religious preacher of Assam during the 15th century A.D.

History of Wooden Mask:
The Rajbanshi community is the largest aboriginal community in the Northern region of West Bengal and Assam including Bangladesh. The word Rajbanshis literally means “royal community”. They have a rich cultural heritage and their own language. Rajbanshi people have a mix culture of both Hinduism and Buddhism. According to Robert Henry Clark “This is consistent with the view, held by a number of scholars, that elements of the worship of Siva or Mahadeva, is complex and at points contradictory. There is much in the present view of Siva which has been attributed to Buddhist sources”. The Rajbanshi community has a rich heritage and culture which they inherited from the ancient civilization. The Rajbanshi community has their own dialects, culture, and way of living. The culture reflects humbleness, peace, unity and harmony with nature, as Rajbanshis are primarily animist.

Gomira dance History:
The word Gomira is a colloquial form of the root word Gram-Chandi, a female deity. The Gomira masks are inexorably linked to the Gomira mask dance prevalent in this area. The exact origins of this craft and the dance are not exactly traceable and lie somewhere in the hoary past. The Gomira dances are organized to propitiate the deity to usher in the ‘good forces' and drive out the ‘evil forces'. It is supposed to arise from Buddhist and pre-Aryan sources and is supposed to be most popular among the lower castes and tribals. It is usually organized within the Bengali months of Baisakh-Jyestha-Asarh, corresponding to mid-April to mid-July of English calendar. There are no fixed dates for organizing these dances, but each village organizes at least one Gomira dance during this period according to their convenience, at a central location in their village. Another occasion for arranging Gomira dance is during the puja of Amat.
Kali, which coincides with the harvesting of mangoes, usually in the Bengali month of Jyestha. Such dances are also organized during puja of Smasan Kali, which does not have a fixed time. Amat Kali and Smasan Kali are local deities, closely related to and derived from the Goddess Kali, basically a form of Shakti. The traditions are an amalgam of animist traditions, which have been absorbed in the Shakti cult, with its predominant female deity. The Shakti cult is deeply entrenched and every village has its own small temple devoted to Shakti, in her many forms, as the guardian deity of that village. Every village of reasonable size, say a thousand inhabitants, has its own Gomira dance troupe. The dancers usually perform dances during the 'season', to supplement their income, but have other vocations relating to agriculture and business or crafts such as smithy, carpentry. The dancers are all male, without exception, and portray one or may characters, male, female or animal. The Gomira dances have two distinct forms. One is the Gomira format, which has characters with strong links to the animist tradition. The characters are Buro-Buri (Old man-Old woman), Smasan Kali, Masan Kali, Dakini Bishwal, Signi Bishwal, Bagh (Tiger), Nar-Rakhas and Narsingha Avatar. The other format is the Ram-Vanwas, which derives its characters from Ramayana, with special reference to the Van-Kand. The characters are Ram, Sita, Lakshman, King Dasarath, Kaushalya, Kaikeyi, Sumitra, Angad, Jatayu, Hanuman, Sugriv, Jambavan, Surya-Bhanu (Sun) and Ravana. Some animist characters have also crept in to this format - Yamdoot and Kaaldoot! Interestingly, the Ram-Vanwas dance is not linked to any season and is actually organized year-round, but is more popular during October- November, closely matching the times for Durga Puja and Kali Puja. In the dance proper, they dance to the accompaniment of Dhak (percussion drum ethnic to rural Bengal) and Kansar (bell-metal disk used as cymbal). After the initial round of dancing, characters are called on to the arena or stage. The interesting aspect is that the total absence of any vocal or oral part in the dance. There are no songs or chants. The dancers choose their own movements, which include gyrations and hops. Ajitcoomar Mookerjee with a foreword by Sir William Rothenstein in book named “Folk art of Bengal” describes the mask dance as a historical tradition of North Bengal. The local people believe that mask has very strong power and the dancers who perform the mask dance are going into trance.

Wooden Mask History:
Villagers pledge a certain type and number of masks to their favored deity when they put forward a wish to be fulfilled. Thus the craft of Gomira mask-making, in its pristine form, catered to the needs of the dancers and any villager wishing to give a mask as an offering to the village deity. A villager makes a 'promise'- called 'manat', to offer a mask to a deity if his or her wish is fulfilled. The wood crafted Gomira masks represent the characters of the two distinct forms of dance – the Gomira and the Ram-Vanwas. Most Gomira face masks have subsidiary characters crafted along the periphery of the main character. So, the mask is a composite of a principal character, surrounded by the subsidiary characters, both of which always have a mythical link between them. For example, the character of Dasarath always accompanies the mask of Jatayu. Ajitcoomar Mookerjee described Wooden Mask as minor arts of Bengal. In 1990, Paresh Chandra Sarkar, a patron of local art and culture of Kushmundi and Late Sankar Sarkar, a local guru started training the youth of Kushmundi and craft enthusiasts in mask making. In 1995, they brought mask making craftsmen under the collective-Mahishbathan Gramin Hastashilpa Samabay Samity Limited. This Cooperative's goal was to popularize the craft and reduce the artisan's dependency on exploitative money lenders. In recognition of their unique craft, the MSME Department, Govt. of West Bengal and UNESCO nominated Kushmandi as a Rural Craft Hub of Bengal in 2013. Banglanatak dot com is the implementing partner of the project. In December 2014, the
artists’ collective celebrated their first village fair called ‘Mukha Mela’. As a part of the project the artists travelled all across India to showcase their craft in various fairs and festivals. Shri Sankar Das travelled to France to participate in Gannat festival in Jun 2015. He also travelled to London to participate in the London Crafts Week in May 2016. Moreover there are young promising artists like Tulu Sarkar, Uttam Sarkar, Sanjulal Sarkar, Gostho Baishya, Shib Soren and many more.

**Technical Specification**

The wooden mask is mainly of two types, one that is used in household for the decoration purposes and the one that is used in the traditional *Gomira* dance. The two types of masks are made by the same process and materials, with some difference between them. If the mask is to be used for the purpose of dancing, only then the eyes, mouth, etc are hollowed out. The masks that are crafted for the decoration purposes are also bulkier and heavier than the mask used in *Gomira* dance. Recently the artists are making diversified products in the form of small fridge magnets, lamp shades etc.

I) **Method of Production:**

Wooden masks of Dinajpur are part of the *Gomira* ritual dance practiced by the local community. In last four or five decades, the masks have found a new market as decorative pieces and collector’s item. The items or the tools that are used are like Banshla, Broad chisel, narrower chisels, and Router chisels, Heavy Hammer, Light hammers, Gouges, Sand papers.

**Step 1:**
The wood is usually purchased from a nearby sawmill or sometimes cut from a tree by the craftsman himself. The village craftsmen are very conscious of the environment and keep on planting trees. The masks are produced through an elaborate process.

**Step 2:**
The mask making begins with cutting the log of wood, given the sizes of masks; the initial piece of wood is about 18 feet to 24 feet. A chunk of wood is split with machines into blocks of 3-4 feet. This is then immersed in water for seasoning, which renders the wood soft and thus, subsequent cutting and crafting becomes easier. The basic form emerges first with the use of a sharp tool called *Banshla* or *adze*.

**Step 3:**
This is followed by the use of a broad chisel and hammer to bring out the final shape. Once the broad structure of the front of the mask is complete, the reverse side is chiseled to fit the face of the wearer. Chisels are used to gouge out cavities such as the opening of the mouth and eyes. If the mask is to be used for the purpose of dancing, only then the eyes, mouth, etc are hollowed out.

**Step 4:**
The final procedure involves fine chiseling of the entire mask. This whole process takes about 4-5 days, or more depending upon the complexity of the mask. Once the mask is complete, then comes finishing; the first step to which is smoothening of the mask, which is done by using sand papers of various grades.
Step 5:
Next, the mask gets a coat or two of natural varnish, which provides smoothness to the mask and ensures durability. They mostly use Terpenes which is collected from the locally available Pine tree. Many a times the masks are sold in this condition itself. In case the masks are to be sold to the Gomira dance performers, they need to be hand-painted, in colours particular to the characters to be portrayed. Depending on requirement, masks are painted. For example, the character of Jambuban is always painted in deep violet.

The preparation process of wooden mask:

Step / Process 1 – Collection of wood, mostly from the nearby forest.
Step / Process 2 – Cutting the log of wood in the proper size and then seasoning the wood
Step / Process 3 – Basic form of the mask emerges first with the use of Sharp tool
Step / Process 4 – The final Stage of the mask is made by the using broad chisel and hammer
Step / Process 5 - After the completion of the front side of the mask, the reverse side is chiseled to fit the face of the wearer.
Step / Process 6 – Gouge out cavities such as the opening of the mouth and eyes
Step / Process 7 – Chiseling of the entire mask
Step / Process 8 – Smoothening the mask by use of sand paper or locally available smoothening substance
Step / Process 9 – Colouring the mask by the use of natural colour followed by varnishing.

J) Uniqueness:

1. The craft of mask making is intrinsically connected with the rituals practiced in Dakshin Dinajpur. Each character has a name and a story with mythological connect. The masks are worn during performance as part of ritual activity. This is the aspect which makes it unique.
2. The mask is made from a single log of wood. There is no joining of multiple logs or wood block.
3. The Gamar (Gmelina arborea) wood gives the mask a unique character. The Gamar is very good and it does not rot easily like other wood. Gamar wood is strong, and durable and is termite free. It is also easy to design on the wood since it is relatively soft. Like other kind of woods it will not get infested by termites very easily and the masks also don’t get cracks.

Impact of Environment:
Masks are made mostly with wood of Gamar tree which is locally grown in the area. This soft wood is termite resistant. Moreover, natural colour is made by the artists to colour the masks brown. Fruit of a locally grown tree called Basatboi is used to extract the colour.

Human Skill:
The intrinsic excellence of wooden mask makers of Kushmandi block of South Dinajpur district gives a distinct identity to the wooden mask craft. The knowledge, skill and tradition that flow from generation to generation have a great deal in the craftsmanship of the wooden mask makers. And this traditional technique heavily reflects in the mask making process. Cutting the log of wood in the proper size and then seasoning the wood require high amount of human skill. The final shape of the mask is made by the use a
broad chisel and hammer, and this part of the mask making process provide the required shape and look to the mask. The shape and look of the mask have to be a proper representation of mythological character. Due to the skill and technique of mask making artists of Kushmandi are able to provide the proper link between mask and mythology.

K) Inspection Body:

1. The Chief Executive Officer, West Bengal Khadi & Village Industry Board
2. The Joint Director, Directorate of MSME, West Bengal & Officer-In-Charge of Technology Facilitation Centre
3. The District Officer of WBKVIB of the concerned district
4. The Scientist ‘C’ and Nodal Officer of Patent Information Centre, West Bengal State Council of Science and Technology, Government of West Bengal
5. Representative of Banglanatak dot com

L) Others:

a. Socio-economic Profile:
   a. The traditional culture faces a strong competition from the modern culture. Nowadays people show less interest in the traditional Gomira dance and more interest in the modern forms of entertainment.
   b. The culture did not expand from the particular place of practice and origin to the surrounding areas. As the art remains stationary in the Kushmandi region, it remains nearly unchanged from the beginning.
   c. Kushmandi wooden mask have lately become a collectors’ item which has motivated the artisans to make decorative and utility items apart from traditional dance masks.
   d. With the rise in income due to wide scale promotion and market linkage the artists are enjoying a better quality of life. Household sanitation coverage has improved which was not there at all. The consumption pattern and savings has gone up.

   a. Action taken by the state government/government of India for its development

District Industries Centre, Dakshin Dinajpur, and Office of the DC Handicrafts keep on arranging skill development workshops and provide the artisans with opportunities of showcasing the products in different fairs, festivals and exhibitions. Since 2013 Department of MSME&T, Govt of West Bengal and UNESCO signed an MOU to develop 10 Rural Craft Hubs in West Bengal. Wooden mask is one of the prominent Craft Hubs. During the course of the project direct market linkage has been done across India through a number of fair, festivals and exhibitions. Linkage has been established with retail outlets and business houses. In June 2015, Shankar Das an eminent Wooden Mask artist visited France to attend the Gannat festival and showcase his skills at UNESCO head quarter in Paris. He again travelled to London in May 2016 to take part in London Craft Week and toured to Edinburg West Bengal Khadi and Village Industries Board in there project named “Renovation and Construction of CFC Building under Cluster Development programme (RCH) has constructed a Common Facility Centre at Mahisbathan including a gallery for the development of wooden mask art WBKVIB also supported the cluster with a working capital grant of Rs. 5 Lakhs in 2015. The artists celebrate their annual festival “Mukha Mela” since 2014.
WOODEN MASK OF KUSHMANDI

KUSHMANDI

WEST BENGAL

0  20  40  60

KILOMETERS

Scientist C
Nodal Officer
Patent Information Centre
West Bengal State Council of Science & Technology
Vidyasagar Chetana Bhavan, Block-OD, PO-29, Sector-1, Salt Lake City, Kolkata-700091.

GI Journal No. 101
November 28, 2017

G.I. APPLICATION NUMBER – 567
Application Date: 18-08-2016

Application is made by The West Bengal Khadi & Village Industry Board, Government of West Bengal, Hemanta Basu Khadi 'O' Gramin Shilpa Bhaban 12, B.B.D. Bag (East), 2nd & 3rd Floor, Kolkata - 700 001, West Bengal, India for Registration in Part A of the Register of Madur kathi under Application No. 567 in respect of Handicrafts – Mats, decorative and utilitarian items made of soft reed falling in Class – 20 & 27 is hereby advertised as accepted under Sub-section (1) of Section 13 of Geographical Indications of Goods (Registration and Protection) Act, 1999.

A) Name of the Applicant : The West Bengal Khadi & Village Industry Board, Government of West Bengal

B) Address : The West Bengal Khadi & Village Industry Board, Government of West Bengal, Hemanta Basu Khadi 'O' Gramin Shilpa Bhaban 12, B.B.D. Bag (East), 2nd & 3rd Floor, Kolkata - 700 001, West Bengal, India

Facilitated by:
Patent Information Centre, WBSCST – DHESTBT, Government of West Bengal

C) Types of Goods : Class 20 and 27 – Handicrafts – Mats, decorative and utilitarian items made of soft reed

D) Specification:

Madur is the Bengali vernacular for floor mats. Mats are an integral part of Bengal’s lifestyle. Madur is a tradition and pride of Medinipur district of West Bengal. Generally, women of the households are involved in weaving this beautiful craft. With the shift in market needs, the mats are now also used for making decorative and utilitarian items.

‘Madurkathi’ are mats woven from a locally available soft reed called ‘Madur kotir’ in Bengali vernacular. This locally available soft reed (Cyperus tegetum or Cyperus pangorei) is found abundantly in the alluvial tracts of East and West Medinipur districts of West Bengal. They thrive well in the damp and morass environment of this region. The Madur kotir/ Madur Kathi grass required for making Madur is largely available in Sabang area of Paschim Medinipur. Weaving mat and other diversified products has become an alternative household economy in that area.

Structural definition:
There are basically two types of products: traditional floor mats and diversified products like table mats, curtains, bags etc.

The artisans make three types of floor mats- Ak rokha, dui rokha and Masland. Ak rokha is a thin and light mat whereas Dui rokha has double Madurkathi weft and hence thicker and heavier than Ak rokha and more comfortable to sit and lie. The third one is Masland which is a textured mat with the decorated aesthetic appearance. Masland is
the finest and most expensive mat among these three types. Madur floor mats from the reed are generally 4ft wide and 6ft long. The quality of Madur depends on the skill required in their production. The weaving also involves the use of reeds which bind the mat together. The number of madurkathi reeds per square inch of the floor mats vary from 15-30 for Ak rokha and Dui rokha to upto 80 for Masland. The length of reeds used for floor mat varies from 4-6 feet. The diversified products are generally made from small cut pieces of reed about 18 inches in length. These mats have 17-18 reeds/sq inch. The Madurs are dyed with vegetable dyes only, The vegetable dye preparation comes from natural sources. Black dye is produced using Haritaki (Terminalia chebula) fruit, fruit and barks of Babla tree (Acacia nilotica). Reddish dye is formed from a local tree name Rang gaach (Peristrophe tinctoria).

These days apart from making of mats for bedding and sitting purpose, the artists involve in preparation of various other products such as door curtain, tiffin carrier, bag and other diversified products as well.

- **Shape:** Large, Medium, Small
- **Height:** Large-45”x50”, Medium: 18”x12”, Small-5”x6”
- **Weight:** Large-5kg, Medium-2 kg, Small-1kg
- **Colour:** Multi-colour

**E) Name of the Geographical Indication:**

![MADUR KATHI](image)

**F) Description of the Goods:**

Madurkathi is an age old traditional craft of West Bengal. Traditionally, these are floor mats woven from a soft reed (Cyperus tegetum or Cyperus pangorei) grown in the alluvial tracts of East and West Medinipur districts of West Bengal. The Madurs are dyed with vegetable dyes only. Expanding the scope of creativity in order to suit the present market, the artists today make various diversified products from these mats, which include table runners and mats, curtains, hats, purse, sun-guards etc.

The mats are popular and beneficial for the sitting as well as bedding purposes. The non-conducting property and ability to absorb sweat makes the mat a necessity household item in the hot and humid climate of West Bengal. These are also used for religious purposes. Fair & festivals are the main market of the products while some life style boutiques also purchase premium products from these artists. The weavers of Madur Kathi mat in Medinipur belong to a particular caste - Mahishyas. The cost of the mat of simple appearance is about Rs. 1000 to 3000 only while a Masland may range from Rs. 50,000 to 1,00,000.
G) **Geographical area of Production and Map as shown in page no:** 138

The district of Paschim Medinipur lies in the South Western corner of the State of West Bengal. It is bound by East Singhbhum (Jamshedpur) district of Jharkhand in the west and by the Mayurbhanj and Balasore District of Odisha in the south. To its eastern side is the Purba Medinipur, while the district Bankura lies to its north. The district’s head quarter is at Medinipur town.

The district of Purba Medinipur is bounded by Paschim Medinipur in the west and north, Howrah in the east and South 24-Parganas in the south-east. The district also enjoys a long coastline of 65.5 kms along its southern and south eastern boundary. The district has a triangular shaped contour with its headquarters at Tamluk.

Bhagabanpur of Purba Medinipur and Sabang, Pingla and Naryangarh block of Paschim Medinipur are the areas where *Madur* mats are produced from the *Madur Kathi* (reed).

### a. Geographical Location:

#### Districts: Paschim Medinipur

<table>
<thead>
<tr>
<th>Name of the district(s)</th>
<th>Paschim Medinipur</th>
</tr>
</thead>
<tbody>
<tr>
<td>latitude-longitude</td>
<td>22°25’ N 87°65’ E</td>
</tr>
<tr>
<td>area in sq km</td>
<td>9,368 sq km</td>
</tr>
<tr>
<td>Neighboring districts/state</td>
<td>Bankura and Purulia district in the North, Mayurbhanj and Balasore district of Orissa in the South, Hoogly, Purba Medinipur district in the east and Singhbhum district of Jharkhand &amp; Purulia in West</td>
</tr>
</tbody>
</table>

#### Location of Sabang

<table>
<thead>
<tr>
<th>Country</th>
<th>India</th>
</tr>
</thead>
<tbody>
<tr>
<td>State</td>
<td>West Bengal</td>
</tr>
<tr>
<td>District</td>
<td>West Medinipur</td>
</tr>
<tr>
<td>Sub-division</td>
<td>Kharagpur.</td>
</tr>
<tr>
<td>Block</td>
<td>Sabang block</td>
</tr>
<tr>
<td>Coordinates</td>
<td>22°10’ 34”N 87°35’04”</td>
</tr>
</tbody>
</table>

#### Location of Pingle

<table>
<thead>
<tr>
<th>Country</th>
<th>India</th>
</tr>
</thead>
<tbody>
<tr>
<td>State</td>
<td>West Bengal</td>
</tr>
<tr>
<td>District</td>
<td>West Medinipur</td>
</tr>
<tr>
<td>Sub-division</td>
<td>Kharagpur.</td>
</tr>
<tr>
<td>Block</td>
<td>Pingle block</td>
</tr>
</tbody>
</table>
Coordinates | 22°16’ 19”N 87°35’08”
---|---
Location of Naryangarh
Country | India
State | West Bengal
District | West Medinipur
Sub-division | Kharagpur
Block | Narayangarh block
Coordinates | 22°09’ 05”N 87°23’34”

Districts: Purba Medinipur

<table>
<thead>
<tr>
<th>Name of the district(s)</th>
<th>Purba Medinipur</th>
</tr>
</thead>
<tbody>
<tr>
<td>latitude-longitude</td>
<td>22° 30” N, 87° 91” E</td>
</tr>
<tr>
<td>area in sq km</td>
<td>4,713 sq km</td>
</tr>
<tr>
<td>Neighboring districts/state</td>
<td>Odisha state is at the south-west border whereas the Bay of Bengal lies in the south; the Hooghly river and South 24 Parganas district to the east and Howrah district to the north- east.</td>
</tr>
</tbody>
</table>

Location of Bhagabanpur

<table>
<thead>
<tr>
<th>Country</th>
<th>India</th>
</tr>
</thead>
<tbody>
<tr>
<td>State</td>
<td>West Bengal</td>
</tr>
<tr>
<td>District</td>
<td>Purba Medinipur</td>
</tr>
<tr>
<td>Sub-division</td>
<td>Egra subdivision</td>
</tr>
<tr>
<td>Block</td>
<td>Bhagabanpur block-I and Bhagabanpur block-II</td>
</tr>
<tr>
<td>Coordinates</td>
<td>22°05′38″ N 87°45′32″</td>
</tr>
</tbody>
</table>

H) Proof of Origin (Historical records):

History of the Districts:
Undivided Medinipur, also referred to as Medinipur was one of the largest districts of West Bengal after independence, covering almost 16% of the total area of West Bengal. On 1st January, 2002, the erstwhile Medinipur district was bifurcated into Paschim Medinipur and Purba Medinipur to enable better administration and an equitable distribution of the fruits of development. Medinipur town became the head quarter of Paschim Medinipur. The head quarter of Purba Medinipur was made at Tamluk. Both the districts now enjoy separate administrative network with different developmental plans to promote optimum utilization of the resources available. Medinipur district (undivided) is
rich with ancient history of royal dynasty and their royal activities. The kingdom of Swashanka, Harshabardhan was the part of undivided Medinipur. One of the most important archaeological sites was the port at Tmaralipo which is present day Tamluk in the divided Purba Medinipur district. After the fall of last independent Hindu dynasty of Kalinga the region came under one of the five Sarkars of Mughalbandi Odisha which was ruled by the Subehdar of Odisha. Bahadur Khan was the ruler of Jaleshwar Sarkar or Hijli (including Medinipur) during the time of Shah Jehan. He was defeated by Shah Suja, the second son of Shah Jehan, then the subshdar of Bengal. Latter on the region comes under the control of Nawab Alivardi Khan.

After the death of Alivardi Khan his successor grandson Siraj ud dulla was betrayed by Mir Zafar and defeated in the battle of Plassey (1757) which consolidated the Company's hold on Bengal and Odisha (along with Medinipur). The district of Medinipur along with Jharkhand, Chittagong, Bardhaman handed over to East India Company by Mir Qasim. The last free king of Dhalbhum was imprisoned in Medinipur town.

The Raj of Narajol, Jhargrm, Lalgarh, jamboni held sway away to their local areas by the Malla kings of Bankura. They held some land of northern part of Medinipur. There were well known freedom fighter against the British rule such as Khudiram Bose.

**History of Madur Kathi:**

Records of the Medieval Period provide the first information about mat weaving in the region of Bengal- when both ordinary mats and the fine variety were produced. In Bengal, the word *Madur* is a generic for floor mats. Though actually, it is the name given to mats woven from a specific type of reed. Mats have been an integral part of the social scene of rural Bengal.

The origin of the craft in west Bengal dates back to the Muslim period when ‘Masland’ mats of superfine variety with fine cotton as weft were produced under royal patronage. Mats were collected as revenue of the Jaigirdari system. In 1744, Nawab Alibardi Khan issued a charter to the jaigirdars in this regard and as a result, it was obligatory to supply ‘masland’ mats for use in the collectorate. They had formed permanent markets for mats in Medinipur. Kasijora & Narajol were the two most important centers of ‘Masland’ mat weaving during this period. Mats of ordinary variety were also produced (*Ak rokha and Dui rokha*). Government officials in the British period found out that a large number of *Masland* mats were being manufactured in Medinipur. According to a census report of 1872 the number of skilled workers engaged in mat making at the district of Medinipur was 618 and mats were one of the principle articles of trade in Medinipur district. It is reported that 448,300 mats were manufactured in the year of 1907-1908. The finest quality mats - the *Masland* was named after the Persian word *Masnad* which means throne. The origin of *Masland* mats can be found in the Muslim period when the finest *Masland* mat was produced by silk weft under the special aegis of royal community of that time in Medinipur. There is a place at Medinipur district named Maslandpur which is a village very close to Tamluk subdivision. The place probably got its name from the *Masland* mat produced in the region. A very fine kind of *Madur* called Masland mat is produced in the undivided district of Medinipur. In respect of the record of British raj times at the beginning of the 20\(^{th}\) century the price of masland mat was 100 INR. The mat of the finest qualities was made at Raghunathbari, Kasijora and Narajol of Medinipur in that time.
I) **Method of Production:**

The process of Madur production involves a series of toilsome activities involving the following steps:

1. **Cultivation of Reed (Madur Kathi):**
   
   Cultivation of Madur reed in damp area of Medinipur district (East and west) Madurkathi is a rhizome based plant (Cyperus tegetum or Cyperus pangorei), which is found abundantly in the alluvial tract of Purba and Paschim Medinipur. The soil and climate of this region is suitable for cultivating this plant. The Madur kathi cultivated here extensively for Mat making. The Madhur kathi sapling is planted around the month of April-May. When the reed grows up to 4 to 5 feet it is cut just above the ground leaving tiny part of it for its re growth. The sticks can be reaped for a period of 3-4 years once the rhizomes are sown. The main seasons for cutting the sticks are April-July and September –November. Best quality Madur sticks are reaped during September-November.

2. **Processing of Madur Kathi (reed):**

   Processing of harvested Madur kathi; i) Cutting of Madur kathi into strip by using special knife ii) Bundling of splitted strips by women.

   From each of the stalks 4 to 8 strips can be prepared by discarding the soft inner tissue. The strips are further processed by soaking in water to make it soft. The strips are then sun dried. The sundried strips are processed by sizing and dyeing. The dyeing of strips are done with vegetable dyes only. Generally borners of the mat are dyed maroon or black. Black dye is produced using Haritaki (Terminalia chebula) fruit or fruit and barks of Babla (Acacia nilotica) tree. Reddish dye is formed from a local tree named Rang gaach (Peristrophe tinctoria). Prior to start of dyeing the mat is tightly bound with palm leaves at the places where natural colour will be retained. The bundle has to be kept in a container filled with dye and cold water prior to submerging. In the next step they are boiled. The boiling differs in respect of times if dye for black it is 10 hours whereas for reddish dyeing it is 24 hours. The boiling time is different with respect to different colours. The moisture is evaporated by sun drying and then the reeds are used for weaving purpose.

3. **Pre looming and looming of Madur Kathi mat**

   The process begins with the preparation of basic raw material which is commonly termed as pre-loom weaving. The painstaking works starts from the steps when the soft reeds and cotton (some cases jute thread) are arranged on a bamboo frame loom as weft and warp respectively. For weaving of Masland mats at least two persons are required. One person places the reeds from left to right by placing one thread on top and another one down the other person does the same thing from right to left at meeting the finishing lines the threads are turned and the process is continued. The popular design on Masland mats are of flowers, honey comb (mouchak), Rhomboidal (barfi), Cascading (jharna) etc. The process of weaving of the Masland mats has much resemblance to the weaving of sari.

   The weaving of mats for preparation of diversified products is done with the help of installed looms locally called as Kedilooms. This loom is operated by a single
person. A length of a mat is produced which is then tailored according to the size of the product.

4. **Post looming**
   In this step the edges of the mat under preparation are cut and the edges are bound with coloured cloth. Then it is polished to have a glossy appearance. The *Do rokha* mats are also bound with ribbon at the edges to make it foldable. The production of a specific mat depends on the demand of the customer.

**J) Uniqueness:**

- A local variety of grass / soft reed (*Cyperus tagetum* or *Cyperus pangorei*) which is found abundantly in the alluvial tracts of Purba and Paschim Medinipur in West Bengal is used to weave these mats.
- The non-conducting property of Madur reed is worth mentioning that infers sweat absorbing ability to the mats.
- The Madurs are dyed with vegetable dyes only, The vegetable dye preparation comes from natural sources. Black dye is produced using Haritaki (*Terminalia chebula*) fruit, fruit and barks of Babla tree (*Acacia nilotica*). Reddish dye is formed from a local tree name Rang gaach (*Peristrophe tinctoria*).
- The design is influenced by local culture. The popular designs are of flower, *mouchak* (honey comb), *barfi* (rhomboidal) and *Jharna* (cascading).

**Impact of the environment:**

The raw material used in this craft, *Cyperus tagetum* or *Cyperus pangorei*, locally known as Madurkathi, grows in this area. The frequent flooding around Medinipur is not good for the cultivation of crop plant in many areas. The damp and morass area with alluvial soil and tropical climatic condition of this area are the criteria for optimum growth of this reed. The cultivation of this reed is an alternative option for the farmers. Hence cultivation of Madur Kathi grass and the weaving of Madur mat has become an important part of the household economy in that area.

**Human skill:**

The processing of Madur Kathi and the skill full weaving of Madur mat is a delicate piece of work. The placing of reeds one by one very efficiently, the making of designs and other required traditional skills are acquired from the ancestors of the artist of *Mahishya* community in the area of Medinipur. The weaving of *Masland* mats requires at least two persons. One person place the reeds from left to right by placing one thread on top and another one down the other person does the same thing from right to left at meeting the finishing lines the threads are turned and the process is continued.

**K) Inspection Body:**

1) The Chief Executive Officer, West Bengal Khadi & Village Industry Board (WBKVIB), West Bengal
2) The Joint Director, Directorate of MSME, West Bengal & Officer-in-Charge of Technology Facilitation Centre
3) The District Officer of WBKVIB of the concerned district
4) The Scientist C & Nodal Officer of Patent Information Centre, West Bengal State Council of Science and Technology, Government of West Bengal
5) One representative of Banglanatok.com

November 28, 2017
L) Others:

a) Action taken by the state government in association with the government of India for its development

DIC, Purba and Paschim Medinipur, DCH organize fairs and festivals at Kolkata, Delhi, Surajkund, (Haryana), Siliguri, Jaipur etc where substantial sale takes place. Since 2013 Department of MSME&T, Govt of West Bengal and UNESCO have undertaken the initiative of developing 10 Rural Craft Hubs in West Bengal and Madurkathi of Purba Medinipur is one of them. Banglanatak dot com is the implementation partner in this initiative. As part of the project, design skill development workshops, direct market linkage is being carried out. The artists are participating in fairs and festivals across the country with their newly designed articles. Madurkathi dyeing training has also been undertaken. Moreover WBKVIB has taken the initiative of training and market linkage of more than 4000 Madurkathi artisans across Purba and Paschim Medinipur districts under NFM. Banglanatak dot com is the implementation partner in this initiative. Efforts are on to revive the tradition of weaving masland mats.
General Information

What is a Geographical Indication?
- It is an indication,
- It is used to identify agricultural, natural, or manufactured goods originating in the said area,
- It originates from a definite territory in India,
- It should have a special quality or characteristics unique to the geographical indication.

Examples of possible Geographical Indications in India:
Some of the examples of Geographical Indications in India include Basmati Rice, Darjeeling Tea, Kancheepuram silk saree, Alphonso Mango, Nagpur Orange, Kolhapuri Chappal, Bikaneri Bhujia etc.

What are the benefits of registration of Geographical Indications?
- It confers legal protection to Geographical Indications in India,
- It prevents unauthorized use of a registered Geographical Indication by others.
- It boosts exports of Indian Geographical indications by providing legal Protection.
- It promotes economic Prosperity of Producers.
- It enables seeking legal protection in other WTO member countries.

Who can apply for the registration of a Geographical Indication?
Any association of persons, producers, organization or authority established by or under the law can apply.
The applicant must represent the interest of the producers.
The application should be in writing in the prescribed form.
The application should be addressed to the Registrar of Geographical Indications along with prescribed fee.

Who is the Registered Proprietor of a Geographical Indication?
Any association of persons, producers, organisation or authority established by or under the law can be a registered proprietor. Their name should be entered in the Register of Geographical Indications as registered proprietor for the Geographical Indication applied for.

Who is an authorized user?
A producer of goods can apply for registration as an authorized user, with respect to a registered Geographical Indication. He should apply in writing in the prescribed form along with prescribed fee.

Who is a producer in relation to a Geographical Indication?
A producer is a person dealing with three categories of goods
- Agricultural Goods including the production, processing, trading or dealing.
- Natural Goods including exploiting, trading or dealing.
- Handicrafts or industrial goods including making, manufacturing, trading or dealing.

Is registration of a Geographical Indication compulsory?
While registration of Geographical indication is not compulsory, it offers better legal protection for action for infringement.
What are the advantages of registering?
- Registration affords better legal protection to facilitate an action for infringement.
- The registered proprietor and authorized users can initiate infringement actions.
- The authorized users can exercise right to use the Geographical indication.

Who can use the registered Geographical Indication?
Only an authorized user has the exclusive rights to use the Geographical indication in relation to goods in respect of which it is registered.

How long is the registration of Geographical Indication valid? Can it be renewed?
The registration of a Geographical Indication is for a period of ten years. Yes, renewal is possible for further periods of 10 years each. If a registered Geographical Indications is not renewed, it is liable to be removed from the register.

When a Registered Geographical Indication is said to be infringed?
- When unauthorized use indicates or suggests that such goods originate in a geographical area other than the true place of origin of such goods in a manner which misleads the public as to their geographical origins.
- When use of Geographical Indication results in unfair competition including passing off in respect of registered Geographical indication.
- When the use of another Geographical Indication results in a false representation to the public that goods originate in a territory in respect of which a Geographical Indication relates.

Who can initiate an infringement action?
The registered proprietor or authorized users of a registered Geographical indication can initiate an infringement action.

Can a registered Geographical Indication be assigned, transmitted etc?
No, A Geographical Indication is a public property belonging to the producers of the concerned goods. It shall not be the subject matter of assignment, transmission, licensing, pledge, mortgage or such other agreement. However, when an authorized user dies, his right devolves on his successor in title.

Can a registered Geographical Indication or authorized user be removed from the register?
Yes, The Appellate Board or the Registrar of Geographical Indication has the power to remove the Geographical Indication or authorized user from the register. The aggrieved person can file an appeal within three months from the date of communication of the order.

How a Geographical Indication differs from a trade mark?
A trade mark is a sign which is used in the course of trade and it distinguishes good or services of one enterprise from those of other enterprises. Whereas a Geographical Indication is used to identify goods having special Characteristics originating from a definite geographical territory.
THE REGISTRATION PROCESS

In December 1999, Parliament passed the Geographical Indications of Goods (Registration and Protection) Act 1999. This Act seeks to provide for the registration and protection of Geographical Indications relating to goods in India. This Act is administered by the Controller General of Patents, Designs and Trade Marks, who is the Registrar of Geographical Indications. The Geographical Indications Registry is located at Chennai.

The Registrar of Geographical Indication is divided into two parts. Part ‘A’ consists of particulars relating to registered Geographical indications and Part ‘B’ consists of particulars of the registered authorized users. The registration process is similar to both for registration of geographical indication and an authorized user which is illustrated below:

- **Filing an Application**
- **Examination**
- **Objections**
- **Opportunity for Hearing**
- **Refused**
- **Acceptance**
- **Advertised in the GI Journal**
  - **Opposition if any**
  - **Allowed or refused**
  - **Appeal to IPAB**
- **Acceptance of GI**
- **Entered in the GI Register**
- **Registration Certificate issued**
- **Particulars of Regd. GI entered in Part A of the Register**
- **Particulars of Regd. GI entered in Part B of the Register**