

**COMMISSION FOR AGRICULTURAL COSTS AND PRICES**  
**REPORT ON PRICE POLCY FOR COPRA**  
**FOR THE 2006 SEASON**

In this report the Commission presents its views on price policy for Copra for the 2006 season. The Commission recommends that:

- (i) **the Minimum Support Prices (MSP) of milling copra and ball copra for the 2006 season, be fixed as follows:**

	<b>(Rs per quintal)</b>
<b>Milling Copra</b>	<b>: Rs. 3590</b>
<b>Ball Copra</b>	<b>: Rs. 3840</b>

(Para 24)

- (ii) ***the practice of declaring MSP of Copra during the month of January be maintained so that timely price signal is received by all stakeholders in the market, including farmers;*** (Para 2)
- (iii) ***the scope of National Agricultural Insurance Scheme should be extended to provide risk cover to coconut farmers as fluctuating yield and income from coconut farming threaten the livelihood security of millions of small and marginal farmers.*** (Para 7)
- (iv) ***a well coordinated strategy be evolved to meet the large requirements of seeds and planting materials for replacement of old, senile and diseased coconut trees;*** (Para 10)
- (v) ***the CDB should play a pro-active role as a link between research laboratories, industry and farmers to provide adequate information on various aspects of coconut development to farmers, for which appropriate schemes could be designed in the framework of Public Private Partnership;*** (Para 11)

- (vi) **government should earmark certain funds under horticulture mission for coconut development to be channelised through CDB so that feasible drip irrigation schemes benefiting small and marginal farmers could be implemented;** (Para 12)
- (vii) **the financial strength of NAFED be appropriately enhanced, on an enduring basis to enable it to undertake price support operations effectively;** (Para 13)
- (viii) **government should examine the scope of raising import duty on edible oils, especially palm oil to protect Indian oilseed sector in general and coconut sector in particular;** (Para 17)
- (ix) **the methodology for estimation of cost of cultivation of coconut under Comprehensive Scheme be strengthened with appropriate coverage in the major producing states;** and (Para 22)
- (x) **there should be integrated efforts by CDB, government and ICAR to develop appropriate technology in association with the industry so as to improve the cost efficiency in coconut production, particularly by reducing labour requirement and popularise the same among the farming community.** (Para 23)

2. The Commission submitted its report on price policy for copra for the 2005 season on September 20, 2004 recommending that the Minimum Support Price (MSP) for the fair average quality (FAQ) of milling copra be fixed at Rs. 3570 per quintal and of ball copra at Rs.3820 per quintal. The Government announced the price support policy for copra on January 13, 2005, fixing the MSP at the same levels as recommended by the Commission. These prices marked an increase of Rs.70 per quintal for both milling and ball copra over the respective MSP fixed for the preceding season. The Commission, while recording its satisfaction over the timely announcement of MSP by the Government would like to convey that various stakeholders did express their appreciation in this regard and urged the Government that similar step should also be taken for the forthcoming season.

The Commission therefore, recommends that ***the practice of declaring MSP of Copra during the month of January be maintained so that timely price signal is received by all stakeholders in the market, including farmers.***

(Table 1)

3. Coconut is grown in over 90 countries in the world but about three-fourth of coconut production is concentrated in three countries namely Indonesia (32 percent), the Philippines (23 percent) and India (20 percent). Sri Lanka is distant fourth in global production hierarchy with 4 percent share. Geographically, Asia and Pacific region dominates coconut production accounting for about 88 per cent of the world production. Although India is the third largest producer of coconut with one-fifth share, its production of milling copra is around 12 per cent of world output, whereas the Philippines and Indonesia account for 42 per cent and 24 per cent share respectively. So far as export of copra in value term is concerned, the Philippines tops the list followed by Indonesia and Sri Lanka.

4. Coconut cultivation in India is spread over 18 states and 3 union territories. However, four southern states of Kerala, Karnataka, Tamil Nadu and Andhra Pradesh account for over 90 per cent of total coconut acreage and production in the country. Gradual expansion of coconut area in the country was experienced over the past two decades, which increased from 10.8 lakh hectares in 1980-81 to 18.6 lakh hectares in 1997-98. Since then, the trend in its acreage in the country had been inconsistent. In 1998-99, the area declined to 17.6 lakh hectares. But subsequently it increased to its peak level of 19.3 lakh hectares in 2001-02 and remained more or less stable at 19.2 lakh hectares during 2002-03.

5. The year 1994-95 was the landmark in coconut economy with production and productivity scaling respective record levels of 13300 million nuts and 7760 nuts per hectare. The process of agricultural trade liberalization also commenced after that and quantitative restrictions were gradually lifted and import of agricultural produce including various edible oils were permitted subject to tariffs. Incidentally distinct trends of growth of production and productivity were witnessed in the pre-liberalization and post liberalization periods. The robust coconut production growth of 6.46 per cent per annum during the period

1980-81 to 1994-95 was supported by 3.40 per cent per annum growth of acreage and 2.96 per cent per annum growth of productivity. Afterwards, there was reversal in these trends and coconut production recorded negative growth of 0.77 per cent per annum during 1994-95 to 2002-03. This was mainly due to productivity decline by 1.57 per cent per annum in the corresponding period. The dislocation of growth rhythm in coconut economy, though was on account of multiplicity of factors such as deficient monsoon rainfall in 2001 and 2002, wide spread infestations of crop in peninsular India and impact of dwindling demand of coconut oil because of the easy availability of palm oil as cheap import substitute, the performance of major producing states varied quite widely. In Kerala, the production deceleration was mainly due to declining acreage, while the productivity trend was modestly positive. But in Tamil Nadu, sharp decline in productivity led to steeper production fall. In Karnataka, the production growth was positive, despite falling productivity, as area continued to expand in the state in post 1994-95 period.

6. The inter-state variations in the production parameters of coconut in the recent past has also brought to focus emerging changes in the relative importance of various States as shown in Table-A. Given almost the same order of overall production of coconut in TE 1994-95 and TE 2002-03 i.e. 12172 million nuts and 12600 million nuts per year respectively, most noticeable phenomenon was the sharp fall in the acreage share of Kerala in total coconut area in the country from 54.6 percent to 48.8 percent. The corresponding shares of Karnataka and Tamil Nadu increased from 15.6 percent and 15.7 percent to 19.0 percent and 17.7 percent respectively. The improvement of acreage prominence in Karnataka was also evident in its increased share in total production from 10.8 percent to 12.7 percent. It is worth noting that since 1994-95, almost 2 lakh hectares area under coconut have been added in these two states, which is about 10 per cent of total coconut area in the country. These newer plantations are expected to improve the yield profile of coconut in these states in the coming years. Since, the coconut plantations have long economic life and as coconut production is integrated with further value chain, the aforesaid dynamics of coconut production economy will be having long term implications. The positive acreage response in Karnataka as against the overall production slackness in the

country in the last decade is also indicative of improved post harvest integration with higher valued end-production of ball copra in the State.

**Table-A: Changing Share of States in Coconut Production**

State	Share of States in All India (%)			
	TE 1994-95		TE 2002-03	
	Area	Prodn.	Area	Prodn.
Kerala	54.6	42.9	48.8	44.0
Tamil Nadu	15.7	28.6	17.7	24.7
Karnataka	15.6	10.8	19.0	12.7
Andhra Pradesh	4.9	9.2	5.5	8.9
Others	9.2	8.5	9.0	9.7
Total	100	100	100	100

7. The productivity of coconut in India is higher than average world productivity as well as that of all other major producing countries. However, the declining productivity of coconut in the past few years has become a major area of concern. The yield of coconut has been showing a gradual decline from 2000-2001 onwards and is reported at 6337 nuts per hectare in 2002-03, as compared to 7145 nuts per hectare in 1998-99 and 7760 nuts per hectare of record productivity achieved in 1994-95. The decline in coconut yield is attributed to a number of factors, such as high incidence of eriophyid mite and other diseases, that reduce the vigor of the palm resulting in loss of yield, sizeable number of senile palms, predominance of rainfed small and marginal holdings in coconut cultivation, adverse weather conditions, intermittent drought, inadequate irrigation facilities as well as on-farm crop culturing and crop management. Though official data relating to area, production and yield of coconut is not yet available for the years 2003-04 and 2004-05, the Commission's interaction with State Government officials and various agencies revealed that there was no significant improvement in coconut production and productivity during these years. Devastating tsunami of December 2004 caused damage to over 6 thousand hectares of plantation crops in Andaman and Nicobar Islands. Adverse weather conditions and the problem of disease infestation were the two major risk factors that affected coconut production and productivity and resulted in low income to farmers. In the absence of any effective mechanism for risk cover, the economy

of coconut planters has suffered quite severely. As the coconut plantation is a life line in southern states and farmers tend to lose on account of vagaries of weather, pests and diseases every year, the Commission reiterates its earlier recommendation, that ***the scope of National Agricultural Insurance Scheme should be extended to provide risk cover to coconut farmers as fluctuating yield and income from coconut farming threaten the livelihood security of millions of small and marginal farmers.*** (Table 11)

8. Disease infestation continues to be a cause of concern in coconut sector. The major diseases affecting the coconut trees include Tatipaka in Andhra Pradesh, root-wilt in Kerala and Tamil Nadu, leaf-rot in Kerala and the wind-born eriophyid mite and stem bleeding in Karnataka, Andhra Pradesh, Kerala and Tamil Nadu. The high incidence of debilitating diseases reduce the productivity of coconut. The root-wilt disease, that is prevalent in Kerala for more than a century had of late assumed serious dimension. It spread to eight out of fourteen districts of the state. The high incidence of this disease in five districts including Alappuzha, Pathanamthitta, Kottayam, Kollam and Ernakulam damaged nearly 60 per cent of the leaves and brought down the productivity to less than 25 nuts per tree. The root-wilt reportedly affected nearly 245 lakh palms in 4.10 lakh hectares in the state. The wind-born pest, the eriophyid mite has further aggravated the problem. The incidence of the mite was assessed to be 55 per cent in Kerala, 44 per cent in Tamil Nadu, 37 per cent in Karnataka and 22 per cent in Pondicherry. This pest feeds on the soft tissues of the nuts in the early stages of their development and the continuous feeding causes brownish patches on the surface of the nuts, that prevents not only the growth of the nuts but also reduces its size, shell and kernel by almost 25 percent. The mite attack also affects the coir industry by reducing the husk recovery from nuts and affecting the yield and quality of coir fibre, making de-husking process more laborious and costly. In a nutshell, the wide spread infestation of diseases has seriously impacted the coconut economy in major producing states, adversely.

9. The Commission was informed that even though the total eradication of above mentioned diseases was not possible, certain steps could be taken to reduce the gravity of the problem. The Central Plantation Crops Research

Institute (CPCRI) has evolved certain package of practices to manage diseases that include cutting and removal of disease advanced palms, replanting with quality seedling wherever planting density permit and adoption of Integrated Nutrient Management (INM) and Integrated Pest Management (IPM) for managing coconut gardens affected by wilt-root. The Coconut Development Board (CDB) has been implementing the Integrated Farming in coconut holdings for productivity improvement, under which more than 27 lakh root-wilt disease advanced palms were cut and removed and a compensation of Rs. 49.38 crores was extended to Kerala. Besides, under the Technology Mission on Coconut, the CDB extended financial assistance for the management of pests and disease to carry out large scale demonstration of technologies for the management of eriophyid mite and leaf eating caterpillar; adoption of IPM and Integrated Disease Management (IDM) package for control of pests and diseases; and also to develop necessary infrastructure facilities for large scale multiplication of parasitoids for the biological control of leaf eating caterpillar. The other remedial measures include the application of monocrotophos through root-feeding or spraying affected branches at fortnightly intervals with decofol or an emulsion of neem oil with garlic in soap. The root feeding, however, has limited applicability in areas affected by the root wilt disease, and for spraying to be effective, this has to be done at least three times consecutively by all the affected farmers.

10. The Commission took note of various programmes being implemented during 2005-06. These included management of disease affected palms by providing assistance to the tune of Rs 250 per palm to the farmers for cutting and removal of disease advanced and senile palms; laying out demonstration field trial to transfer the available technology on management of disease; establishment of organic manure units to supplement the soil/nutrient depletion. The Commission was happy to note that the Planning Commission has cleared Kerala Government's Project for management of root-wilt affected coconut holdings for enhancement of productivity in five worst affected districts of the State. However, the endeavour to replace large number of senile and infected plants creates enormous demand for planting materials. Further, the planting materials need to be procured from disease free areas. The constraints of seed farms in the domain of Government would necessitate the dependence on

private sources for sourcing the seeds and planting materials. But the available resources are far short of requirement. The Commission therefore recommends that ***a well coordinated strategy be evolved to meet the large requirements of seeds and planting materials for replacement of old, senile and diseased coconut trees.***

11. Irrigation has a prolific impact on reduction of intensity of disease infestation. It is observed that the intensity of infestation is below 50 per cent in gardens having irrigation and around 20 per cent in gardens with irrigation and better farm management practices, that include optimal application of organic manures, chemical fertilisers, neem based bio pesticides and adoption of intercropping. Contrary to this, the infestation incidence is higher with substantially reduced size of the nuts in neglected gardens under the grip of drought. To maintain the viability of coconut production, it is essential to make it profitable and competitive by enhancing its productivity through rejuvenation of existing plantation with input management, soil and moisture conservation and replacing old and unproductive palms with high yielding and disease resistant varieties and adopting integrated farming with inter/mixed/multiple cropping system. Although a number of research findings are available in India and abroad in the area of varietal development and pest and disease control measures not much has been put into practice on the ground level. In view of the magnitude of the problem, the Commission recommends that ***the CDB should play a proactive role as a link between research laboratories, industry and farmers to provide adequate information on various aspects of coconut development to farmers, for which appropriate schemes could be designed in the framework of Public Private Partnership.***

12. Irrigation not only reduces disease infestation but also increases productivity of coconut to a significant extent. Coconut responds very well to drip irrigation. But it is not within small farmers' affordability. At present, nearly 90 per cent of coconut area in India is dependent upon rain. In view of the significance of irrigation in raising productivity of coconut, the Commission feels that appropriate irrigation scheme must be devised by the Government exclusively for coconut sector, as in some states it is the life line of rural

household economy. CDB does not have a scheme for developing irrigation facilities in coconut growing states. The Commission therefore recommends that ***government should earmark certain funds under horticulture mission for coconut development to be channelised through CDB so that feasible drip irrigation schemes benefiting small and marginal farmers could be implemented.***

13. While the coconut economy was reeling under supply side constraints, the situation on demand side was also not too encouraging. The average Index Number of Wholesale Prices (WPI) of copra with 1993-94 as base, showed a mixed trend during the first seven months (January-July) of 2005. The WPI at 207.3, 209.0, 189.6 and 180.2 in January, February, March and April, 2005 respectively showed an increase of 21.5, 23.1, 9.4 and 5.6 per cent over the corresponding months of last year. However, the WPI at 171.7, 169.5 and 161.5 in May, June and July 2005 respectively was lower by 1.4 , 9.7and 12.9 per cent compared with the same months of last year. The buoyancy observed in the wholesale prices of copra during 2004 for milling copra was not sustained beyond first two months (January-February) of 2005. The month-end wholesale prices of milling copra during January to April, 2005 remained by and large above the declared MSP of Rs. 3570 per quintal at Alappuzha and Kozhikode in Kerala. Subsequently, these were quoted in the range of Rs.3450 to Rs.3500 in May, June and July 2005 at Alappuzha (for smoked FAQ) and Kozhikode (for astina FAQ), lower than the declared MSP. The prices of milling copra in Karnataka, however, remained higher than MSP during 2005. The fall in prices of milling copra in Kerala may be attributed to poor quality of copra on account of severity of pests and diseases in Kerala, the fall in prices of coconut oil and absence of price support operations by NAFED. As milling copra is used for extraction of coconut oil, its price behavior is significantly influenced by price of coconut oil. The WPI of coconut oil had witnessed buoyancy during 2004. However, by mid 2005 the WPI slid lower than corresponding period during 2004. Though the market price of milling copra has been ruling lower than MSP at several places in Kerala, the market intervention was not triggered. The National Agricultural Cooperative Marketing Federation of India Ltd. (NAFED) could not commence its procurement of copra during current season for want of funds. It was informed

that the NAFED had already consumed the available credit line against Government guarantee for purchase of mustard seeds in the season 2004-05. It is well recognized that in the absence of proper funding arrangements, it would be very difficult for NAFED to organize procurement in the desired manner. The Commission, therefore, recommends that ***the financial strength of NAFED be appropriately enhanced, on an enduring basis to enable it to undertake price support operations effectively.*** (Tables 1,2,3 &9)

14. Market for ball copra which is mainly produced in Karnataka has relatively better demand pull. Its month-end wholesale prices quoted in the range of Rs. 6203 and Rs 8000 per quintal during peak months (January-July) of 2005 were much higher than the declared MSP of Rs 3820 per quintal at Arsikere in Karnataka. The prevailing market price showed a substantial increase over last year's prices. Unlike milling copra, the prices of ball copra remained insulated from the prices of coconut oil because it is not used for oil extraction. The prices of ball copra remained higher because of fall/stagnation in its production since 2000-01 on account of recurring drought and higher demand for tender coconut. The imbalance between demand and supply of ball copra was clearly evident in its market behaviour. (Table 3)

15. The average Index Number of Wholesale Prices (WPI) of coconut oil, with 1993-94 as base, recorded at 172.8 during first seven months (January-July) of 2005 was marginally higher than the WPI of 172.6 during the corresponding period of last year. The WPI of coconut oil during different months of 2005 also revealed a similar trend as that of copra. The WPI after remaining higher than last year's level by 9.2, 11.2 and 3.6 per cent during January, February and March fell below last year's level by 0.9, 6.3, 6.4 and 8.5 per cent in April, May, June and July 2005. In consonance, the month-end wholesale prices of coconut oil remained higher than last year's level during first two months (January and February) at Kozhikode, Alappuzha and Ernakulam in Kerala, first three months (January-March) at Rajahmundry in Andhra Pradesh, and first four months (January-April) of 2005 at Chennai in Tamil Nadu and fell below last year's level in the subsequent months of the year. (Tables 4&10)

16. The global production, trade and prices scenario of coconut and its products such as copra and coconut oil also have been witnessing certain erratic trends in the recent past. The world production supply of coconut was moderately robust with the annual growth of about 1.2 per cent per annum during 1995 to 2003 and the world exports of desiccated coconut increased by 1.3 per cent per annum in the corresponding period (as per FAO data). The average price of copra and that of coconut oil however sharply declined from 489 USD/Tn and 752 USD/Tn respectively in 1996 to 202 USD/Tn and 318 USD/Tn in 2001 respectively. Though after 2001 there is some recovery in world prices of copra and coconut oil and in 2004 these are about 450 USD per tonne and 661 USD per tonne respectively, the global market indeed was on a roller coaster in the past. This phenomenon may possibly be due to a more volatile price behaviour of competing substitutes like palm oil in the global trade. The emerging dynamics of global supply and trade of coconut oil and other oil substitutes highlight the prevailing uncertainty of coconut sector in global perspective as well. (Tables 7 & 8)

17. The agricultural trade liberalization is apparently tinkering the market equilibrium against the interest of coconut oil. The import of cheaper vegetable oil with low incidence of duty and more specifically to the import of palm oils and palm kernel oil has increased the availability of cheaper substitutes for coconut oil. This has depressed the demand for coconut oil, impacting its prices in the market. The palm oil being cheaper than other edible oils dominates the import basket of edible oils. The imports have increased more than fifteen folds from 3.46 lakh tonnes in 1994-95 (April-March) to 52.90 lakh tonnes in 2003-04. The estimated unit value of imported edible oil at Rs 22 per kg. is much lower than the average market price of Rs 60 per kg. of coconut oil in the domestic market of Kerala. Easy availability of cheaper oil in the market has changed the preference pattern of consumers of coconut oil in Kerala. The Commission looked into the consumption dynamics of edible oil in the States of Kerala and Karnataka and using the unit wise data of 55<sup>th</sup> round NSS Consumer Expenditure Survey (1999-2000) analysed that the consumption elasticities of coconut oil was 0.517 and 0.608 in these two States. Correspondingly, the consumption elasticities of other edible oils was only 0.323 and 0.411 respectively. These

variations in the elasticities of competing goods in the consumption basket, in conjunction with substantial price differentials existing in the alternative choices appear to have dented the traditional consumption habits. It is reported that already a consumption shift to cheaper palmolein oil due to price advantage is taking place amongst the lower income strata of the society in Kerala. The Government of India has recently increased the rates of import duty from 65 per cent to 80 per cent for crude palm oil & crude Palmolein and from 75 per cent to 90 per cent for RBD palm oil and RBD palmolein and other palm oils, but this is not adequate to bridge the huge gap between the prices of cheap import substitutes and domestic produce. The Commission therefore recommends that ***government should examine the scope of raising import duty on edible oils especially palm oil to protect Indian oil seed sector in general and coconut sector in particular.*** (Table 12)

18. Coconut is a crop of distinct social and economic relevance in India. It sustains the livelihood of millions of poor farmers in southern states. The prime issue that needs to be addressed is as to how the income from coconut farming system could be maximised. A wide range of options are available such as, adoption of inter-cropping or mixed cropping, adding value to the coconut products or utilization of its by-products to maximise demand and income. However, the patterns of its plantations and prevalence of intercropping is also dependent on farming entrepreneurship as well as customs associated with farming systems. Given the larger life of plantation crops, the alternations therein are not feasible on adequate scale. In Kerala, the coconut plant density is relatively higher compared to Karnataka and Tamil Nadu. Further, owing to small holdings (average size of operational holding in the State is about half an acre) several plantations are nurtured unsystematically, restricting the scope of intercropping. Lack of information also stands as an obstacle before the farmers to adopt the appropriate crop combination to maximise income. During the field visit in Kerala, it was noticed that the initiatives by certain progressive farmers to adopt such approach, integrating vanilla, pepper, arecanut, banana, nutmug and bee keeping with coconut plantations have improved the aggregate farm returns. The initiatives also involved the on-farm development of organic manures and vermi-compost with significant improvement in productivity and pest/disease

control. There is a pressing need to replicate such cropping practices with a view to increase overall returns from plantation holdings. Besides, there is also an urgent need to evolve and propagate the use of diversified coconut products. Commission during its interactions with various stakeholders was apprised that coconut is traditionally called “Kalpvriksha” due to a vast array of produce that are derived from coconut and its by-products. However, the true potential of such produces and their marketability has not been tapped. For example in the processed coconut sector, the Philippines make as many as 300 products and market them the world over, whereas the technology and knowledge of only about 50 products are available in the country. It is important to mention here that product diversification would hold the key to recovery of coconut economy in the near future and therefore, there should be greater focus on product diversification and provisions of required infrastructure, technology and policy support to make things happen.

19. The Commission during its interaction also noted that the current total annual budget for the CDB is quite inadequate to meet the growing demand from various states for coconut development, particularly when its development efforts are required to be more vigorous to tide over the crisis faced by coconut economy in the recent past. The tasks involve control of widespread pests and diseases, uprooting old and senite trees and enabling large scale distribution of plating material. Further, out of the Tenth Plan approved outlays of Rs.150 crores, CDB has so far been allotted Rs.75 crores. Since two years are left in Tenth Plan period, it would be necessary to ensure that CDB’s plan allocation is suitably increased for the remaining two years of Tenth Plan to enable the Board to discharge its mandated role in coconut sector.

20. Cost of production is one of the main considerations in the determination of MSP. However, non-availability of estimates on cost of production of coconut under comprehensive scheme of the Directorate of Economics and Statistics, Ministry of Agriculture, Government of India, remained a constraint in this respect till recently. No doubt, the estimates of cost of cultivation of coconut have been generated under the CS for the year 2003-04 for the state of Kerala and the same have been made available to the Commission. Since only one state has

been covered under CS, the Commission used the data on cost of cultivation/production received from the state governments of Kerala , Karnataka, Tamil Nadu, Andhra Pradesh and Central Plantation Crops Research Institute (CPCRI), Kasargod.

21. The government of Kerala has given establishment and maintenance costs at Rs. 204545 and Rs. 22074 per hectare respectively. This establishment cost is based on a 10 - year establishment period. It may be mentioned in this regard that in a meeting held in Kochi on 22.06.2005 to explore the possibility of expanding geographical coverage of coconut under CS, a decision to consider the average economic life of coconut palm as 50 years and appropriate bank rate as the rate of interest for working out the annuity value was taken. After making these adjustments and adding the amortized cost derived from the cost recovery formula to the annual maintenance cost and dividing with the yield indicated, the state estimate works out to Rs. 5.02 per nut. As against this, the projected cost for the year 2006 using the CS estimate of Kerala works out to Rs.4.99 per nut. CPCRI has estimated the cost of production per nut in Kerala at Rs. 3.75. Average of these three estimates gives the cost per nut at Rs 4.59 in respect of Kerala. The states of Karnataka, Tamil Nadu and Andhra pradesh have provided per nut costs at Rs. 4.83, Rs.5.00 and Rs.4.00 respectively. However, the Karnataka estimate is based on an interest rate of 14 per cent. Moderating this, the cost of production in Karnataka works out to Rs. 4.00 per nut. The weighted average total cost of production on the basis of these three estimates works out to Rs. 4.56 per nut. Assuming that 725 nuts are required for producing one quintal of copra and considering the conversion cost at Rs.270 per quintal, the cost of producing one quintal of Copra is arrived at Rs. 3576.

22. While welcoming the initiative of expanding the geographical coverage of coconut under CS, it is observed that wide divergences exist in the estimates of cost of cultivation and yield of coconut received from various sources (CS, States and Institutes). Keeping this in view, the Commission recommends that ***the methodology for estimation of cost of cultivation of coconut under Comprehensive Scheme be strengthened with appropriate coverage in the major producing states.***

23. Cost of production of coconut in general and the labour component in particular continues to be high, thus making Indian coconut products internationally less competitive. Presently many of the processes of coconut processing are highly labour intensive. Appropriate technology needs to be developed to mechanise the process so that labour dependency is reduced to the minimum and cost effectiveness is improved. The Commission also recommends that ***there should be integrated efforts by CDB, government and ICAR to develop appropriate technology in association with the industry so as to improve the cost efficiency in coconut production, particularly by reducing labour requirement and popularise the same among the farming community.***

24. Thus, considering all the relevant factors such as cost of production, demand – supply situation, domestic as well as international prices and the need for providing relief to the ailing coconut economy, the Commission recommends that ***the Minimum Support Prices (MSP) of milling copra and ball copra for the 2006 season, be fixed as follows:***

	(Rs. Per quintal)
Milling copra	: Rs. 3590
Ball copra	: Rs. 3840

Sd/-

( T. HAQUE )  
CHAIRMAN

Sd/-

( K. PONNUKANNU )  
MEMBER

Sd/-

( M.S. GREWAL )  
MEMBER

Sd/-

( V.M. JADHAV )  
MEMBER

Sd/-

( RAJIV MEHTA )  
MEMBER SECRETARY

SEPTEMBER 8, 2005