

Coconut sugar – A healthy sweetener with high business potential

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'Coconut sugar', a natural sweetener has become a popular alternative to white sugar. Coconut sugar is a value added product from coconut sap (neera) that is gaining reputation in the global market. Due to an alarming increase in diabetic and obese people there is a growing trend of consumption of low calorie, low sugar and sugar free products. Due to its flavour and perceived health benefits it is becoming a hot commodity in the health food world.

A healthy sweetener

Coconut sugar is a low Glycemic Index (35) food product, which means when consumed; it will not cause a spike in blood sugar level. Its production process is simple and leaves much of the rich minerals, vitamins and amino acids found naturally in coconut sap. For example, compared to brown sugar, coconut sugar has 36 times the iron, four times the magnesium, and over 10 times the amount of zinc. Also, coconut palms produce an average of 50-75% more sugar per acre than sugar cane and use less than 1/5th the soil nutrients and water for its production.

Jerry Taray, a coconut farmer in Philippines foresaw the potential of this item. He established a coconut farm with dwarf variety coconut seedlings. These varieties, if nurtured and managed well, start fruiting as early as 3 years from planting. They are suitable for sap extraction because the neera extractors need not have much worry regarding climbing these trees.

Jerry estimated the income generation from coconut sugar and compared it with that of copra. It shows that coconut sugar is much more economical than copra.

In the above computations by Jerry, 480 litres of neera can be tapped from one tree. This is a figure



parts of the country. Now other coconut farmers have also entered this business and are making a living out of it.

A women group has also taken up initiatives to enter this business. A women's group in Aroman, Philippines, with an initial strength of 15 women, established 'Aroman

Copra	
Quantity of nuts produced on one tree per year	96 nuts
Quantity of copra produced from one tree per year	21 kg
Average Income generation	Rs 441/tree/year (as Rs 20/kg)
Coconut sugar	
Quantity of neera extracted from one tree per year	480 litres
Quantity of sugar produced from one tree per year	60 kg
Average Income generation	Rs 16547/tree/year (as Rs 275/kg)

obtained when one tree is assumed to be tapped only for 240 days a year with an average neera extraction of 2 litres per day. But a tree can be tapped for more than 240 days and more than 2 litres can be tapped from one tree in one day. So the real business potential for coconut sugar is higher than the above estimated figures.

To identify potential market for his product, Jerry took part in Trade expo in Cebu, Hong kong, and Germany where he displayed his product to the mass. People were very excited about this product. Jerry received an order of 13.6 tons from a buyer in Holland. A buyer from UK still orders 3-5 tons every month and another from Australia and New Zealand orders 3 tons every 4-5 months. This was possible due to the consistent effort and sheer determination of Jerry in promoting coconut sugar. The knowledge, skill and technology of production of coconut sugar were spread to other

Natural Food Producer Multipurpose Cooperative (AWNFP)' in North Cotabato. This group was organized by the incumbent mayor of Carmen. With support from Philippine Coconut Authority (PCA) and the local government they were able to certify their coconut sugar as organic and enter the export markets. "Before, practically all of us in the group were unemployed. Now they are busy with the employment generated by the coco sugar industry," said Jadrage, chairperson of the cooperative.

These women are meticulous and patient in every step of their coconut sap sugar processing protocol. "Their regular earnings now enable them to help their husbands sustain the schooling of their children and provide for other family needs" said Mateldo Gerodias, chairman of Barangay Aroman.

"We believe our farmers and entrepreneurs can create a niche in

natural products whose primary value is their health quality. Coconut sap sugar is one of those products that has already taken off in the market and which still offers so much valuable growth potential," said, Agricultural Research director, (PCA), Dr. Nicomedes P. Eleazar. Philippines exported 220 metric ton of coconut sugar in the year 2012 as compared to 36 metric ton in the year 2010. This product is shipped to the Middle East, South Korea, Hong Kong, Norway, Canada, Switzerland, Australia, and New Zealand. This is the level of growth of demand for coconut sugar in the world.

Another major country which is dominant in this sector is Indonesia. It currently has well over 100,000 farmers within its population that rely on coconut sugar as their primary income. Those 1,00,000 coconut sugar producers bring over 50,000 ton of coconut sugar to market domestically every month. That's over 6,00,000 ton of coconut sugar produced and mostly consumed domestically in Indonesia every year.

What is the status of India in terms of Coconut sugar production? Nowadays, most of the coconut farmers in India still rely on copra-based products which have a low price in the market. Therefore, for the last 30 years, there is no significant improvement in the income of coconut farmers. It has always been a puzzle for agriculture and economic planners on how to help marginalized coconut farmers from their conventional copra processing and trading. And the solution is product diversification and promoting new products of high market value.

Coconut sugar production provides an opportunity for the Indian coconut farmers as it can provide relatively better income than that of copra-based products. This is where the formation of Coconut producer societies (CPS) and women's Self help groups formed by Kudumbashree becomes handy. United effort from these groups will help in availing credit facilities,

Area, Production and Productivity in Major Coconut Growing Countries (2012)

Country	Area ('000 ha)	% Share	Production (Million Nuts)	% Share	Productivity (Nuts/ha)
Indonesia	3796	30.51	16256.00	22.80	4282
Philippines	3574	28.73	15862.00	22.25	4438
India	2039	16.39	21892.00	30.70	10737
Sri Lanka	417	3.35	2741.11	3.84	6573
Tanzania	310	2.49	427.511	0.60	1379
Brazil	279	2.24	3457.612	4.85	12393
Thailand	214	1.72	806.00	1.13	3766
Papua New	221	1.78	1495.00	2.10	6765
Mexico	176	1.41	1397.2	1.96	7939
Vietnam	157	1.26	1015.14	1.42	6466
Malaysia	112	0.90	570.00	0.80	5089
Samoa	97	0.78	266.5	0.37	2747
Vanuatu	92	0.74	447.00	0.63	4859
Mozambique	70	0.56	313.72	0.44	4482
Fiji	65	0.52	162.50	0.23	2500
Solomon	38	0.31	100	0.14	2632
Ghana	55	0.44	365.124	0.51	6639
Jamaica	49	0.39	301.464	0.42	6152
Myanmar	42	0.34	421.85	0.59	10044
Others	639	5.14	3001.69	4.21	4697
Total	12442.00	100.00	71299.41	100.00	5731

Source: APCC Statistical Year Book 2012

technology and training programs from various Government organizations such as Coconut Development Board. Also, during the time of sale of their products, the poor and marginalized farmers can bargain for better prices.

There are lots of advantages for the farmers in taking up this activity. It provides employment for many people. Tappers are required for extracting neera and women for processing it into sugar. If this activity is conducted in 2 or 3 shifts then it can further increase employment opportunities. This collective effort will encourage them to work harder in order to increase profit margin by increasing the volume of production of sugar. Therefore coconut sap sugar industry is a promising business opportunity for coconut farmers of India.

Small and medium land holding farmers in Philippines have started to replicate Jerry's practices of Coconut sugar business. They are now determined to find their way out of poverty. With support from Philippines Coconut Authority and the local governments, both men and women farmers have come together in groups to realize the power of unity and team work. India, being a leading producer of coconuts, possesses great opportunity for the farmers, who have already formed the three tier Farmer producer Organisations. Mutual coordination and collective effort will make coconut sugar industry grow and reach potential markets, thereby improving the standard of living of the coconut farmers.