

STATEMENT OF CASE

For

Application for GI Registration of Goan Cashew Feni *(GI Application no. 120)*

Filed by

Department of Science, Technology &
Environment (DST&E), Govt. of Goa

In association with

The Goa Cashew Feni Distillers & Bottlers
Association (GCFDBA), Goa.

To the

Geographical Indication (GI) Registry,
Chennai

Through

Patent Information Center (PIC), Goa

March 2008

- A. **Types of goods** - Alcoholic Beverages (except beers) under Class 33

B. **Specification** - Goan Cashew Feni is an alcoholic beverage made by fermentation and distillation of juice of cashew apples. The Goan Cashew Feni is well known for its unique fruity flavor and traditional medicinal properties. Cashew apples are collected manually mainly for harvesting cashew nuts, and the apples are used for the production of Feni. Normally, the apples, which have fully ripened and fallen on the ground, are collected, crushed for the extraction of juice and the extracted juice is fermented and distilled, without the addition of any foreign ingredient, to obtain Feni. Basically, Feni production is undertaken for a period of three months only, as the apples are available only during the months of March, April and May.

C. **Physical and Chemical Composition of Goan Cashew Feni -**

Physical	-	Colorless clear liquid. If matured in wooden barrels it turns Golden brown tint
Aroma	-	Fruity pleasant, strong Cashew Apple.
Ethanol content v/v	-	18 grav at room temperature using Cartier Hydrometer <i>or</i> 42.8% v/v using Gay Lussac Alcoholometer calibrated at 15 ^o C and Centigrade Thermometer (Source: IS 2302 – 1962 Table 1 – Temperature)
Tartaric acid (expressed in terms of g per 100 liters of absolute alcohol)	-	Maximum 200
Volatile acid (i. e. Acetic Acid – expressed in terms of g per 100 liters of absolute alcohol)	-	Maximum 60
Esters as ethyl acetate (expressed in terms of g per 100 liters of absolute alcohol)	-	Minimum 50
Aldehydes as		

acetaldehyde (<i>expressed in terms of g per 100 liters</i>)	-	Minimum 25
Ammonium Chloride	-	To pass the test
Copper as PPM	-	Maximum 10 PPM
Methanol	-	To pass the test
Furfural (<i>expressed in terms of g per 100 liters of absolute alcohol</i>)	-	Maximum 5
Residue on Evaporation (<i>in g</i>)	-	Maximum 0.2

D. Name of the geographical indication [and particulars] -

Cashew crop is grown in Goa along with some other regions of India as well as other parts of the world namely – Brazil and East African countries. However, till date, ‘Cashew Feni’ is produced and recorded in various Government documents only in the State of Goa, India.

Goan Cashew Feni is named after state of Goa, the place of its production and the word “Feni” is derived as such due to the fact that when the liquor is shaken in a bottle or poured in a glass, some froth is formed which in the local Konkani language is known as “Fen”. Reportedly, Goan Cashew Feni is being produced at least for the last 450 years. The Cashew tree was introduced in Goa by the Portuguese sailors in the 16th Century, mainly for checking soil erosion along the coast. Later, Cashew apples were utilized for preparation of liquor through distillation by traditional method in almost each and every cashew plantation located in the state. Crushing, fermentation and distillation are still practiced by the traditional method all over the state and thus gives employment to thousands of local people. The art of distillation is totally eco-friendly, man-made process, which is traditionally acclaimed and transferred through generation to generations, or from one *bhaticar* to another. There is no school or institution that

provides any such teaching methods (i.e. distillation procedure) nor books on the process anywhere.

The origin of the name Goa or Gomantak, as it is also known, is lost in the mists of time. In the later Vedic period (c.1000-500 BC), when the Hindu epic Mahabharat was written, Goa has been referred to in Sanskrit as Gomantak, a word with many meanings, but basically signifies a "fertile land".

The most famous legend associated with Goa, is that of the mythical sage Parashuram (the sixth incarnation of Lord Vishnu), who several thousand years ago created the entire stretch of Konkan coast by ordering the seas to recede. The Sea God gave up the lands on the banks of the two main rivers of Goa viz. Mandovi and Zuari (then called Gomati and Asghanasini) for the settlement of Aryans accompanying Parashurama.

Local legend has it that, "Lord Brahma, the God of creation, was enjoying a nap exhausted after his creation of beautiful flowers, fruits, monkeys and man. Saraswati seeing her husband at rest, stealthily turned her hand at the job he left unfinished. She took the saffron blush of mangoes, softness of orange and the template of a pear, fashioned them into a fruit. She was enjoying herself with her creation when she found her husband slowly waking up. She felt guilty, and only then, she realized the mistake of leaving the nut outside the fruit. She hurriedly dimpled the top of the fruit, stuck the nut and left it hanging upside down on a tree. And ever since it was lying upside down in this manner."

- E. **Description of the goods** - Goan Cashew Feni is produced by the fermentation and distillation of cashew apple juice obtained by crushing of cashew apples and hence is colorless. Most importantly, production of Feni does not involve addition of any foreign ingredients. The size, juice content as well as the composition of cashew apples vary from place to place and tree to tree depending on the quality of the soil, rainfall and other physical/biological parameters. However, the main components of the apple juice are moisture, carbohydrates, proteins, fat, sugar, tannic acid, Carotene, Vitamin C, calcium, phosphorus and iron. The liquor so obtained by a typical distillation process is characteristically

Goan more specifically because the end product i.e. Cashew Feni is a distillate that is ready for drinking unlike other alcoholic drinks where water and other ingredients are added to make it potable.

Goan Cashew Feni is primarily considered as country liquor and it has a strong fruity flavor, peculiar taste, strong aroma and astringent smell. It was also produced for its medicinal properties in addition to its consumption as an alcoholic beverage. Feni has been used for treating the ailments such as worm sickness, cold, body ache, fever or flu, toothache, wounds /cuts, cramps, low blood pressure, irregular movement of bowels, loss of sleep for aged people, diarrhea etc. Also, different types of cocktails can be prepared from Cashew Feni as base.

F. Geographical area of production and map -

Goa is located on the West coast of India facing the Arabian Sea and lies between 14° 19" North latitude and 73°38" East Longitude, with a total geographical area of 3,61,113 hectares (*Refer Figure – 1*). Cashew is grown all over Goa. It was basically introduced by the Portuguese to prevent soil erosion. North Goa district has 39,987 ha of area under cashew cultivation while South Goa district has 14,871 ha. Cashew, being a tropical crop, is well suited for warm and moist climate. A Cashew sapling requires 4 to 5 years to produce its maximum yield. Also, proximity to sea helps to increase the yield of the trees. Also, almost in each and every cashew plantation, juice is extracted by the traditional method of crushing the apples by bare feet followed by distillation and fermentation of the same.

G. Proof of origin [Historical records] -

Van Rheedee, in his book "Hortus malabaricus" mentions Cashew. There is a reference to the preparation of liquor from cashew apple in the book written by Fr. Clemente da Ressurreicao titled Tratado, II published in the year 1782. Reference to Cashew Feni is also made in a Royal Letter written on the subject of taxation of country liquor including Cashew Feni. Similarly a reference to Feni was found in the research journal "Oriente Portuguesa" published in 1833. The

main article pertains to taxation of liquor in India during the Portuguese Rule. Also references to Cashew Feni dating back to 1877, 1886 and 1892 were found as cited in the book Glossario Luso- Asiatico by Rodolfo Delgado published in the year 1920. (*Copy of the Royal Letter may please be referred as enclosed with original application*)

H. Methods of Production –

Fermentation: - The juice extracted from cashew apples is allowed to stand for a period of 3 to 4 days. When fermentation is allowed to start aerobically, one of the changes that are brought about, is the production of heat. This indicates the onset of fermentation. The course of fermentation follows a particular pattern. The rise in temperature is noticed from 2nd day onwards upto 4th day. This is precisely the time where the activity of the yeast is to the maximum. In any fermentation, it is essential to record the temperature and specific gravity after every 12 hours. At the end of 4th day of fermentation process, the ambient temperature is attained in the fermenter indicating the slow rate of fermentation. A wooden ladle is used to punch the cap every 8 hours. Thus, at the end of 4th day, free-run wine is ready for distillation. It is desirable to keep the temperature low during fermentation. Carbon dioxide (CO₂) produced carries the fruit pulp to the surface, which forms a cap (as thick as 6"). It is necessary to break to cap to avoid development of unavoidable flavoring components/constituents, produced by solids.

Distillation: The process of distillation is traditionally called Bhatti. The various implements that are needed for distillation are described briefly.

BHATICAR	-	Distiller
KAZ	-	Cashew Tree
KAZHE	-	Many Cashew Trees
Kazkar	-	Man
Kazkarn	-	Women
Tanverlan	-	White and reddish flowering.
Phokan	-	Seed growth
Kakado	-	Green apple

Muto	-	Red/Yellow ripe apple
Patlo	-	Basket to collect fruit
Kato	-	Stick for picking apples
Kolmbi	-	Pit for collection
Olnta/Olanap	-	Separating seed from fruit
Malap	-	Process of extraction of juice from fruit
Chumal	-	Pulp after extraction of Juice
Niro	-	Nectar

IMPLEMENTS

Vazan	Process of extraction nectar
Palhpaneche	
Vaal	
Khorn	Complete Pot Still holder for heating (Bhatti) by firewood (Ordinary mud is mixed in water and kept for 2 days (Kusunk)
Bhaan	Copper Pot (To seal the bhaan broken tiles {Nalkatte} sealed with mud To close the pot (lid) made out of wood.
MOREN	
DHANO	
SUMBLI	Stick for holding the lid.
KHANI	To tie the lid.
	To tighten the stopper.
NALLI	Connector from heating Pot to Cooling Still.

Nalli made from bonke tree or altencha Zhad covered with gabo (from plaintain tree) then covered with sumbli
Sealing Process - Joint is sealed by using malmal cloth and Rohini mud and pulp of phalpane.

The **first distillation** would require 130 ltrs. of fermented juice to be taken in the copper cauldron (Bhaan) and heated by use of firewood, the temperature is controlled by increasing or reducing the quantity of firewood being burnt. This is done on approximate measure based on the experience of the distiller (Bhatticar). The Juice starts boiling and vaporization will begin in about 40 minutes from the time of lighting the fire and requires about 30kgs. of firewood till the completion.

The vapour passes through the bamboo pipe (nalli) to the clay earthen pot (Lavni) and gets condensed into liquor called Todap. The lavni is kept cool by the regular use of water manually. The yield thus obtained would be about 25 to 26lts. and about 16 to 17 grav in strength.

The **next process** (*i.e. 2nd distillation*) would be distilling Feni.

About 130 ltrs. of Todap (Liquor derived from 1st distillation) is taken along with 110 ltrs. of fermented Cashew Juice in the copper cauldron (Bhaan) and this mixture is again heated. In about 45 minutes the vaporization will start and yield about 22 to 23 ltrs. of Cashew Feni of 19 to 20 grav strength in about 3½ hours consuming about 40kgs. (2½ maan) of firewood). This process is called the 2nd distillation and gives the Cashew Feni its distinctive flavor and peculiar taste not found in other liquors.

I. Uniqueness -

Goa is the only place where cashew apples are used for the production of the liquor called Feni. Cashew Feni has a strong flavor and aroma, which is unique as also the Cashew apple. The production process is also unique, as it requires skilled workers and the production secrets are not shared beyond the community, which is engaged in traditional production of Cashew Feni. Also the medicinal properties of Feni are unique. Feni has been used for treating sicknesses such as worm sickness in children, cold, body ache, fever or flu, toothache, fresh wounds and cuts, cramps and catches due to chilly weather, low blood pressure, irregular movement of bowels, loss of sleep for aged people, diarrhea etc.

J. Inspection Body -

In order to deal with the G.I. related issues, the following inspection body has been constituted.

1. The Director, Department of Science, Technology & Environment (DST&E), Govt. of Goa, Saligao.
2. The Commissioner, Excise Department, Govt. of Goa, Panaji.
3. Representative of the The Goa Cashew Feni Distillers & Bottlers Association.
4. The Director, Directorate of Agriculture, Govt. of Goa,, Krishi Bhavan, Miramar.
5. The Director, Food and Drugs Administration, Govt. of Goa, Panaji.

K. Others salient properties of Feni:

The Goan Cashew Feni is also used for its medicinal value. Feni production is a cottage industry and provides employment to thousands of local people. During the distillation of cashew juice, the first distillate obtained is called Uraq (15 to 20% of alcohol) and it is also consumed as a beverage. It is very important to note that the word Feni is written in two spellings i.e. "Feni" and "Fenny". Cashew apple after crushing is used as cattle feed and distilled juice (spent wash) is excellent organic manure after composting.

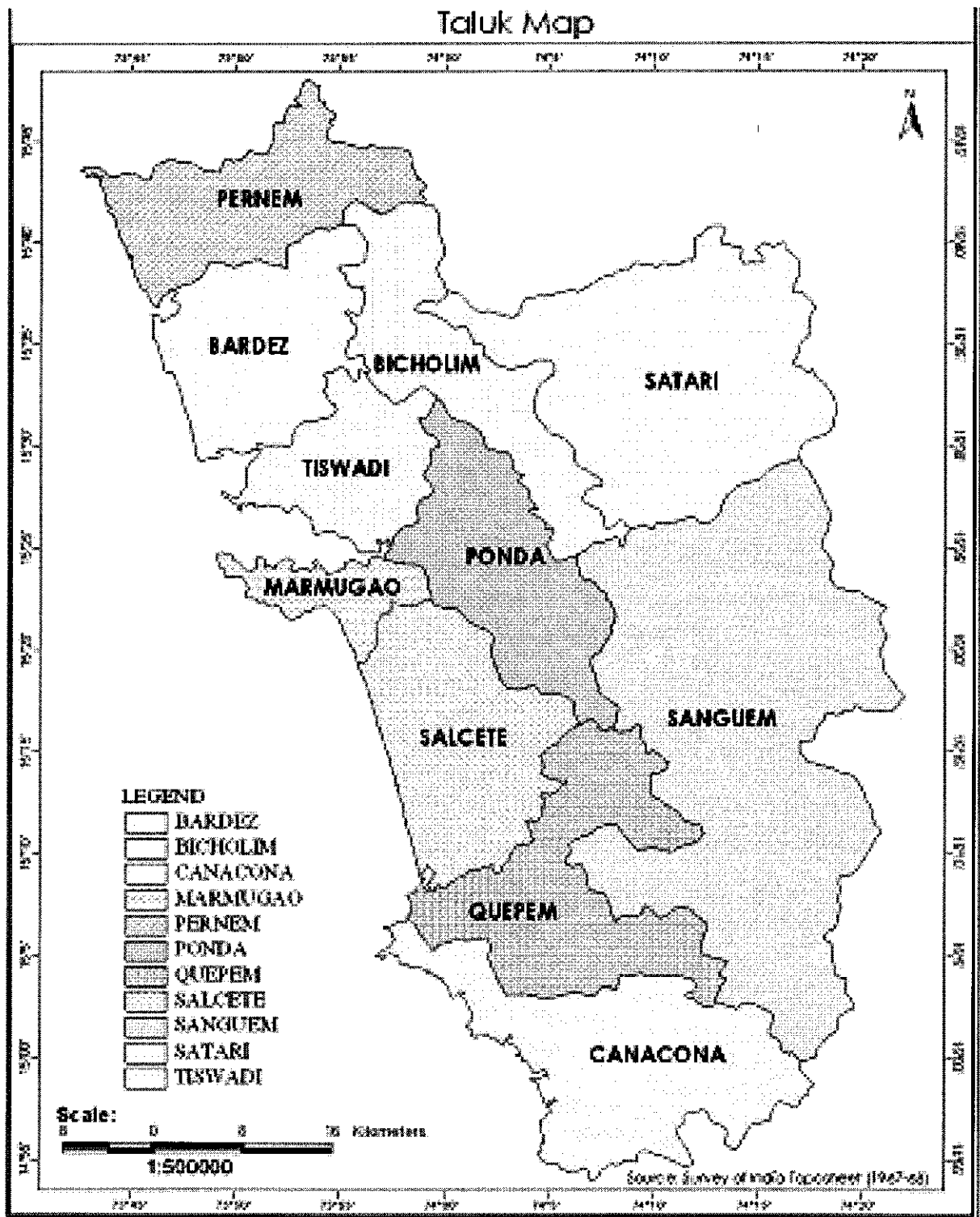


Figure 1. Geographical Map of Goa