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USUAL CANE JUICE WITH AN UNUSUAL BLEND – A CASE STUDY IN TAMIL NADU, INDIA

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Abstract

With the programmes like ‘Skill India’, ‘Stand up India’ and ‘Make in India’, the government of India is giving more emphasis on enterprises, in particular agricultural enterprises. Enterprises and start – ups in agriculture is a rarely chosen option among the farmers and unemployed youth. This is because of the heavy risk associated with agribusiness. But here is a graduated duo, who left their highly paid job and are now engaged in sugarcane juice business, solely with their own effort and self-motivation. They have become successful with this commercial crop, in their first attempt on agribusiness. In this context, in India, cane juice is the most sought after health drink, next only to coconut which cater during summer to combat heat and sun stroke. Documenting this success story will not only guide the sugarcane farmers in starting a business venture, but also will motivate the interested youth to become Agripreneurs. This unique model of business can be very well replicated in other areas but success is assured only when there is dedication and perfection.

Keywords: Enterprise, Sugarcane juice, Agripreneurs, Dr. Karumbu and Innovation.

SUGARCANE–AN INTRODUCTION:

Sugarcane (*Saccharum officinarum*) is one of the several species of tall perennial true grasses of the tribe Andropogoneae. It is native to the warm temperate and tropical regions of South Asia and

Southeast Asia. Sugarcane is the world’s largest crop by production quantity. In 2012, the Food and Agriculture Organisation (FAO) estimated that sugarcane was cultivated on about 26×10^6

hectares, in more than 90 countries, with a world-wide harvest of 1.83×10^9 tonnes.



The world demand for sugar is the primary driver of sugarcane agriculture. Cane accounts for 80% of sugar produced; most of the rest is made from sugar beet. Other than white sugar, products derived from sugarcane include molasses, bagasse and ethanol

Top five sugarcane producers – 2015

S. No.	Country	Production (Thousand Metric Tonnes, TMT)
1.	Brazil	739267
2.	India	341200
3.	China	125536
4.	Thailand	100096
5.	Pakistan	63750

Source: Food And Agricultural Organization (FAO) of United Nations: Economic And Social Department: The Statistical Division

CANE JUICE:

A vital component of sugarcane is Cane juice. This juice is mostly consumed immediately after crushing the cane and is not considered for value addition due to poor keeping quality. Given its popularity

to beat the heat, cane juice also possess plenty of health benefits as listed below.

- i. Cures Acne.
- ii. Prevents or treats sore throat, cold and flu.
- iii. Helps in speedy recovery from jaundice.
- iv. Promotes weight loss, keeps body fit and healthy.
- v. Clears urinary flow; helps kidney to function smoothly.
- vi. Good for digestion.
- vii. Lowers body cholesterol.
- viii. Fights against **Healthy Cane juice** prostate and breast cancer
- ix. Diabetic can enjoy without fear.
- x. Provides glucose and hydrates body quickly.
- xi. Cures febrile disorders.
- xii. Aids liver functioning.
- xiii. Facilitates development of bones and teeth.
- xiv. Prevents bad breath and tooth decay.
- xv. Ensures safe pregnancy.



**Nutritional information of 28.35 g
(1ounce) of cane juice**

S. No.	Nutrients	Quantity (g)
1.	Proteins	0.20
2.	Water	0.19
3.	Ash	0.66
4.	Fat	0.09
5.	Total carbohydrates	27.40
6.	Sugar	25.71
7.	Calcium	32.57 mg
8.	Potassium	162.86 mg

Source: indobase.com

Cane juice has about 36 calories per 100 gm of weight.

In India, cane juice is the most sought after health drink next only to coconut which cater during summer to combat heat and sun stroke. These health drinks are mostly sold by street – side vendors usually when the demand increases with the increasing mercury level. Of the two, cane juice is normally rejected by health conscious citizens because of the unhygienic crushing process and poor keeping quality. This has led to a situation in which cane juice is strike off as a health drink inspite of its innumerable health benefits.

DR. KARUMBU – A CANE JUICE SURGEON:

In order to revive the glory of cane juice, the two graduates, Manikandan and Arul Prasath (MBA and BCA resp.,) of Coimbatore, both in their late twenties, thought of a venture with cane juice. Both of them were childhood friends from a nearby village in a neighbouring district of Coimbatore.

There born a business venture in agriculture, named literally as “Dr. Karumbu” (*Karumbu* is the Tamil word

for Sugarcane). It is a first of its kind enterprise, running successfully by a duo with no agricultural background. The trade name “Dr. Karumbu” and trade design were coined and developed by them for which they had availed trademark after registration.



Actually, Arun and Manikandan started the cane juice business in 2009 as a counter in a shop in Race course, Coimbatore. But they realised that this did not add any value to their brand. So in 2011, they opened their first Dr. Karumbu outlet in Nehru Nagar, Coimbatore. In the Race course counter, they also offered fast foods. But very soon they realised that it was unhealthy and when they opened the Nehru Nagar outlet, they decided not to add any food to their menu. All the ideas and strategies followed by them are their own and none of them are implemented before elsewhere. They have also not consulted any scientific or business organisations for technical or marketing advisory. The initial investment made by them is Rs. 10 lakhs for which they had availed a loan from the bank. Now, the enterprise is running very successfully with many innovative strategies implemented mostly by trial and error method. More than academic localities, cane juice sales is a mass hit in residential areas among the aged senior citizens and fitness freaks

The duo had established their business venture with three strong principles which are projected below.

- Health & Hygiene
- Zero impact on environment (Go Green)
- Awareness creation

PROCUREMENT & PROCESSING:



The main raw material for this enterprise is Sugarcane. After trying out with a few sugarcane varieties, they had fixed the variety PSR 00-343 as the best one for quality juice extraction. This variety is grown by the farmers of neighbouring Erode district of Tamil Nadu in large numbers. PSR 00-343, released by Philsurin is tall with fairly thin to medium, cylindrical, brownish purple stalks.

It has the advantage of very good germination and heavy tillering, resulting in high tonnage of 120 tons cane per hectare with each ton yielding 2.22 bags of 50 kilos, or a yield of 266.4 bags of sugar. This is highly resistant to smut and rust and resistant to yellow spot disease. Hence, it is procured from them with the help of middle men. While procuring, they ensure that the cane is cut properly and no damages are reported. Usually, 5 tonnes of canes are procured on weekly basis and also based on demand.

After procurement, the canes are stored in a processing unit at Koundampalayam, which is situated in the outskirts of Coimbatore. In this

processing unit, peeling of outer purple coat is done manually by three trained labourers. Similar to procurement, peeling is also done based on demand and is stored in cool condition for a maximum of only two days; above which the cane will become unfit for quality juice extraction

VALUE ADDITION AND SALES:



The duo had designed a unique cane crushing machine which crushes the cane efficiently. The machine is regularly cleaned and gloves are used while the sugarcane is fed into the machine. They are employing labourers on part time basis for juice extraction and machine maintenance. The extracted cane juice is bottled in plastic bottles bearing their brand name. Only fresh stalks are used for juice extraction. No water, white sugar, preservatives or artificial flavour is added to the juice. It is 100% raw, pure, natural and unrefined extract. Since the juice is extracted from pre-cooled cane, it is not a necessary to add ice to it while serving.

Apart from this bottled cane juice, they also came up with a set of mocktails with cane

juice by blending healthy seasonal fruits like Amla, Mango, Sapota, Cucumber, Pine apple, Water melon etc., thereby avoiding fruits such as Apples and Grapes, that are not available as fresh always. All their value added products are

very reasonably priced and named appropriately. Sales takes place for 12 hours a day from 10 in the morning to 10 in the night.

List of products of Dr. Karumbu with price

S. No.	Products	Price / cup
	Freshly squeezed sugarcane juice	
	<i>Basics</i>	
1.	Natural	Rs. 20. 00
2.	Lemon	
3.	Ginger	
4.	Lemon & Ginger	
5.	Chilli	
6.	Chat Masala	
7.	Pepper & Salt	
8.	Mint	
	<i>Cane O Lemon delight</i>	
1.	Lemon mint cool	Rs. 30. 00
2.	Lemon Ginger cool	
3.	Lemon Ginger mint cool	
4.	Chilli Lemon cool	
5.	Honey Lemon cool	Rs. 35. 00
	<i>Smoothies</i>	
1.	Banana	Rs. 30. 00
2.	Mango (Seasonal)	Rs. 40. 00
	<i>Herbal juice</i>	
1.	Amla	Rs. 30. 00
	Blended with Sugarcane juice	
	<i>Mocktails</i>	
1.	<i>Cucumber refresher</i> (Sugarcane juice, Cucumber, Lemon)	Rs. 30. 00

2.	<i>Sweet Rasam</i> (Sugarcane juice, Chilli, Ginger, Mint, Lemon)	Rs. 30. 00
3.	<i>Pineapple Mint</i> (Sugarcane juice, Pineapple, Mint)	Rs. 40. 00
4.	<i>Coconut cane</i> (Sugarcane juice, Tender coconut, Honey)	Rs. 40. 00
5.	<i>Heart Warmer</i> (Sugarcane juice, Water melon, Pomegranate, Lemon)	Rs. 60. 00
6.	<i>Cucu Pineapple cooler</i> (Sugarcane juice, Pineapple, Cucumber)	Rs. 40. 00
7.	<i>Water melon Cucumber Punch</i> (Sugarcane juice, Water melon, Cucumber)	Rs. 40. 00

Source: Dr. Karumbu outlet, Saibaba colony, Coimbatore.

The price list itself throws light on the uniqueness of Dr. Karumbu. Though they are selling all these cane juice blends, the most preferred among the public is raw cane juice extract. Plastic bottles with raw cane juice of small (200 ml), medium (500 ml) and large (1000 ml) size of prices Rs. 20, 40 and 70 respectively are sold akin to commercial carbonated beverages. These bottled cane juices must be consumed within a day of purchase even if it is in the refrigerator because sugarcane juice has a shelf life of only an hour and a half. Another unusual fact about this product is that consumers of any age group can have it, irrespective of diabetics. Since, all the products take up their sweetness from cane juice which has only complex sugar, no white sugar is added to them. This complex sugar in the cane juice takes a long time for breaking down into simple sugar in the body and hence does not harm diabetic patients. Whereas if white sugar is added for sweetness, it consists of simple sugar which is easily absorbed by the body and hence lead to a spike in blood sugar levels.

CHALLENGES:

When raised queries about challenges faced by them, they responded quickly as listed below after prioritization.

- Peeling of purple coat of sugarcane by the labours occupies a major part of their costs. More than costs, it requires highly skilled labours with sumptuous time for peeling.
- The above constraint is a consequence of lack of an efficient sugarcane peeling machine. A sugarcane peeler will reduce their expenses and ensures quick supply of peeled canes to the outlets.
- Shorter shelf life of the products. This hinders the sales of their product to distant places. The shelf life of cane juice can be lengthened by adding artificial preservatives, which is against their ethics.
- Usage of plastic bottles for sales is another issue which is also against their motto of 'Go Green'.
- Since there is no organic cane producing farms known to them, they were made to procure inorganic canes for processing at present.
- Lack of awareness among the public about the benefits of cane juice. Moreover, there also prevails a misconception that just drinking a glass of juice would give them diabetes.

FUTURE PLANS:

To overcome the above listed constraints and also to meet out the rising demands, they had few plans for implementation in the future.

- Planning to give franchise of their brand name to other interested Agripreneurs.
- Opening another one or more outlets in addition to the present two outlets.

- Efficient usage of cane trash (canes after juice extraction) by sending it as an input for compost and paper cup making.

A missed out interesting fact is that both of them left their well – paid software jobs to start this business. Through this business, they are not only solving the problems of cane juice lovers, but also increasing the number of cane juice lovers. Each of the two outlets is taken care by them individually. Both the outlets are rented and employs two to three labours on part time basis. More than all these, the duo had set an example for many unemployed graduates. They stand as a figure of confidence to many new young innovators and also to farmers. This unique model of business can be very well replicated in other areas but success is assured only when there is dedication and perfection.

SUGGESTIONS:

All the strategies followed by them are based on their own research and development. Till today, they had consulted only with their closed circles. There is a possibility of utmost improvement to the enterprise if it is technically supported by Sugarcane Breeding Institute, State Department of Agricultural Marketing and Agri – business and the Tamil Nadu Agricultural University and financially supported with the schemes of Ministry of Micro, Small and Medium Enterprises (MSME).

REFERENCES:

- caneinfo.nic.in
- indobase.com
- www.fao.org.

ACKNOWLEDGEMENTS:

- “THE HINDU” – Metro plus, Krithika. R, *Sweet deal for summers*, dated May 2, 2016.
- Mr. Arun Prasath of Dr. Karumbu, face – to – face conversation, dated May 7, 2016.