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**GEOGRAPHICAL INDICATIONS JOURNAL**



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INTELLECTUAL  
PROPERTY **INDIA**

भौगोलिक उपदर्शन पंजीकृति,  
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**GOVERNMENT OF INDIA**  
**GEOGRAPHICAL INDICATIONS**  
**JOURNAL NO. 50**

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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 50 of the Geographical Indications Journal dated 07<sup>th</sup> May 2013 / Vaisakha 17<sup>th</sup>, Saka 1935 has been made available to the public from 07<sup>th</sup> May 2013.

## NEW G.I APPLICATION DETAILS

App.No.	Geographical Indications	Class	Goods
379	Devgad Alphonso Mango	31	Agricultural
380	RajKot Patola	24	Handicraft
381	Kangra Paintings	16	Handicraft
382	Joynagarer Moa	30	Food Stuff
383	Kullu Shawl (Logo)	24	Textile
384	Muga Silk of Assam (Logo)	23, 24, 25, 27 & 31	Handicraft
385	Nagpur Orange	31	Agricultural
386	Orissa Pattachitra (Logo)	24 & 16	Handicraft
387	Bastar Dhokra (Logo)	6 & 21	Handicraft
388	Bell Metal ware of Datia and Tikamgarh (Logo)	6	Handicraft
389	Meerut Scissors	8	Manufactured
390	Karvath Kati Tussar Sarees And Fabrics	24 & 25	Textile
391	Terracotta of Pen	21	Handicraft
392	Silver Craft of Hupari	14	Handicraft
393	Crochet Craft of Goa	26	Handicraft
394	Copperware of Pune	31	Handicraft
395	Azulejos Painting of Goa	16	Handicraft
396	Coconut Carving of Goa	20	Handicraft
397	Banaras Gulabi Meenakari Craft	27	Handicraft
398	Banaras Metal Repousee Craft	27	Handicraft
399	Leather Toys of Indore (Logo)	28	Handicraft
400	Dindigul Locks	6	Manufactured
401	Mohaba Pan	31	Agricultural
402	Kuthampully Dhoties & Set Mundu	25	Textile
403	Srivilliputtur Palkova	29	Food Stuff
404	Mysore Craft	18 & 22	Manufactured
405	Markhana Marbles	19	Natural
406	Salem Mango	31	Agricultural
407	Hosur Rose	31	Agricultural

**PUBLIC NOTICE**

No.GIR/CG/JNL/2010

Dated 26<sup>th</sup> February, 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 1<sup>st</sup> April, 2010, The Geographical Indications Journal will be Published and hosted in the IPO official website [www.ipindia.nic.in](http://www.ipindia.nic.in) free of charge. Accordingly, sale of Hard Copy and CD-ROM of GI Journal will be discontinued with effect from 1<sup>st</sup> April, 2010.

**Sd/-**  
**(P. H. KURIAN)**  
**Registrar of Geographical Indications**

Advertised under Rule 41(1) of Geographical Indications of Goods (Registration & Protection) Rules, 2002 in the Geographical Indications Journal 50 dated 07<sup>th</sup> May 2013

**G.I. APPLICATION NUMBER – 205**

Application Date: 25-03-2010

Application is made by **Kalanamak Scented Paddy Production & Conservation Society**, Bhimappar, Near Railway Crossing, Siddharthnagar, Uttar Pradesh, India for Registration in Part-A of the Register of **KALANAMAK RICE** under Application No: 205 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** : **Kalanamak Scented Paddy Production & Conservation Society**
- B) **Address** : Kalanamak Scented Paddy Production & Conservation Society, Bhimappar, Near Railway Crossing, Siddharthnagar, Uttar Pradesh, India
- C) **Type of Goods** : **Class – 30 – Rice**
- D) **Specification** :

"Kalanamak Rice" is one of the finest quality scented rice of Uttar Pradesh, India. The name Kalanamk Rice has been derived due to its black husk (kala = Black, & the suffix 'namak' means salt). It is famous for its taste, palatability, and aroma.

Plant: Vigorous, Tall (140-178 cm).

Leaf: Dark Green, length 24-32 cms.

Grain: Tall (1.8 to 4.1 mm).

Colour: Blackish with thin skin (shell)

Cooking Time: It takes around 10 minutes to prepare 100 gm of rice + 150 ml water in a pressure cooker (Under normal conditions) cooked rice is fluffy, soft, non-sticky, sweet, and easily digestible with relatively longer shelf-life.

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

**KALANAMAK RICE**



**F) Description of Goods :**

"Kalanamak Rice" is one of the finest quality scented rice of Uttar Pradesh, India. The name Kalanamk Rice has been derived due to its black husk (kala = Black, & the suffix 'namak' means salt). It is famous for its taste, palatability, and aroma.

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

<b>Morpho-agronomic traits</b>	<b>Description</b>	<b>Grain Traits</b>	<b>Description</b>
Basal leaf sheath colour	Green	Kernel length	5.76mm
Tillering ability	Medium (20 tiller/hill)	Kernel width	2.18 mm
Days to 50% flowering	115 days (Photosensitive)	L/B Ratio	2.64
Days to maturity	145 days (Photosensitive)	Grain type	Medium Slender
Culm angle	Slightly Open (45°)	Kernel colour	White
Leaf length	59 cm.	1,000 grain weight	15 grams
Leaf width	1.4 cm.	Hulling	80%
Panicle length	31cm.	Milling	75%
Panicle type	Open	Head rice	70%
Plant height	142 cm.	Alkali value	6-7
Aroma in plant	Highly scented	Volume Expansion	4.5 times
Apiculus colour	Brown (tawny)	Gel consistency	80 mm
Awning	Absent	Amylose content	22%
Lemma, Palea colour	Purplish Black	Aroma in grain	Strong
Stigma colour	Purplish Black	Taste	Superb

**G) Geographical Area of Production and Map as shown in page no. 10 :**

Geographical Area of production of Kalanamak Rice include Zone 6 North East Plain Zone of Uttar Pradesh, as defined by the Department of Agriculture of U.P, which include Bahraich, Balramapur, Basti, Deoria, Gonda, Gorakpur, Kushinagar, Mahrajgani, Sant Kabir Nagar, Siddharth Nagar and Sravasati districts in the State of Uttar Pradesh .

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

Kalanamak Rice is in cultivation since the Buddhist period (600 BC). The grains were found from excavation of **Aligarhwa (district Siddharthnagar, Uttar Pradesh, India)**, located at Nepal border. Aligarhwa has been identified as the real kapilvastu, the Kingdom of king Shuddodhan, father of Lord Buddha. Shudedodhan, as the name suggests, means pure rice. Aligarhwa in the foothills of the Himalayas is considered the paddy bowl. During excavation carbonized rice grains resembling Kalanamak Rice were recovered from one of the rooms, which was supposed to be the kitchen store.



Fa-Hien, the Chinese traveler wrote that when Prince Siddhartha (Lord Buddha) visited Kapilvastu for the first time after attaining 'pure knowledge', while passing through Bajha jungle, he was stopped at Mathla village by the people. The villagers asked Siddhartha to give them 'prasad'. Siddhartha took the rice he had taken in alms and gave it to the people, asking them to sow it in a marshy place. The rice thus produced "will have typical aroma which will always remind people of me," he said. Since then Bajha jungle has vanished and its place has been taken by Bajha village near Kapilvastu. Instead of Mathla, now Mudila village exists. The actual belt of Kalanamak rice is still believed to be the tract between Bajha and Aligarhwa. This variety, if sown elsewhere, loses its aroma and quality.

The first effort for the conservation of Kalanamak was made by the Englishmen William built four reservoirs at Bajha, Martghi, Moti and Majghauli to produce Kalanamak Rice in a large quantity. They not only produced this variety for their own consumption, but transported it to England from Uska-Bazar Mandi, passing through Dhaka (now in Bangladesh) via sea route. Due to its increasing demand, the British captured the land around Kapilvastu and established Birdpur and Alidapur states. All these evidences indicate that Kalanamak Rice has been cultivated in Siddharthnagar from or even before the Buddhist period (600 BC).

#### **I) Method of Production :**

Agronomical practices being followed by the farmers are as follows:

- I. **Seed Germination Test:** The seed is usually being tested for the germination rate before sowing it.
  - a. Soil is placed in a sand pot.
  - b. Water is sprayed over the soil to keep the soil wet.
  - c. 100 No. of seed grains are sown.
  - d. The pots are regularly sprayed by water to keep moist for a week.
  - e. After one week percent germination is observed by counting the seedling. If eighty to ninety percent germination is there then further it is treated that seed is of good quality.

#### **II. Seed Rate- 20 kg/hectare**

#### **III. Preparation of Nursery:-**

- a. Preparation of One Mandy Nursery is required for sowing One Bigha of paddy.
- b. The field needs to be irrigated once to keep the soil cool.
- c. After intensive puddling of soil, mix 30 kg of cow dung (per mandy).
- d. After 3 hours of the puddling process, germinated seeds can be sown in the nursery.
- e. After 8 day of sowing of seed the field has to be irrigated and 5 kg of Neem cake per bigha & 100 gm's of multi plus is added.
- f. After 20 to 22 days the nursery is to be transplanted in the field.

#### **IV. Pest and Disease-**

Before the seeds are sown requisite treatment for pest resistance & control should be done to keep the seeds safe & free from diseases that manifest in at this stage.

Kalanamak Paddy seed is treated with "Trycoderma" and cow urine.

The procedure adopted is as follows:

- a. 5 kg paddy seed is treated with 3 gms of Trycoderma Powder with proper dilution using water.
- b. The Treated Paddy seed is kept for 24 hours.
- c. After 24 hours the treated seeds are to be placed in a coconut sack with some heavy object on it.
- d. within 2-3 days the seed are ready for sowing.

Removal of infected seeds and keeping the field clean helps in reducing the incidence.

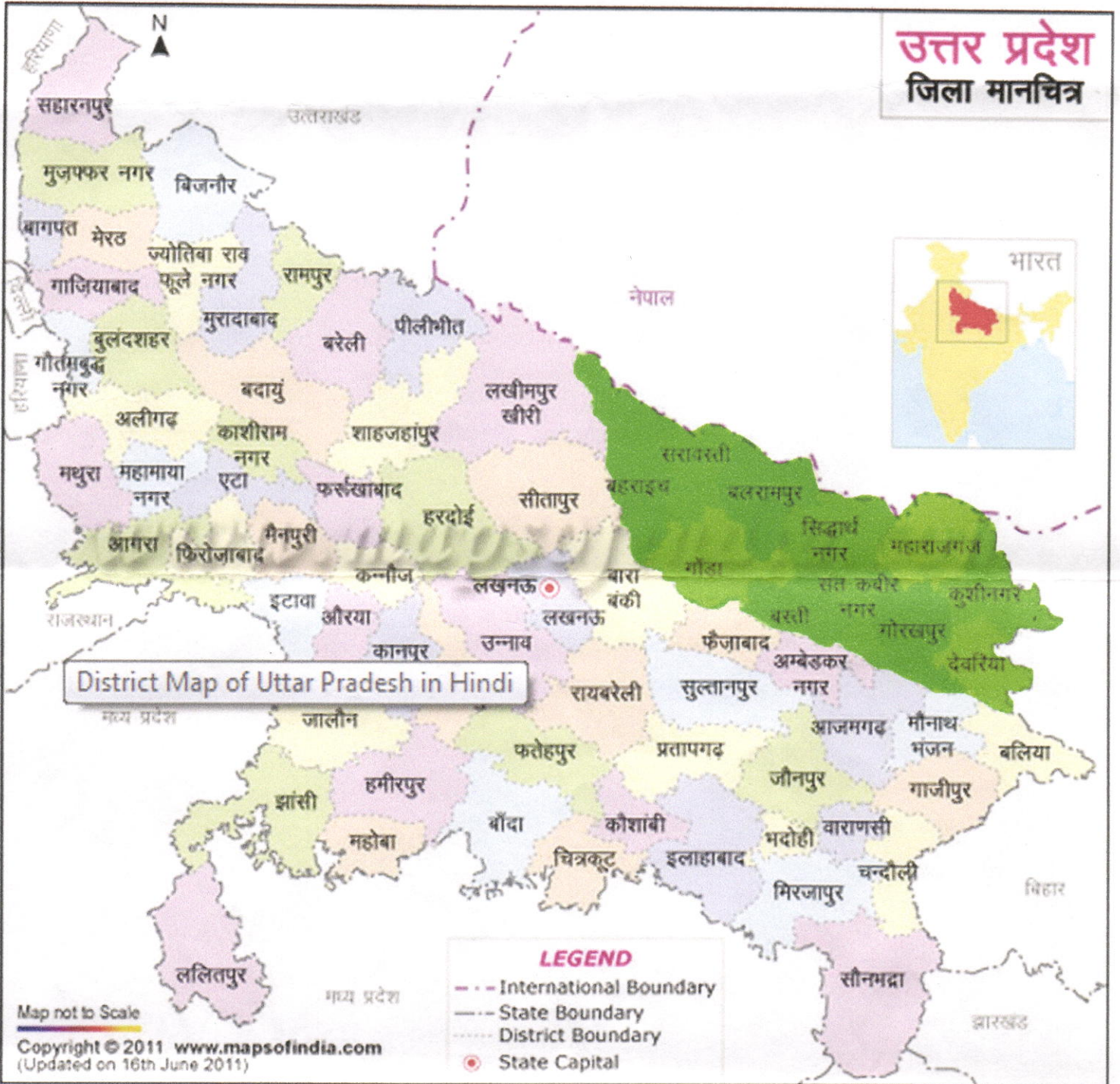
#### **K) Uniqueness:**

1. Outer layer of the grain is 'black' that is husk colored with dark brown - black.
2. Aroma is stronger than any other rice cultivated in india. It has "3" number of scented gean rather than "2" number ( all other scented variety except kalanamak rice )
3. Newly milled rice is non sticky and sweet rather than any other scented rice.
4. Newly milled rice is easily digestible that is exceptional character of kalanamakrice.
5. Kalanamak rice considered to be finest quality rice in international trade.
6. Cooked rice is fluffy.
7. In local market it earn higher price than basmati rice.
8. Relatively longer shelf - life of the very cooked rice.
9. Famous for taste and palatability rather than any other scented rice.
10. Soft gel consistancy and having 25-30 % amylose.

#### **L) Inspection Body:**

The inspection body consisting of the following members has been constituted.

1. Department of Plant Breeding and / or Genetics, Indian Agriculture Research Institute, New Delhi.
2. Shoharatgarh Environmental Society Shoratgarh, Siddharth Nagar,
3. Narendra Dev Agriculture University, Kumarganj, Faizabad.
4. Deputy Director of Agriculture, Siddharth Nagar.
5. Gram Pradhan, Niyao, Shoratgarh, Siddharth Nagar.
6. Kalanamak Cented Paddy Production And Conservation Society Siddharth Nagar.
7. Krishi Vigyan Kendra, Sohona, Siddharth Nagar.



North-East plain zone of U.P. (highlighted in light green)

*[Handwritten Signature]*

*[Handwritten Signature]*  
24.01.2013  
Chairman

सचिव  
सुगन्धित धान उत्पादन एवं संवर्धन समिति  
भीमापार-सिद्धार्थनगर  
24/01/2013

P. R. D. F.  
Gorakhpur

Advertised under Rule 41(1) of Geographical Indications of Goods (Registration & Protection) Rules, 2002 in the Geographical Indications Journal 50 dated 07<sup>th</sup> May 2013

**G.I. APPLICATION NUMBER - 232**

Application Date: 09-03-2011

Application is made by **Patan Double Ikat Patola Weavers Association**, Patolawala Farm house, O/s Phatipal Gate, Salviwado, City: Patan, Taluka: Patan, District: Patan-384265, Gujarat, India for Registration in Part-A of the Register of **PATAN PATOLA** under Application No: 232 in respect of Textile and Textile goods not included in other classes; bed and table covers, etc., falling in Class – 24 and Clothing, Sarees and Dupattas, etc., falling in Class – 25 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 :** **Patan Double Ikat Patola Weavers Association**
- B) Address :** Patan Double Ikat Patola Weavers Association, Patolawala Farm house, O/s Phatipal Gate, Salviwado, City: Patan, Taluka: Patan, District: Patan-384265, Gujarat, India.
- C) Type of Goods :** **Class – 24** – Textile and Textile goods not Included in other classes; bed and table covers, etc.  
**Class – 25** – Clothing, Sarees and Dupattas, etc.
- D) Specification :**
- Patan Patola are pure silk double ikat fabrics, whose gorgeous colours and striking patterns are the products of exquisite workmanship produced in the city of Patan predominantly by the members of Salvi Community.
  - Patan Patola are pre-industrial creations and have rare and unique texture.
  - PATAN PATOLA are totally hand created and no machine is used.
  - PATAN PATOLA are prepared on a special single loom operated by hand.
  - PATAN PATOLA have distinctive colour patterns and motifs including geometrical shapes, flowers, animals, leaves, etc and traditional designs that remain same on front and reverse sides permitting the PATAN PATOLA to be reversible with no change in the appearance of the PATAN PATOLA.

- Geometric designs on PATAN PATOLA are such that the appearance is same regardless of which of the four corners it is worn from.
- PATAN PATOLA have two pallavs (the end portions of the patola) with border and one side has golden jari patto.
- Approximately 20 -22 denier x 8 ply (total 160 to 176 filaments) special pure raw silk is used per PATOLU (plural PATOLA)
- Length of Patan Patola is from 5 to 8 yards
- Width of PATAN PATOLA is from 48 to 54 inches
- Weight of PATAN PATOLA is from 460 to 520 grams
- Durability of PATAN PATOLA is about 300 years.

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

**PATAN PATOLA**



**F) Description of Goods:**

PATAN PATOLA are the finest example of ikat known in the world, which is the double ikat, where the warp and weft are tied and dyed before they are woven. The patterns emerging in the PATAN PATOLA are much more defined, with a very good finish compared to any other ikat available in the world.

PATAN PATOLA are pure silk double ikat saree-like wearable fabrics, whose gorgeous colours and striking designs are the products of exquisite workmanship. Besides sarees, dupattas, handkerchiefs, tablecloth, lace, etc. can also be prepared from the PATAN PATOLA. They resemble printed cloth, but are far different from any printed cloth. There are several ways of systematically classifying the various types of PATAN PATOLA. They can be grouped according to size and use, according to the number and arrangement of patterned parts and according to pattern motifs.

There are some 10 basic patterns, mainly of plant, zoomorphic and geometrical motifs. Customarily, different groups of buyers require different designs, usually following the dicta of their religion. In a weaving technique so complicated, it is natural that geometrical motifs should predominate. These were used in variations between the border and body pattern, with the motifs sometimes enlarged in the pallav (the end portion of the patola). The plant, animal and human forms are likewise combined in symmetrical patterns.

The most common motifs in PATAN PATOLA are parrots, elephants, plants, ladies, flowers, trellis, baskets, leaves, etc. These are used in many different permutations and combinations for the body, border and the pallav, making different designs. Among the main designs, the popular ones are:

Narikunjar, Ratanchawk, Navaratna, Voragaji, Chhabdi bhat, Chokhta bhat, Chanda bhat, Pan bhat, Phul bhat, Laheriya bhat, Tarliya bhat, Zumar bhat, Sankal bhat, Diamond bhat, Star bhat, Butta bhat, Sarvariya bhat, etc.

PATAN PATOLA normally use red or vermilion as the background colour. The other colours that are used for dyeing along with red are yellow, orange, pink, green, blue, purple, white and black.

The distinctive motifs on PATAN PATOLA remain same on front and reverse sides permitting the PATAN PATOLA to be reversible with no change in the appearance of the PATAN PATOLA. Geometric designs on PATAN PATOLA are such that the appearance of the PATAN PATOLA is same regardless of which of the four corners the PATAN PATOLA are worn from. PATAN PATOLA have two pallavs (the end portions of the patola) with border and one side has golden jari patta. The texture of the Patola is rare and unique as they are pre-industrial creations. Durability of PATAN PATOLA is about 300 years.

In PATAN PATOLA approximately 20-22 denier x 8 ply (total 160 to 176 filaments) special pure raw silk having smooth feel is being used. Length of PATAN PATOLA is from 5 to 8 yards and width of PATAN PATOLA is from 48 to 54 inches. Weight of PATAN PATOLA is from 460 to 520 grams.

PATAN PATOLA are generally woven on a single loom operated only by hand and which has no leg paddle and is slanted at one end. An instrument called Lunki is used in preparation of PATAN PATOLA which permits odd and even threads to be moved up or down and which acts like a peddle or pavadi. The loom is only a frame that has no mechanical motions and is different from handlooms. Both warp and weft threads of PATAN PATOLA are tied and dyed before weaving. PATAN PATOLA are such a fine piece of handwork that requires a special measurement tape that can measure even a 100th part of an inch. Minimum 2 pieces of Patola of the same colour combination and design are prepared as single piece without blouse piece.

In the making of PATAN PATOLA, no harsh chemicals or detergents are used but instead oil soaps and vegetable colours are used, which make PATAN PATOLA softer than other silk fabrics/sarees available in the world, even though the PATAN PATOLA are thicker than those available silk sarees.

**G) Geographical Area of Production and Map as shown in page no. 33 :**

Patan is located in Patan District of northern Gujarat between the Aravalli Range and the Gulf of Khambat. The geographical location of Patan lies between 71.31° to 72.20° East longitude and 23.55° to 24.41° North latitude.

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

Patan, an ancient fortified town, was founded in 745 AD by Vanraj Chavda, the most prominent king of the Chavda Kingdom. He named the city Anhilpur Patan or "Anhilwad Patan" after his close friend and Prime Minister, Anhil. It is variously referred to in Sanskrit literature as Anahilpatak, Anahipattan, Anahilpur, Anahilvad Pattan, Pattan, etc.

From the era of Patan's Maharaja Kumarpal and Kalikal Sarvagnya Acharya Hemchandracharya's time i.e. approximately from 900 years, Patan has become famous for PATAN PATOLA, also known as PATAN NA PATOLA or PATOLA OF PATAN.

Craftsmen or weavers of PATAN PATOLA were originally Salvi families. Around 1175 AD, King Kumarpal, who was a Jain religion follower, used to wear a new Patolu everyday for worshipping God. At that time Patola were imported from MungiPatan near Jalna situated near Aurangabad, Maharashtra State. However, the King of Jalna used to wear those Patola before they were imported and hence such used Patola were not holy for worshipping God. Therefore, King Kumarpal defeated the King of Jalna and brought the Salvi Craftsmen from Jalna to Patan. Since then the Salve craftsmen, the Patola weavers, have lived in Patan and the Patola woven by them became famous as Patola of Patan or PATAN PATOLA. The Salvi weavers do still visit Jalna for their social rituals.

From the accounts of European travelers, Patola were known from the year 1516 AD. Correa (1523 AD) speaks of Patola which were offered for sale at Malecca at high prices. A letter dated 1616 AD from the East India Company mentions Patola bought by the English merchants. After the discovery of the sea route to India, it is probable that other European nations trading in Indian commodities carried the Patola across the distant seas. In Gujarat it is said that the existence of Patola has been since the tenth century.

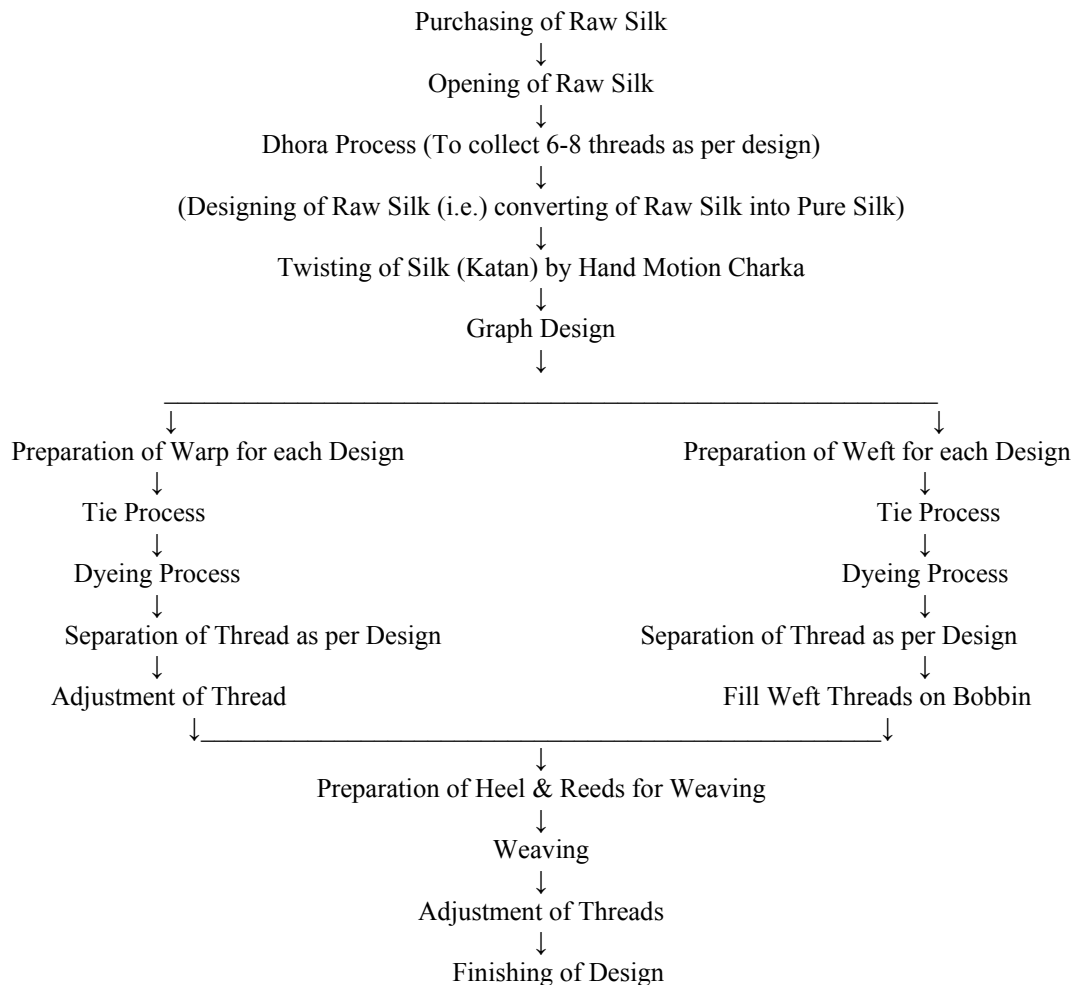
Historical Evidence of the existence of the PATAN PATOLA, which is also known as PATOLA OF PATAN or PATAN NA PATOLA in Gujarati language, can be corroborated through:

- a) A detailed article on PATAN PATOLA published in the Illustrated weekly of India on July 12, 1953

- b) Gujarat state Gazettes published in 1975 by the Government of Gujarat on Mehsana District mentioned that the PATAN PATOLA are hand woven variety of saree dating back to the 12th Century
- c) At least 11 major publications in the form of Books on Ikat weaving in India mention PATAN PATOLA
- d) Documentary on “Patolas of Patan” by Films Division, Ministry of Information and Broadcasting, Government of India
- e) Postal Stamp on “PATAN PATOLA” was released by Government of India, in 2002
- f) The exhibits in various museums:
  - Vadodara Museum at Vadodara, Gujarat
  - Prince of Wales Museum, Mumbai, Maharashtra
  - Kutch Museum, Bhuj, Gujarat
  - Calico Textile Museum, Ahmedabad, Gujarat
  - Albert Museum, London

**I) Method of Production :**

Flow Chart of preparation process of PATAN PATOLA





Parts of the manufacturing process described below are borrowed from the book *The Patola of Gujarat* authored by Alfred Buhler and Eberhard Fischer.

❖ Raw material:

The following **raw materials** are used for manufacturing PATAN PATOLA:

○ **Raw Silk**

- 20 – 22 denier pure raw silk derived from cocoons of silk worms from Mulberry trees. Such raw silk is imported from China or Japan by the applicant Association.

○ **Vegetable Dyes**

- Eco-friendly dyes are made of turmeric powder, iron rust, pomegranate skin, Indigo, kirmaj [cochineal], bojgar, and some Indian tree extracts such as-
  - aritha powder [soap nut powder -botanical name: Sapindus Trifolatus],
  - majith [Indian Maddar-botanical name: rubia cordifolia]
  - kampilol[red ochre, botanical name: Mallotus phillippensis],
  - ambla [Indian gooseberry- Botanical Name: Emblica officinalis, Phyllanthus emblica, Euphorbiaceae],
  - parijat or harsingar [botanical name: Nyctanthes arbor-tristis],
  - laakh [sealing wax, lac],
  - harde [botanical name: Terminalia chebula,
  - kesudo [botanical name: Butea monosperma],
  - kaatho[extract of heartwood of Acacia catechu],
  - dhavdi na phool [flowers of Fire - Flame Bush–botanical name: Woodfordia fruticosa (Linn.) Kurz], etc

○ **Chemicals**

- Tin Chloride, Alum, potassium dichromate, Copper Sulphate, Ferrus Sulphate, potassium permanganate, potassium di-phosphate, naphthol, acetic acid etc

○ **Pure jari**

- Pure jari is a Gold plated silver thread wound over silk thread
- Silver or copper jari is also used as per the design requirements

○ **The Loom:**

- PATAN PATOLA are prepared on a special single loom operated by hand.
- The loom is slanting on one side and does not have any leg paddle.
- The loom is a frame having no machine attached to it and has no mechanical motion.
- PATAN PATOLA are such a fine piece of handwork that a special measurement tape is required that can measure even a 100th part of an inch.
- Thus, the loom used in PATAN PATOLA is very different from regular handloom.

❖ Yarn preparation:

The objective of this step of the process is to end up with silk yarn to be used as warp and weft. The raw material is either 20 or 22 denier raw silk purchased either from China or Japan. In case of 20 denier raw silk thread, there are very fine 20 threads that form the 20 denier raw silk thread and in case of 22 denier, there are 22 very fine threads. 8 such raw silk threads are used to make the yarn to be used as warp or weft. The following briefly describes the process:

To begin with, purchased skeins of raw silk are opened and laid taut on a reel with a vertical axis and wound individually on long-stemmed, umbrella-shaped hand reels called *Partis*. The hand reel is turned with one hand and the yarn is guided with the other hand. The opening of the skeins is called KHOLVANU (to open) and the rewinding on hand reels is called CHHOTU KARVANU (to make short).

Once this is done, approx eight threads, as per the design combination, are plied together by lightly hand twisting them and feeding them onto another hand reel. This is called the *Dhora* process. The individual threads are fed from hand reels kept inclined on the floor. The threads are lightly twisted with one hand and wound on another hand reel. This is known as VAL APVANU (to give light twisting).

The 8-ply thread is then wetted by dipping it in a water trough, shaken and rewound in its wet state into hanks. The yarn ends are tied to a swift with horizontal axis which is driven from the side. Formation of large hanks on the swift is known as FALKO and is necessary for better degumming. This makes the yarn initially loose enough to be thoroughly and uniformly softened.

Thereafter a process called de-gumming (traditionally known as *Ushamna*) is done by soaking the hanks of silk for a minute in boiling water mixed with soda ash and oily soap with coconut oil. The hanks are then stirred carefully in the

solution and are hung up for drying. The degumming is called SAFED KARVU (make white) or BAFVANU (heating in fluid).

Once dry, the silk hanks are then wound individually on hand reels ensuring that the yarn is uniformly under tension and evenly spaced on the hand reels. As the yarn is wound on the reel, it passes through fingers of an artisan for winding it under tension and evenly spacing it on the reel. The hanks are then filled into bobbins and wound onto a *charkha* (spinning wheel) which is distinct from a normal charkha. It is then twisted and transferred to a smaller *charkha*. From this, the warp and the weft are prepared.

Two rows of 6 hanks each are rewound at a time. A slight additional twist is imparted to the yarn during rewinding to compensate for the difference in the rotational speeds of the swifts and the reel. The yarn is then again rewound, now, on cubic stand pools. Further twisting is required again to compensate for the difference in rotational speeds of the two axes.

❖ Design to be prepared on graph paper:

Before preparing the warp and weft the designs are worked out on graph paper with detailed indications of colours to be used and precise sizes of the various motifs. Graphs are prepared for the body, *pallav*, and border. Graphs have to be prepared very meticulously as the graphs are the basic designs on the basis of which the warp and weft are to be tied.

❖ Process of making warp and weft from yarn:

The instrument for preparing warp is called *Tana Ghodi*. The instrument for preparing weft is called *Paati no Aado*.

**Preparing warp:**

For making warp, assembling or warping is the most important step in the preparation for resisting and subsequently for weaving. The warp is spread on a rectangular frame and sectioned by grouping the threads in their correct place. The warp is prepared on pegs (known as *khinti*) and is folded once and grouped and sub-groups by leasing cords for time.

The warp (also known as TANO) is assembled with the help of pegs protruding horizontally. The pegs are either round iron rods or metal tubes and are covered with white cloth. The number and arrangement of pegs can be altered at will (additional holes are provided in the wall for this purpose) to suit the length of warp being assembled. Generally, 17 pegs are necessary. Series of 5 of these are arranged in vertical parallel rows, 2 are placed above and to the left of one of the rows and 4 are placed below and to the right of the other row. In front of the set of pegs are placed twelve wooden stand-bobbins in two rows, which contain the

8-ply silk threads to be used as warp. Each of these 12 threads is drawn upwards at an angle and passed through one of the 15 glass rings fixed on a bamboo tube hanging from the ceiling. Each thread is then drawn through a short guide rod or raddle on which 12 glass rings of similar type are fixed. The warper holds the guide rod in his right hand and thus, prevents crossing of the warp threads. He gathers the 12 threads as a bundle in his left hand and ties them to the topmost, outermost peg on the left. The threads then are passed to the peg at the bottom right and back in such a way that all 12 threads together cross at the top left and the individual threads cross 4 times at the bottom right. To make this happen, the warper guides all the 12 threads around the three longer pegs at the bottom and takes them back forming a figure 8. A helper separates the threads, crosses them individually over his thumb (i.e. the threads are laid alternatively above and below the thumbs) and pushes them over the shorter pegs. Thus, the odd and even individual threads are crossed 4 times at the end position. The threads are fixed in this position by string-loops. At the same time, the helper also fixes the group of 12 threads by means of crossings or knots and separates 8 large sections from one another. These operations are essentially for the purpose of avoiding yarn entanglements during the subsequent stages.

In the course of assembling process, the supply spools (stand-spools) are inverted so that yarn runs off more easily. After the entire yarn or the required length has been assembled, the wrapper snips off the threads at the guide rod, winds them back on the supply spools and ties the ends to the small nails fixed at the top.

The warp is removed from the pegs and is then wound round the first two pegs plus one other peg which is placed above the regular warp pegs. The end of the warp with the four crosses goes round the pegs last. The warp is then secured by tying a cord through the end loop and the beginning threads.

The warp as removed from the pegs is in the form of skeins about 19 meters long; it is also divided into groups of 12 threads each and 8 sections and has 5 crossings fixed by string-loops. The warp threads (ends) are stretched taut by inserting smooth, cylindrical wooden pieces at the ends of the skeins. The ends of the wooden pieces are attached by means of ropes to wooden blocks, which in turn are fastened by ropes and anchored to the floor (or the house door).

Four flat sticks are now attached to the leading threads which fix the warp at one end. The sticks help in maintaining the arrangement of warp threads. This end of the warp will be referred to as the front end in what follows; it is later fixed to the breast beam or the cloth beam of the loom. A lease rod is also inserted at the back end of the warp.

During the warping process the warp threads were divided into groups of twelve threads and into eight bundles. These eight parts are now separated by inserting four flat sticks. Each bundle contains fourteen groups of twelve threads each.

Thus, the warp consists in this case of 112 groups or 1344 threads. The warp sheet is somewhat loosened to facilitate the formation of bundles and then re-tensioned.

Charcoal is now rubbed on a stone and the powder mixed with water to form slurry which is used to mark the warp. A mark is made with the finger at a spot three feet (approximately one metre) from the front end, using a ruler. One warp thread is broken at this place, and folded lengthwise into three equal parts. This division is again marked with charcoal. The thread is then twisted back in place.

Such a marking divides the warp into three portions of equal length, with a small remainder at the front end. Subsequently, the warp will be folded crosswise at each of the spots (each portion represents the length of a saree), and the parts will be placed on top of one another for resisting. At this stage, the separation of the warp into eight sections is pronounced only at the front, where four lease rods have been inserted. Therefore, the next step, before cross-folding, is to extend this separation over the entire length of warp and to arrange the individual threads or thread groups in the proper order. For this purpose, the first lease rod is pushed towards the back end of the warp, the second rod (oval in cross section) is turned 90° and also pushed back. This portion of the warp is tapped with a stick to loosen the threads. The operation is then repeated with the third and fourth lease rods. Any broken threads are mended. Four workers are needed for this phase of the process extending over the entire warp sheet. One worker holds the warp at the side so that the threads do not slip over the lease rods, the second taps the warp sheet; the third frees the threads sticking to one another and the fourth twists the broken threads together.

At the back end one lease rod is now replaced by a thick red string. The three other rods are replaced by threads, the ends of which are knotted together.

The next step is the grouping of threads in sets. A ground thread, to which a number of leasing threads are attached at regular intervals, is issued for this purpose, as well as for a similar operation on the weft. The ground thread is tied parallel to the warp on the wooden block and to one of the outer bundles of warp threads. The front end of the warp still contains a lease rod. The thread loops inserted earlier to fix the thread separation are now removed. The counting of threads for grouping into the sets can now begin. In this case, each set consists of seven warp threads. The weaver counts the threads individually with the middle finger of his left hand and pushes them on with the middle finger of the right hand. After each set of seven threads, the helper inserts a set-separating thread. In the operation that was actually observed, 49 such groups were formed in all, with the last group lying outside the 48 leasing threads. The leasing threads were then drawn tight over these first 343 threads in sets of seven and the separation of the next section was taken up. This step has to be repeated a number of times (mostly 3 times), depending on the pattern and the number of pattern repeats.

Once the threads have been grouped, the next stage is the putting together of the sets which will be identically patterned. The seven-thread sets are individually lifted up over the warp sheet. Three workers stand near the warp sheet with crossed sticks in their hands and lift up one set of threads at a time on the cross sticks. Two helpers assist in separating and lifting the threads. The sticks are then replaced by leasing threads again. Each separate bundle of four sets of threads is tied with a cotton thread at six yard intervals (measured from the first marking, three feet from the front end). Subsequently, the individual bundles are turned in opposite directions and re-assembled.

After the assembling of the individual groups lengthwise, the warp sheet is folded across. The back end of the warp is lifted up by two workers and brought forward to the marking at the front end, in other words, the warp is folded across once. The bundles of both ends are arranged alternately; the front ends are twisted into a loop, drawn backwards over the lease rod for about 1.5 ft. and inserted between the bottom ends. After the first transverse folding, the loops at the front end are then pulled into equal lengths and a lease rod is inserted at this spot. Afterwards, the back end of the warp is lifted and pulled (drawn towards the front end). Thus, the warp ends of all three Patola planned lie on top of one another on one side, while the middle portions of the Patola are superposed on the other. In all, six layers of warp to be patterned in the same manner are assembled one over the other. Before being transferred to the tying device, the individual bundles are united again, fixed and strengthened by the insertion of iron rods.

### **Preparation of weft**

A wooden beam is used to assemble the weft yarn. The beam is placed horizontally on the floor or supported by stands; it has vertical pegs around which the weft yarn is wound. This appliance is called PATI TANVANU, literally, stretching beam. One of the pegs, made of hard wood with a rounded tip, is fixed firmly to the beam. At the other end of the beam, there are two rows of holes; a short iron stick is inserted into one of these. This arrangement is obviously to facilitate winding of the weft according to the fabric width required.

A thick, red, plied ground cord is stretched out on the beam between the pegs; 48 thinner strings branch out from the cord as a sort of a coarse fringe. The cord is called DORI MALA literally string garland. Twelve stand spools are placed in front of this device. Yarns from six of these spools are passed through glass rings fixed on a rod attached to the ceiling.

The worker, usually sitting cross-legged on a chair, gathers the six threads in one hand and winds them around both the pegs. After each round, i.e. when twelve threads of half the winding length lie on top of one another between the pegs, the worker throws a leasing thread over them. This process is repeated until all the

48 leasing threads are inserted. One more set of threads is wound above the last leasing thread. Thus, 49 groups are obtained, each group consisting of twelve weft yarns. These are tied into bundles with the help of string loops at either end. The entire operation is then started afresh, whereby the last leasing thread is inserted first. In all, the process is repeated until the number of windings equals half the number of sets. For example, if, the set consists of twelve threads, the winding is done six times. The yarns are then pressed together and the bundle fixed with string loops at both ends. Three additional groups of weft threads are prepared and fixed in the same manner as the first.

The weft sections, thus, have six times (six threads from six spools) four layers of 49 bundles (which corresponds to one wrapping or tying repeat) of twelve threads each (one set). One wrapping or bundle hence consist  $6 \times 4 \times 12 = 288$  yarns, which generally is the upper limit as ordinarily; each bundle has 120-150 yarns. Modern PATAN PATOLA have twelve repeats in the main body. Four layers of six repeats each would therefore mean that weft yarn required for two PATOLA are prepared in one step. The weft required for the third PATOLU of the same warp has to be prepared separately.

Warp and weft are resisted and dyed in the same manner and, nowadays, also at the same time.

#### ❖ Process of tying the knots on warp and weft

Once the warp and weft are ready in the frame, the tying begins, always from the right, with the use of thread or old cloth. Exact measurements of the portions being tied are taken continuously. As different portions of the yarn are tied, it is removed from the frame and dyed. But it has to be returned to the frame in order to make the new ties for the next dyeing. The process continues until every colour in the pattern appears in the yarn.

The warp is stretched to an eight yard length, and the weft is stretched on frames to 48'1/2 inches, the exact size it will be on the loom. Starting from the right hand stretcher bar and working to the left, the threads are marked vertically with a charcoal string at approximate distances of one centimeter. The ties are made with a fine double ply cotton cord. The bundles are wrapped tightly and knotted with a half-hitch at the left end of the wrap and then the end of the cord is snapped off close to the knot.

At one end the warp prepared in the fashion described above is attached to a thin iron rod by means of cords inserted between the tie bundles (i.e. groups to be patterned similarly). The rod in turn is attached with the help of ropes to blocks or hooks fixed in the walls of the workshop. The same is the case at the other end of the warp, but there the threads lead around a cylindrical piece of wood. The skeins are stretched out horizontally and lie vertically on top of one another. The device for the wrapping is known as ADO.

The weft threads are also mounted afresh after winding. Iron rods are also inserted here in place of the pegs in the winding device and used to stretch the weft yarn on a wooden frame. The frame is placed in such a way that the yarn bundles lay horizontally one over the other. The frame is called DANDAKU.

The wrapping (BANDHVANU KAM, lit. tying work) is carried out, as a rule, without any sketched model. Weavers must be acquainted with at least the common designs. New design drawings or old sketches are rarely used.

The resisting for the large red areas in warp and weft is simplified by wrapping the corresponding sections of the bundle in a sheet of plastic and tying this sheet with a cotton thread. Before applying the resists the length and the width of the warp and the weft of the ikat parts are measured with the help of a ruler with inch markings, in order to determine the exact size of the ikat portion.

Subsequently, vertical lines (liti) are made with the help of a blackened cotton thread at regular intervals corresponding to the width of a weft set. This is necessary because the patterning of both warp and weft must be identical. The number of bands formed in this way must correspond to the number of sets in the weft. The charcoal lines help the worker during tying. The spaces between them represent the length of the smallest wrappings. Similar markings (CHAPVANU KAM, lit. drawing work) are also applied to the weft bundles.

When a wrapping is begun one end of the tying yarn is inserted between the bundles. Then the yarn is tied around this portion and the further coils are placed as close to one another as possible. At the end of one wrapping, the yarn is pushed through the last coil, drawn tight and the protruding end is snipped off. This fixing is known as GANTH (lit. knotting). The knot is on the left hand side, which means that tying is started from the right. Tying is generally started from the right and proceeds horizontally to the left. Thus, it is not that certain main motifs are blocked out first and the details introduced subsequently. Rather, the tying proceeds from one end of the frame to the other, all the bundles in the frame (across the entire width) being successively included.

To avoid the shagging effect due to weather changes, the warp and weft are re-arranged horizontally and vertically by plumbing to avoid the gaps or errors in the design. This is a unique process, by which exact designs are obtained on PATOLA.

#### ❖ Process of dyeing

Since the PATAN PATOLA designs have several colours, the warp and weft have to be dyed repeatedly and hence also resisted repeatedly. The yarns have to be partially wrapped and dyed for the first dyeing. Then certain portions must be



opened for the next dyeing and others tied to be protected from the next dyeing. This sequence is continued until all the dyeing are completed.

Different methods are known for this part of the work. A common feature of all of them is that red is dyed first, followed by yellow, blue and black. Orange can be dyed before yellow (unless orange is obtained through over dyeing); instead of blue, green and after that blue and black can be applied.

The following sequence is traditional and based on the use of natural dyes:

- 1) Tying portions which are to remain white or are not to be dyed orange, red, violet (or violet-black).
- 2) Red dyeing.
- 3) Tying portions which are to remain red; opening of wrappings for yellow and green.
- 4) Yellow or orange dyeing as over dyeing of red.
- 5) Tying of portions which are to remain yellow and orange; opening of wrappings for blue.
- 6) Blue dyeing (red which has been over dyed to yellow now becomes violet-black, yellow and blue yields green).
- 7) Removal of all wrappings.

In all, wrappings have to be applied three times and removed three times. At the end of the process, the yarn is white, yellow, orange, red, blue, green and violet-black.

Soaking of the hanks in water is part of the dyeing process and is common before each dyeing. Before the yarn is dyed, it is left soaking in cold water for a day or two so that the fibres will absorb the dyes evenly. It is necessary to rub the yarn by hand rather vigorously to get the fibres wet enough. One need not be concerned about the cotton wraps becoming untied because the cotton wrapped round the silk gets much tighter when it is wet.

For the soaking treatment as well as for dyeing, the hanks are removed from the tying devices and hung overnight on a line or a wall hook to dry. A couple of ties are removed the next morning to check the results of the treatment. The hanks have to be stretched out again for further tying or removal of ties for the next dyeing stage. The worker, sitting on the floor, slips the leasing loops over his big toes, spreads his legs and inserts two thin iron rods along the leasing cords. The rods are used to fix the hanks on the tying devices described earlier. The steps of opening and retying can hardly be carried out without mistakes if the bundles are slack and not properly arranged.

Bundles of warp and weft yarns which will be used for the same PATAN PATOLU are generally dyed together.

A needle with a wooden grip (SOYO) is used to open the ties. The free end of the wrapping thread, which has been pushed under the windings, is pulled out with the help of the needle, and the thread is unwound. As a rule, the thread is used again for tying.

The equipment for dyeing is extremely simple: vessels made of enamel, aluminium and tin-plated copper (KATHROT) for the fluid dye, small water containers (LOTA) similar to the ones used in every Gujarati household, pots (TAPELU), a primus stove, metal spoons, a beam balance without a pointer and weights which are not calibrated. The dyestuffs packed in paper or plastic, developing substances, salt and soda are stored in large tins, oil in glass bottles.

❖ Preparation of the dyed yarn for weaving

**Preparation for warp:**

The groups of warp threads which were tied together for dyeing have now to be rearranged in their proper positions.

Just as the assembling of the warp before tying varies in details depending on the design, the preparatory steps for weaving also differ from case to case.

The weaver, sitting on the floor, stretches the yarn bundles from which all ties have been removed between his spread-out feet. As the first step, he has to separate the folded warp layers. For this purpose, he attaches the strings holding the individual bundles to his left big toe. In a similar fashion the other big toe holds the two skein ends, one of which has a twisted loop and the other an untwisted loop. The warp is now laid out on the long corridor (where the tying was also carried out), unfolded and stretched out in 20 yard lengths, corresponding to three PATAN PATOLA.

With the help of inserted rods the yarn bundles are fixed on pegs at both ends and spread over the rods. The individual repeats of the design are then separated layer wise with the help of flat sticks. The leasing strings inserted earlier facilitate this operation. Leasing rods are now inserted in the crossings created by the thread separation. In the same fashion, sticks are inserted at the places where the warp had been folded and where leasing strings have also been inserted. Thus, the three sections of the warp are separated, each section corresponding to one PATOLU. This operation results in a separation of the warp threads according to pattern repeats (the groups lie one over another) properly arranged and tensioned. The weaver walks back and forth along the warp sheet and leases out the individual threads gathered in bundles. The individual layers are separated by means of sticks and arranged in the right sequence by hand with the aid of the leasing strings. This operation is also carried out at the upper end and at the places where the warp had been cross-folded.

By pulling the warp sheet taut, the individual layers lying on top of one another are further separated and the different sections can be clearly recognized. During this entire operation, warp threads break repeatedly and have to be mended as soon as possible. It becomes necessary to attach short additional lengths of threads whenever a thread has become too short as a result of repeated breakings and knottings.

The different layers of threads are lifted up and separated. For a design that is symmetrical, the layers have to be correspondingly “rotated”. For this purpose, additional sticks are introduced and groups of threads turned over the sticks by hand. The sticks are then moved through the entire length of the warp sheets, whereby the sheet is tapped to loosen threads sticking together.

During these transversal dislocation operations, the warp is in a taut state. However, it is necessary to loosen the sheet prior to each rotation or turning and re-tension it subsequently. About six persons are needed for this stage of processing. Since the warp has to be rearranged in the same way at the two ends and each of the three sections, the warp tension has to be regulated and the broken threads have to be repaired.

The border strips with their own ikat design are now attached to the main field (these are generally prepared in large numbers separately and stored in the form of bundles). The monochrome threads for the longitudinal borders are also attached. These threads are held together by a looped string so that they can be simply attached to the sides of the main warp sheet.

Subsequently, the leasing threads left near the leasing sticks are knotted to loops to prevent the warp threads from slipping or disarrangement. The sticks are then removed. The warp is carefully pushed together, wound on a bamboo rod and stored.

### **Preparation of weft:**

The weft yarns are arranged in sequence and wound on bobbins and numbered. After the weft was dyed and untied, it was unlaced from the stretcher bars. Now, two people hold the wefts, stretching the end ties on their toes while they untie and remove the cords which united the four layers tied through each end, thus separating the four layers.

When the top layer is separated from the three bottom layers it is twisted to the right over weaver’s right big toe and the helper’s left big toe. The next layer is separated, twisted and placed over the same toes on top of the previous twisted layer until all the four layers are separated.

These four layers of weft are separated from one another. Since they contain six yarn systems each, a further sub-division is necessary. Each layer is wound on a separate hand-swift (*parti*) and three pairs of threads are then transferred to two other *partis*. Then the pairs of threads are separated and wound onto a *parti* side by side. As in the case of the first unwinding, the weaver holds the swift with the pairs of threads between his toes and rotates the other *parti* with his right hand. He keeps apart the threads with his left hand and winds them separately.

The *partis*, each containing one wrapping repeat, are arranged in a row on the wall near the loom for weaving.

#### ❖ Preparing the loom for weaving

Before the warp is gaited on the loom, all the wooden and bamboo parts are carefully cleaned with a piece of cloth. Special attention is paid to the notched stick (KAHARA); the notches are cleaned individually in order to prevent the warp threads from sticking and breaking.

The loom used for PATAN PATOLA manufacture has no rigid framework fixed to the floor or any other part of the workshop. The components of the loom are connected to one another only by means of a few ropes and cords and, above all, by the warp sheet. As a result, each warp gaiting practically means a reconstruction of the loom.

To begin with, two weavers fix a set of patterned weft threads on the breast beam (TOR) so that the warp threads can be correctly positioned. Subsequently, the weft threads are removed and used for weaving. The ends of the warp threads are pushed in groups over the thin stick which is then tied to the breast beam. Roughly one third of the warp is now unwound from the ball. Two weavers squatting on the floor centre the string loops, fixing the lease loops and replacing them with the two parts of the warp beam. The semi-circular stick is inserted first, followed by the cylindrical one. In order to simplify the job, one worker loosens the string loops while the other enlarges the opening between the threads with his forefinger. A few of the warp bundles are now provisionally knotted at equal intervals behind the semicircular bamboo stick (fixed by wrapping so that the stick cannot slip backwards). The warp is then lifted up by the two sticks and tied by a rope to the thick bamboo pole of the warp device, which in turn is attached in the middle to the tension rope hanging from the ceiling. As a result, a sheet of warp about 3-5 metres long is stretched at eye level across the workshop. The rest of the warp remains wound as a ball and hangs from the wall hook above the tension rope.

As the next step, the worker arranges the single-coloured border threads, beginning from the extreme left. Initially they are loose and are tightened by twisting and knotting behind the first two parts of the beam. The weaver sits on a chair behind the loom. A helper spreads all warp bundles uniformly over the

entire width and shortens the threads wherever necessary by twisting so that all the threads are evenly tensioned.

The notched stick is then inserted in a position where the crossing has been fixed by a cross string. The stick is turned sideways to avoid damage to the threads.

The next step is the introduction of the shed rod. Its two ends are connected by cords to the notched stick so that the warp threads do not slip out.

The weaving sword (lunki-a wooden pressure bar) is now inserted in a similar manner in the second shed fixed by a string loop, between the threads which are by now uniformly spread. Two weavers draw the sword through the warp sheet up to the shed rod, thus ensuring that the two layers of warp necessary for shed formation are completely separated from each other in the front portion.

The notched stick is now turned and the warp threads are placed in the notches in groups. The warp threads are drawn tight. All cross strings which have been replaced by sticks are now removed.

The next step is the sizing or starching (VALLU, starch) of the warp. Water in which rice has been cooked (OSAMAN) is used for this purpose. The starch is applied from above and below by a man using a sprayer, in order to strengthen the yarn. The portions of the yarn where the heddles are to be placed are given an additional smearing of viscous starch paste. The two yarn layers are again separated by hand, one layer is lifted up and the other depressed.

Threads are commonly used for preparing the heddles, frequently, the material from an old heddle rod. The thin fixing rods on the main heddle bar are loosened, the loops successively gathered in the left hand and passed on to a reel (PARTI) being rotated by a helper. The reel is then fixed to the wall in such a way that it can freely rotate to prepare new heddles.

The heddles are made from one continuous element of nylon seine cord. First, the cord is passed through the width of the warp just in front of the first cross. The heddles are made around a smooth wooden tool. Moving from left to right, the first loop is tied, then several other loops are made for extra heddles. After the first tie, the heddles are not tied at the top but simply looped around the wooden tool, picking up every top thread of the warp in front of the cross. When quite a few heddles are wrapped, they are slipped off the left side of the tool, twisted and tucked under the top warps at the cross.

After the heddles are made through alternate warp threads, a heddle bar is slipped through the heddles hole from right to left. Then the bar is raised and tied into position from strings coming down from the ceiling. The heddles are straightened from right to left, making sure none is tangled or crossed.

Another heddle bar is wrapped in wet cloth and inserted through the heddles. The wet cloth wrapped and tied around the bar holds the strings firmly in place. After it is inserted, it is raised above the original bar. Then, two other cloth bound bars are placed on either side of the two bars. These four bars are held tightly in place and are stitched together with a large needle and heavy cord in a wide half-hitch across the length of the bars.

During the process the bottom heddle bar is inserted over the warps that are attached to heddle strings and under the unattached warps. Also, the shed stick is inserted in the warp and temporarily laced to the bottom heddle bar in three places, at both ends and in the middle, in order to hold everything in place. Now, the shed stick is untied and the bottom heddle bar is taken out and reinserted to lie atop all the warps.

As the last step, the pressure bar with handle (LUNKI) is placed on the warp behind the heddles, connected with cords to the shed stick, at the handle to the upper parts of the heddle bar device and with another cord to the ceiling.

#### ❖ Process of weaving

As a rule, two persons are engaged in weaving. The weaver stands on the right side and tends to the heddle device, pushes the shed stick to form sheds, passes the sword in and out, turns it to open the shed, beats up the weft thread and inserts the shuttle from the right side. The person working on the left side is often less strong –who sits on the bench and works as a helper. The helper keeps the shuttles filled, replaces the bobbins in the shuttle in the correct sequence and throws the shuttle from the left side. Both the weavers regularly check the weft and the design.

No special steps are needed to form the shed rod shed since the shed rod normally lies directly under the heddles and presses one group of threads high enough for the sword to be inserted from right. The sword is tilted on edge, the shuttle thrown across and the weft arranged by hand at the edges. Care is taken to ensure that the white of the guide stripe in the warp coincides with the white portion of the weft. The fingernail or a metal plate is drawn across the weft, the sword is turned, the weft beaten-up, the sword drawn out sideways to the right and placed on its frame. By lifting the handle, the pressure bar (LUNKI) is pushed down in front of the shed rod and pressed on the ward sheet sufficiently to lift the heddles and form the heddle shed. The sword is again inserted, tilted on edge, the shuttle pushed through, the weft straightened and beaten-up. The pressure on the pressure bar handle is eased and as a result the heddles and the shed stick revert to their original positions. Now, the shed rod shed is formed and the process repeated.

Warp threads of excessive length are shortened by twisting. During the weaving, the temple lying below the freshly woven portion has to be reset nearer to the fell after every few picks.

After about 5 centimetres have been woven, both sides of the fabric are rubbed with the edge of a steel plate to remove the encrusted starch. For this purpose, the cloth beam is lifted up and turned back a quarter so that the warp tension is reduced.

Each weaver, with a needle in his right hand, now inspects the design and pulls the warp threads one by one. The weavers, then, scratch the fabric surface with a number of needles held in their hands like combs so that the warp threads are slightly pushed sideways and the weft threads pushed in. This arrangement of the design takes about half-an-hour and is indispensable for clarity of patterning.

The warp is moistened before the part of the fabric just woven is wound onto the cloth beam and tightened. In fact, care is taken to see that the warp threads are always slightly moist. The weft yarns are stored in water till weaving and inserted wet.

For protection, a white cotton cloth is placed between the adjacent layers of PATAN PATOLA wound on the cloth beam.

When a saree-length has been woven, a few centimeters of the warp are left free and weaving is resumed with a small stripe of yellow or red weft. Later the Patola woven one after the other are separated by cutting through the middle of this stripe.

Once all the three patola forming one set of warp have been woven and the end of the warp is near the breast beam, the three parts of the leasing arrangement are taken out first. Then, the handle of the LUNKI is removed from the heddle rod. The shed rod and the pressure bar are removed as well.

The fabric is then cut at the end (or the thin stick of the breast beam arrangement is drawn out) and rolled off from the cloth beam. The heddle system is also removed for reuse later. Finally, the piece is cut into three patola and folded for sale.

After weaving the Patola, it is opened on the loom and final finishing is done with a half round plate, which gives smoothness and shine to the cloth which is called *gasaniya*.

**K) Uniqueness:**

- PATAN PATOLA is generally woven on a single loom operated only by hand, which has no leg paddle and is slanted at one end, which is unique and very different from a regular handloom.
- PATAN PATOLA are silken saree like fabrics whose gorgeous colours and striking patterns are the products of exquisite workmanship. The pattern emerges as the warp is laid out and then gets brilliantly delineated when the weft is thrown across.
- PATAN PATOLA are double ikat creations and hence both warp and weft threads of PATAN PATOLA are tied and dyed before weaving.
- The loom is only a frame that has no mechanical motions and is different from handlooms.
- The instruments used in the preparation of PATAN PATOLA and for operation of the loom are different from regular handlooms.
- Eight silk threads are enmeshed into one by hand. Raw silk threads are thinner than hair and hence eight such threads are woven together.
- Starch is applied after every 8-10 inches of weaving so that the yarn does not get tangled.
- Instead of readymade reeds, the reeds (*Waa*) used in production of PATAN PATOLA are prepared by the craftsman himself from cotton threads by a special technique.
- For moving odd and even threads up and down, a special hand operated instrument known as *Lunki* is used as opposed to a leg operated peddle used on conventional looms.
- The most unique of all the production processes in PATAN PATOLA manufacturing is the weaving process. The challenge lies in synchronization of designs in the warp and weft yarn which have been incorporated in the preparatory processes so that the planned design emerges in the woven fabric. This is the main trait of PATAN PATOLA.
- The design of PATAN PATOLA is refocused after approximately 6-7 inches of weaving by tugging the warp yarn with an iron rod. The bobbin thread has to be passed from one side to the other manually at every step with the support of the *vee* made of sesame wood. The inclination of the loom makes it easier to move the shuttle.
- The secret of the technique of PATAN PATOLA weaving is in the tie-dyeing of the silk threads called *bandhara* process in India. Unlike the usual practice of dyeing the thread in one uniform colour, the warp and the weft are both dyed in a variegated range of shades along the whole length of each single silk thread achieved by tying or knotting it. This unique process is therefore known as tie-dyeing or knot dyeing.
- PATAN PATOLA cannot be woven in humid weather, because when the humidity is high, the yarn tends to tangle. During monsoon, a heater is kept under the loom.
- PATAN PATOLA is such a fine piece of handwork that it requires a special measurement tape that can measure even a 100th part of an inch.



- Minimum 2 pieces of patola of the same colour combination and design are prepared as single piece without blouse piece.
- The texture of the PATAN PATOLA is rare and unique as they are pre-industrial creations.
- Durability of PATAN PATOLA is about 300 years.
- The distinctive motifs on PATAN PATOLA remain same on front and reverse sides permitting the PATAN PATOLA to be reversible with no change in the appearance of the PATAN PATOLA.
- Geometric designs on PATAN PATOLA are such that the appearance of PATAN PATOLA is same regardless of which of the four corners the PATAN PATOLA is worn from.
- PATAN PATOLA has two *pallavs* with border and one side has golden *jari patto*.
- Though PATAN PATOLA are much thicker than silk sarees or silk fabrics, they are softer than silk sarees or silk fabrics. Uniqueness of PATAN PATOLA is durability despite softness.

**L) Inspection Body:**

The Association has “two tier” inspection system:

- I. Initial inspection by Expert Artisans, who weave the PATAN PATOLA
- II. Inspection by Inspection Committee consisting of two members of the Association and one expert Independent Agency as appointed time to time

The inspection and quality control are undertaken by the expert Artisans at the first instance who employs high standards of quality control. Subsequently the final products are time to time inspected by the above said Inspection Committee.

Apart from the above two tier inspection system, the other members of the Association also act in as an advisory capacity to the expert artisans.

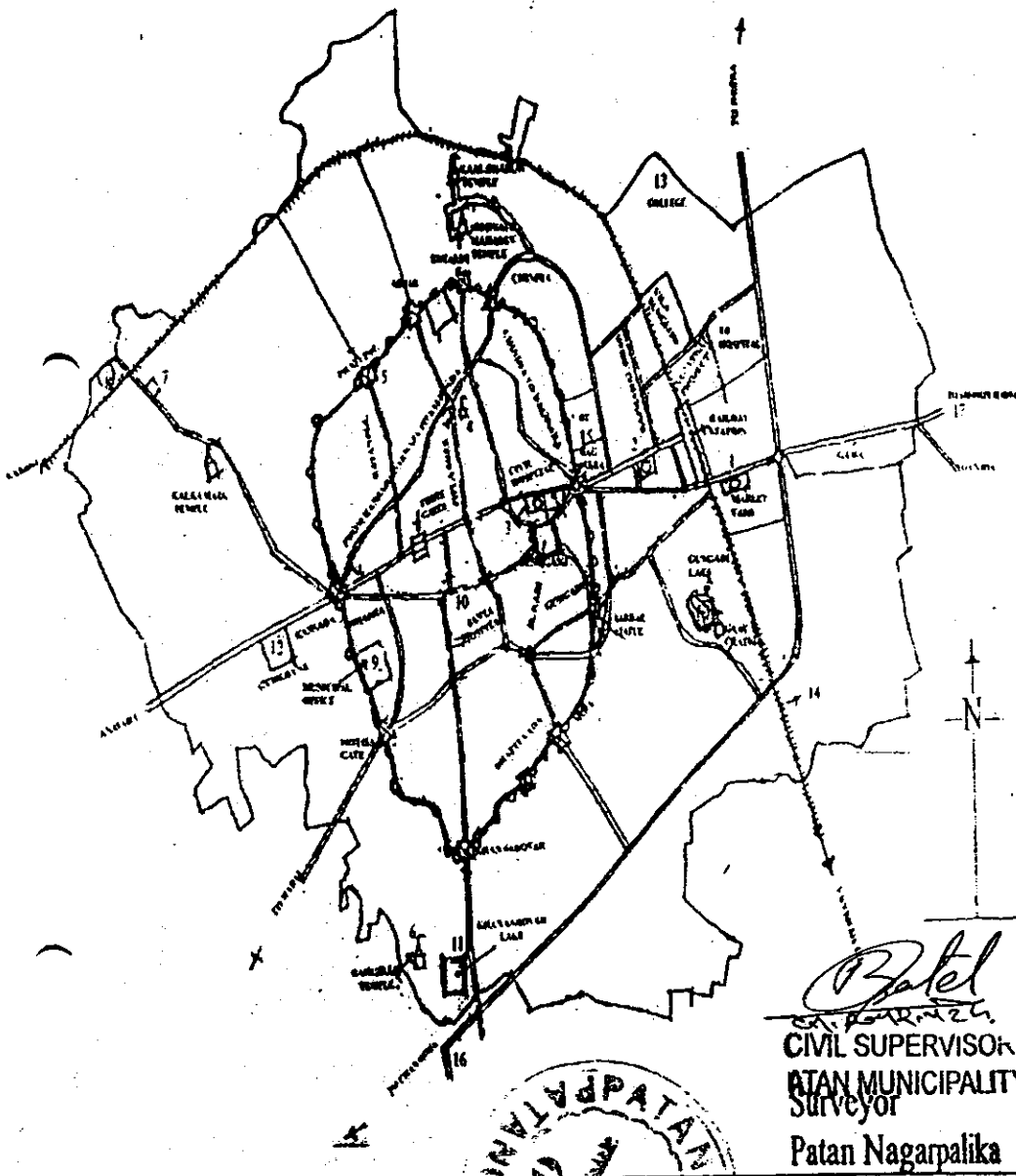
**M) Others:**

**Mode of sale of Product and Product availability to Customers:**

PATAN PATOLA are not sold through retail outlets. Interested customers are shown albums of PATAN PATOLA and at times even parts of PATAN PATOLA are shown. The designs, colour combination, delivery time and price are fixed and then on completion of PATAN PATOLA, after inspection, it is hand delivered to the customer.

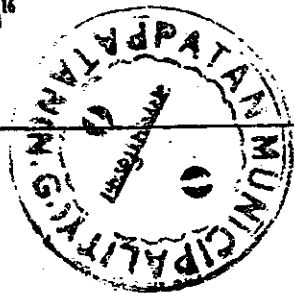
# PATAN CITY MAP

- 1-3 Municipal Market
- 4 Panchasar Jain Temple
- 5 Court Vistar Gates
- 6 Hindu Temple
- 7 Rani ki Vav
- 8 Sahastraling Lake
- 9 Municipality Office
- 10 Civil Hospital
- 11 Khan Sarovar Lake
- 12 Gymkhana
- 13 College
- 14 Patan Mehsana Railway Line
- 15 ST Stand
- 16 Deesa Chanasma Road
- 17 Patan Siddhapur Road



*Batel*  
 CIVIL SUPERVISOR  
 PATAN MUNICIPALITY  
 Surveyor  
 Patan Nagarpalika

*[Signature]*  
 Chief Officer  
 Patan Nagarpalika



**G.I. Authorised User Application No.-366 in respect of Lucknow Chikan Craft  
Registered GI Application No.-119**

Application is made by, **M/s. Ideal Light Society**, Represented by Renu Singh, President, C 4/2, Nirala Nagar, Lal Colony, Lucknow, India dated January 30, 2012 for Registration in Part-B for Authorised User in respect of Registered Geographical Indication **Lucknow Chikan Craft** under Application No-119 in respect of goods textile and textile Goods, not included in other classes; bed and table covers Goods falling in Class 24, Clothing falling in Class 25 and Lace and embroidery falling in Class 26 is hereby advertised as accepted under sub-section (1) of Section 13 of Geographical Indications of Goods (Registration and Protection) Act, 1999

- (A) **Applicant** : **M/s. Ideal Light Society**
- (B) **Address** : **M/s. Ideal Light Society,**  
Represented by Renu Singh, President, C 4/2,  
Nirala Nagar, Lal Colony, Lucknow, India
- (C) **Date of Authorised  
User Application** : January 30, 2012
- (D) **Registered Geographical  
Indication** : **Lucknow Chikan Craft**
- (E) **Registered Proprietor** : (i) Small Scale Industry, Government of Uttar Pradesh, (ii) Network of Entrepreneurship & Economic Development (NEED); (iii) Lucknow Chikan Handicraft Association, (iv) Shilp Sadhana
- (F) **Address** : (i) Small Scale Industry, U.P. Govt., Shri. Lal Bahadur Shastri Bhawan, U.P.Secretariat, Lucknow - 226 001  
(ii) Network of Entrepreneurship & Economic Development (NEED), 39-Neel Vihar, Sector-14, Near Power House, Indira Nagar, Lucknow-226016;  
(iii) Lucknow Chikan Handicraft Association, II Floor, Ganpati Bhawan, 5, Khun Khunji Road, Lucknow-226003;  
(iv) Shilp Sadhana, 14, Ram Block, Sector-11, Rajajipuram, Lucknow-226017
- (G) **Class** : 24, 25 and 26
- (H) **Goods** : **Class 24** -Textiles and textiles goods, not include in other classes; Bed and Table Covers  
**Class 25** - Clothing  
**Class 26** - Lace and embroidery

Advertised under Rule 41(1) of Geographical Indications of Goods (Registration & Protection) Rules, 2002 in the Geographical Indications Journal 50 dated 07<sup>th</sup> May 2013

**G.I. Authorised User Application No.-385 in respect of Bikaneri Bhujia  
Registered GI Application No.-142**

Application is made by, **M/s. Shri Bishan Lal Babu Lal**, Darsaniyo ka Chowk, Bikaner – 334001, Rajasthan, India dated May 21, 2012 for Registration in Part-B for Authorised User in respect of Registered Geographical Indication **Bikaneri Bhujia** under Application No-142 in respect of Food Product (Snacks) 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) **Applicant** : **M/s. Shri Bishan Lal Babu Lal .**
- (B) **Address** : **M/s. Shri Bishan Lal Babu Lal,**  
Represented by its Partner Shri. Jeevan Lal Agarwal  
Darsaniyo ka Chowk, Bikaner – 334001,  
Rajasthan, India
- (C) **Date of Authorised  
User Application** : May 21, 2012
- (D) **Registered Geographical  
Indication** : **Bikaneri Bhujia**
- (E) **Registered Proprietor** : Bikaner Bhujia Udhyog Sangh
- (F) **Address** : Bikaner Bhujia Udhyog Sangh,  
71A, RICCO Residential Colony, Bichhwal,  
Bikaner – 334006, Rajasthan, India
- (G) **Class** : 30
- (H) **Goods** : **Class 30 – Food Products (Snacks)**

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## 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 Indication 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 goods 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:

