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BULLETIN

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SOME HINTS FOR THE IMPROVEMENT OF COCONUT CULTIVATION

BY K. P. AMRITHANATHA AIYER, MEMBER, I. C. A. R.

THE coconut tree requires good drainage if it is to yield well, a high percentage of sand content in the soil being necessary for this purpose. Open porous soils are also bad. In the case of too sandy soils, it will be advantageous if some clay or alluvium is applied while in the case of soils which are too clayey in nature, the application of sand would be highly beneficial. The silted up rivers, canals, and tanks and the sandy coastal regions afford ample sources for the removal and application of sand or clay. It will improve the soil texture of coconut gardens and at the same time restore the water-ways and tanks. I have tried this experiment with success in some of my lands in Travancore. The coconut gardens with too sandy soils are poor yielders and the addition of some clay and organic manures has improved the soil tilth and increased the yield. The deeply clayey soils of some paddy lands have been improved by the addition of the surplus sand removed from the highly sandy areas of river beds.

In Travancore, Cochin and Malabar where the rainfall is very heavy, the mineral and manurial contents of soil are being washed away.

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Very little effort is being made either to replenish or to minimise this loss. The construction of terraces and drains and the cultivation of leguminous plants like cow-pea, sunn-hemp etc., for incorporation into the soil are very useful, rather necessary for not only the prevention of soil erosion but also for the preservation of soil texture and moisture.

Calcium deficiency is one of the main defects in the soils of Travancore and perhaps of also the major portions of the West Coast regions. The application of lime is the only remedy for overcoming the same. Lime is a great soil improver and makes manuring more effective. It may be applied either as quicklime or as well powdered calcium carbonate obtained from lime-stone, chalk etc. Eminent agricultural experts like Sir A. D. Hall and Sir E. J. Russel have written about the efficacy of calcium carbonate. Lime need be applied once in three years only and it is said that 75 to 100 kerosine tins of lime per acre will be a suitable dose.

The application of manure has been dealt with at length in the previous issues of this Bulletin and I don't wish to repeat them here. There seems to be an impression among some cultivators that chemical fertilizers may be harmful. Chemical fertilizers, e. g., Amonium Phosphate, Amonium Sulphate, Potassium Sulphate etc. will be highly efficacious for giving a sudden impetus oo the plant growth and may be applied tver a basal dressing of cattle manure, compost, oil cakes, fish manure and bone-meal, Ash is also a valuable manure for coconuts. It should not be mixed with chemical fertilizers and should be applied separately. In the case of disease affected trees, artificial fertilizers give a quick and a sudden stimulation to the plant growth and are therefore welcomed by several ryots. However, chemical fertilizer need not be considered as a substitute for organic manures but may be used as a good supplement; and this combination preceded by the application of lime also will, I think, be sufficient to maintain the soil fertility.

The spraying of Bordeaux mixture on the foliage of coconut advocated by Dr. K. P. V. Menon in a previous issue has been done by me in a compound during the last two years. I have faith in its efficacy against leaf-diseases and nut falls. This is a very simple process which can be done easily under the supervision of the local Agricultural Officer. Any person can easily get himself trained in this work and there should be a spraying machine, some lime and copper sulphate and a tree climber at his disposal for the efficient discharge of the work.

Coming next to the improved methods of plantation, it should be noted in the first place that the inter-space between the seedlings should be not less than twenty-five feet. The removal of some trees to maintain an interspace of at least twenty five feet between the rows of trees in one of my lands where the trees were very close to one another has augmented the total yield in spite of the reduction in the number of trees. Wide spacing will improve the health and the resisting capacity of the trees

A Simple Method of Preserving Seed Coconuts

By C. M. JOHN, OILSEEDS SPECIALIST, COIMBATORE
and
G. V. NARAYANA, SUPERINTENDENT, AGRICULTURAL RESEARCH STATION, KASARAGOD

SEED coconuts harvested during the summer months from February to May alone are considered suitable for raising seedlings. They are sown in the nursery either at the commencement of the south-west monsoon rains in June or in some places with the north-east monsoon rains in October. During this interval, they generally get over-dry, losing the water ('milk') inside and thereby become unfit for sowing. If the nuts are sown immediately after the harvest in summer the watering charges will be high. Therefore it is necessary to preserve the seednuts properly for some months till they are sown in the seed bed.

Usually no particular method is adopted or special care taken by ryots for preserving their seed coconuts. They are generally dumped in some odd place in the house or the holding till they are required for sowing. Since the seed nuts are harvested only when they are dead-ripe and the nuts have to pass through the hot summer months they become too dry and lose their germination capacity unless they are properly preserved.

A simple method for preserving seed nuts is the following:-

As soon as the nuts are harvested or as early as possible after harvest they are removed to a shed or verandah protected from direct sunlight. A layer of dry sand about three inches thick is spread on the floor and the seed nuts are placed on the sand close to one another with the base or stalk-end up. They are then covered up completely

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against diseases and it is said that it will also reduce the height of the tree to some extent.

High yielding disease-resistant varieties of cocoanut seedlings should be selected and used for all new plantations. It is indeed a great blessing to the cultivators that the evolution and multiplication of improved local and exotic seedlings have been taken up by the Central Coconut Committee. The introduction of suitable dwarf varieties and disease resistant varieties with the same yielding capacity and kernal-content as those of the best local ones will be highly useful for acclimatisation as well as hybridization.

Soil protection, manuring, liming spraying, etc. mentioned above and also the removal and destruction of disease-affected leaves in disease-affected coconut gardens, may be done consecutively for at least three or four years to note the improvement and should be continued as a routine work as long as the plantation lasts.

with dry sand till it fills up all interspaces among the nuts and stands some three inches above the nuts. The nuts are left in the sand till they are required for sowing, and they keep quite well without the milk or water in the nut drying up even for a period of five to nine months.

Trials at Kasaragod

In March 1938 the first trials on the preservation of seed nuts in sand were conducted at the Coconut Research Station, Kasaragod. One hundred seed nuts taken at random were preserved in sand as explained above. Another set of hundred seed nuts picked at random and not preserved in sand but simply exposed on the floor of the shed formed the control.

Five months after the trials were started, the nuts were examined. In the sand-preserved lot all the nuts were in perfect condition but in the control only 62% of nuts were fit for sowing, the rest being over dry and unfit for sowing. The nuts were examined again four months later i. e. nine months after the trials were started. It was then found that among the sand preserved lot only 9% of the nuts became dry while in the exposed control all the nuts became dry and unfit for sowing. Good germination (90%) was obtained by sowing the seed nuts preserved in sand. This method of preserving seed nuts in sand has been extensively tried during the last three years at the Coconut Research Stations snd found quite successful.

Trials at Tindivanam

The above findings were further verified under East Coast conditions at the Agricultural Research Station, Tindivanam (South Arcot District) where the summer is very severe with the maximum temperature going up to even 112° F. Seed nuts from Kasaragod harvested during 1939 and 1940 seasons were utilised for the trials. Lots of 100 seed nuts were preserved in sand in shade with control as at Kasaragod. It was found that the seed nuts preserved in sand for five months from April to August gave 63% of germination while in the control not preserved in sand the percentage of germination was only one.

Conclusion

These trials clearly show that seed coconuts can be preserved in sand for a period of five to nine months without much deterioration in their germination capacity. This method of preserving seed nuts is being regularly adopted at the Coconut Research Stations where the nuts have to be stored for a maximum period of five months from January to May. The method is now, therefore, advocated for the use of the public interested in the proper preservation of seed nuts.

Incidentally, it was also found that oranges (loose jacket) lime fruits, ginger, etc., could be preserved in sand without deterioration for appreciably longer periods than when they are exposed to the air and stored in the ordinary way.

—The Madras Agricultural Journal.
(May 1942)

(a) **COST OF PRODUCTION:—** Please furnish a statement of cost of production in recent times, say for February 1948 the information being furnished under the following heads:-

I. Cost of cultivation

A. *Cost of bringing up to bearing*

1. Cost of seedlings
2. Digging pits (including lining, levelling etc.)
3. Planting (including manuring at the time of planting)
4. Digging or cleaning tanks, channels, etc.
5. Watering & wrapping
6. Manuring
7. Cultivation
8. Enclosures, supervision charges etc.
9. Other items.

Total of I. A.

B. *Cost of maintenance (per year).*

1. Tillage (levelling, mounding etc.)
2. Manuring
3. Harvesting and collecting
4. Watering & wrapping
5. Cleaning channels, drains etc.
6. Repair to fence, supervision charges etc.
7. Other items.

Total of I. B.

II. Cost of production of 1 ton of copra

(excluding cost of nuts).

1. Husking
2. Breaking open shells and separating kernel
3. Handling and drying charges
4. Cost of fuel, maintenance of kiln etc.
5. Other items.

Total.

(b) Should the prices of coconut products be based on the price of coconut or should the price of coconut be decided by the product and if so, why?

(c) Should the prices of coconut and coconut products be decided by those of the competing products?

(d) Should the price be fixed for the whole year or for a shorter or longer period?

(e) When should the prices be announced? Should it be at harvest time or some other period? When should the changes in prices be announced?

9. What administrative machinery do you recommend for determining fair prices?

10. In order to make the prices effective would you suggest that the State should give an undertaking to buy at all times any surplus in the market which cannot be disposed of at the fixed prices? If not what alternative measure would you recommend?

11. a) In order to ensure that the prices do not go beyond the maximum limits would you recommend the building of buffer stocks, if so what is the quantity to be so held and by whom?

b) Would the imports be a state monopoly in order to implement the price policy and if so which authority should be entrusted with the control of the imports?

12. Can you offer any other suggestions for making the measures with regard to the stabilisation of prices effective?

Replies may please be sent so as to reach the undersigned before the 30th April, 1948.

K. GOPALAN,
Secretary.

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SUPPLEMENT TO
BULLETIN ISSUED BY
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April 1948

COCONUT PRICE STABILISATION

It will be recalled that mention was made in the January issue of the 'Bulletin' of the constitution of a Special Sub-Committee to go into the question of the stabilisation of the prices of coconuts and coconut products. In order to enable the Sub-Committee to have before it adequate data regarding the cost of cultivation of coconut, production of copra etc., it has been decided to issue the following questionnaire to elicit the required information. We shall be grateful to receive from as many readers as possible answers to the questionnaire. Those unable to do so may please pass it on to such of their friends as can furnish answers which should be sent so as to reach the Committee's Secretary before the 30th April 1948.

Questionnaire

1. It has been suggested that in stabilising prices of coconut and coconut products, prices should generally be fixed at levels fair to both producers and consumers. Do you agree with this view? If not what do you consider the aim of price stabilisation should be?

2. Do you consider that the price should be fixed for coconut and all the coconut products or is it enough if those of a few only are fixed? Please indicate for which of them the prices should be fixed.

3. Is it necessary to fix the prices of all the different qualities of coconut and coconut products, or is it sufficient if those of a few important qualities are fixed? Please indicate the qualities for which prices should be fixed.

4. Do you consider that the prices should be fixed for all the markets or is it enough if those for the primary markets alone are fixed? If the latter, how should the prices in other markets be fixed?

5. Do you think that the prices of coconut and coconut products will not become effective if the prices of other competing oils are not fixed?

6. Should the price be levied at a fixed level or should there be maximum and minimum levels imposed?

7. Do you consider that the prices of coconut and coconut products should be related to those of primary articles of consumption like paddy, dhal etc? If so please indicate the articles the prices of which should be taken into consideration in fixing the prices of coconut and coconut products and the relationship that should be maintained between them.

8. How would you determine the fair price? Do you agree that the following factors should be taken into account for the purpose?

COCONUT SHELL CHARCOAL

By Dr. K. L. Moudgill, Director of Research & Vice-Chairman, Council of Research, University of Travancore

THE use of coconut shells as a source of charcoal is not so well developed in India as in other coconut producing countries. The production of this charcoal was a thriving cottage industry in Ceylon even before the war. It has been prized, even in India, for its high calorific value but it has been used, in the past, only for selected small jobs, by goldsmiths and washermen. The most important quality of this charcoal has not been appreciated, namely that, whether unprocessed or activated, it has a high absorption capacity for gases and colouring matter and can, therefore, be used with great success as a refining agent, both as a deodoriser and a decoloriser.

To fill Gas Masks

During the early stages of the war, there was imminent fear, almost to the point of panic, of gas warfare being sprung as a surprise by the Germanic Armies and Air Force. Gas warfare has such a dreaded history, that the Allies naturally preferred to err on the side of excessive caution. Large quantities of coconut shell charcoal were acquired and rushed to England and France, under high priority, to be activated and used for the filling of gas masks. As Ceylon could not meet the demand, the Department of Supply of the Government of India was asked to help. A large scale production of coconut shell charcoal was organised along the West Coast and extensive supplies were made. After a while, the demand fell. There was no gas warfare and it came to be believed in India that this charcoal may again lapse back into its comparative pre-war obscurity.

Peace-time uses

This does not necessarily follow There are half a dozen peace-time uses, for every use, potential or real, of any material during war-time. That is so in the case of this charcoal. Coconut shell charcoal, especially the activated material is still in demand as a refining agent in the sugar industry and many others, where removal of malodorous vapours or undesired colouring matter is sought. The manufacture of the charcoal is an extremely simple process, its grading is easy and the process can be carried out as an occasional cottage activity, according to the supply of material. Some of the factors connected with the production of good quality coconut shell charcoal are described in this article.

When the demand for this charcoal rose rapidly as a result of the war, the Government of Travancore undertook to supply large quantities as munition of war. The only method then in vogue in Travancore was to burn it in small earthen pots, and it was adopted by goldsmiths who use the material in their trade because of its high calorific value. Attempts were made to produce it by burning in stacks, but much ash was produced and the live charcoal had to be quenched with water, which was frequently saline and increased the mineral content of the product. The Ceylon method of burning it in large pits was introduced, but difficulties were encountered, which sometimes led to the loss of the entire charge. The product had to conform to specifications prescribed by the Department of Supply of the Government of India and large

quantities were rejected because the charcoal was over or under-burnt or the moisture and mineral content, due to quenching, was too high.

Burning pits

An Inspector was posted in Travancore by the Government of India to facilitate the inspection of the product before shipment; and he was given facilities for his testing work in the Department of Research. As a result of the collaboration thus offered, he was enabled to suggest suitable modifications in the specifications to ensure even a better standard of output. This department also undertook to examine the methods of manufacture, with a view to eliminate the defects and to ensure a speedier output of a standard article of uniform quality. A small pit, with a covering of mild steel plate, which gave a quicker turnover and uniform burning was devised after a number of trials. The relative merits of the two pits can be judged from the following brief description.

Open pit (Ceylon type)

This is dug in the ground to a depth of 12 feet, with a diameter of 15 feet at the top and 12 feet at the bottom. It is filled to a depth of 4 feet and firing is started at several points by scooping out the shells and throwing burning rags soaked in kerosene in the cavities thus formed. As the fire spreads, more shells are heaped in and care is taken that the fire plays under and around the shells rather than over them. The hot smoke and vapours, rising upwards from the pit, set up a downward draught of air along the sides of the pit, and the rising, hot vapour helps also to dry the shells at the top. The vapours contain combustible hydrocarbons and are apt to catch fire at the top, and the fire light the dried shells. This fire is put out by gentle spraying with a few handfuls of water. As the carbonised shells sink in the pit, more are added till the pit is filled with glowing charcoal, when the top embers are quenched with water and the pit is quickly covered with green coconut leaves and old gunny bags soaked in water and sealed with a thick layer of wet earth. The burning takes 8 to 12 hours, and 16 labourers are employed. The pit is allowed to cool for some 16 to 20 days. The cracks in the mud plaster are repaired from time to time, as otherwise, the charcoal continues to smoulder, the pit does not cool down and much of the charge is wasted. The yield is 20 to 25 per cent.

The defects of the pit are that the fire cannot be controlled during the burning, some of the shells remain underburnt and others get over-burnt, considerable quantities of water have to be used for quenching, a shower of rain during burning ruins the entire charge, the earth from the mud plaster contaminates the charcoal when the pit is opened, and as some times happened, if the charge does not cool down completely before the pit is opened up, the charcoal catches fire and the partly emptied pit cannot be reclosed.

(b) **Small Covered pit** (Travancore University Pattern)

As a result of the experiments conducted in this department, the size of the pit was reduced to 4 feet in diameter and 6 feet in depth. In this pit, the bottom is made to taper to a point, footholds are scooped out in the sides at a depth of three & half feet, and a mild steel plate one sixteenth inch thick, is provided as a lid. The fire is started only in the centre, bottom, and the shells are heaped in as the fire spreads, care being taken that free flame is not allowed to show itself. Towards the end, the lid is placed

on the heap and as the burnt shells settle down, the lid comes to rest on the edges of the pit. No quenching is necessary nor are leaves and wet earth used to fill the pit. The edges of the lid are luted with earth and the pit cools in two to three days, chiefly because the metal cover helps to conduct away the heat. Should rain interrupt the burning, the lid is placed in position and the burning resumed after the shower has passed over. The chorcoal produced is of uniform quality, it is free from earthy contaminations and over-burning, and under-burning is minimised. If any part of the charge is found aglow when the charcoal is being removed, the pit is quickly covered with the lid and sealed, and the remaining charcoal is recovered, without appreciable loss, after further cooling. The burning takes two to three hours and one labourer can conduct all the operations. The yield is 28-32 per cent.

A Cottage Industry

It may be remembered that coconuts are found all over the West Coast and, besides the quantity converted into copra, large proportion is used in the home. Considerable quantities of shells are available in the interior and their collection and transport in commercial quantities is not easy. If the shells are converted into charcoal, the quantity to be transported would be reduced to one-third. The production of this charcoal can be taken up as a cottage industry, particularly, in the interior.

The pit should be dug in compact clay or laterite at some height above subsoil water level and at a distance from habitations, as the acrid smoke is offensive to men and cattle. Sandy soil is not suitable. The shells may be in any condition, fresh, dry or wet, in cups or in bits. Good coconut shell charcoal snaps with a clean shining fracture and gives a metallic sound when dropped on hard ground. Under-burnt shells do not give a clean fracture and do not give the charcteristic mettallic sound. Over-burnt shells are friable and the surface of fracture as also the sound when dropped is dull.

It may incidentally be mentioned that the Government of India had asked Messrs. Parry & Co., Madras, to manufacture shell charcoal in Travancore in ovens, with recovery of the pyroligneous acid which is rich in acetic acid, but the proposal was dropped after the plant had been fabricated.

Some Data

Some imporant data regarding the production and quality of cocoanut shell charcoal is given below:-

1. One ton of shell corresponds to 7000 to 8000 full shells.

2. Yield of charcoal is 25-32 per cent.

3. **Proximate Analysis of Charcoal** (Average of the laboratory by the small pit method): Moisture, 6.24 per cent; Volatiles 5.46 per cent; Ash 0.54 per cent; Fixed carbon 87.76 per cent. Coconut shell charcoal contains the highest percentage of fixed carbon of many ligneous charcoals examined in this laboratory.

Specifications for Charcoal: Moisture, below 10 per cent; Volatile matter, below 7 per cent; Ash, below 1 per cent; not more than traces of chlorides, sulphates etc.

Average labour required:

(a) digging 5 small pits - -	2 cooly days
(b) charging and burning in 5 pits - -	2 cooly days
(c) discharging - -	1 cooly day
(d) sorting, sieving, grading	2 cooly days
(e) supervision for the entire work -	2 maistry days

YOU ASK, WE ANSWER

Q. Do the size and weight of coconuts depend upon proper manuring and watering of the trees? Does the weight decrease as the tree grows older? Are not nuts harvested in the rainy season smaller in size and weight?

A: The size and weights of coconuts are more varietal than environmental. However, it is to a limited extent influenced by soil, manure, irrigation and seasonal conditions. The size and weight of nuts are known to decline in very old palms. Generally nuts that come to harvest in the summer months have maximum size and weight while those that ripen during rainy months are small. This is in all probability due to climatic conditions prevailing at different parts of the year.

Q: Does the weight of the coconut depend only on its size? Is the weight dependent on the thickness of the kernel? In what way can the thickness of the kernel be increased?

A: Weight of the husked nut does not depend upon the size of unhusked nut. The weight of the husked nut depends on its size, thickness of shell thickness of kernel and the water inside the nuts. A higher outturn of meat or copra is dependent upon the size and thickness of the kernel. The thickness of meat is to some extent increased by adequate manuring with all essential plant foods and good supply of water.

Q. What is the proper manure that may be applied to the coconut tree in sandy regions so as to increase the number, size of nuts and thickness of kernel?

A: Sandy soil is deficient in all essential plant foods and organic matter. A liberal application of all essential plant foods (nitrogen, phosphoric acid and potash) and organic matter and necessary irrigation especially in the dry months will result in better yields of coconuts. Application of good river silt and growing and incorporating green manure plants are also desirable for sandy soils. Fish guano, oil cakes, cattle manure and other organic manures are more desirable for sandy soils than inorganic manures. The best manure will be:-

Groundnut cake...	12 to 15 lbs. per tree
Ash ...	30 to 40 lbs. „
Fish guano ...	10 lbs.
or	
Super-phosphate.	2 lbs.

These should be applied in addition to growing and incorporating a suitable green manure crop.

The pits may last over 25 burnings.

5. Output from 5 pits --burning 25000 shells in two days-- is 0.85 tons of charcoal.

6. Materials required:

(1) Sieves ¼ inch mesh.
(2) Lids to cover each pit
(3) Shovel, spade
(4) Gunny bags for packing

—*The Indian Coconut Journal*

NEWS & NOTES

Coconut Shell Charcoal

Elsewhere in this issue we have published an article on "Coconut Shell Charcoal" by Dr. K. L. Moudgill of the Travancore University. As Dr. Moudgill has pointed out coconut shell charcoal has innumerable uses in industry, particularly as a decolorizer and deodorizer. The production of coconut shell charcoal as a subsidiary cottage industry has all the promise of a prosperous future, if only under enlightened leadership cooperative marketing of the stuff is undertaken.

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Porbander Market

The January 1948 issue of "The Ceylon Trade Journal" publishes some interesting information regarding the demand for coconuts and coconut products in the State of Porbander, in the course of a Survey of the Indian Market by the Ceylon Trade Commissioner in India. Porbander is said to have imported recently 2,300 tons of Philippine Copra. But it was found to be inferior in quality from the points of view of colour, kernel and oil content. Some lots had been attacked by insects. The oil content was found to be only 40 to 50 per cent. The local consumption of copra has been estimated at about 1,500 tons per year and there is said to be a preference expressed for Ceylon Copra with its superior oil content. Porbander imports from Malabar 1,000,000 fresh nuts for edible and ceremonial purposes. Double the above quantity may be required for distribution in the hinterland. Here again it would appear that preference has been expressed for the Ceylon nut because of its superior kernel content. Exporters from Malabar will do well to take note of the above trends in the coconut trade.

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Arecanut Development

The tall, slim areca palm lifting its crown straight to the skies grows in most places as a good neighbour of the bigger coconut palm. Although arecanut is used by people of all classes and the palm has been the main source of livelihood to thousands of people, not much has been done so far to develop the arecanut industry on scientific lines. But that neglect will soon be a thing of the past. An *Ad hoc* Committe was set up last year by the Government of India to devise ways and means of improving the industry, with the Secretary of the Indian Central Coconut Committee functioning as the Secretary of the *Ad hoc* Committee also. The second meeting of the *Ad hoc* Committee will be held at Ernakulam on the 16th April when it will consider important development schemes as well as the question of the set up of the Arecanut Committee. Arecanut has bright days ahead.

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Regulated Markets

The Indian Central Coconut Committee has had under consideration the question of organizing regulated markets for Copra in important coconut growing regions, so that the vagaries and abuses now prevalent in the markets could be eliminated and the primary producers saved from the chicanery of middlemen and assured of a fair deal. A start in this direction was made when a meeting attended among others by the Directors of Agriculture and Industry and Commerce and the Registrar of Co-operative Societies, Cochin, Mr. K. P. Madhavan Nair, Member, Indian Central Coconut committee, Mr. R. Krishna Iyer, Assistant Manager, Tata Oil Mills Co., Ernakulam and the Secretary, Indian Central Coconut Committee was held in the Committee's Office on the 31st March 1948 to

MARKET REPORT

(MARCH 1948)

Cochin, Alleppey & Calicut

There was a further slow-down in the business during the month in all the three markets. The general depressing conditions in the markets mentioned in the last report continued almost throughout the month of March 1948 and the prices moved to lower levels, the undertone remaining bearish. Some slight improvement was recorded in the second half of the month but the recovery was so slight that it could hardly help to infuse appreciable enthusiasm to the transactions in the markets.

The following were the prices on the first of March 1948.

1-3-1948	Cochin		Alleppey		Calicut	
	Rs.	A.	Rs.	A.	Rs.	A.
Cocoonuts per 1000	118	0	-		104 to 105	0 0
Copra per ton	752	5	692	9	736	0
Coconut oil per ton	1034	9	991	13	1056	0
Coconut oil cake per ton	333	15	307	13	368	0

Prices marked a downward trend in all the three markets during the first week and on the 8th March they were reported as follows:

8-3-1948	Cochin		Alleppey		Calicut	
	Rs.	A.	Rs.	A.	Rs.	A.
Coconut per 1000	118	0	—		103 to 104	0 0
Copra per ton	694	4	649	13	672	0
Coconut oil per ton	974	11	923	6	992	0
Coconut oil cake per ton	323	14	256	8	352	0

The prices of copra, oil and oil cake in Cochin touched almost the rock bottom level towbrds the end of the 2nd week and on the 12th coconut oil was quoted at Rs. 913 per ton at Cochin and Copra at Rs. 676-8-0 per ton. At Alleppey the lowest level was reached on the 13th when coconut oil was quoted at Rs. 863-2-0 per ton and copra at Rs. 599-6-0 per ton.

The prices on the 15th March were as follows:

15-3-1948	Cochin		Alleppey		Calicut	
	Rs.	A.	Rs.	A.	Rs.	A.
Coconuts per 1000	108	0	—		96 to 97	0 0
Copra per ton	693	10	616	8	672	0
Coconut oil per ton	973	10	924	12	976	0
Coconut oil cake per ton	239	3	218	6	320	0

consider the steps to be taken for organising a regulated market for Copra, in Cochin. The consensus of opinion at the meeting was that the question must be viewed as a single one for the whole West Coast, instead of piecemeal for portions of it. It was, therefore, decided to convene another meeting for next month to be attended by the representatives of the copra trade and industry in Travancore, Cochin and Malabar so as to concert measures for inaugurating regulated markets in all the three areas.

ARSIKERE & TIPTUR

(Mysore State)

The following Report on the conditions of the coconut market in Arsikere and Tiptur has been received from the Chief Marketing Officer in Mysore:-

This report is on the conditions of the coconut market in Arsikere and Tiptur during the latter half of February and the first half of March 1948.

During the period under report, there was a good supply of coconuts to the markets, though the supply of copra was not much. The demand for coconuts from the Bombay side has fallen down considerably owing to the inflow of the same from Bazwada and Trichinopoly at much lower rates. Booking of copra to important places in the Northern India via Hutgi by M. S. Railway is restricted from last 3½ months. On account of this some exporters used to carry copra by lorry to M. S. M. stations, such as, Malur, Hindupur, Ranibennur and Hubli and were booking via Hutgi. Now the booking in these parts is also restricted and hence, there is a gradual decrease in the prices of copra.

The price position during this period was as follows:—

Prices of copra, coconut oil and coconut oil cake showed an upward trend in all the three markets during the third week as a result of some transport becoming available for moving oil to Calcutta and Northern Indian Markets.

Prices on the 22nd March 1948 were reported to be as follows:

22-3 1948	Cochin		Alleppey		Calicut	
	Rs.	A.	Rs.	A.	Rs.	A.
Coconuts per 1000	105	0	—		85 to 87	0 0
Copra per ton	743	6	701	2	736	0
Coconut oil per ton	1057	2	1026	0	1056	0
Coconut oil cake per ton	289	14	263	5	320	0

Prices of coconuts at Cochin and Calicut and of copra, oil and oil cake in all the three markets rose till the 24th. The position on the 30th of the month was as follows:

30-3-1948	Cochin		Alleppey		Calicut	
	Rs.	A.	Rs.	A.	Rs.	A.
Coconuts per 1000	105	0	—		75 to 80	0 0
Copra per ton	750	3	709	10	720	0
Coconut oil per ton	1057	2	—		1056	0
Coconut oil cake per ton	264	4	242	13	320	0

CEYLON COCONUT OIL

We give below the prices at which the last consignment of Ceylon Coconut oil was distributed in the 1st week of March 1948 at Cochin, Bombay and Calcutta:-

Cochin	Rs. 1,650	per ton with containers.
Bombay	Rs. 1,555	per ton ex Docks with containers.
Calcutta	Rs. 1,575	per ton ex Jetty with containers.

No consignment of Ceylon Copra has been received since October 1947.

Reg. No. C. 282

Bulletin Issued by The Indian Central Coconut Committee

III Week of February 1948

	Tiptur	Arsikere
a) Coconuts per 1,100	Rs.130 to 150	1) Red quality Rs.185 2) Bulk Rs.145 3) Small Rs. 110
b) Copra one satta of 10mds. or 315 lbs.	Rs. 220 to Rs. 225	Rs. 225
c) Coconut oil per md. of 24 lbs.		Rs. 13/-
I Variety	Rs. 14-6-0	
II do.	Rs. 13-4-0	
III do.	Rs. 12-4-0	

IV Week of February 1948

a) Coconuts per 1,100	Rs. 150/-	1) Red quality Rs.170 2) Bulk Rs.130 3) Small Rs. 90
b) Copra one satta of 10mds. or 315 lbs.	Rs.220 to 225	Rs. 180/-
c) Coconut oil per md. of 24 lbs.		
I variety	Rs. 13-12-0	
II do.	Rs 12-8-0	
III do.	Rs. 11-4-0	

I Week of March 1948

	Tiptur	Arsikere
a) Coconuts per 1,100	Rs. 150	1) Red, 2) Bulk } Rs.110 3) Small Rs. 80
b) Copra one satta of 10 mds. or 315 lbs.	Rs.165 to 170	Rs. 150
c) Coc. oil per md. of 24 lbs.		Rs. 12
I variety	Rs. 13-2-0	
II do.	Rs 11-14-0	
III do.	Rs 11-4-0	

II Week of March 1948

a) Coconuts per 1,100	Rs.140 to 165	1) Red, 2) Bulk } Rs.120 3) Small Rs.80
b) Copra one satta of 10 mds. or 315 lbs.	Rs.140 to 150	Rs.150 to 160
c) Cocoonut oil per md of 24 lbs.		Rs. 12-2-0
I variety	Rs 12-12-0 to Rs.13	
II do.	Rs. 11-4-0 to Rs.12	
III do.	Rs. 10-8-0 to Rs.11	

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