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Marketing team with innovative strategies for 12th plan

Dear Coconut Farmers,

In the recent past, many potential entrepreneurs have shown keen interest in establishing processing units in the coconut sector. They are aware of the fact that coconut and coconut products are good for health and having good demand, but they do not have a clear idea about how to proceed in marketing. Marketing division of CDB which was concentrating on collection of data, on price analysis and trying to develop market intelligence is now thinking of a new and innovative strategy for marketing of coconut products in the domestic and foreign markets. Production capacity of the existing processing units are quiet insufficient to meet even the domestic demand. It is in this context that we are trying to discuss about innovative marketing strategies in this issue of Indian Coconut Journal.

Coconut cultivation in India is spread across 18 states and 3 Union Territories, but almost 90% of the area under cultivation and 91% of the production are in the four Southern states of Andhra Pradesh, Karnataka, Kerala and Tamil Nadu. Almost 88% of the coconut produced in the country is used for copra and oil making. Any variation in the price of coconut oil, is adversely impacting the coconut price and this in turn leads to neglect of the crop. The 220 coconut processing units already assisted under TMOC manufacture 12 different value added products. None of them are facing any problem in marketing within the country and few of them could successfully capture international markets too.

As per census 2011, the Indian population living in urban areas has reached around 37.7 crores. This population is bigger than that of USA and European Union. If coconut products with good shelf life which are conveniently packaged are made available to urban consumers, many of them would love to use coconut products. Coconut oil is not being used much outside Kerala, Karnataka and Tamil Nadu for edible purposes, but all over India it is used for application on hair and body. Usage of tender coconut water in the raw form as well as in the packaged form, desiccated coconut (with and without fat), coconut milk, coconut milk powder, coconut milk cream, ball copra (edible copra) as dry fruit, coconut chips, natural vinegar made out of coconut water and neatly packaged coconut oil for non edible purposes are already sold across the country. Many such products from Sri Lanka, Thailand, Malaysia, Philippines and Vietnam are readily available in the urban markets in India. The 2011 census figures reveal that there are 53 million plus cities and 462 towns with more than 1 lakh population. The 63

JnNURM cities in India account for more than 65% of the urban population. These 63 towns could be taken up as first level 'potential market' which can be targeted during 12th five year plan. The marketing team of CDB has brought out a product mix which includes packed tender coconut water, coconut chips, desiccated coconut, virgin coconut oil, coconut milk, coconut milk cream, coconut milk powder, ball copra, packed coconut oil and natural coconut vinegar.

CDB do not intend to purchase products from manufacturers or would not take up wholesale or retail distribution. But our 'marketing team' will facilitate manufacturers through their consortiums or association to access these markets (forming of consortiums of manufacturers of each product from coconut is being attempted) like the already existing "association of coconut based activated carbon manufactures" in India. Collecting relevant information regarding demand, seasonality, availability of products, potential areas and passing on this information to the consortiums along with generic promotion of products can be supported by CDB. The marketing division of CDB consists of a team of two Deputy Directors (Marketing) at Chennai and Kolkata and another Deputy Director at Market Development cum Information Center (MDIC) at New Delhi, a Senior Technical Officer (Marketing) at Bangalore, Marketing Officer and Assistant Marketing Officer at head quarter. The team is expected to gather relevant data, disseminate information using modern systems of communication and monitor the progress on a regular periodicity in the selected cities. Teaching and training institutions in management can be identified for taking up market research and surveys. A fairly long collaboration with these management institutions will surely help the manufacturers' associations to collect relevant information. To reach out to atleast a small segment of the potential consumers of the 63 towns, we have to have hundreds of new processing units.

Tender coconut water has great potential to be marketed across the country. Even when coconut prices were falling, price of tender coconut was steady and quite stable in India. In order to make sufficient quantities of packaged tender coconut water available in all these 63 JnNURM cities, a rough estimate indicates that we should have 150-200 new tender coconut units with a processing capacity of 10,000 tender coconuts per day. India being the second largest producer of coconut and having the highest productivity can very well increase the production and harvest of tender coconuts in the country. The present level of usage of tender coconut is less than 10% of the total national production. In order to reach out to more

domestic market we have to inspire and motivate new entrepreneurs to this sector and start marketing in 20-25 cities. Based on market studies, market surveys and market performance, more investors may be attracted in to the sectors including joint ventures with existing players in the global market. New investors may be encouraged to establish units at the earliest with support from Technology Mission on Coconut (TMOC) from CDB. By the end of the 12th Five Year Plan, we can reach out to all the 63 JnNURM cities.

Similar methodology for scaling up marketing and production of other products in the product mix can be adopted. CDB can tie up with public sector cooperative federations of various state governments having a pan Indian presence for establishing marketing infrastructure. We have to go about collaborating with the cooperative marketing federations or cooperative consumer federations having their retail outlets in these cities for initiating the marketing. Consortiums can also find out C & F agents, wholesale dealers and establish a chain of retailers. Going along with the existing retail chains and outlets is another option to be explored. CDB can promote Business 2 Business meets as well as Business 2 Customer meets in the selected cities for the proposed 'product mix'. During the past few years Board has participated in 100 to 125 exhibitions across the country. In future exhibitions, major focus can be given on promoting this product mix across the urban consumers in India.

Another area that CDB has to explore further is collaborating with other commodity boards like Tea Board, Coffee Board and Spices Board for creating basic marketing infrastructure under one roof. With extra support from SFAC, Ministry of Food Processing Industries and appropriate ministries/ departments of the State governments, with least new investment in infrastructure, we can try to make the presence of coconut products across the country. The concept of 'constructive competition' and 'growing together' rather than 'destructive competition' and defeating each other should be our guiding principle for this. NASSCOM is a living example that can be emulated by consortiums of coconut product manufactures.

Listing out a directory of producers and manufacturers of each coconut product, directory of potential buyers and wholesalers, assessment and forecast of demand, making use of professional staff at consortium level, developing a supply chain with professional staff etc are to be addressed. CDBs network in India includes 3 Regional Offices, 6 State Centres, a Market Development cum Information Centre at New Delhi and the Head Office. CDB have to develop an information system, indicating details such as who produces what at which place and their

capacity; who needs what products at which place, when, how much at what price.

The responsibility of the producers is to ensure best quality, stable and affordable price, continuous supply, better shelf life, attractive packaging and timely delivery. Based on this, production units can introduce positive structural changes in production which in-turn will create a situation where the over dependence on coconut oil and copra will be reduced. Surely it is a win-win-win situation for farmers, processors and consumers.

Farmer collectives starting with Coconut Producers Societies (CPSs) integrated to Federations of Coconut Producers Societies and Producer Companies can, if they wish so, directly enter into processing of coconut for value addition. Or they can think of aggregation of the products at appropriate levels which can ensure adequate and regular supply to existing and potential manufacturing units. The mutually agreed price for a reasonable period will surely help the farmers and processors.

As this is the time for preparation of budgets of various state governments, let us encourage and motivate the state governments to put up projects to encourage entrepreneurs and farmer collectives to set up more processing units for coconut. Earmarking an extra incentive of 25% for the units for producing value added coconut products over and above the 25% subsidy given through Technology Mission of CDB, an enabling tax regime, say a 0% VAT for the coconut processing units atleast for the first five years etc will surely facilitate establishment of more processing units in those states. Another request forwarded to state governments is to establish 'coconut parks' in districts with 25,000 or more area under coconut cultivation. More farmers can be attracted to coconut cultivation with appropriate high yielding and hybrid varieties. Improving the cash flow in the countryside through the farmers and farm labourers will surely result in rural prosperity. Many of the untapped areas in the non traditional states and 'disturbed districts' can be brought under coconut based farming system ensuring sustainable income to the farmers as well as workers. It can create lots of employment opportunities for the youth in those areas. All these ideas revolve around how successfully we can implement this new and innovative marketing strategy.

Wish you all a happy and prosperous new year.

Yours sincerely,



T K Jose
Chairman



Innovative marketing strategies in JnNURM cities

Mini Mathew

Publicity Officer, CDB, Kochi

Coconut Development Board (CDB) is a statutory body established under the Ministry of Agriculture, Government of India for the integrated development of coconut cultivation and industry in the country with focus on productivity increase and product diversification. Recommending measures for regulating imports and exports of coconut and its products is the major activity under market promotion. Adopting measures to get incentive prices for coconut and its products and fixing grades, specifications are also the functions of marketing wing. Board has always been in the forefront in discharging the duties assigned by the government from time to time.

Since the coconut farmers are badly affected by the recent price crash of coconut, copra and coconut oil, Board concentrated its efforts to help the farmers from this severe crisis in accordance with Board's mandate.

Countries with less production of coconut have gone long way ahead of India in marketing value added coconut products. Sri Lanka with less than 1/6th of the area under coconut cultivation is exporting coconut products four times than that of India. Philippines, Indonesia, Vietnam and Thailand are the other major global players in coconut value addition and export.

A major share of the coconut

produced in our country is used for making copra and coconut oil. Only a meager share is used for processing for value addition. There are an array of products that can be made from coconut. It is high time that we must change the existing method of fixing price of coconut based on coconut oil price.

It is in this context that the marketing team of the Board is trying to create market for coconut products in 63 JnNURM cities which come under the Jawaharlal Nehru National Urban Renewal Mission. Let us hope that these initiatives will make revolutionary changes in the coconut sector. JnNURM is a huge mission which aims at creating 'economically

productive, efficient, equitable and responsive cities' by a strategy of upgrading the social and economic infrastructure in cities. During the 12th Five year plan period, the marketing team of CDB would identify market for the coconut product basket in these 63 cities. The coconut product basket consists of 10 coconut value added products, viz. **packed tender coconut water, coconut chips, desiccated coconut, virgin coconut oil, ice cream, coconut milk cream, coconut milk powder, ball copra, packed coconut oil and coconut vinegar.**

Why the JnNURM cities?

Coconut sector is trying to identify the immense opportunities existing in the JnNURM cities. Through these novel value added products, Board is trying to delink the existing coconut-copra-coconut oil linkage and is attempting to introduce innovative marketing strategies. This attempt of the Board is for establishing a strong marketing network for coconut based value added products in the JnNURM cities among the big business houses and giant corporates. The newly introduced marketing team has a catalyst role to play between consumers and producers. They will find out demand for basket of coconut products through market studies/surveys/ research in collaboration with management/ teaching / training institutions. The joint efforts with these institutions will make the job of marketing team easier for finding out potential pockets/urban markets in JnNURM cities. Almost 37.7 crores of urban population residing in JnNURM cities



Innovative marketing strategies

comprises of 31.6% of total population of India and it would contribute about 65% of the Gross Domestic Product (GDP). It is bigger than the US population. It is hoped that the attempt of Board would give an impetus to the manufacturing units to reach out to JnNURM cities.

63 important cities of India are included in JnNURM. This includes 7 metro cities with 4 million plus population, 28 cities which have 1-4 million population and 28 cities with less than 1 million population. 70% of the urban population is estimated to be living in JnNURM cities. State capitals, important tourist centers and pilgrim centers also come under JnNURM cities.

Many innovative and natural products are being introduced to urban consumers in India, exploring the growing purchasing power of the urban middle class. Food habits are also tilting towards natural products. This is an opportunity for coconut products to capture the minds of urban consumers. Tender coconut water and neera in place of artificial soft drinks, virgin coconut oil in lieu of virgin olive oil, virgin coconut oil based beauty care products, edible ball copra and coconut chips as convenience snack items and coconut palm sugar having low glycemic index for diabetic patients are capturing the attention of health conscious consumers. Compared to the rural folks, the urban population has enough purchasing power and there exists a good consumer culture which provides demand for any good product. Hence natural coconut products with good quality will definitely have good demand among

the urban population. Mostly employed urban inhabitants prefer readymade foods packed in tins and cans and hence it is sure that these packaged products will definitely find good demand in JnNURM cities.

It is estimated that more Keralites occupy urban centers in other states too. Majority of them prefer to use coconut and coconut products. There are also other South Indian occupants who also

prefer using coconut products. Thus the market will be periodically widened. It is the responsibility of the marketing team to exploit this opportunity by making available the products as per demand.

Marketing Team of CDB



From L to R: Smt. S.Deepthi Nair, Marketing Officer; Shri. Gajram Singh, Deputy Director (Dev), Shri Hemachandra, Deputy Director (Mktg), G.M. Siddarameswara Swamy, Senior Technical Officer (Mktg), Sri. K.S.Sebastian, Asst. Marketing Officer and R.N. Das, Deputy Director (Mktg)

Recommending measures for improving marketing of coconut and its products and recommending measures for regulating imports and exports of coconut and its products is the mandate of the marketing team of CDB. Adopting measures to get incentive prices for coconut and its products and fixing grades, specifications and standards for coconut and its products are also the functions of Marketing Department. The marketing division of CDB consists of a team of 6 officials working at different metros and head office but networked through cell phones, internet and video conferencing. They can gather relevant data, disseminate information using modern systems of communication and monitor on a regular basis. Two Deputy Directors (Marketing) at Chennai and Kolkata and another Deputy Director at Market Development cum Information Center at New Delhi, a Senior Technical Officer

(Marketing) at Bangalore, Marketing Officer and Assistant Marketing Officer at head quarter form the 'marketing team' in CDB. Suitable management institutions will be identified by the team from JnNURM for taking up market research and surveys. Many of the management departments and their graduate and post graduate students especially those specializing in marketing can do a lot of studies and projects in the marketing of coconut products. Our marketing team will collaborate with such institutions in these 63 cities to estimate a primary demand of coconut products.

Board's marketing team will be controlling the market interference of Coconut Producers Federations and their apex body, Producers Company.

Marketing team will ensure the quality as well as the uninterrupted

supply of value added products produced by Coconut Producers Societies and their Federations. Financial assistance will be extended to the projects of Producer Companies on coconut value added products. The team will also conduct Business 2 Business meet as well as Business 2 Customer meets in the selected towns for the product mix of coconut. Marketing team will make tie up with public sector cooperative federations of various state governments. The team will equip the farmers' consortium to find out C & F agents, wholesale dealers and establish a chain of retailers. Going along with the existing retail chains and outlets is also another option to be explored by the team. Team in association with the publicity wing of the Board will participate in exhibitions for promoting this product mix across the urban consumers in India.



Coconut products for sale in US supermarket



Coconut Palm Sugar - the future hope for diabetic patients

Awareness creation on the qualities of coconut and coconut products

To introduce the coconut products, Board may participate or conduct exhibitions in and outside India. Board can also conduct business meets to introduce coconut value added products and also for educating the consumers on its qualities. Major exhibitions in JnNURM cities may be identified and Board can participate in the same.

Trademark: Consumers are confident on products from reliable sources with good quality. Trademarked items are marketed well than those which doesn't have a trademark.

Packaging: Attractive packaging is an important factor. Many products with attractive packaging and good shelf life are available in the markets. Board can work in association with Indian Institute of Packaging. Board has also published books on packaging.

Marketing of Niche Products: There are many popular niche products available in the market. For

example, virgin coconut oil is a value added product. Many niche products made from virgin coconut oil like massage oil, products for aroma therapy, virgin coconut oil capsule, shampoo, facial creams and skin protective products are coming to the Indian market from Philippines, Thailand, Fiji, Samoa and American countries. We must compete with such products and make it available in all JnNURM cities in all emporiums and shopping malls.

Labelling: Consumers are very cautious about the nutrient component of the product. For example, if they get information about the nutrients and energy they get from 100 ml coconut water, they can purchase the product according to their requisition.

Role of Coconut Producers Societies

One of the major obstacles for the lack of coconut value added products is the huge working capital required for setting up a single unit. With the timely and apt interference of the Board, more than 1869 CPS and 50 Coconut Producers Federations are formed in coconut

sector. 10 Federations together can form a Producer Company. This would pave the way for the strengthening of the coconut sector. Working on a group basis would bring down individual costs. This will also benefit the farmers by avoiding the exploitation of middle men. Hence our farmer collectives must immediately take up processing for value addition. Board under the **Technology Mission on Coconut** is extending 25% financial assistance to eligible entrepreneurs. They can also avail financial assistance from central and state governments. Societies will have to mobilize only the balance fund.

New Marketing strategies during the 12th Five Year Plan

In the beginning of the 12th Five Year plan, India lags far behind in coconut processing and export of value added products. Board through the innovative marketing strategies is planning to ensure the supply of coconut products according to its demand. At present there are only 14 tender coconut processing units in India. According to our estimate, if we need to market processed tender coconut



Role of management institutions in developing new market strategy

water in all the 63 cities, we should have at least 150-200 units. We must have at least 96 units for catering to the need of 100% consumers in all metros. At present there are only 2 coconut milk units, 2 coconut milk powder units, 80 desiccated coconut powder units, 17 virgin coconut oil units, more than 100 coconut oil units and only 4 coconut chips manufacturing units. The average coconut productivity of India is 8303 nuts per ha. i.e. 48 nuts per tree. We must accelerate our per palm productivity to 150 nuts per tree for making available the product mix in all the JnNURM cities. This year's export turnover of coconut products have crossed Rs. 837 crores. This increase is from a very low level of Rs.6 crores in 2004. India too can compete in the world market if we can make our export turn over at Rs.5,000 crores by the end of this Five Year Plan period.

As per estimates, we must have 1795 chips units to cater to 20% of the consumers in these cities. In this regard we should have to produce 21,545.52 MT coconut chips from which we can produce 107 million 20g packets. It may not be possible to meet the demand, even if all the CPSs are starting 2 units each.

Board at its Technology Development Centre is offering training programmes in coconut chips and coconut vinegar manufacturing. More CPS members have to be trained for producing good quality labelled products in attractive packaging which can be marketed with trade marking. The encouragement and financial assistance of the state and central government is also needed.

Coconut production must be intensified for meeting the demand of these processing units. We must plant maximum high yielding disease resistant hybrid varieties on a larger scale. Coconut Producers Federations and Companies must work in association with various research institutes, Agricultural Universities and Colleges having post graduate programmes in Life science for producing maximum high yielding coconut seedlings.

From Coconut Producers Society to Consortium

Grape Growers Association of India is the best example of a consortium well equipped in market study. Coconut Growers Associations and Coconut Processors Consortia must be formed to work unitedly for making use of the latest technologies and

knowhow and for obtaining maximum assistance from the government.

Like Quilon district in Kerala is famous for cashew export, Pollachi in Tamil Nadu is keeping ahead in tender coconut production. The farmers of Pollachi have formed the Tender Coconut Growers Association and this ensures a fair price for their produce. Activated carbon manufacturers of India have formed Activated Carbon Manufacturers Association and is attending to the needs and addressing to the problems of its members. These are best examples that can be replicated in coconut sector too.

Extension Activities of CDB

Coconut products must be made available in the existing markets in order to have a steady market for the value added coconut products produced by the Coconut Producers Societies. CPS themselves can establish tie up with existing outlets in and around major cities and pilgrim centers. Establishing retail outlets would not be a feasible idea as it requires a huge investment, while many of our farmers won't be able to meet the investment cost. Board would also try to market products through the public distribution system of state governments. Board is making awareness creation on the goodness of coconut through both the print and electronic media. Regular reports are appearing in the print media and social networking sites on the goodness of coconut. This itself is creating consumer demand for the products.

Since its inception, the Publicity wing of Coconut Development



Board is creating awareness among the farmers and other stakeholders. Through the generic promotional programmes initiated by the Board since 2005, coconut products have found prominent place in the international market. This has resulted in the emergence of many tender coconut processing units.

As a part of product promotional campaigns, hoardings and LED bill boards are installed across the country in major railway stations, Delhi metro stations and tourist spots. Advertisements on the health and medicinal aspects of tender coconut, coconut oil and other coconut products are displayed on the window panels of long distance trains, bus shelter hoardings in metro cities, unipole hoardings, traffic booth hoardings and airport hoardings. Upto date information on coconut and its products are made available through All India Radio. There was also auto branding and KSRTC bus branding in Kerala and hydraulic van branding in Delhi. Awareness creation is made for children through programmes for kids and advertisements in children's magazines. Consumption of tender coconut has increased

manifold and acclaimed national and international acceptance. These intensive efforts have



created increase in usage and export of coconut.

The extension activity of the Board has made an easy acceptance for coconut and its products. Many reputed management institutions have come up to be associated with the Board. Tie up with other related organisations should also be made as part of intensifying the product promotional programmes.

Investors meet and business meets can be conducted in different

parts of the country for identifying entrepreneurs. The CDB-NAFED 'Palmgate', a retail outlet of coconut products at the head office of the Board is a good model that can be replicated in Board's regional offices and state centers. Possibility of associating with other Commodity Boards like Tea Board, Coffee Board and Spices Board can also be considered and their products too can be marketed through joint outlets. Markets may be created for coconut products in civil supplies stores and department stores of the state government. Coconut products need to be marketed through e-commerce. Producer consortiums should

explore the possibility of making available coconut products in retail chains and malls. Market for coconut related ayurvedic products can be identified through 'Care Keralam' which is promoting ayurvedic marketing. Market chains can also be established through links with super markets, malls, emporiums and ayurvedic shops.

If the marketing team work with this vision and mission they could reach the targeted goal.

A kick start through CDB hits global market

Mini Mathew

Publicity Officer, CDB, Kochi

Virgin coconut oil (VCO), extracted from fresh coconut meat without chemical processes is said to be the “mother of all oils”. It is rich in medium chain fatty acids, particularly lauric acid and is a treasure trove of minerals, vitamins, antioxidants and is an excellent nutraceutical. It has about 50% lauric acids, having qualities similar to mother’s milk, thus confirming its disease-fighting ability. When lauric acid enters human body it gets converted to Monolaurin, which has the ability to enhance immunity. Several studies have confirmed that this compound has the ability to kill viruses including herpes and numerous other bacteria. Its antiviral effect has the ability to considerably reduce the viral load of HIV patients. The health benefits of VCO are second to none; ranging from speeding up body metabolism and providing immunity against a horde of commonly prevalent diseases.

Mosons Extractions has identified the immense potential of virgin coconut oil and is producing beauty care products using virgin

coconut oil. The products branded as ‘Indulekha’ is having worldwide demand. M/s. Mosons Extractions, a 40 year old small scale enterprise started as a desiccated coconut



powder manufacturing unit has now turned into one of the major producers of Virgin Coconut Oil. They have availed the financial and technical support from CDB under TMOC during 2008-09 for developing the unit. The company run by Anwar and his son Fayas, natives of Dharmadom in Tellichery, Kerala, have conquered international markets mainly Middle East and European countries. Indulekha’s skin care oil, hair care

oil and white soap have good demand across the globe. They are having established markets across India with an annual sales turn over of Rs.300 crores.



Mosons is exporting three lakh virgin coconut oil bottles in 100ml packs to gulf countries every month. They are producing 200-250 MT virgin coconut oil every month. Face pack, face cream and white soap are the other products produced. Mosons is also manufacturing ‘Beevees Curry Masala’ in which desiccated coconut powder is the main ingredient. Renowned Malayalam actor Mamooty is the brand ambassador of ‘Indulekha white soap’ and actor Jayaram is doing the advertisement for ‘Vayodha’ brand hair care oil which acts against hair falling and greying of hair.

Along with the products quality, advertisements helped the promoters to reach out to the global market. Mosons used to participate in exhibitions across the country under CDB’s banner. Mosons is having a marketing team who keep observing the market trends. 180 employees are working in Kerala alone and more than 50 employees are working in Gulf countries to intensify the marketing operations.





Coconut products consolidate markets in cities

Deepthi Nair. S.

Coconut though classified as an oilseed crop is a horticultural crop that can be put into multifaceted uses. Though a multitude of value added products is possible from coconut, the only established industry linked to coconut is the coconut oil industry and hence the high dependence of coconut pricing on the price of edible oils. Coconut pricing is highly dependent on the pricing of coconut oil and copra, which in turn is dependent on the prices of coconut oil in the international market and the import of palm oil. India being an edible oil deficient country, import of edible oils will continue. Stability in coconut prices can be achieved only through concentrated efforts to break from this dependence on coconut oil.

To encourage more industries in coconut sector, CDB has been orienting its activities towards product diversification by encouraging establishment of processing units under the Technology Mission on Coconut

(TMOC). More than 200 units have been financially supported under TMOC. Still, the proportion of value addition undertaken in coconut is limited. Production of any value added product is not the hurdle in development of food processing. The marketing of the product is the major challenge perceived by many small scale potential entrepreneurs which inhibits them from taking the surge. Coconut processing units are small and medium scale in investment and hence cannot afford to engage highly paid professionals for the marketing of their products. The experience of the Board from the recently conducted Entrepreneurs meet in Kochi reveals that the money involved for initiation of coconut processing units is not a big investment for entrepreneurs and there were many willing to make an entry except for the anxieties in marketing. Extending a confidence to the entrepreneur regarding the assured market is an important step and the Board has visualized a new

marketing strategy to achieve this. As a development Board, CDB estimates the demand and identifies possible outlets and marketing points in urban areas which will provide a customer base and an assured market to the entrepreneur. It is in this context that CDB has put forth a programme of New Innovative Marketing Strategies for coconut products during the 12th five year plan in addition to its regular developmental schemes. It is a programme aimed to encourage, promote and establish markets for various value added products from coconut in all the cities of India by the end of the 12th plan.

Objectives of the initiative:

The new innovative marketing strategy proposed by Coconut Development Board is unique and the first of its kind. CDB has a strong and well distributed marketing team placed in the potential cities of Delhi, Kolkotta, Chennai, Bangalore and Kochi. CDB also has state centres and

regional offices which can undertake market promotion activities in the cities adjacent. The objective of the implementation of this new innovative marketing strategy is to make coconut products available in the major cities of India during the 12th plan period.

The main objectives of the new innovative marketing strategy are:

- Ensuring fair, reasonable and steady price to the small and marginal coconut farmers throughout the country. Almost 98% of the coconut farmers in the country are small and marginal farmers having less than 2 ha of holding size.

India stands first in productivity, second in production and third in area under coconut cultivation in the global coconut scenario. But processing for value addition, marketing and export, are still at the infancy stage. Small island countries like Srilanka having coconut cultivation less than 1/6th of that of India, production less than 1/7th of that of India, have achieved an export turn over of coconut products 4 times than that of India i.e. from unit area of coconut cultivation, the export of value added products in Srilanka is almost 24 times that of India.

- Ensuring healthy and natural food products to wide range of urban consumers in India.

Assured market will kick start large number of processing units which can ensure fair, reasonable and steady price to the farmers, which will help to boost productivity and production of coconut in the country.

Increase in production, productivity, processing and marketing of coconut and coconut products will create more wealth in the country side and create lot of new employment opportunities in rural India.

The coconut with assured price and potential for processing, much more new areas can be brought under coconut cultivation/coconut based farming, in the non traditional states like N.E. states and the 'disturbed' districts of India, wherein large scale rural employment generation for youth and women is possible through coconut cultivation/coconut based farming.

Marketing strategy: The strategy will be

- Make an estimation on the market demand for the coconut products in the major cities
- Establish retailing networks, introduce new products, develop niche markets
- Tie up with wholesalers, C&F agents etc
- Production plan for processed products based on market demand through initiation of new units or expansion of existing ones
- Common outlets for Commodity Boards, NAFED, cooperative marketing federations etc without additional infrastructure
- Undertake generic promotion of the products from coconut
- Encourage integration of processing units to form product specific Consortium of Processors
- Encourage e-marketing of products through authorized

trading portals

Implementation methodology

i. The target market :

Targeting cities for the promotion of traditional, existing or new products provides more chance for development and establishment of markets since the population in urban centres is more, city folk are more willing to experiment new products rather than rural people and cities offer wide range of existing infrastructure that can be utilized for establishing retail network without additional investment. An analysis of the population in the major cities as per the details in Census 2011 states reveals that there are 53 million plus cities in India i.e., with population more than a million and 468 cities with more than a lakh population. The cities of Greater Mumbai, Delhi and Kolkotta have populations more than 1 crore while Chennai, Bangalore, Hyderabad, Ahmedabad, Pune and Surat have population more than 4 million. There will be a great demand for coconut products even when a population of at least 10% in these cities is targeted.

Number of cities in India as per Census 2011

Population	Number of cities
More than 10 million	3
5-10 million	5
2-5 million	11
1-2 million	34
Total	53
0.5-1 million	43
1-5 lakh	372
Total	468

ii. Develop and promote a good

product basket :

Coconut had been traditionally known for its health attributes and medicinal qualities and held an integral part in the social life and religious customs of the country. But industries based on coconut did not come up due to lack of knowledge on the prospects for value addition and small scale processing in coconut. The single industry that is based on coconut is the oil industry and hence coconut is perceived by the common consumer in terms of the products copra and oil. In order to break this nexus of over dependence of coconut on copra and oil, CDB has been promoting product diversification into various value added products. CDB has now planned to concentrate on the following product basket for market development during the 12th plan period.

Product basket

Tender coconut water coconut chips, virgin coconut oil, dessicated coconut powder, coconut milk/milk powder/ milk cream, ball copra (as edible dry fruit) pure coconut oil for edible purpose, pure coconut oil for non edible purpose, natural vinegar and coconut ice cream

Board intends to encourage and motivate many new entrepreneurs to produce the products in the basket through TMOC.

iii. Assessment of demand for coconut products in the targeted cities

The demand for coconut products in these cities will be assessed in association with Management training institutions,



marketing departments and students. A preliminary estimation done by the Board reveals that around 80 crore coconuts are required for the production of value added products included in the product basket sufficient to cater 10-25% of the population in the 9 mega cities with more than 4 million population. This forms 5 % of the total production of coconut in the country. A coverage of 10-25% of the population at the minimum consumption rate of the selected products consumes around 5% of the production. This indicates that market development and coverage of consumers to the bare minimum in the selected cities will consume a major proportion of the production that the demand for coconut will increase stabilizing the price for the product at any time of the year. In fact enhanced production through area expansion, scientific cultivation and increasing production and productivity has to be supplemented to sustain the industry.

iv. Production according to a**marketing plan**

With the demand for coconut products estimated by the Board and assured market in place, the Board would work backwards towards encouraging establishment of processing units undertaking the production of the basket of products. Coconut is a crop ideal for processing since it is not perishable, does not need a cold chain like fruits and vegetables and technology for processing is simple and accessible for the entrepreneur. Along with this, providing an assured market will attract investors.

CDB has developed technology for the production of value added products from coconut in association with research institutions like CFTRI, DFRL, State Agricultural Universities etc. In order to attract investors, Board has also plans to conduct Entrepreneur meets in the 4 major coconut growing states in South India with an objective to attract investors, of which one meeting has

already been conducted in Kochi on Nov, 2nd 2012 and the next scheduled for 11th January 2013. Board provides financial assistance for the establishment of units at 25% subsidy subject to a maximum of Rs. 50 lakhs. Board has also approached the different State Governments in the major southern states for an additional support of 25% for the units, which Government of Kerala has agreed to. CDB intends to promote cottage/small scale units manufacturing the selected product basket. The details of estimated investment for the processing units manufacturing products in the product basket is detailed below

vision of the Board is to integrate 10 Federations to form a Producer Company (PC) with majority share holding by coconut farmers. CDB intends to involve Producer Companies in production of value added products from coconut. Producer Companies with 50% equity contribution from member farmers and an equivalent contribution to equity from the Central and State Governments will enable establishment of a strong industry in the sector. The Board has already formed 1866 CPS in the Southern states and 48 federations in Kerala. It is targeted to form 100 PCs during the 12th plan period.

Product	Estimated investment in lakhs Rs. (capacity 1MT finished product)
Tender coconut water	45-50
Coconut chips	40-42
Virgin coconut oil	75-80
Dessicated coconut powder	50-55
Coconut milk/milk powder/ milk cream	60-65 (330-350 for spray dried powder)
Ball copra (as edible dry fruit)	10-12
Pure coconut oil for edible purpose	20-25
Pure coconut oil for non edible purpose	20-25
Natural vinegar	6-7 (100 litre capacity /day)

v. Giving a prominent role to Farmer Collectives in processing and value addition

CDB has facilitated formation of grass root level farmer collectives called Coconut Producers Societies(CPS) which comprise of 40-100 farmers. 15-25 CPS have been integrated to form Coconut Producers Federations (CPF). The

vi. Consortium of Processors

Existing manufacturers can be motivated to enhance their capabilities, move on to newer enriched products and make them improve their qualities to adhere to the food quality standards globally. Integration of processors to form a Consortium or Association of Producers and formation of Marketing Companies to undertake aggressive market promotional activities on behalf of the Consortium throughout the targeted cities is envisaged. Already, the manufacturers of activated carbon from coconut shell manufacturers in India have formed an association. A consortium of processors will help in better production planning in accordance to market demand. One step further, the possibilities of e-marketing will also be explored through the Consortium.

vii. Establishing a retail network for coconut and its products in the selected cities

CDB has the objective to make the products in the product matrix available in the urban centres throughout the country. A direct forward linkage of the units producing the products with the retail end will ensure a shorter supply chain and the producer earning a greater

Milestones for Producer companies

State	2012-13	2013-14	2014-15	Total
Kerala	10	10	10	30
Tamilnadu	5	10	10	25
Karnataka	5	10	10	25
Andhra Pradesh	-	5	5	10
Others	-	5	5	10
Total	20	40	40	100

share of the consumer rupee. In this context, CDB had decided to promote the marketing of coconut and coconut products in major urban centres in the country in a phased manner. As an initial step it was decided to concentrate on the 63 JnNURM cities.

The plan of the Board in ensuring availability of coconut products in the urban centres of the country is as follows:

Cities to be covered	Time of completion
9 metro cities with over 4 million population	2012-13
Cities with over a million population	2013-14
Remaining JNNURM cities	2014-15
50% of towns with population above 1 lakh	2015-16
Remaining towns with population above 1 lakh	2016-17

viii. Collaboration and tie ups with marketing /sales institutions

Establishing tie ups with institutional retailing networks like State Marketing Federations, Consumer Federations, Cooperative Marketing Federations etc and retail chains like Big bazaar, More, Reliance etc will be undertaken thereby avoiding duplication of investment in infrastructure. The infrastructure of the retail chain can be made use of. The added advantage is that market development is less difficult since it can be initiated by catering to the stabilized consumer base the retail chain can offer.

List of Cooperative Marketing Federations in different states

- National Agricultural Cooperative Marketing Federation of India Limited - NAFED
- Tribal Co-operative Marketing Development Federation of India Ltd - TRIFED
- Delhi State Civil Supplies Corporation Ltd
- Maharashtra State Cooperative Marketing Federation - MSCMF
- West Bengal State Cooperative Marketing Federation Ltd - BENFED
- Andhra Pradesh State Co-operative Marketing Federation Ltd - A.P. MARKFED
- The Andhra Pradesh State Civil Supplies Corporation Limited
- Gujarat State Cooperative Marketing Federation Ltd. - GUJCOMASOL
- Gujarat State Civil Supplies Corporation Limited
- Gujarat Co-operative Milk Marketing Federation - GCMMF
- Rajasthan state cooperative marketing federation
- Rajasthan State Food and Civil Supplies Corporation limited
- The Kerala State Co-operative Marketing Federation Ltd - MARKETFED
- The Kerala State Co-

- operatives Consumers' Federation Ltd - CONSUMERFED
- Kerala State Horticultural Products Development Corporation Ltd.- HORTICORP
- The Kerala State Civil Supplies Corporation - SUPPLYCO
- Horticultural Producers Co-operative Marketing and Processing Society - HOPCOMS
- Karnataka Food and Civil Supplies Corporation
- Karnataka State Co-Operative Marketing Federation KSCMF
- Tamil Nadu Cooperative Marketing Federation TANFED
- The Tamil Nadu Civil Supplies Corporation

ix. Collaboration and tie ups with Management/Teaching/ Training institutions :

The demand for coconut products will be assessed in association with Management / Teaching /Training institutions, marketing departments and students. Collaboration for conduct of market studies, demand assessment, market research, market surveys etc can be undertaken in association with the institutions. The findings of the studies will be vital information for the processing units to plan their production, packing, to diversify their products with different flavours etc. Diversion of a proportion of the production for value addition and processing will



not only create new demand for the products and open up new markets but also stabilize prices ensuring the farmers an enhanced and sustained income.

x. Common display cum sales outlets for Commodity Boards:

There are different commodity Boards functioning under the Government of India, dealing with development of different crop sectors. A common retail outlet for the display cum sale of the different value added products from these crops can be thought of. It will serve in the introduction, familiarization and market development of different value added products .

xi. Better use of advances in information technology :

The Consortium of processors can very well plan their marketing in an efficient manner utilizing the advances in information technology. Marketing of their products can be done with the click of a button on a

computer. Consortium of processors can undertake e-marketing by getting registered at a trade portal. Uploading information on the availability of the products through trade portals will not only effect sales but also provide avenues for market development by providing new consumers with information on the products thus developing niche markets.

xii. Generic promotion of the products in the product matrix:

The various products included in the product matrix have to be promoted for increasing market acceptance. Generic promotion of the products will be undertaken by CDB highlighting the nutritional attributes and other parameters. Promotion of the healthy attributes of pure coconut oil, virgin coconut oil for its therapeutical properties against a wide range of diseases like Alzheimers, Autism etc, coconut chips as a natural snack product with no food additives, coconut ice cream as a dairy free ice cream,

tender coconut water as an energizer, health drink, natural drink and freshening drink, vinegar for its natural origin etc are ways and means by which generic product promotion is envisaged.

xii. Logistic and supply chain management :

Establishing Consortium of Processors and tie ups with established retail chains will enable better and cheaper logistics. Efficient supply chain management is possible through better marketing planning supported by better production planning. Logistics coordinated under the auspices of Consortium itself will help in increasing efficiency.

The implementation of the new marketing strategy will be closely monitored and the customer feedback collected on new products and existing products. This will be passed on to the processors for modification of their processing and packaging. Based on customer receptiveness, new products or new flavours will be experimented. Niche markets will be developed, like for instance fractionated coconut oil, value added virgin oil, chips with butter scotch, chocolate and vanilla flavours etc. Nurturing the food processing sector by providing support at all levels will enable establishing of a viable and profitable coconut based industry with contributions to the economy of the country, employment generation and rural upliftment. The Board looks forward to developing a defined growing market for coconut products.

Marketing Officer & Member Marketing Team, CDB, Kochi-11

Market Potential for value-added Coconut Products in Indian Cities

Sebastian K.S.

India is a large country with 28 States and 9 Union Territories. According to the 2011 census the population of India is 121.02 crores which makes it the second most populated country in the world. India is home to around one sixth of the world population. India is expected to become the most populated country in the world by 2025. About 68.84 percent of the Indian population lives in the rural areas and contributing to a mere one third of the GDP. 31.16 percent of the population lives in urban areas contributing two third of the national income.

Despite the comparatively low per capita income in India, the country is a highly lucrative market owing to the presence of a huge number of high income group population. The Indian market is bigger than even some of the advanced countries. Of the 20 crore households in India, 50% belong to low income group, followed by 30% lower middle income group, 12% middle income group, 5% upper middle income group and 3% high income group. The Indian consumer is known for his desire to secure the right value for the money that he spends on goods. Such orientation to value has labeled Indians as one of the most discerning consumers in the world. Like Indian consumers, the Indian market is also unique. Perhaps, only in India, one can see traditional

products marketed side by side with modern products. For example, broom competes with vacuum cleaner, hair oils with shampoo and toothpowder with tooth paste.

Even though adequate technology is available for the production of food articles from coconut in India, the fact remains that coconut sector is lethargic in adopting the new methods. Barring coconut oil, desiccated coconut powder and ball copra, consumers have little knowledge about products like virgin coconut oil, coconut milk powder, coconut milk cream, coconut chips, packed tender coconut water etc. Surely, these products could gain very good acceptance among urban consumers, if presented in the right way. Coconut Development Board is in the process of facilitating the production and marketing of these value added products in large quantity commensurate with its demand in cities. In the first phase, it is proposed to make available these products in the nine cities having population of more than 89 million as per the census 2011. Though these products can be manufactured indigenously with the state of the art technologies, very few entrepreneurs have shown interest in the venture. This is mainly because the prospective entrepreneurs are not fully aware of the potential of the market.

Extent of the markets to Mega Cities

Here an attempt is made to assess the demand for coconut products, which are convenient to use and generally acceptable to the urban population. In the initial phase this exercise is limited to the nine mega cities having population of more than 40 lakhs. The total population in these cities is 8.98 crores. The infrastructure required for exploiting this enormous market potential is also estimated.

As coconut oil, desiccated coconut powder and ball copra are already having adequate infrastructure for production, an efficient marketing network to make available these products in an appealing manner to the urban consumers only to be ensured. Since urban consumers are not familiar with products except coconut oil, desiccated coconut and ball copra, the demand in the mega cities has been estimated with the assumption that only 10 percent of the population will consume these products (except coconut chips) in the initial years. However since chips can be packed and sold in very small quantities, packs of 20g (Rs.15/- for 20g pack) can easily make inroads in the urban market. It is assumed that 25% of the population will receive this product in the very first year of its introduction in the mega cities.

Coconut Chips

In the initial years 21,546 MT of coconut chips will be required for the mega cities. At least 1800 small scale units, each with capacity to process 500 coconuts per day will

be needed to produce the requisite quantity of coconut chips. The Coconut Producers' Societies (CPSs) formed in various coconut

growing states can consider venturing into this activity. The quantity of coconuts required for making chips is hardly 2% of the coconut production in the country.

Estimated demand for coconut chips and the requirement of infrastructure for processing.

Mega Cities	Population (in lakhs)	Estimated consumers (in lakhs)	Estimated market (in MT)	Manufacturing units required (in Nos.)	Quantity of coconuts required for processing (nos. in crores)
Greater Mumbai	184.14	46.04	4419.36	368	5.52
Delhi	163.15	40.79	3915.60	326	4.89
Kolkata	141.13	35.28	3387.12	282	4.23
Chennai	86.96	21.74	2087.04	174	2.61
Bangalore	84.99	21.25	2039.76	170	2.55
Hyderabad	77.49	19.37	1859.76	155	2.32
Ahmadabad	63.52	15.88	1524.48	127	1.91
Pune	50.50	12.63	1212.00	101	1.52
Surat	45.85	11.46	1100.40	92	1.38
Total	897.73	224.43	21545.52	1795	26.93

Assumption: 20% of the urban population would consume this product @20gms per week. Infrastructure requirement is worked out based on the processing capacity of 500 coconuts per day.

Packed Tender Coconut Water

Tender coconut is available in almost all cities in the country. However due to its bulkiness and difficulty in disposal of the waste, tender coconut in raw form is difficult to suit consumption particularly on formal occasions. This impediment has now been resolved and this favourite liquid refreshment is

available in easy portable, convenient and hygienic format to suit consumption on all occasions. Tender coconut water has now become the most sought after beverage in Europe and USA. Tender coconut water sales doubled in the USA and Europe during 2011. In Indian cities also sale of packed tender coconut is slowly

picking up. If 10% of the city dwellers consume this product once in a week, the demand for this product in mega cities would touch 86,000 kilo litres. To produce this much quantity, 96 units with a processing capacity of 10,000 tender coconuts per day are required and 28.73 crores of tender coconuts will be needed for the same.

Estimated demand for packed tender coconut water and the requirement of infrastructure for processing.

Mega Cities	Population (in lakhs)	Estimated consumers (in lakhs)	Estimated market (in KL)	Manufacturing units required (in Nos.)	Quantity of coconuts required for processing (no's in crores)
Greater Mumbai	184.14	18.41	17677.44	20	5.89
Delhi	163.15	16.32	15662.40	17	5.22
Kolkata	141.13	14.11	13548	15	4.52
Chennai	86.96	8.70	8348.16	9	2.78
Bangalore	84.99	8.50	8159.04	9	2.72
Hyderabad	77.49	7.75	7439.04	8	2.48
Ahmadabad	63.52	6.35	6097.92	8	2.03
Pune	50.50	5.05	4848.00	5	1.62
Surat	45.85	4.59	4401.60	5	1.47
Total	897.73	89.77	86182.08	96	28.73

Assumption: 10% of the urban population will consume this product @200ml per week. Infrastructure requirement is worked out based on the processing capacity of 10,000 tender coconuts per day working 300 days in a year.

Desiccated Coconut Powder

Desiccated coconut powder is obtained by drying ground or shredded coconut kernel after the removal of brown testa. It finds extensive use in confectioneries, puddings and many other food preparations as a substitute to raw grated coconut. The main uses of DC are for the confectionary industry, as a filling for chocolates

and candies; the bakery industry for biscuits, cake and nut filling products; direct usage to decorate cakes, biscuits and ice cream preparations and various other snacks. Desiccated Coconut (DC) is a product which is known to the urban consumers in India. Being a convenient product for households, it will not be difficult for DC to find

a market of 4300 MT in the households of mega cities alone. To make this product available in convenient packaging to the dwellers of mega cities, 6 DC manufacturing units of 2.50MT per day processing capacity is needed. 4.31 crores of coconut will need to be processed for this purpose alone.

Estimated demand for Desiccated coconut Powder and the requirement of infrastructure for processing.

Mega Cities	Population (in lakhs)	Estimated consumers (in lakhs)	Estimated market (in MT)	Manufacturing units required (in Nos.)	Quantity of coconuts required for processing (no's in crores)
Greater Mumbai	184.14	18.41	883.87	1	0.88
Delhi	163.15	16.32	783.12	1	0.78
Kolkata	141.13	14.11	677.42	1	0.68
Chennai	86.96	8.70	417.41	1	0.42
Bangalore	84.99	8.50	407.95	1	0.41
Hyderabad	77.49	7.75	371.95	1	0.37
Ahmadabad	63.52	6.35	304.90	0	0.30
Pune	50.50	5.05	242.40	0	0.24
Surat	45.85	4.59	220.08	0	0.22
Total	897.73	89.77	4309.10	6	4.31

Assumption: 10% of the mega city dwelling families will consume 2.4 kg of DC @200gms per month. Infrastructure requirement for processing is estimated at the rate of 2.5MT of DC per unit having processing capacity of 25,000 nuts per day.

Coconut Milk Powder

Coconut milk powder is a comparatively new product, which

is a spray dried product similar to dairy milk product. Coconut milk

powder if dissolved in water will result in coconut milk which can be

Estimated demand for Coconut Milk Powder and the requirement of infrastructure for processing

Mega Cities	Population (in lakhs)	Estimated consumers (in lakhs)	Estimated market (in MT)	Manufacturing units required (in Nos.)	Quantity of coconuts required for processing (no's in crores)
Greater Mumbai	184.14	18.41	883.87	1	1.77
Delhi	163.15	16.32	783.12	1	1.57
Kolkata	141.13	14.11	677.42	1	1.35
Chennai	86.96	8.70	417.41	0	0.83
Bangalore	84.99	8.50	407.95	0	0.82
Hyderabad	77.49	7.75	371.95	0	0.74
Ahmadabad	63.52	6.35	304.90	0	0.61
Pune	50.50	5.05	242.40	0	0.48
Surat	45.85	4.59	220.08	0	0.44
Total	897.73	89.77	4309.10	3	8.62

Assumption: 10% of the Mega city dwelling family consume coconut milk powder @200gms per month. Infrastructure requirement for processing estimated in such a way that typical spray dried milk powder unit is having processing capacity of 1,00,000 nuts per day.

used in place of fresh coconut milk for food preparations / beverages in households and food industries. This product is very convenient to use and is expected to get good acceptability in cities. This product could be easily

find a market of 4300MT in the first year itself. At present only three units are producing this product in the country and their combined processing capacity is hardly one lakh nuts per day. There is very good

scope for setting up at least one unit each in major coconut growing state. 8.62 crores of nuts are required to be processed for meeting the demand in mega cities alone.

Coconut Cream

Coconut cream is the processed milk extracted from fresh matured coconuts. Made from the solid kernel of the mature coconut fruit, creamed coconut is a 100% pure vegetable product and has no additives or artificial flavours. It is used in a wide range of foods and can also be used in the manufacture of bakery products and for flavouring food stuff. Processed

and packed coconut cream has a shelf life of six months. This product can also generate very good demand in view of its convenience and ease of use. The urban housewives are sure to welcome this product on account of the easiness to use and the release that it offers from strenuous grating and manual processing to users. The annual demand of this product

in the initial years in the mega cities is to the tune of 4,300 KL. To make 4300KL of coconut cream, 4 units with installed capacity of 20,000 coconuts per day are required. 2.15 crores of nuts need to be processed for this purpose. Except one or two tiny units, no medium or big coconut cream manufacturing unit is operating in the country. The product which is available in the market now is imported products.

Estimated demand for Coconut Cream and the requirement of infrastructure for processing

Mega Cities	Population (in lakhs)	Estimated consumers (in lakhs)	Estimated market (in KL)	Manufacturing units required (in Nos.)	Quantity of coconuts required for processing (no's in crores)
Greater Mumbai	184.14	18.41	883.87	1	0.44
Delhi	163.15	16.32	783.12	1	0.39
Kolkata	141.13	14.11	677.42	1	0.34
Chennai	86.96	8.70	417.41	1	0.21
Bangalore	84.99	8.50	407.95	0	0.20
Hyderabad	77.49	7.75	371.95	0	0.19
Ahmadabad	63.52	6.35	304.90	0	0.15
Pune	50.50	5.05	242.40	0	0.12
Surat	45.85	4.59	220.08	0	0.11
Total	897.73	89.77	4309.10	4	2.15

Assumption: 10% of the Mega city dwelling family consume coconut cream @200gms per month. Infrastructure requirement for processing estimated in such a way that typical coconut cream unit is having processing capacity of 20,000 nuts per day.

Virgin Coconut Oil

Virgin Coconut Oil (VCO) is extracted from fresh coconut meat. It is rich in antioxidants and excellent for cosmetic applications. VCO is used as super fatting agent in soaps. It is also used as a base oil for lotion, cream, body butter and lip balm formulations. VCO is also

emerging as a nutraceutical and functional food, especially in controlling body weight and preventing obesity. Demand for this product is gradually increasing in the country. Only a few units in the country are manufacturing this product, which is not sufficient to meet the growing demand within the

country. If the urban population uses this product even in a limited quantity its demand would be 4,300 KL per annum. To manufacture this quantity, 22 units with processing capacity of 10,000 coconuts per day are required and about 6 crores nuts will be required annually.

Estimated demand for Virgin Coconut Oil and the requirement of infrastructure for processing.

Mega Cities	Population (in lakhs)	Estimated consumers (in lakhs)	Estimated market (in KL)	Manufacturing units required (in Nos.)	Quantity of coconuts required for processing (no's in crores)
Greater Mumbai	184.14	18.41	883.87	5	1.36
Delhi	163.15	16.32	783.12	4	1.20
Kolkata	141.13	14.11	677.42	3	1.04
Chennai	86.96	8.70	417.41	2	0.64
Bangalore	84.99	8.50	407.95	2	0.63
Hyderabad	77.49	7.75	371.95	2	0.57
Ahmadabad	63.52	6.35	304.90	2	0.47
Pune	50.50	5.05	242.40	1	0.37
Surat	45.85	4.59	220.08	1	0.34
Total	897.73	89.77	4309.10	22	6.63

Assumption: 10% of the mega city dwelling family consume coconut cream @200ml per month. Infrastructure requirement for processing estimated in such a way that typical virgin coconut oil unit is having processing capacity of 10,000 nuts per day.

Ball Copra

In India, about 50,000 MT of ball copra is manufactured annually by slow drying whole mature coconuts with occasional artificial drying. This copra is consumed with sugar or made into chips for manufacturing sweets, etc. Ball copra is also used for religious and cultural ceremonies as well as for traditional medicines. In India, the demand for ball copra comes mainly from areas where coconut cannot

be grown. The usage of edible copra in sweets, sweet pan and other packed snacks is growing fast. The ball copra as a dry fruit is now competing with other dry fruits like cashew, peanut and almond. Ball copra is mostly made in Karnataka and consumed during the winters. Earlier consumption and demand of ball copra was limited to three months starting from November. With the growth in retail

sector and rising consumption of packed snack foods a new dimension has been added to the demand of ball copra. The estimated demand from this product in mega cities is to the tune of 1,795MT per annum. 60 small scale edible copra making units with a processing capacity of 3 lakhs nuts per annum are required to make 1,795MT of ball copra per annum.

Estimated demand for Ball Copra and the requirement of infrastructure for processing

Mega Cities	Population (in lakhs)	Estimated consumers (in lakhs)	Estimated market (in MT)	Manufacturing units required (in Nos.)	Quantity of coconuts required for processing (no's in crores)
Greater Mumbai	184.14	18.41	368.28	12	1.36
Delhi	163.15	16.32	326.30	11	1.20
Kolkata	141.13	14.11	282.26	9	1.04
Chennai	86.96	8.70	173.92	6	0.64
Bangalore	84.99	8.50	169.98	6	0.63
Hyderabad	77.49	7.75	154.98	5	0.57
Ahmadabad	63.52	6.35	127.04	4	0.47
Pune	50.50	5.05	101.00	3	0.37
Surat	45.85	4.59	91.70	3	0.34
Total	897.73	89.77	1795.46	60	6.63

Assumption: 10% of the mega city dwelling family consume ball copra @1kg per annum. Infrastructure requirement for processing estimated in such a way that typical ball copra unit is having processing capacity of 3, 00,000 nuts per annum.

Pure Coconut Oil

Coconut oil is extensively used as an ingredient in many packaged foods and in many non-food goods. Because this oil is high in saturated fats, many food makers are replacing it with more costly unsaturated oils. Coconut oil is rich in short and medium chain fatty

acids. Lauric acid, the major fatty acid from the fat of the coconut, has long been recognized for the unique properties that it lends to non-food uses in the cosmetic and soap industry. It is extensively used in soap making for its lather and moisturizing properties and in lotions

and creams. If pure coconut oil is made available in the cities in convenient packing it is easy to widen its market in the cities. If the mega city dwellers use minimum quantity of coconut oil i.e. 250ml per month the total demand for coconut oil per annum would cross 5,000MT.

Estimated demand for Coconut Oil and the requirement of infrastructure for processing.

Mega Cities	Population (in lakhs)	Estimated consumers (in lakhs)	Estimated market (in MT)	Manufacturing units required (in Nos.)	Quantity of coconuts required for processing (no's in crores)
Greater Mumbai	184.14	18.41	1104.84	4	0.83
Delhi	163.15	16.32	978.90	3	0.73
Kolkata	141.13	14.11	846.78	3	0.64
Chennai	86.96	8.70	521.76	2	0.39
Bangalore	84.99	8.50	509.94	2	0.38
Hyderabad	77.49	7.75	464.94	2	0.35
Ahmadabad	63.52	6.35	381.12	1	0.29
Pune	50.50	5.05	303.00	1	0.29
Surat	45.85	4.59	275.10	1	0.21
Total	897.73	89.77	5386.38	19	4.04

Assumption: 10% of the Mega city dwelling family consume pure coconut oil @250ml per month. Infrastructure requirement for processing estimated in such a way that typical coconut oil milling unit is having processing capacity of 300 kl per annum.

In urban areas of the country where 37.71 crores (constituting about 31.16% of the population) people reside, there is immense scope for marketing coconut products in view of the presence of large number of middle and higher income groups. It can be reasonably estimated that the value added coconut products in the Indian cities has got a market worth Rs.10, 000 crores. The number of nuts needed to be processed for the purpose is estimated at 351 crores which constitutes only 22 per cent of the coconut production in the country.

Marketing facilities should be arranged in a time bound manner duly taking into consideration the market size for each value added product as well as the physical infrastructure required for producing the needed quantity. It is expected to be achieved through the active co-operation of the CPSs, their Federations, the proposed

Producer Companies, individual entrepreneurs and the Co-operative sector and the state government initiatives. As the provision for individual marketing facilities will require additional financial burden, all efforts should be taken to involve various agencies already in existence. Initially, it will be more prudent to utilize the services of the state marketing federations, consumer federations, marketing societies and other governmental and non-governmental institutions for this. Serious thought may be given to the formation of a Producers' Consortium for marketing products. This kind of arrangements have relevance in view of the fact that the enterprises currently in existence as well as those which are likely to come up in future will be largely in the small scale sector. Industrial Parks need to be set up in all districts where coconut is produced and single window system should be

implemented to help producers to augment their capacity when the marketing of the value –added products are diversified to smaller cities other than the mega cities. Government should also extend possible tax breaks at least in the initial years of operation. The most suitable strategy is to develop the domestic market for value-added products in view of the fact that the domestic prices of such products is the highest among all the coconut producing countries. The price of coconut will increase in direct proportion to the demand for nuts on account of the requirement for value added products, resulting in higher prices for farmers. The tendency of severe price crashes due to over dependence on the traditional products viz. copra and coconut oil can be prevented through these efforts.

*Assistant Marketing Officer & Member,
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Marketing strategy for promotion of ball copra and desiccated coconut

GM Siddarameswara Swamy

Ball Copra: Karnataka is the major producer of ball copra in the country. In Karnataka both big and small farmers convert their coconut into ball copra particularly in Tumkur, Hassan, Chitradurga and Chikkamagalur districts. In these regions nearly 60% of the produce is converted into ball copra. It is estimated that nearly 130 thousand metric tonnes of ball copra is produced in the state. Trading of ball copra is through Agricultural Produce Market Committee (APMC) (Regulated Market Committee). Grading of Ball copra is based on quality and size of nut. Small size copra commonly known as “Sanna” is fetching high price. The quality of ball copra is determined based on physical appearance & moisture content on subjective observations.

There are six RMC markets dealing in ball copra trading. Tiptur APMC is the major ball copra trading centre and the price determined at this market centre will be reflected in the other markets for fixing the trading price. The other important market places for ball copra are Arsikere, Kadur, Turuvekere, Huliya, Gubbi and Tumkur. Trading at these markets

is done through tender followed by open negotiation. In Tiptur there are about 200 commissioned agents and about 100 traders. Most of the ball copra produced in the state is marketed through the regulated markets and nearly 80% of the produce will be exported to the Northern states. Since time immemorial most of the trading is done individually by the traders through brokers and hence, the actual buyer / importer of ball copra are not aware / disclosed by the trader and they treat this as very secret due to many reasons.

The ball copra produced in Karnataka particularly in maidan districts is highly valued for edible purposes which is very sweet in taste. The use of ball copra is innumerable and is mainly used in preparation of sweets, bakery products and confectionaries. The traditional processing of ball copra is done by storing the well matured coconuts for a period of 11-12 months in the residential building of the farmers called ‘ATTA’. In the recent period the practises has been developed by the farmers for the construction of godowns exclusively for storing coconut by providing sufficient air circulation.

Nearly 80 % of produce is marketed in up country markets like Delhi, Ahmedabad, Kolkata, Pune, Rajasthan, Mumbai, Jaipur, Patna,

Nagpur, Cuttack, Indore, Puri, Guwahati, etc.

Strategic solutions for marketing of ball copra

CPS federation/ farmers community based companies/ district level societies can take up direct marketing of their produce by avoiding middle men.

Farmers may adopt modern technology in fastest processing of ball copra by availing financial assistance under TMOC. Ball copra is considered as a dried fruit which generates heat in human body. Since, ball copra is having medicinal value it may be promoted in cold and European countries. Technology may be developed for packing ball copra in consumer packs – vacuum packing using polyester laminated with polythin cover or metalized polyester cover otherwise vacuum packing using polyester laminated with polythin cover or metalized polyester cover + filling of nitrogen gas will definitely improve the shelf life and also help in avoiding oozing of oil in transit and rancidity. Farmers must be trained in modernized packaging and encouraged to adopt modernized packaging. Board can create through awareness publicity programmes, seminars and exhibitions depicting the uses of ball copra.

Desiccated coconut powder (DC)

In India there are about 135 desiccated coconut units producing about 80,000 metric tonnes which could be valued up to 480 crores taking average cost of DC at Rs.60/- per kg. It is estimated that nearly 19.00 lakh coconut is consumed every day (800 million nuts per annum) by these DC units. At present most of the units are utilizing only 75 % of their installed capacity.

Nearly 80 % of the production of DC is consumed in northern states mainly used by sweet and bakery & biscuit manufacturers and confectionary industry. It is estimated that only 10 % of the production is utilized for culinary purpose, mostly by south Indian population living in northern states. Desiccated coconut powder is marketed under various brands through the channel of agents / distributors located in different places. Packing of desiccated powder in consumable pack will be made at the processing units itself as per the requirement of distributor / agents. In some cases the consumable re-packing will be done by the distributor under various brand names.

The major market centres for DC are New Delhi, Mumbai, Ahmedabad, Kolkata, Hyderabad, Ghaziabad, Patna, Ludhiana, Jaipur, Pune, Amritsar, Surat, Nagpur, Jammu, etc. It is understood that nearly 50 % of the production is marketed at Delhi and the produce marketed to Amritsar & Jammu is exported to Pakistan and the produce marketed to Kolkata is exported to Bangladesh.

Ball Copra enjoys a premier status in the dry fruit market in North India

In old Delhi, Khari Bhoti market is the oldest and main market where the product is sold as hot cakes in festive seasons. Shops are not one or two, but are as big as 50 wholesale and around 250 retail shops. On an average 10,000kg ball copra is sold daily.

The retail price of ball copra commonly known as Bombay copra, Tiptur copra etc, ranges from Rs.80 to 110 per Kg where the value addition is 8-12 times. This premium



Ball Copra displayed for sale in Khari Bhoti market, New Delhi

price reveals the future potential of the produce in dry fruit market. Some of the wholesalers also sell the DC powder in 25kg bags.

At present desiccated powder manufacturing units are facing various problems related to availability of quality raw material marketing (competitiveness of product) finance and policy issues.

In Karnataka there are about 100 units accounting to produce 60,000 MT of DC and contributing about 75 % of the production in India. Tumkur, Mysore, Mandya, Chamarajnagar, Hassan, Uttar Kannada and Dakshina Kannada are the major producing areas in Karnataka. Among these nearly 60-65 units are located in and around Tiptur area.

Since DC manufacturing is highly labour oriented, emphasis has to be made to develop improved technologies to mechanize the process like de-shelling and peeling to address the skilled labour shortage. Board may support in importing the

know how from the other countries. The unit must be kept hygienic with modern processing facilities for which Board may provide financial assistance under the TMOC scheme. ISI or BIS certification should be made mandatory for ensuring best quality. Each unit should be equipped with quality control laboratory. The quality of Indian DC must be equalled with international standards so that the Indian DC can be competitive in international markets. In order to promote export of DC and compete with international price, export incentives and subsidies may be provided under the admissible schemes for export promotion. Technology or know how may be developed from other countries for utilization of matured coconut water which is drained as a waste in dc units.

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Bindied Tender Coconuts, Conquering Markets

Remany Gopalakrishnan



It was in 1995, the trio P.Sekar Parthasarathy, Bhadri Parthasarathy and P. Prabhakar Parthasarathy acquired 78 acres of land at Annamalai, Pollachi with the intention of starting agribusiness. There was no option before them in selecting the main crop other than coconut, since it was a period of resurgence of Pollachi as the hub of agribusiness based on coconut. It was also a time when hybrids from DeeJay farm, Madurai, the pioneer in coconut hybrid production in private sector were gaining popularity in the length and breadth of the country. Therefore the Parthasarathy brothers did not have any choice other than DeeJay farm for sourcing the planting material. They procured 5000 DeeJay hybrids and planted in the farm, now known

as BG farm. The DSP farm of the Board at Mandya was another source of tender nut variety of seedlings. Seedlings of Chowghat Orange Dwarf (COD), which is the recommended variety for tender nut purpose were procured from Mandya.

DeeJay hybrids are well known for their bigger nut size, higher water content and sweet taste. The enterprising brothers took a firm decision that their future business would be oriented on marketing tender nuts to major cities where literate and health conscious segments prefer natural health drinks. They decided to cash in the opportunity opened before them. BG farm thus started transporting tender nuts from hybrid palms in 1999 i.e. in the fourth year of the

planting and set the record of transporting tender nuts for the first time in truckloads as a business venture. With the bigger nut size and high water content of 700-800 ml per nut, they captured the tendernut market. **Harvesting of tender nuts is done in bunches by using hook and ropes. The bunch after cutting from the stalk is hooked and rolled down slowly from the crown to the ground without causing damage to the nuts.**

One truck load carries 5000 tender nuts. The major destinations are Chennai, Madurai, and Tutucorin in Tamilnadu, Mangalore in Karnataka, and Guntur and Vijayawada in Andhra Pradesh. Vijayawada is the longest destination from where BG farm tender nuts travel around 850km.



BG's bindied tender nut bunches

Deejay hybrids are popular for their high productivity as well. The hybrids planted in BG farm give the per palm productivity of 220 nuts per year. About 60 to 65% of nuts are harvested at the tender nut stage. Last year, BG farm sold 8 lakh tender nuts and 6 lakh mature nuts. Dehusked mature nut weighs on an average 770 g and nut with husk about 1.5kg. On an average, 100 nuts give 22 kg copra. Annual sale of tender nuts ranges from 8 to 9 lakhs and in some years even more. Sekar, the eldest of the trio recollects that this year, they fetched the ever lowest price for tender nut @ Rs.10 per nut, which was Rs.17 during the last year.

BG farm is a demonstration farm, integrating perennial intercrops like cocoa and nutmeg. 5000 coconut trees are interspersed with 15000 cocoa and 600 nutmeg. Nutmeg and cocoa are the main produces next to tender nuts and income from these crops is highly encouraging, reveals Parthasarathy brothers.

What is special with BG farm tender nut?

Nothing, but the logo of big round red bindi in white background, which is the trade mark of BG farm. Each nut is pasted with a sticker logo which is the brand of BG farm tender nuts. Lots of enquires are received for the tender nuts with bindi. The logo has thus become an inevitable trademark of BG farm tender nuts.

Their only concern is that nuts from Pondicherry are often mixed by vendors with BG farm nuts.

Farsight brought them success

Parthasarathy trios are reaping success from the agribusiness. They could foresee the potential of tender nuts in the country three decades ago and their business is now mainly concentrated on this product. **They are looking for innovative marketing techniques to reach the niche and untapped markets.** Bigger size and heavy weight of tender nuts

often put hurdles in marketing as house hold packs. This has to be overcome by finding out alternate methods. They were attracted by the plastic cartons carrying grapes, oranges and apples. Why can't we start packing 6 nuts in plastic cartons and introduce them in the market as family packs? Experience in the marketing sector encouraged them to follow the suit of fruit business and **Sekar brothers are now venturing into the marketing of tender nuts in cartons.** Similarly breaking tender nuts without wasting water or piercing nut with ease was another impeding factor in marketing tender nuts. Incidentally they happened to see a small device developed by a farmer from Uduppi. They took the lead in mass multiplication of this device and marketing them along with the tender nut sale. The attempt did not go waste. The product clicked the

It is high time to act upon

World over craze for tender nut water is booming up. Many aerated drink manufactures are venturing into this field. Enquiries from various corners are pouring in on the availability of tender nut water. This situation is a serious point to ponder and is opening vistas for capturing and widening tender nut market. In south India, only Tamilnadu is having a sizeable extent of plantations with tender nut variety. The seedlings raised in the DSP farm of the Board at Mandya since its establishment were mostly used by farmers from Pollachi and Coimbatore. Therefore even Kerala is now depending Tamil Nadu for dwarf seed nuts and seedlings. At farm gate farmer gets Rs. 10-15/- for tender nut and Rs. 18-20 for seed nut.

Tender nut harvesting in the 7th or 8th month of maturity saves the nutritional requirement of the palm for 3-4 months and help in the formation of more inflorescence, which in turn results in more per palm productivity. In the gardens where under planting is possible farmers invariably should plant dwarf varieties. Likewise in the gardens where replanting and rejuvenation is taking place, farmers should compulsorily be motivated for planting tender nut dwarf variety or hybrids which can serve both the purpose.

market and is being sold in tender nut market as hot cakes. There are many more enterprising and progressive farmers from Pollachi who follow the path of BG Farm. Pollachi set another record of forming Pollachi Tender Coconut Growers Association, the first of its kind in the world.

In the wake of severe price fall, growing tender nut variety is one of the best strategies for countering the ill effects of price fall either by fetching premium price for tender nuts or by reducing the arrival of copra in the market. Board is therefore advocating the farmers to use at least 25% dwarf seedlings suitable for tender nut purpose and 25% hybrids which are suitable for both tender nuts and oil extraction.

A Technology for packing tender nut water is developed by the Coconut Development Board in association with Defense Food Research Laboratory (DFRL), Mysore. Board, under the Technology Mission on Coconut (TMOC) extends 25% subsidy for

Sign posts to future



Euromonitor International sees Coconut water's rise to being the next big thing in soft drinks is inevitable'. MNCs such as PepsiCo, Coca Cola and Nestle have established a presence in the rapidly growing packaged coconut water market, with Pepsi acquiring

starting coconut based industrial units as back ended credit subsidy. In Kerala the Government of Kerala in its budget 2012 has announced 25% subsidy over and above the Board's subsidy. Tender nut parlours can avail 50% subsidy towards its establishment cost.

An inevitable shift in strategy

There are only 7 tender nut packaging unit functioning at present in the country. Efforts are, mooted to establish minimum 100 units in the country with the help of prospective entrepreneurs. One unit having daily processing capacity of 10,000 nuts requires 3 M nuts a year. 100 such units can consume 300 M tender nuts annually. This is only 2 percent of the present production. By starting 5000 tender nut parlours in major cities another

Kero coco Brazil's leading coconut water brand with 43% market share in Brazil's off-trade volume. Brazil, of course, is the world's largest market for packages coconut water, and packaged coconut water accounting for 67% of juice volume sales in 2010, up from 47% in 2005 and 21% in 2003, growing at the expense of orange juice.

Companies like Fresh Fruit Ingredients, owners of the Fiesta brand in the Philippines have a diversified portfolio of coconut products that are creating beachheads across developed markets and could create a 'natural sports drink' revolution through presence in McDonalds and Pizza Hut and strong appeal to sportsmen, women and children.

300 M nuts can be made use of, ie. another 2%. Our aim is to utilize atleast 25% of the total production in the form of tender nuts. Presently 15-20% of total production is estimated to be utilized as tender nuts. For producing 600 M nuts annually nearly 20,000 ha under tender nut variety is required. For these purpose nearly 35 lakhs seedlings of tender variety is required. This warrants planting of more tender nut varieties. In the seedling production strategy more focused attention towards this direction is needed. Board is already at it. Similarly research institutions and Agricultural Universities will also take the lead in the efforts of making available sufficient quantity of seedlings suitable for tender nut purpose.

Deputy Director, CDB, Kochi-11

The Product Basket for

Tender Coconut Water

The water of tender coconut (TCW) is a sterile, nutritious and thirst quenching health drink. It possesses therapeutic properties. The TCW has a calorific value of 17.4 per 100gm. TCW is rich in potassium and other minerals. Sugars form an important constituent of the TCW. The concentration of sugars in the nut water steadily increases from about 1.5 per cent to 5-5.5 per cent in the early months of maturation and then slowly falls reaching about 2 per cent at the stage of the full maturity of the nut.



Desiccated Coconut

Dehydrated coconut meat in the grated and shredded form is desiccated coconut (DC). A large number of units in India are manufacturing DC which is mainly absorbed by the confectionery and other food industries. DC is also used as a substitute to grated coconut in various household preparations. DC is available in different grades based on the fineness of the material.

Coconut Cream

Processed and packed coconut cream is a ready-to-use product which can either be used directly or diluted with water in various edible preparations. Coconut cream when partially defatted is called coconut milk. Coconut cream/ milk is used as an ingredient in household recipes and as a component of processed foods. Coconut milk/cream is available in pouches, bottles and tetra packs. Technology for the manufacture of coconut cream is available with Coconut Development Board.



Spray Dried Coconut Milk Powder

Spray drying is the best method for the preservation of coconut milk. Spray dried coconut milk powder is reconstituted into coconut milk by adding water which can be used to make various food preparations. The product offers additional advantages such as less storage space, bulk packaging at reduced cost and longer shelf life. Technology for the manufacture of spray dried coconut milk powder is available with the Board.

or 63 JnNURM cities



Virgin Coconut Oil

Coconut oil obtained from coconut milk is called virgin coconut oil. Traditional and modern methods are available, for the manufacture of virgin coconut oil. In the traditional method, milk extracted from grated coconut kernel is boiled to get oil. Of late, the traditional method has been partially mechanized using a bridge press and mechanical grater. The modern method of extracting oil from fresh coconut kernel is known as wet processing.

The virgin coconut oil is considered superior for use as edible oil, hair oil and baby oil because of its pleasing aroma and purity. It is applied on the body of babies to protect from skin troubles. Because of its low FFA content, this oil has a long shelf life.

Ball Copra

Ball copra is made by storing unhusked coconuts in a suitable store, which is usually a two-storey brick and mortar building, the floor and the four sides of the upper storey being made of wooden bars spaced two to three inches apart. Fully ripe nuts of twelve to fourteen months are stored in the upper floor of the store. They are frequently stirred and smoked by a slow fire, set under the platform using coconut palm waste or cheap firewood. During the period of storage, the water inside the nuts gets dried up and the kernel gets detached from the shell. The entire process takes eight to twelve months. When quite dry, the nuts are husked, the shells are broken with a heavy iron knife and the copra balls removed. The copra is clean, white inside and sweet in taste and is therefore highly priced.



Coconut Chips

Coconut chips is a ready-to-eat snack food. It is prepared in salted and sweetened forms. The Central Plantation Crops Research Institute, Kasargod has standardized the process for preparation of chips. Coconuts of 9-10 months old are used for the preparation of chips.

Coconut vinegar

Coconut vinegar is made from fermented coconut water and is used extensively as a preservative and flavouring agent in pickles, salads, sauces and many other condiments. Coconut vinegar is also made from the sap of the coconut tree and is similar to the fresh coconut water. Naturally fermented coconut vinegar is rich in minerals and vitamins such as beta carotene, calcium, iron, magnesium, phosphorous, potassium and sodium. Raw, unfiltered organic coconut vinegar is similar to the one that is fermented naturally. Coconut vinegar helps in digestion and improves the quality of cooked meat and fish. It is a healthier alternative to synthetic vinegar.



Coconut Oil

Coconut oil is a unique cooking oil as it contains the short and the medium chain saturated fatty acids as the major component fatty acids. It finds extensive use in the food industry due to its characteristics such as easy melting behaviour, resistance to oxidative rancidity, pleasing flavour and good digestibility. Coconut oil has gained importance as a dietary fat because of its high content of lauric acid, the source of monolaurin in the body and 16W content of Omega 6. It can be used for manufacturing margarine and shortenings. Coconut oil is preferred as a fat in the preparation of filled milk, infant milk powder, ice-cream and confectionery and bakery products. Because of stable character, coconut oil is the preferred fat for deep frying.



Activated Carbon Manufacturers Association for capturing markets

M.M. Abdul Basheer

Activated Carbon is the new success mantra from coconut shell. It is a crude form of graphite. The raw material has a very large influence on the characteristics and performance of activated carbon. Activated carbon can be made from many substances containing high carbon content such as coal, wood and coconut shells. Among them activated carbon from coconut shell is considered best suitable for most applications due to its high hardness. The introduction of Activated carbon, a value added product from coconut shell was in fact a boon to coconut farmers. This new product could make 10% increase in the price of coconut shell.

Today there is a huge demand for coconut shell based activated carbon in the global market especially for pollution control, gold purification, automotive industry and pharmaceutical industry. The global demand for coconut shell based activated carbon in the recent years has been increasing at a rate of 5-9%, particularly in the areas of US, Europe and Japan in the next five years. Though activated carbon can be made from various kinds of biomass, coconut shell based activated carbon is reported to be superior in quality and commands a good price in the international market. India is recognized as one of the important suppliers of activated carbon to the world

market. The Coconut Development Board has supported establishment of about fifteen activated carbon manufacturing units, which have a capacity to produce more than 100 MT of activated carbon per day. Export of shell charcoal and activated carbon from India had earned USD 55 million in foreign exchange in 2010-11. World demand for activated carbon is expected to grow at five per cent per year, touching 2.0 million tones by 2012-13. More than 15000 people are employed in this sector.

There are 20 activated carbon manufacturing units in India and all these units have together formed their consortium called Coconut Activated Carbon Manufacturers Association (CACMA). The Association is taking up the issues of its members on priority basis. The Association is ensuring the farmers a fair price for their produce like shell and charcoal by avoiding the exploitation by middlemen. Association keeps recording the international price and is coordinating the export price of the produce. CACMA is also guiding its members on pollution control measures and for availing the various incentives of the government from time to time. Shri. M M Abdul Rasheed, Managing Director, Indo German Carbons is the President of CACMA.

Indo German Carbon Limited (IGCL) is the first Activated Carbon project of its kind in India. Combining the best of German technology with Kerala's abundant coconut production to manufacture world class activated carbon from coconut shell. Indo German Carbons Limited (IGCL) is a leading international manufacturer and supplier of all kinds of coconut shell based activated carbon products and solutions, utilizing the latest technologies to provide a comprehensive range of carbon products for all applications. Located in the industrial hub of Cochin, in South India IGCL exploits the advantages of its abundant availability of raw material and the state-of-the-art equipments and technology to produce steam activated carbon from coconut shell. Incorporated in the year 1995, the first phase of the plant was commissioned in 1998 which was then the first and the largest world class activated carbon plant in India. Driven forward by the ambition to meet the challenges and requirements of its customers today, the company underwent rapid expansion and modifications. Now after enhancing the capacity by three times in a time span of five years, IGCL stands well ahead of any other manufacturer in the region in all related aspects.

President, CACMA



Deejay Farm for the best hybrid seedlings

Sona John

David Lobo, the founder of Deejay Group, one of the largest hybrid coconut breeding farms in the country learned from his father that there is only one way to do a job, the 'Best Way'.

Inspired by late Prof. Antony Davis, the pioneer in coconut breeding, Lobo decided to try his luck in coconut breeding, Lobo was determined and had blind faith in Prof. Antony Davis. He did the designing and planning and Lobo followed what he wanted to do and today he has his own hybrids. Lobo recalls that it took three to five years time to collect enough planting material.

The first planting of selected breeding stock was done in the year 1984 in 80 ha. located near Madurai in Tamil Nadu, and in the next three years Deejay hybrid seedling project covered an area of

200 acres with nearly 10,000 palms. The first hybrid seedling was produced in 1990 and with numbers increasing, there are now more than 1.5 million hybrids in the field.

Deejay has developed its own good mother palms that yield very early, yields large nuts and high yield. Its qualities are transferred to the hybrid and this mother palms give Deejay today the quality of hybrid which is flowering in one third the time and yielding three times of quantity. Over the years Deejay has developed a unique mother palm with specific characteristics that act synergistically in the progeny giving further improved productivity to the advantage of the coconut farmer. Deejay has developed three hybrids namely Deejay Sampoorna, Deejay Pushkala and Deejay Vishwas.

The parental varieties are from India only, many of which are not

in existence now. It is classified into groups and hence Deejay know the father and mother of their different lines they cross and produce the hybrids. The quality of the hybrids is the quality of the mother palms produced by Deejay. The father and mother of all mother palms is known to Deejay. Based on the advice of Prof. Davis, Deejay Coconut Project, used two varieties of dwarf palms of proven genetic potential with the necessary colour characteristics for quality control, as the female parent. With regard to the male parent, large numbers of seed material from selected Andaman Talls, Tiptur Talls, Nagarcoil Talls and West Coast Talls, were procured, planted in nurseries, selected for preferred characteristics and planted in the coconut breeding estate in Madurai.

Maximum selection procedure resulted in the best dwarf mother and the best tall father being

retained. Also, by using two dwarfs and four tall, Prof. Davis was able to ensure that the breeding garden would produce hybrids with better variability, vigour and capacity. These two factors of rigorous selection and proven genetic material have resulted in the DeeJay hybrid palm having excellent productivity.

DeeJay Dwarf as the female parent begins to flower within 18 months, and produces bunches with larger coconuts. These advantages have been absorbed into the DeeJay hybrid. Today there are over 10,000 dwarf mother palms in the DeeJay breeding programme.

At DeeJay Farm, the spathe is manually opened before it is fully matured. It is cut and opened, the male flowers are removed and is pollinated at the right time. According to Lobo, if you open the spathe too early, nuts wouldn't be mature, if you open it late, the pollens will spread. DeeJay is collecting and preserving the pollen grains in their own lab.

DeeJay's hybrids are having hybrid vigour and is performing better on the disease front and on the insect pest front better than the tall and dwarfs.

DeeJay employs modern and scientific methods of record keeping, selection procedure, technical inputs, hybridization techniques, pollen collection and preservation and on-going research. Specially developed computer software keeps the weekly records and tracks over 10,000 individual tree performances. DeeJay's quality control lab monitors pollen quality. Trained technical staff is responsible for the emasculation, for collecting the male flowers, process, separate and store the pollen as per



David Lobo

need. Harvesting of seed nuts, handling, storage and selection before planting in the nursery is done by staff with training. At DeeJay, everything possible is done

DeeJay Hybrid Field Performance

- High yields of 250 plus nuts average per annum
- Early flowering in 24 months
- Copra of 200 grams per nut
- Higher Oil content 68%
- 600 ml of sweeter water in the tender coconut
- 43750 Nuts per ha.
- 8750 kgs of copra per ha.
- 5950 kgs of oil per ha

Every adult parent palm is manually emasculated and pollinated for maximum productivity and every seedling is checked for quality before sale.

to ensure that the farmer gets a seedling that is a great hybrid of the highest quality.

Eventhough DeeJay is producing half a million seedlings a year, DeeJays hybrids are booked two

years in advance. The seedlings are mostly sold in Tamil nadu. Since the demand for DeeJay hybrid seedlings has outstripped the supply, DeeJay has started new seedling production centres, one each in Tamilnadu, Karnataka and Goa. More centres will be established, to ensure that the farmer does not have to wait. DeeJay is now producing half a million seedlings in an year. DeeJay's next year's production target is one million and in 6-7 years DeeJay's targetd yearly production would go upto two million seedlings. Most business houses would say that the purpose of business is profit, but DeeJay believes that the purpose of business is profit through service.

Since DeeJay's goal is to help farmers to generate more income, David Lobo is planning to venture into value addition. A project on producing coconut palm sugar from neera at Goa is his immediate future plan. Lobo is hopeful that this project which would be strated in an years time would save the farmers from the exploitation of middle men. Since tender coconut is having high demand, DeeJay is

Deejay Sampoorna

The Deejay Sampoorna Hybrid is the result of more than 25 years of meticulous scientific expertise using the finest breeding stock from around the world.

Features

- Ideal general purpose hybrid
- Early yielder - first flowering within 24 months after planting
- Large number of nuts - upto 250 nuts per annum per tree



- When harvested for tender coconuts, yield improves by approx 30% - 400 tender nuts per annum reported by some customers
- The tender coconut at 7 months contains 500ml of sweet coconut water
- Good kernel and copra content - approx. 200grams per nut
- Approx. 8,750 kgs of copra per annum per hectare
- Approx. 5 tonnes of coconut oil per hectare

planning for tender coconut processing. This project is expected to commence in two years time.

Deejay provides after sales service to all its customers in guiding them with timely management practices and through personal visits

Deejay Pushkala

This Deejay Pushkala hybrid is the result of several years of field evaluation. These hybrid seedlings are specially produced for tender coconut purpose and will be the perfect answer for the ever growing tender coconut market needs. These seedlings will be the preferred choice to supply tender coconuts to the processing industries.



Features

- Ideal hybrid for tender coconut water
- Early yielder - flowering within 26 months after planting.
- Large number of nuts-350 tender nuts per annum reported by customers
- The tender coconut at 7 months contains more than 600ml of sweet coconut water
- Premium selling price for tender coconuts.

to customer's farms to identify shortfalls and to suggest corrective action. A detailed management guide is provided to all customers which will serve as a guide as well as an accurate record of performance.

David Lobo believes in the spirit of innovation. He further believes

Deejay Vishwas

The Tall cultivar parent used in producing the Deejay Vishwas Hybrid coconut palm is one of the highest yielding tall growing in sub-optimum conditions. If you wish to produce more nuts per palm, sweet tender coconut water, quality copra and oil.



Features

- Excellent general purpose hybrid
- Early flowering and fruiting
- Very high yields of nuts per hectare
- Ideal Quantity of 300ml of tender coconut water
- High copra & oil production

that a sale is not complete until the customer gets the anticipated benefits. He ardently believes that his profit must be the legitimate reward for the services rendered to society.

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*Coconut Development Board,
Kochi-11*

Coconut country

Indulekha Aravind / Bangalore Dec 22, 2012, 00:30 IST

Maddur, a nondescript town on the Bangalore-Mysore highway... Indulekha Aravind visits the bustling market...

The Coconut Craze

Touted for thirst-quenching, skin-soothing goodness, this tropical-fruit star is straining the supply chain

BY KRISTA MAHR

UNDER A METAL ROOF IN BANDAGAMUWA, in western Sri Lanka, a line of seated men and women swing their small axes in sharp, neat strokes. Chips of brown coconut husk fly into the muggy October air, thick with the ripe smell of fermenting fruit. In seven or eight swift flicks of the wrist, the hat-haters tender each coconut...

the fruit: sales of coconut-water drinks in the U.S. and Europe have doubled to more than \$265 million in 2011 and are expected to double again in the U.S. this year, according to New Nutrition Business, a consulting group in London. "Coconut water is the fastest growing beverage category in the world," says Julian Mellentin, director of...

FRUITFUL RESEARCH

success story, but growers and processors are worried that the coconut craze may not be sustainable. The supply chain is efficient globally but not locally. Coconuts are grown mainly by small farmers from Brazil to Kenya to Indonesia, who often sell their output to middlemen. In many places, that means the sudden popularity of coconuts is not yet translating into higher prices for farmers. There is plenty of fruit now, but...

by Sam Paul A

Kozhikode: Great days may be ahead for the 35-lakh coconut farmers in the state. Setting the stage for a virtual coconut revolution, 51 different value-added products have been developed from the humble coconut by a former CBI officer.

P M Gopalan is a recipient of the President's gold medal and was once a part of the CBI teams that investigated several sensational cases, including the assassination of Rajiv Gandhi and the murder of Sister Abhaya. With his research for...

10 years in his post-retirement stint, he has brought out a diverse range of products, including packaged coconut drinking water, coconut honey, pickle, sauce from tender coconut water, baby oil, mouth freshener and coconut cookies. Gopalan, hailing from Kuttamboor in Kozhikode, is now on a mission to unleash the true potential of coconut by starting an institute which will offer training in coconut product diversification and preparation of traditional medicines at Nannimda in Kozhikode. He hopes to realise the...



P M Gopalan

project in collaboration with like-minded people and a coalition of farmers - the United Small Farmers Association of South India. COCONUT PRODUCE, grown by smallholders, less than 5 hectares, sell their fruit to factories at meat, coconut oil and more—

Gopalan attributes his knowledge of coconuts to the time spent in Lakshadweep. He served on the islands for 22 years from 1965 before joining the CBI. "Owing to salinity in the water, people there use coconut and its byproducts for cooking food and as medicine. After my retirement from the CBI in 1998, I started to engage more in the research and development of various value-added products from coconut," he says. As part of getting government subsidy for the proposed institute, he is planning to submit a detailed...

project report to the Development Board. "All these should be made for farmers and the educated on the of diversification added product as it went way forward. K Muralidharan, CDB, says that providing a tailormade project per the nodal R Hall, Department of the opinion this soon

CDB

Shenoy Kar

Kochi: The Coconut Development Board (CDB) to market a product seven coconut-based across 96 cities in

"These products on a consumer study conducted three years ago, revealed a huge demand nut-based products. K S Sebastian, marketing officer of CDB-based nodal promoting coconut and related industries country. The basket included aged tender coconut virgin coconut oil and cream, desiccated nut powder, ball nut chips and products

100%

Increase in sales of coconut water in the U.S. and Europe in 2011, to...

million, and world's nut oil, its content, king by

TNN Dec 27, 2012, 01:35 AM IST

Maddur market gives coconut growers a fair deal

Tags: West Bengal | Maddur Tender Coconut Market | Maddur market | Coconut growers | Andhra Pradesh

BANGALORE: Coconut is grown in 16 states. Harvesting of tender nuts accounts for 25-30% of India's annual production of 19,000 million coconuts. The top leads in tender coconut harvesting, followed by Tirupur and Pollachi in Tamil Nadu, West Bengal, Maharashtra and Gujarat," Jose says.

Far from The Coconut Tree

In the news

Coconut Development Board plans to set up

Kochi, Dec 21
The Coconut Development Board is planning to explore markets for basket of seven coconut products through 63 JNNURM cities.

The basket includes packaged tender coconut water, virgin coconut oil, milk powder and cream, desiccated coconut powder, ball copra, coconut chips and pure coconut oil.

Demands for these products have been identified based on a consumer acceptability study conducted in metros and major cities across the country, CDB officials said.

The Board's project on the annual include promoting 100 tender coconut units, five virgin coconut oil enterprises, 100 desiccated coconut manufacturing companies and 50 chips making units through JNNURM cities during the current financial year. There is a mismatch of production of various products with their increasing demand. The Board had already sup-

A... by maki... better-c... chain... ducir... in fr... for... R...



OPPORTUNITIES for availing assistance for coconut processing units under TMOC

Jayashree, A*

INTRODUCTION

Under Technology Mission on Coconut (TMOC), Coconut Development Board is providing assistance for setting up of coconut based industry... The programme is being implemented by the Board since 2001-02 as a part of the strategy for integrated development of coconut industry in India to address growing concerns of the coconut growers in a strategic manner. The programme is being implemented by the Coconut Development Board in collaboration with the Government of Kerala, Government of Tamil Nadu, Government of Karnataka, Government of Andhra Pradesh, Government of Odisha, Government of West Bengal, Government of Assam, Government of Jharkhand, Government of Chhattisgarh, Government of Madhya Pradesh, Government of Uttar Pradesh, Government of Bihar, Government of Rajasthan, Government of Gujarat, Government of Maharashtra, Government of Haryana, Government of Punjab, Government of Himachal Pradesh, Government of Jammu and Kashmir, Government of Ladakh, Government of Andaman and Nicobar Islands, Government of Chandernagore, Government of Pondicherry, Government of Lakshadweep, Government of Dadra and Nagar Haveli, Government of Diu, Government of Daman and Diu, Government of Chandernagore, Government of Pondicherry, Government of Lakshadweep, Government of Dadra and Nagar Haveli, Government of Diu, Government of Daman and Diu.

Under Technology Mission on Coconut (TMOC), Coconut Development Board is providing assistance for setting up of coconut based industry... The programme is being implemented by the Board since 2001-02 as a part of the strategy for integrated development of coconut industry in India to address growing concerns of the coconut growers in a strategic manner. The programme is being implemented by the Coconut Development Board in collaboration with the Government of Kerala, Government of Tamil Nadu, Government of Karnataka, Government of Andhra Pradesh, Government of Odisha, Government of West Bengal, Government of Assam, Government of Jharkhand, Government of Chhattisgarh, Government of Madhya Pradesh, Government of Uttar Pradesh, Government of Bihar, Government of Rajasthan, Government of Gujarat, Government of Maharashtra, Government of Haryana, Government of Punjab, Government of Himachal Pradesh, Government of Jammu and Kashmir, Government of Ladakh, Government of Andaman and Nicobar Islands, Government of Chandernagore, Government of Pondicherry, Government of Lakshadweep, Government of Dadra and Nagar Haveli, Government of Diu, Government of Daman and Diu.

to market coconut-based products nationwide

Developing markets for value-added products will help curb the price fall coconut, which is now at Rs 4 per nut, says the Coconut Development Board

oil. "We plan to market these products in a phased manner, and during the first phase, we could market in seven cities with over four million population - Delhi, Mumbai, Bangalore, Chennai, Kolkata, Ahmedabad and Hyderabad," Sebastian said.

Developing markets for value-added products will help curb the price fall coconut, which is now at Rs 4 per

nut, believes the marketing team at the CDB.

However, developing coconut-based industries is a major challenge. For example, coconut milk powder is produced by only two firms in the country - one at Vathalagundu in Tamil Nadu and the other at Thrissur in Kerala. Similarly chips production is limited to 5 lakh packets per annum, which wouldn't even meet the demand from the top seven cities. Hence, the Board is busy developing small industries across the country and has already financed 200 units. It is also trying to sell the products through supermarkets, Khadi shops, and outlets run by the consortium of coconut farmers, revealed Deepthi Nair, marketing officer of CDB.

Warning

... included as components under this. A... report along with application and all... nents has to be submitted for avail... assistance from the Board under the... rator can avail subsidy from the con... tment agencies also but the total... uld be below 50% of the project cost

the components Adoption of Tech... up/expansion/modernization of... nits, adopting technologies for... way... of produ-

Far from the Coconut Tree



Coconut Water

Rich in potassium, coconut water is the world's fastest-growing beverage category. Its U.S. sales exceed pomegranate juice's, according to market-research firm SPINS



Edible Coconut Oil

certified as... by new research... as a

... are scrambling. "It's a r... ing to business play... idroes, the APCC's n... officer. Companies w... offer higher prices, h... ers' commitment—... A few producer... by making the fi... better-compensat... chain. When Har... ducing coconut w... in full swing. Te... founders Justi... Riboud design... fresh juice wor... of harvest, der... heat treatme... a few weeks... this tricky s... Lanka befor... Harmless/... certified as... for as mu... tional coc... a farmer... experie... Inve... ers has

One coconut=one egg, but for Chinnamma, one coconut=Rs.48



While our coconut farmers are lamenting that they hardly get Rs. 4, the price of an egg for

coconut, here is the success story of a women entrepreneur who makes Rs.48 from a single coconut. Smt. Chinnamma from Thrissur district in Kerala is producing chips from coconut and is selling this coconut value added product under the brand name Coco Snaky.

It was at a time the price of coconut was very low and they had difficulty in selling the nuts, Chinnamma and her husband Joy decided to try their luck in value addition. Initially they prepared



honey from coconut milk and vinegar from coconut water. It was in 2001 that they came to know about coconut chips. Immediately on hearing the same, they took

training and started to produce coconut chips under the brand name Chinnus coconut products.

Chinnamma is making chips from 300 nuts per day. She is getting 1 kg chips from 10 nuts. Around 20-25 kg chips are manufactured everyday. 70% of this is sold in bulk packing in star hotels. The rest is packed in 20 gm packs and is sold @ Rs. 12 per packs. From a single coconut she is making around 90 gm chips. Earlier she used to sell the products in melas and exhibitions only, but her products are having good demand now even in foreign markets. Both Joy and Chinamma agree that coconut chips is having good demand. They are not in a position to supply the products in tune with the demand.

Coconut Producers' Societies and Federations growing in number

Formation of CPSs and Federations are gaining momentum in various states. In Kerala 2045 CPSs have formed of which 1845 are registered with the Board. In Tamil Nadu 168 CPS have formed and 47 registered with the Board. In Karnataka and Andhra Pradesh the CPS formation is picking up and expected to cross 500 shortly. Federation comprising minimum of CPSs have formed in many districts of Kerala and so far 49 federations are registered with the Board.

States	CPS in formation process	No. of CPS registered	No. of Federations registered
Kerala	2045	1845	49
Tamil Nadu	168	47	0
Karnataka	270	0	0
Andhra Pradesh	185	0	0
Total	2668	1892	49

Coconut Country

Maddur, town on the Bangalore-Mysore highway, has the biggest organised market for tender coconuts. Maddur Agricultural Produce Market Committee (APMC), is the country's biggest wholesale tender coconut market, and the only organised one of its kind. Located 80 kilometres from Bangalore in the Mandya district, on the Bangalore-Mysore highway, anywhere between 400,000 and 700,000 tender coconuts are traded here daily, with the number going up to 900,000 in summer months.

The market was established in 1992, before which the trade in tender coconut used to happen in and around smaller markets in Maddur. Earlier, the coconuts used to be bought directly from farmers and would be sold in Bangalore. After APMC was set up, they started getting dispatched to Delhi, Mumbai and Hyderabad as well. Currently, the price is around Rs 10 per piece. Prices vary from day to day. The coconuts come from Maddur and adjoining areas such as Kollegal, Channarayappattana, Mandya and Pandavpura.

The market was established with the aim of facilitating an auction platform to enable farmers to get better prices; but contrary to recent reports, the mechanism in place is "mutual negotiation", where the price is arrived at through bargaining between the trader and individual seller, with on-the-spot payment in cash.

Prices have nearly doubled in the last five years, from Rs 4-5 per tender coconut to Rs 9-10. Here the

farmers prefer not to auction their produce as that would involve the tedious process of grading them into different sizes as well as running the risk of damaging them while unloading them.

Coconut Development Board, is playing an active role to play in the promotion of tender coconuts, and in increasing their popularity. The campaign was started in 2004 so that farmers could reduce their dependence on ripe coconuts, used primarily to make oil, the prices of which was falling because of cheaper vegetable oil imports. Farmers could also harvest tender coconuts in 6 to 7 months, instead of the longer wait required for the nuts to ripen, which meant they could earn more. The year 2012-13 has been declared the year of tender coconut by the Govt. of Kerala. This coincided with the increasing interest globally in tender coconut water as a health drink.

The Board has just received the go-ahead to set up three coconut bioparks for industries making coconut-based products, and is also supporting kiosks selling tender coconut. Globally, interest in packaged tender coconut water is increasing, with Coca-Cola buying a majority stake in Zico, the second biggest brand in the market, estimated to be *\$350 million. A Business Wire report says the market for coconut water grew 100 per cent in 2011, riding on its nutritional properties such as natural electrolytes, and potassium content.

*Courtesy: Business Standard,
22nd December 2012*

The Coconut Craze

World over, the demand for coconut and its products are on the increase says a report appeared in one of the recent issues of *TIMES*. Coconut is becoming America's latest trendy exotic edible, following the path of the pomegranate and the berry. From Dandagamawa, in western Sri Lanka, it is sent to Los Angeles, 9300 miles away. The hottest part of the market is coconut water, sales of coconut-water drinks in the U.S. and Europe have doubled to more than \$265 million in 2011 and are expected to double again in the U.S. this year.

Other parts of the coconut are in demand too. Coconut oil, once demonized for its high saturated-fat content, has been rehabilitated by research extolling its health benefits and by the popularity of vegan baking.

The rise in demand has been dramatic says the report. In the Philippines, the government estimates that coconut-water exports quadrupled in the first quarter of 2012 compared with the same period in 2011. Across Asia, coconut-oil exports to the U.S. have grown 3.3% annually over the past five years, according to the Asian and Pacific Coconut Community (APCC).

Vita Coco, one of the dominant coconut-water brands in the U.S., once bought coconuts only from Brazil, using a local company to produce, flash-pasteurize and ship the juice out in Tetra Paks. Demand was increasing faster than they could produce and many a times Vita Coco had to turn down major retail partners because the product wasn't going to be available. Now the company found new suppliers in Sri Lanka, the Philippines and Mexico, and those countries now provide a significant share of its coconuts.

Courtesy: The TIME

Coconut Cures

Coconut and coconut oil has always been the subject of controversy. A disturbing trend is the malicious propaganda and negative publicity against coconut linking its consumption with coronary heart disease in human being. Many studies are now proving the beneficial effects of the medium chain fatty acids in coconut oil. Now coconut oil rich diet is advocated even by doctors against preventing diabetes, thyroids, Alzheimer's disease and even autism.

How Coconut Oil Can Help Alzheimer Patients

As coconut oil's use becomes more accepted and widespread, and as people begin to realize the dangers of the low-fat dietary belief, more testimonies are appearing in diseases like Alzheimer's. One of the most widely published reports is from Dr. Mary Newport as reported by the St. Petersburg Times. Dr. Newport's husband had been diagnosed with early onset of Alzheimer's. After using drugs that slowed down the effects of Alzheimer's, she looked into clinical drug trials and found one based on MCTs that not only slowed the progression of Alzheimer's, but offered improvement. Not being able to get her husband into one of these trials, she began to give him Virgin Coconut Oil, and saw incredible improvement in his condition. He began taking coconut oil every day, and by the fifth day, there was a tremendous improvement. "He faced the day bubbly, more like his old self. More than five months later, his tremors subsided, the visual

disturbances that prevented him from reading disappeared, and he became more social and interested in those around him.

Coconut Oil and Diabetes

A study done in 2009 at the Garvan Institute of Medical Research in Australia by Dr. Nigel Turner and Associate Professor Jiming Ye demonstrated that a diet rich in coconut oil protects against 'insulin resistance in muscle and fat. A diet rich in coconut oil, which is high in medium chain fatty acids, also avoids the accumulation of body fat caused by other high fat diets of longer chain fatty acids of similar calorie content. These findings are important because obesity and insulin resistance are major factors leading to the development of Type 2 diabetes.

A study was conducted in 2010 to study the effect of saturated fatty acid (SFA)-rich dietary vegetable oils on the lipid profile, endogenous antioxidant enzymes and glucose tolerance in type 2 diabetic rats. The study concluded that the type of fatty acid in the dietary oil determines its deleterious or beneficial effects. Lauric acid present in coconut oil may protect against diabetes-induced dyslipidemia.

A Healthy Choice for the Thyroid

Coconut oil is a saturated fat made up primarily of medium chain fatty acids. Also known as medium chain triglycerides (MCTs), medium chain fatty acids are known to increase metabolism and promote

weight loss. Coconut oil can also raise basal body temperatures while increasing metabolism. This is good news for people who suffer with low thyroid function.

Autism Reversed with Virgin Coconut Oil

Autism is a developmental disability that affects how the brain functions, especially in those areas of the brain that control social ability and communication skills. Boys are most likely to develop autism, and most children are diagnosed before the age of three.

Rosemarie Rosale live in Lapu-Lapu City, Cebu in Philippines. Her son Homer Ponce Rosales was diagnosed with autism spectrum disorder (ASD). Despite behavioral therapy, Homer showed little progress. Then she took him to a special school where she was introduced to a gluten-free and casein-free diet for the child.

After following the gluten-free and casein-free diet for almost 10 months, his behavior improved, he became more manageable, he began to socialize with other kids, could read and write a little, and talk a little. She came to know how coconut oil could be used to strengthen the immune system, prevent illness, and improve health. She started giving coconut oil to him every day and sometimes three times a day. After two months, a dramatic improvement in his behaviour especially in his speech was noticed.

For more information visit the website of the Board www.coconutboard.nic.in

Export Opportunities for Coconut Products

COCONUT OIL, DESICCATED COCONUT AND COCONUT FAT

Agrifrom the Romanian company based in Vietnam starts to import coconut products such as coconut oil, desiccated coconut and coconut fat. Interested parties may contact: Ms. Marietta Keri Sales representative Vietnam Tel: 84 (0) 165 931 5073, Email: mariettakeri@agrifrom.rot, Website: www.agrifrom.ro

COCONUT FIBRE

GTL Company is looking for coconut fibre. Supplies may directly contact: Ms. Busayawan Santivarangkana GTL (Thailand) Co., Ltd. 227 Soi Suanplu 6, South Sathorn Road Thungmahamek, Sathorn Bangkok 10120 Thailand Tel: 662-675 4172-8 Fax: 662-675 4170-1 Mobile: 08-1814-1248 Email: busayawan@gtl-thailand.com.

COCONUT OIL

A company is looking for crude (unrefined) coconut oil. Interested parties, please contact: Mr. Gilberto Hernandez.

Jose Paiewonsky e Hijos S.R.L. Santiago R.D., USA Tel: 809-5751512 Ext. 240 Fax: 809-5758553 Email: gilberto@josepaiewonsky.com

WHITE COPRA

White copra produced in Indonesia is available for shipment 4 tons/day. Interested parties, please contact: Mr. Mazuki Chen Jln. Raya Malingping Banyah Km.4 Desa Cilangkahan, Kec. Malingping Lebak, Banten 42391 Indonesia Tel: 62-818123052 Fax: 62-252-508020 Email: marzuki.chen@gmail.com

DESICCATED COCONUT AND COCONUT MILK POWDER EXPORTER

Viet Delta Corp. can supply the said products with good quality and competitive price. Interested parties may contact: Ms. Susan Nguyen Export Department Viet Delta Corp. 20/5 Dinh Bo Linh, Ward 24 Binh Thanh District Ho Chi Minh City Vietnam Tel: 84-8-35114928 Mobile: 84-01689977498 Fax: 84-8-38998085 Email: sales14@vdelta.com.vn

COCONUT WATER AND MILK

An Australian buyer has approached Pacific Islands Trade & Invest, expressing interest in importing certified organic coconut milk from the Pacific islands.

The buyer is currently buying in 20 litre containers from Thailand. Product must be certified organic. For further details contact:

Mr. Jeremy Grennell, Pacific Islands Trade & Invest P.O. Box 5407, Sydney, NSW 2000, Australia, Tel: 612 9290 2133, Email: jeremy.grennell@pacificttradeinvestment.com

COCONUT WOOD

A company is looking for suppliers of wood of red coconut and black palmyra (black palm tree) as lumber/timber/ squares/logs/planks with specification of the thickness: 20/30/40/50 mm, widths: 5 – 15 cm (may be 20 cm), or square: 5x5 6x6 8x8 10x10 cm, Lengths: 1m+, high + medium density, best quality, and dry (AD+KD). Interested parties may contact:

Mr. Mathias Pfeifhofer
Email: brainwood@gmx.de

CRUDE COCONUT OIL

We are looking for suppliers of long term coconut water and coconut milk that are not tied up with major global brands. Interested parties may contact: Dr. Vinay Chand ITC/UNCTAD/WTO Consultant and President for Marketing Vinay Chand Associates 230, Finchley Road London, NW36DJ United Kingdom Tel: 020 77945977, Fax: 020 7431 5715 Email: vinaychand@msn.com Website: www.ruraldevelopment.info Or Mr. Gregory Solomon Senior General Manager-GK Foods Grace Foods (USA), Inc. 3350 SW 148 Avenue, Suite 110 Miramar, Florida 33027 USA Tel: 954-8741608 Fax: 954-8741733 Email: gregory.solomon@gkco.com

Source: Cocommunity, December 2012

COCONUT MILK BEVERAGE

An Indian entrepreneur is interested in acquiring the technology for producing and processing coconut milk beverage.

VIRGIN COCONUT OIL PRODUCTION

A Thai entrepreneur is interested in acquiring the technology for production of virgin coconut oil. He plans to set up a coconut oil production line with technical co-operation from technology providers.

Modern Food Processing, December 2012, For further details visit: www.technology4sme.net

112th Board meeting of CDB



A view of the meeting. Seen are Shri. K. Dharmarajan, Adv. Varkala B Ravikumar, Prof. G Balachandran, Chairman, Coir Board, Shri. T K Jose IAS, Chairman, Coconut Development Board. Shri. Vasanth Vishu Limaye, Vice Chairman, Coconut Development Board, Shri. R Kalaiselvan, Shri. Mani C Kappan, Shri. Sugata Ghose, CCDO and Dr. A.K. Nandi, Secretary, CDB

The 112th meeting of the Coconut Development Board was held on 8th December 2012 at Pollachi, Tamil Nadu under the chairmanship of Shri. T K Jose IAS, Chairman, Coconut Development Board. Shri. Vasanth Vishu Limaye, Vice Chairman, Coconut Development Board, Prof. G

Balachandran, Chairman, Coir Board, Dr.D G Bakwad, Director Horticulture, Maharashtra, Members of the Board; Adv. Varkala B Ravikumar, Smt. K R Netravathi, Shri. K. Dharmarajan, Shri. R Kalaiselvan and Shri. Mani C Kappan attended the meeting. Shri.

V V Limaye handed over the land lease agreement of DSP Farm Dapoli, Maharashtra to Chairman, CDB during the occasion. The members visited coconut gardens in Pollachi and M/s.Yogic Foods, manufacturer of tender coconut water in pet bottles.

2nd Investors' Meet scheduled for 11th January 2013

KSIDC in association with Coconut Development Board, Dept. of Agriculture, Govt. of Kerala and Kerala Agriculture University is organising one day investors meet in coconut processing sector on 11th January 2013 at Kozhikode. The meet is organised with a specific purpose of supporting coconut based investors in industrial park at Kuttiadi being established by KSIDC. KSIDC has already taken possession of 135 acres of land at Kuttiyadi in Kozhikode for establishing 'Kera Park' and will allot land for potential entrepreneurs to start ventures in coconut sector.

The investors meet will be

inaugurated by Shri. K.P. Mohanan, Minister of Agriculture, Govt. of Kerala. Shri. Subrato Biswas IAS, APC, Govt. of Kerala, Shri. Tom Jose IAS, Managing Director, KSIDC and Shri. T.K. Jose IAS, Chairman CDB will participate in the meeting.

KSIDC and Coconut Development Board are trying to promote processing units in coconut sector in Kerala. The meet will discuss various aspects in coconut industrial sector viz. value addition, processing, innovative marketing strategies at national and international level support to exporters through Coconut Export Promotion Council etc. Successful entrepreneurs in coconut processing

sector will also share their experiences.

KSIDC will facilitate the interested investors from Malappuram, Palakkad, Kozhikode and Kannur.

Prospective investors and Coconut Producers' Federation interested in participating in the meet may contact the Executive Director, Kerala State Industrial Development Corporation (KSIDC), Kochi, Phone: (O): 0484-2321443, Cell: +9198847330785, (Email: thomaskutty@ksidcmail.org). Registration shall be on the first come first serve basis only and limited to a maximum of 150 delegates.

Technology Development Centre - Training programmes for Entrepreneurs



Training programmes in progress at TDC, Vazhakkulam

The main objective of the Technology Development Centre of the Coconut Development Board located at South Vazhakulam, Aluva, Kerala is to promote the overall development and growth of coconut based industries in the country. The activities carried out in TDC area as follows-

- a) Conduct of 4 day Entrepreneurship Development programmes for Entrepreneurs.
- b) Two day training cum Process Demonstration on coconut vinegar from matured coconut water.
- c) One day training cum Process Demonstration on coconut convenience foods and minimally processed tender coconut.

The TDC has a full fledged NABL accredited Quality Testing laboratory at South Vazhakulam Aluva. The laboratory is equipped with advanced analytical instruments and qualified staff as per NABL requirements to carry out

chemical/microbiological tests of coconut based products.

The main products covered under the training program are coconut chips, coconut biscuit, coconut burfi, coconut ladoo, coconut pickle, coconut jam, coconut chocolate, coconut lemonade, coconut chutney powder, minimally processed tender coconut and coconut vinegar. During the month of November 2012 and December 2012, TDC has conducted 6 training programmes in coconut convenience foods for 141 persons and to training programmes for coconut vinegar production from matured coconut water for 14 trainees.

During January to April 2013, the TDC intends to conduct 12 training programmes for coconut convenience foods, 6 training for coconut vinegar and 16 batches for minimally processed tender coconut for entrepreneurs from the states of Kerala, Tamil Nadu, Karnataka, Andhra Pradesh, West Bengal and

Assam. The Board can conduct training programmes in other states through the infrastructure facility available at DSP Farms of the Board and Krishi Vigyan Kendras. For more details on the training program, contact: Sree Kumar Poduval, Processing Engineer, Tech Dev Centre, Coconut Development Board, South Vazhakulam, Aluva-683105, Ph-0484 2679680

G.R. Singh awarded Ph.D



Shri Gaj Ram Singh, Deputy Director (Dev.), CDB, MDIC, Delhi is awarded Ph.D. by the 'Sido Kanhu Murmu University, Dumka, Jharkhand'. His research work was on the topic 'Globalisation and the economy of coconut farmers in north eastern region, an evaluation'

Mandya women SHGs spearheading towards chips making



The women SHG get trained in coconut chips making

Coconut Development Board, DSP Farm Mandya and Department of Horticulture, Government of Karnataka jointly conducted one day training programme in coconut chips manufacturing at Coconut Processed Products Demonstration-cum Training

Centre, Javaranaahalli, Mandya on 29th November 2012. The training programme was inaugurated by Shri.M.K.Singh, Farm Manager, DSP.Farm, Mandya. 20 members from DSP Farm, Mandya and another 20 members from Department of Horticulture and Zilla

Parishad, Mandya participated in the training programme. During the training candidates were trained on coconut chips making. In addition to that they were also exposed to the different value added products of coconut including ball copra drier unit and cup copra drier unit.

Women gets trained in coconut convenience food making



The trainees with Smt. Malamoni Hazarika, Master trainer, Shri. L.Obed, Deputy Director and Shri. Rajeev P. George, Director, CDB

Coconut Development Board, Regional Office Guwahati organized a training programme on convenience foods on coconut from 10th to 13th December 2012. Eight participants from Greeha Lakshmi Atma Sahayak Got, and Kamrup attended this programme. Shri.

Lunghar Obed, Deputy Director presented the introductory remarks on coconut and its importance. Smt. Malamoni Hazarika, master trainer demonstrated preparation of different coconut products like coconut chips, jam, biscuits, candy, pickle, coconut oil, coconut water,

squash etc. The trainees were briefed on market exposure which included packing, labeling, displaying of items and selling of their prepared coconut products in the market. Rajeev P. George, Director, spoke during the concluding session and distributed certificates to the trainees.

Intensive efforts for hybridization in DSP Farms



MYD x WCT, CGD x WCT and COD x WCT are being produced. Hybrid seedlings produced from Mandya has greater demand in south India. At present the area under coconut cultivation in India is 18.95 lakh ha and the requirement of seedlings for new planting in non traditional areas and traditional area is estimated as 10 million seedlings. However the production from Govt. sector is only 3.2 million which leads to a wide gap in the demand and supply. In this situation Board has initiated measures for increased seedling production from the seven DSP Farms with emphasis on hybridisation. With this objective emasculatation of inflorescences is carried in DSP farms aiming a total

To explore hybrid vigour hybridisation is done in coconut by crossing dwarf cultivars with tall or vice-versa artificially. Dwarf palms above eight years are suitable for hybridisation. The fully matured inflorescence is cut opened and male flowerers are removed by cutting spikelet leaving female flowers and covered with kora cloth bag. Pollination with pollen mixture of pollen and talc powder in the ratio of 1:9 is sprayed in alternative days in the morning hours when the female flowers reach receptive stage. After the completion of female phase of 7-12 days the fertilized flowers tips turn black and the bags are removed. The fertilized flower develops into hybridized seednuts by 11-12 months. From a palm around 80 to 100 hybridized seednuts and 40 to 50 hybrid seedlings can be produced. Hybrid seedlings are heavy bearers

producing more than 150 nuts per palm per annum.

Hybridisation programme was initiated in DSP farm Mandya in the year 1990. Subsequently the work was extended to other farms like Neriamangalam and Abhaya puri. At present

Vegiwada, Pitapally and Kondagaon also initiated the programme in a trial basis. So far three lakh hybrid seedlings were produced and distributed from different DSP Farms of the Board. In Mandya COD x TT, CDG x TT, MYD x TT and MOD x TT and in Neriamangalam MOD x WCT,



emasculatation of 24,000. This will increase the number of hybrid seedlings produced in next planting season to many fold. Board is now collaborating with various colleges and institutions for research projects on hybridisation and hybrid seedling production so as to increase hybridisation at farmers field itself.

Board wins the Best display award

An exhibition to highlight the achievements and developments of various government departments and to create awareness about the new arrivals, in products as well as services/ facilities including welfare programmes & policies for the

received the award for the Excellent Display. Smt. Krishna Tirat, Minister of State for Women & Child Development, Govt. of India distributed the prizes to the winners.

Samples of different brands of coconut oil, virgin coconut oil,



Shri. S. Kumaravel, Technical Officer, CDB, receiving the award from Smt. Krishna Tirat

benefit of the public, NNS Media Group, Delhi organized 7th edition of 'Meri Dilli Utsav 2012' at Punjabi Bagh Stadium, New Delhi from 3rd to 5th November 2012. The Fair was jointly inaugurated by Smt. Kiran Chopra, Director, Punjab Kesari Group of Publications and Mahasay Dharampal, Chairman, MDH Group.

Board participated in the exhibition with an objective of creating awareness on the health and nutraceutical values of coconut and its products, their usage in daily life in accordance to the change in life style of people especially in a metropolitan city like New Delhi. Coconut Development Board

desiccated coconut powder, coconut milk/ milk powder/ milk cream, coconut pickle, jam, packed tender coconut water, activated carbon, shell charcoal, handicrafts and other coconut based food & beverage, industrial & household utility items were showcased in Board's stall. Posters highlighting the versatility of coconut, goodness of coconut and its products, etc. were also part of the display.

Apart from these, publications on different coconut based value added products, their qualities & uses. were distributed to the visitors to create awareness. Sale of coconut oil (KLF Nirmal) was also arranged in Board's stall through M/

s KC Enterprises, New Delhi. The Fair was witnessed by more than 40,000 people.

The visitors attracted by the array of coconut products displayed as they are aware only about the fresh tender coconut, matured coconut, coconut oil (as a cosmetic) and desiccated coconut. Clarifications/ guidance on the queries regarding uses and availability different value added products were also provided by the Board's officials.

Apart from the Board several central and state departments like National Small Industries Corporation, Coffee Board, Coir Board, National Commission for Women and Ministry of Women and Child Development participated in the fair.

Awareness programme

An awareness programme on Technology Mission on Coconut and coconut pests and diseases was held on 12th December 2012 at Tumkur, Karnataka. Dr. T.I. Mathewkutty, Director, Coconut Development Board, Bangalore inaugurated the programme and Shri. Vishveshwaraiah, President, Coconut Grower's Association, Turuvekere presided over. Shri. Vijayakumar Hallikeri, Deputy Director, CDB in his presentation spoke on the importance of value addition and TMOC projects. The programme was jointly organised by the Coconut Development Board and Coconut Grower's Association, Turuvekere. 200 farmers and entrepreneurs participated in the programme.

Monthly operations in coconut gardens

January

Andaman & Nicobar Islands: Irrigate the palms. The frequency of irrigation and quantity of water depends on the type of soil and the method of irrigation.

Andhra Pradesh: Clean the crowns of the palms. Search for leaf eating caterpillar and destroy the affected leaves by cutting and burning. Detect the palms affected by Ganoderma wilt and drench the plant basin with calixin 5 per cent or aureofungin sol by dissolving 1 g aureofungin + 1 g. copper sulphate in 5 litres of water. The same treatment is to be repeated after 15 days. Isolate the disease affected palm by taking isolation trench around the palm. The healthy palms in the immediate vicinity of diseased palms should be treated similarly with the above solution to prevent further spread of the disease. If attack of the mite is noticed, spray neem oil - garlic - soap emulsion 2 percent or azadirachtin @ 4ml per litre or root feed azadirachtin @ 7.5 ml with equal quantity of water. Under rainfed condition a light ploughing may be done. Start irrigating the palms.

Assam: Continue irrigation. Attend to intercultural operations around the palm. Continue collection of seednuts from the selected mother palms and store them in a cool dry place. Apply pond silt to coconut garden. Start digging pits of 1m x 1m x 1m size in the main field at a spacing of 8m x 8m in square system for transplanting of seedlings.

Bihar / Madhya Pradesh/ Chhattisgarh: Clean the crowns of the palms. Continue irrigation. If there is scarcity of water, adopt drip irrigation. Keep the basins of palms weed free. Provide shade to the newly planted seedlings. Mulch the basins of the palms with dried leaves. Apply tank silt/forest soil/compost in coconut gardens. Apply blitox @ 5g/litre or Dithane M 45 @ 2g/litre on the crown and bunches to avoid secondary infections due to cold injury.

Karnataka: Irrigate the palms regularly. Under drip system 60-70 litres of water per palm per day may be given. Raise suitable intercrops under irrigated conditions. If leaf spot disease is noticed spray the leaves with one per cent bordeaux mixture. If the palms are affected by leaf eating caterpillar cut and burn the severely affected leaves. Spray the underneath of leaves with 0.05 m per cent malathion or 0.02 per cent dichlorvos. Release parasites of suitable stage. If

spraying has been done release the parasites only after 15 days in the pest prone areas. If the attack of the mite is noticed, spray neem oil - garlic - soap emulsion 2 percent (20 ml neem oil + 20 gm garlic emulsion + 5 gm soap in 1 litre water) or azadirachtin @ 4ml per litre or root feed azadirachtin @ 7.5 ml with equal quantity of water. Plough the land and destroy weeds under rainfed conditions.

Kerala/Lakshadweep: Irrigate young seedlings and adult palms. Clean the crowns of palms. Cut and remove all the senile and unproductive palms from the garden. Continue the prophylactic spraying either with bordeaux mixture or any other copper fungicides available in the market. If the attack of leaf eating caterpillar is noticed, spray the under surface of affected leaves with 0.02 per cent dichlorvos or malathion. Select mother palms for seednut collection. Start irrigation. If mite infestation is noticed clean the



crowns of the palms and spray neem oil - garlic - soap emulsion 2 percent or azadiractin @ 4ml per litre or root feed azadiractin @ 7.5 ml with equal quantity of water.

Maharashtra/Goa/Gujarat: Clean the crowns of the palms by removing dead and decaying matter. Spray the crowns with one per cent bordeaux mixture if fungal diseases are noticed. If the attack of leaf eating caterpillar is severe, cut and remove all the affected leaves and spray the lower side of the leaves with 0.05 per cent malathion or 0.02 per cent dichlorvos. Release parasites only after 15 days of spraying.

Orissa: Seasonal intercrops may be sown. Irrigate coconut and the intercrops. Incorporate green manure. Coconut basins may be mulched with coir pith/ husk etc.

Plant protection chemicals may be applied according to the pest/disease. If the attack of eriophyid

mite is noticed root feed azadiractin 5 per cent @7.5 ml with equal quantity of water. Clean the crown. Continue other maintenance operations to the intercrops as well as coconut.

Tamil Nadu/Puducherry: Clean the crowns of the palms. If rain is not received in early January, start the regular irrigation. Treat the stem bleeding affected palms by applying coaltar or bordeaux paste after removing the affected tissues. Dig isolation trenches of 1m deep and 50cm wide, 2 meters away from the base of the palms affected by Thanjavur wilt. Apply 5kg neem cake per palm per year. Drench the basins with 40 litres of one per cent bordeaux mixture per palm. Treat the palms with 100 ml calixin 5 per cent through root feeding at quarterly intervals for one year. In areas where mite infestation is noticed, spray neem oil - garlic - soap emulsion 2 percent (20 ml

neem oil + 20 gm garlic emulsion + 5 gm soap in 1 litre water) or azadiractin @ 4ml per litre or root feed azadiractin @ 7.5 ml with equal quantity of water especially on the perianth region of buttons and affected nuts.

Tripura: Irrigate the palms at an interval of 3-4 days. The basins of each palm should be mulched with leaves, to reduce the loss of soil moisture. Before mulching, drench the basins with chlorpyrifos 0.05 per cent to avoid the attack of termites. Provide partial shade to new plants to protect from scorching. One per cent bordeaux mixture or any other copper fungicide may be sprayed to protect the palms from bud rot or leaf rot.

West Bengal: Continue harvesting of nuts. Start irrigating young seedlings in the field as well as in nursery and provide shade. Select mother palms for seednut collection.

PITEX 2012

Coconut Development Board, Market Development cum Information Centre, Delhi participated in the 6th edition of Punjab International Trade Expo (PITEX 2012) held from 6th to 10th December 2012 at Ranjit Avenue, Amritsar, Punjab. The programme was inaugurated by Shri Anil Joshi, Minister for Industries, Govt. of Punjab in the presence of delegates from different organizations, including government officials from Pakistan.

CDB has been participating in the event since the last three years

The awareness created by the Board on the health aspects of various coconut products, value added products which are new, convenient & time saving and at par with the changing lifestyle could attract more visitors to the Board's stall. Informative posters on the goodness of coconut and its derivatives were displayed in the Board's stall. Sale cum display of coconut products like packaged tender coconut water, coconut oil, virgin coconut oil, coconut chips and coconut oil based toiletries were made in the Board's stall through manufacturers and dealers.

Shri Sukhbir Singh Badal, Deputy Chief Minister, Punjab presided over the valedictory function of PITEX 2012 on 10th December 2012. Shri Anil Joshi, Minister for Industries, Punjab was also present during the occasion.

The Expo was organized by PHD Chamber of Commerce with the support of Ministry of Textiles, Ministry of Food Processing, Ministry of MSMEs, NABARD, NSIC and other organizations. Over 300 exhibitors, including central and state government organisations from various parts of India and abroad participated in the event

Market Review - November 2012

Deepthi Nair S.

Highlights

- ◆ The price of milling copra, ball copra and coconut oil expressed a steady trend at all the major markets during the month under report.
- ◆ The international price of coconut oil expressed a downward trend during the month under report.

The prices of copra and coconut ruled below Minimum support Price in major producing states and procurement activities were initiated by the Government machinery under Price Support schemes.

COCONUT OIL

The price of coconut oil quoted at all the major marketing centres in the country expressed a steady trend during the month under review.

The monthly average price of coconut oil at Kochi was Rs. 6014/- per quintal. The price of coconut oil at Alappuzha market also moved in tune with the price behavior at Kochi market. The monthly average price was Rs. 6008/- per quintal at Alappuzha market and Rs.6120 at Kozhikode market. The prices at Kochi, Alappuzha and Kozhikode markets were about 3 to 5 percent higher than the prices prevalent in October 2012. It is reported that the price of coconut oil remained

more or less steady in Kerala due to lack of demand from upcountry buyers.

MILLING COPRA

The monthly average prices of FAQ copra recorded at Kochi market was Rs.4144/- per quintal. The monthly average prices of Rasi copra at Alappuzha market was Rs.4036/- and at Kozhikode market was Rs.4052/- per quintal. The prices at Kochi, Alappuzha and Kozhikode were about 3 to 4 percent higher than that of the previous month. The procurement operations under Price Support Scheme have already been initiated in Tamilnadu and Kerala by TANFED and NAFED respectively. The Minimum support price of milling copra has been fixed at Rs. 5100/- per quintal for 2012 season. A total quantity of 27950 MT of copra was procured by Nafed through Tanfed in Tamilnadu and 16486 MT was procured in Kerala by Nafed through Kerafed and Marketfed. Around 6468 MT

of copra was procured in Andhra Pradesh and 3350 MT in Lakshadweep.

The monthly average prices of milling copra at Ambajipeta market in Andhra Pradesh was Rs.3860/- per quintal compared to Rs. 3923/- recorded during the previous month.

EDIBLE COPRA

The monthly average prices of Rajapur copra at Kozhikode market was Rs.5520/- per quintal, which was marginally lower compared to the price in previous month.

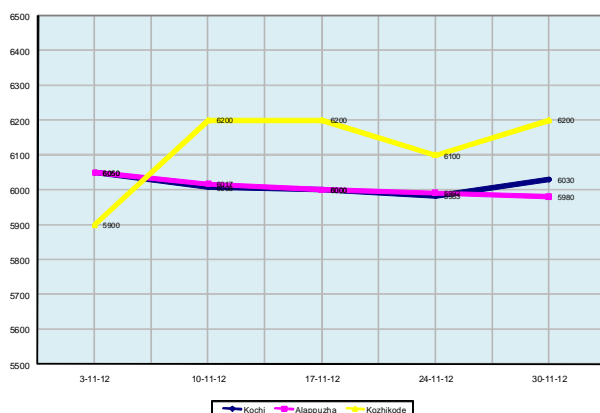
The monthly average prices of ball copra at Kozhikode market averaged at Rs. 4881/- per quintal.

The monthly prices of ball copra at APMC market, Tiptur, in Karnataka averaged at Rs. 5056/- per quintal in November 2012 while it was Rs 5800/- in Bangalore and Rs. 5057/- in Arsikere.

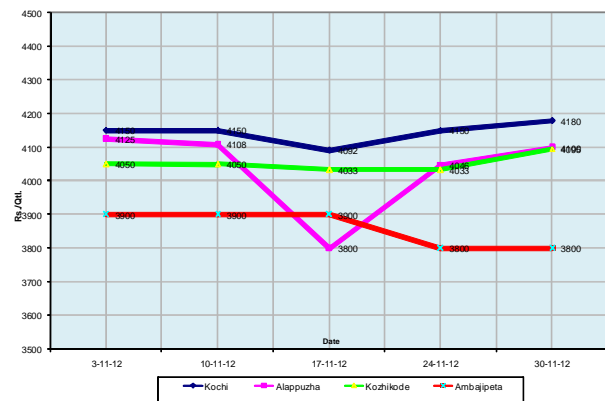
The Minimum support price of edible copra has been fixed at Rs. 5350/- per quintal for 2012 season.

DRY COCONUT

The monthly average price of dry coconut was around Rs. 4258/- per thousand nuts at Kozhikode market which was marginally lower than that of the previous month.



Price behaviour of coconut oil during November 2012



Price behaviour of milling copra during November 2012

COCONUT

The monthly average price of Rs.7200/- per thousand nuts for dehusked coconut at Nedumangad market remained the same throughout the month.

Arsikere APMC market recorded an average of Rs.5561/- for thousand partially dehusked nuts which was marginally higher than that of previous month.

The monthly average prices of partially dehusked coconut at Bangalore APMC market was Rs. 6686/- which was marginally lower than that of previous month.

The monthly average price of partially dehusked coconut Grade-1 quality at Mangalore APMC market slid to Rs.9524/- per thousand nuts which was marginally lower than that of the previous month.

Monthly average prices of Mature nut, Tender nut and Ball copra in North Eastern Region during the month of November 2012.

	Assam							Nagaland	Mizoram	Tripura
	Guwahati	Nelbari	Nagoan	Sonitpur	Darrang	Karimganj	Silchar	Dimapur	Aizawl	Agarthala
Mature nuts (in Rs./ nut)	14	20	21	14	17	17	21	21	50	14
Tender Nuts (in Rs./ nut)	10	9	9	16	17	14	20	18	44	13
Ball Copra(in Rs./ Kg.)	90	130	90	165	95	120	160	120	120	95

Market Price

Date	Coconut Oil			Milling Copra				Edible Copra	Ball Copra				Dry coconut	Coconut	Partially dehusked coconut					
	Rs./Qtl.																Rs./1000 nuts			
	Kochi	Alappuzha	Kozhikode	Kochi (FAQ)	Alappuzha (Rasi Copra)	Kozhikode	Karkala	Kozhikode	Kozhikode	Tiptur	Bangalore	Arsikere	Kozhikode	Nedumangad	Arsikere	Bangalore	Mangalore (Grade-1)			
3-11-12	6050	6050	5900	4150	4125	4050	3900	5700	5200	5217	5800	5194	3500	7200	5600	6800	9600			
10-11-12	6008	6017	6200	4150	4108	4050	3900	5500	4833	4967	5800	5020	3900	7200	5367	6800	9642			
17-11-12	6000	6000	6200	4092	3800	4033	3900	5454	4750	4960	5800	5006	5933	7200	5500	6500	9080			
24-11-12	5983	5992	6100	4150	4046	4033	3800	5617	4900	5109	5800	5059	4017	7200	5600	6650	9650			
30-11-12	6030	5980	6200	4180	4100	4095	3800	5330	4720	5030	5800	5005	3940	7200	5740	6680	9650			
Average	6014	6008	6120	4144	4036	4052	3860	5520	4881	5056	5800	5057	4258	7200	5561	6686	9524			

Source: Kochi: Cochin Oil Merchants Association and Chamber of Commerce, Kochi - 2, **Kozhikode:** The *Mathrubhumi* daily **Alappuzha:** The *Malayala Manorama* daily, **Arsikere :** APMC, Arsikere

Price quoted for office pass copra at Kozhikode and Rasi copra at Alappuzha markets. NT : No transaction

month of November 2012 was about 9 percent lower when compared with the price in previous month and lower by about 45 percent compared to that of the corresponding month last year. The monthly average price of US\$ 588 per MT for copra was marginally lower than that of the previous month and about 60 percent lower than that of the corresponding month last year.

The domestic price of coconut oil during the month of November 2012, in Philippines was US\$793 per MT and in Indonesia; the price was US\$725 per MT. The international price of Palm oil, Palm kernel oil and Soybean oil were US\$790, US\$800 and US\$1150 per MT respectively.

Marketing Officer,
Coconut Development Board