## **History of Jaggery**

Project Report Submitted by

Dr. Prerna Mittal Assistant Professor Shri Ram College Muzaffarnagar

funded by

Mahalaxmi Paper and Craft Pvt. Ltd. Muzaffarnagar



Shri Ram College Muzaffarnagar

> Principal Shri Ram College Muzaffarnagar

Co-ordinator IQAC, Shri Ram College, Muzaffarnagar



# Maha Luxmi Paper & Craft P Ltd

Ref

Grant 2019-20

Date: 10.06.2019

To

Dr Aditya Gautam Director Shri Ram College Muzaffarnagar

Subject:

Sanction of Rs. 50,000/- grant for Gur Mahotsav.

Dear Dr Gautam ji,

This is with reference to our letter dated 12.07.2019. We are sanctioning and paying Rs. 50,000/- to your college for the Project "History of Jaggery" for Gur Mahotsav. Please give us a receipt of the amount paid to you.

Thanking you,

Yours Sincerely

(Neeraj Kumar Taayal)

Director

MahaLuxmi Pvt. Ltd.

CERTIFIED

Co-ordinator IQAC, Shri Ram College, Muzaffarnagar Pilipipol Shri Ram College Muzaffamagar

Bhopa Road, Muzaffarnagar-224117, Uttar Pradesh, India

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## SHRI RAM COLLEGE

(Affiliated To CCS University, Meerut & Approved By NCTE)

CIRCULAR ROAD, MUZAFFARNAGAR

### 'A' Grade Accredited by NAAC

Date: 12.07.2019

Dr. Prerna Mittal, Department of Education Shri Ram College, Muzaffarnagar

We are pleased to inform you that the Project Proposal entitled "History of Jaggery" submitted by you to the Management Committee, which is related to Maha Luxmi Paper and Craft Pvt. Ltd has been approved and an amount of Rs. 50,000 has been sanctioned for the Project in your department.

Please start working on the above said project and take necessary action for timely completion of the project.

Principal

CERTIFIED

Co-ordinator IQAC, Shri Ram College, Muzaffarnagar

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57-A, Agarwal Market, First Floor, Mahavir Chowk, Muzaffarnagar (U.P) – 251001 Phone No. 0131-2622405

## <u>Utilization Certificate</u>

S.N.	Detail of sanction of Fund with Project name and Duration	Amount
1.	30-Day project on History of Jaggery, Date of Sanction of Fund- 12-07-2019 as per Sanction Letter	50000.00
	TOTAL	50000.00

It is Certified that out of Rs. 50000.00 (Rs. Fifty Thousand Only) of grants sanctioned by M/s Maha Luxmi Paper and Craft Pvt Ltd during the year 2019-20 in favor of Shri Ram College, Muzaffarnagar, a sum of Rs. 50000.00 has been utilized for the purpose of the project for which it was sanctioned and that the balance of Rs. Nil remaining unutilized at the end of the year has been surrendered. The Extra amount (If any) is met out by Shri Ram College.

2. Certified that we have satisfied our self that the conditions on which the grant was sanctioned have been duly fulfilled/are being fulfilled and that we have exercised the following checks to see that the money was actually utilized for the purpose for which it was sanctioned.

#### Kinds of checks exercise-

- 1 Checking of cash book
- 2 Checking of payment vouchers.
- 3 Checking of expenses bills.

or Shri Ram College

Secretary

Place: Muzaffarnagar Date- 16-08-2019 CERTIFIED

Arincipa;

For Goel Rakesh & Co. Chartered Accountants

Rakesh Kumar Goel

M. No. 071858 FRN: 003374C

Co-ordinator IQAC, Shri Ram College, Muzaffarnagar

#### History of Jaggery

Jaggery is a traditional non-centrifugal cane sugar consumed in the Indian Subcontinent and Southeast Asia. It is a concentrated product of cane juice and often date or palm sap without separation of the molasses and crystals, and can vary from golden brown to dark brown in colour. It is similar to the Latin American panela, also known as piloncillo in Mexico. It contains up to 50% sucrose, up to 20% invert sugars, and up to 20% moisture, with the remainder made up of other insoluble matter, such as wood ash, proteins, and bagasse fibres. Jaggery is very similar to muscovado, an important sweetener in Portuguese cuisine and British cuisine. The Kenyan Sukari ngutu/nguru has no fibre; it is dark and is made from sugar cane.

#### Etymology

Jaggery comes from Indo-Portuguese jágara, jagra, from Telugu (chakkara), Kannada (sakkarae) meaning sweet or Malayalam (cakkara), ultimately from Sanskrit śarkarā, which means candied sugar. It is a doublet of sugar.

#### Origins and production

Jaggery is made of the products of sugarcane and the toddy palm tree. The sugar made from the sap of the date palm is more prized and less commonly available outside of the regions where it is made. The toddy palm is tapped for producing jaggery in India, Bangladesh, Pakistan, Nepal, Myanmar and Sri Lanka. In Sri Lanka, syrup extracts from kithul (Caryota urens) trees are widely used for jaggery production. All types of the sugar come in blocks or pastes of solidified concentrated sugar syrup heated to 200 °C (392 °F). Traditionally, the syrup is made by boiling raw sugarcane juice or palm sap in large, shallow, round-bottomed vessels.

#### Preparation

Harvesting sugar cane without pre-burn - the abundant waste on the ground will be irrigated to release nutrients for the next crop.

Historically, the sugarcane cultivators used crushers that were powered by oxen, but all modern crushers are power-driven. These crushers are placed in fields near the sugarcane plants. The cut and cleaned sugarcane is crushed and the extracted cane juice is collected in a large vessel. A quantity of the juice is transferred to a smaller vessel for heating on a furnace.

The vessel is heated for about an hour. Dried wood pulp from the crushed sugarcane is traditionally used as fuel for the furnace. While boiling the juice, lime is added to it so that all the wood particles rise to the top of the juice in a froth, which is skimmed off. Finally, the juice is thickened. The resulting thick liquid is about onethird of the original volume.

This hot liquid is golden. It is stirred continuously and lifted with a spatula to observe whether it forms a thread or drips while falling. If it forms many threads, it has completely thickened. It is poured into a shallow flat-

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bottomed pan to cool and solidify. The pan is extremely large to allow only a thin coat of this hot liquid to form at its bottom, so as to increase the surface area for quick evaporation and cooling. After cooling, the jaggery becomes a soft solid that is molded into the desired shape. The quality of jaggery is judged by its colour; brown means it is higher in impurities and golden-yellow implies it is relatively pure. Due to this grading scale, coloured adulterants are sometimes added to jaggery to simulate the golden hue.

### South Asia (Indian subcontinent) and Southeast Asia

Jaggery is used as an ingredient in sweet and savoury dishes in the cuisines of India, Pakistan, Bangladesh, Nepal, Sri Lanka, Afghanistan, Iran. For example, a pinch of it is sometimes added to sambar, rasam and other staples in Udupi cuisine. Jaggery is added to lentil soups to add sweetness to balance the spicy, salty, and sour components, particularly in Gujarati cuisine.

In Sri Lanka, jaggery is usually made using the syrup of the kithul palm tree, or from coconut syrup. The espective names in Sinhalese are kitul hakuru and pol hakuru. Jaggery from the syrup of the Palmyrah palm is more prominent in the northern part of the country; this is referred to as palmyrah jaggery or that hakuru. Jaggery made from sugarcane syrup is considered inferior to these types of palm syrup based jaggery varieties, and the term jaggery is generally understood in the country to refer to palm syrup based jaggery rather than sugarcane jaggery.

Maharashtra in India is the largest producer and consumer of jaggery known as "gul" in Marathi, "gur" in Urdu, "bellal!" in Telugu, bella in Kannada, "Vellam" in Tamil, "sharkara" in Malayalam, "gua" in Bengali, "Gōa" in Gujarati, "miaa" in Sanskrit, gur in Hindi. Kolhapur is one of the largest producers of jaggery in India and has a GI Tag for Jaggery. Most vegetable dishes, curries, and dals, and many desserts contain it. Jaggery is especially used during Makar Sankranti for making a dessert called tilgul. In Gujarat, a similar preparation known called tal na ladu or tal sankli is made. In rural Maharashtra and Karnataka, water and a piece of jaggery are given to a person arriving home from working under a hot sun. In Indian culture during the New Year feast, jaggery-based sweets are made. In Andhra, Telangana and Karnataka on Ugadi festival day (New Year), Ugadi Pachadi is made from jaggery and five other ingredients (shad ruchulu- sweet, sour, salt, tangy, spice and bitter) and is consumed symbolizing life is a mixture of happiness, disgust, fcar, surprise, anger and sadness.

Molasses, a byproduct of the production of jaggery, is used in rural Maharashtra and Karnataka as a sweetener. It contains many minerals not found in ordinary sugar and is considered beneficial to health in traditional Ayurvedic medicine.6 It is an ingredient of many sweet delicacies, such as gur ke chawal / chol ("jaggery rice"), a traditional Rajasthani or Punjabi dish.

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In Gujarat, laddus are made from wheat flour and jaggery. A well-known Maharashtrian recipe, puran poli, uses it as a sweetener apart from sugar. Jaggery is considered an easily available sweet which is shared on any good occasion. In engagement ceremonies, small particles of it are mixed with coriander seeds. Hence, in many Gujarati communities, engagement is commonly known by the metenym gol-dhana, literally "jaggery and coriander seeds".

Jaggery is used extensively in South India to balance the pungency of spicy foods. In Andhra Pradesh, and Tamil Nadu it is used for sweets such as chakkara pongal and milk pongal (prepared with rice, milk, jaggery). During Sankranti, Arisclu, an authentic Andhra Pradesh dish, is prepared, and in Tamil Nadu, ellurundai (sesame balls), Adhirasam and pori vilangu urundai (puffed rice balls) are prepared as offering called prasadam - to God during puja and festivals such as Diwali, Tamil New Year and Janmashtami.

A sweet liquid called "Paanakam", made of water, jaggery and peppercorns is prepared as the favorite offering Lord Rama during Rama Navami festival. In Kerala, it is considered auspicious and is widely used in cooking. It is a vital ingredient in many varieties of payasam, a sweet dish. In Tamil Nadu, jaggery is used exclusively as a sweetener. It is used in a dish called chakkarai pongal. It is prepared during the festival of Pongal (Thai Pongal), which is held when the harvesting season begins. It is used to make kalhi, to sweeten fruit salads and payasam (sweet milk) that are offered to the Gods. Jaggery is used in religious rituals. In rural areas, cane jaggery and palm jaggery are used to sweeten beverages, whereas refined sugar has replaced it in urban areas.

#### Semisolid sugarcane juice drying in another pan for preparation of jaggery: a practice in India

In Odia cuisine, cakes or pi has contain jaggery. Pithas like Arisa pitha are made out of jaggery called as guda in Odia. Kakara pitha contains coconut filings which are caramelized using jaggery. Guda is also added to rice lakes known as chuda and eaten for breakfast. Some marmalade made of mango and dillenia contain the ingredient.

In Bengali cuisine, it is commonly used in making sweet dishes, some of which mix jaggery with milk and coconut. Popular sweet dishes such as lannulanu or palishapta pinha mix it with coconut shreds. Jaggery is molded into novel shapes as a type of candy. The same preparation of sweets have been made in its neighbouring state of Assam. Some of the popular sweet dishes of Assam such as til-pitha (made of rice powder, sesame and jaggery), other rice-based pitha, and payas are made of jaggery. In some villages of Assam, people drink salty red tea with a cube of gurd (jaggery), which is popularly called cheleka-chah (licking tea). Traditional Karnataka sweets, such as paayasa, obbattu (holige) and unday use different kinds of jaggery. A pinch is commonly added to sambar and rasam. Karnataka produces sugar and palm-based laggery.

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Co-ordinator IQAC, Shri Ram College, Muzaffarnagar Muzaffarnagar in Uttar Pradesh has the largest jaggery market in the world, followed by Anakapalle in the Visakhapatnam District in Andhra Pradesh. The Kolhapur District in western Maharashtra is famous for its jaggery, which is yellow and much sought-after in Maharashtra and Gujarat. Mandya in Karnataka is known for its jaggery production.

In Myanmar, jaggery is harvested from toddy palm syrup. In central Myanmar and around Bagan (Pagan), toddy syrup is collected solely for making jaggery. The translucent white syrup is boiled until it becomes golden brown and then made into bite-size pieces. It is considered a sweet and is eaten by children and adults alike, usually in the afternoon with a pot of green tea. It has been referred to locally as Burmese chocolate. Toddy palm jaggery is sometimes mixed with coconut shreds, jujube puree or sesame, depending on the area. This type of jaggery is used in Burmese cooking, usually to add colour and enrich the food.

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