

***Proceedings of the 37<sup>th</sup> meeting of Project Approval  
Committee (PAC) of Technology Mission on Coconut held  
at Kochi on 12<sup>th</sup> December 2011***



The 37<sup>th</sup> meeting of the Project Approval Committee (PAC) on Technology Mission on Coconut (TMOC) was held at the Board Room of Coconut Development Board, Kochi on 12<sup>th</sup> December 2011 at 10.30 AM under the Chairmanship of Shri. T.K. Jose IAS, Chairman, Coconut Development Board and Chairman PAC. The list of members attended the meeting is in annexure I.

Chairman welcomed all the members of PAC and invited expert to the meeting. In his introductory address Chairman stressed the need for strengthening the institutional research as well as enhancement in the productivity of the coconut. It is required to have a fast breakthrough in the technology development dissemination and upgradation. Research support has to be enhanced for product development in order to have price stabilization in the coconut sector, more commercial units for value added products for both domestic and international markets have to be established under support from TMOC. In countries like Philippines large scale plantations are being taken up to meet the growing demand for raw material (coconut, tender coconut etc.). In eastern & north eastern states the farm gate price of coconut is still very low. There is a need for setting up suitable processing facilities in these regions. Similarly there is need for revision of project costing and quantum of assistance to promote the coconut industry. Handholding by the State Government will also provide additional impetus to the development of coconut based industries. The following agenda items were taken up in the PAC meeting.

***AGENDA No. 1: Confirmation of the Proceedings of 36<sup>th</sup> Project Approval  
Committee Meeting held on 12<sup>th</sup> August 2011***

The Committee confirmed the proceedings of the 35<sup>th</sup> Project Approval Committee Meeting

## ***AGENDA No. 2: Action taken report of the 36<sup>th</sup> PAC Meeting***

The committee perused the action taken on the decision of the 36<sup>th</sup> meeting of the Project Approval Committee.

## ***AGENDA No. 3: Approval of new project proposals:***

### ***1. Project for Development of Low Fat Nutritionally Rich Delicious Fresh Tender Coconut Cream - SCMS Institute of Bioscience and Biotechnology Research and Development, SIBB R&D, Management House, South Kalamassery, Cochin at a total cost of Rs.70.075 lakhs***

The project was submitted by Prof. (Dr). C. Mohankumar, Director, SCMS Institute of Bioscience and Biotechnology Research and Development, SIBB R&D, Cochin. The objective of the project is to utilize the low fat endosperm and the tender water for the preparation of a nutritious low fat cream, compositional analysis of the endosperm, tender water and the cream, standardization of the protocol at each step based on the flow chart, optimization of the process parameters viz, efficacy of grinding, tender water - endosperm ratio; sweetener concentration; concentration of preservatives; packing & storage and stability tests, oral Toxicity analysis of the product, studies on the possibility of storage at room temperature using modern technologies and microbial analysis as per the food quality tests.

The committee after detailed discussions approved the proposal in principle. However it was suggested that:

- a. The name of the product developed should be suitably changed to indicate the specialty of the product.
- b. There is no provision to employ a scientist in a project of similar type, Research associate with PG qualification as per DST norms may be appointed.
- c. Toxicity studies may be taken up only on the final product.
- d. Since it is mandatory for the research institutions to have main equipments like homogenizer, invertors microscope etc. these items may be deleted from the total cost.
- e. The final deliverable would be to develop an innovative product and come out with a commercially viable replicable model. The institute should also hand hold the entrepreneur in establishing commercially viable units. The project costing may be reworked accordingly and revised project submitted for approval of Chairman.

### ***2. Nutritional Evaluation of the Embryonic Tissue - Haustorium of the Germinating Coconut as a Food Supplement and its Therapeutic Analysis - SCMS Institute of Bioscience and Biotechnology Research and Development, SIBB R&D, Management House, South Kalamassery, Cochin at a total cost of Rs.70.15 lakhs***

The project submitted by Dr. Salini Bhasker, Senior scientist, SCMS Institute of Bioscience and Biotechnology Research and Development (SIBB R&D) was presented before the PAC by the Director, SIBB R&D. The objective of the project is to develop a nutrient rich food supplement from coconut haustorium, analysis of macro and micro constituents viz. protein, sugars, amino acids, vitamins, hormones, minerals of the juice, standardization and optimization of nature of the tissue and preparation, therapeutic analysis in rat models during normal and pregnancy conditions and toxicity analysis for popularizing the extract as a health drink.

The committee opined that:

- a. Technology for large scale production of haustorium is yet to be developed. A project for development of a food supplement and therapeutic analysis may not be advisable unless studies on standardization of technology for large scale production of haustorium is also taken up simultaneously.
- b. Packaging studies of the final product may also be included in the study.
- c. The product and the technology would be viable only if the farmer gets a higher price for the haustorium and the product fetches high value as a food supplement.
- d. Since the institute undertaking the research should have basic equipments like spectrophotometer, micro fermentor etc., the cost of these equipments may not be funded under TMOC.
- e. It was suggested that the project may be revised on the above lines and submitted to PAC for approval.

**3. *Molecular action of Cocos nucifera water on  $\gamma$  radiation induced oxidative damage and cellular signaling - University College of Science & Technology University of Calcutta, APC Road, Kolkata at a total cost of Rs.7.68 lakhs***

The project was submitted by Dr. Sanjit Dey, Associate Professor, Dept. of Physiology, University of Calcutta, Kolkata. As per the suggestion of the expert and decision of ISC, the objectives have been limited to: 1) Study radio protective effects of coconut water in *in vitro* systems like DNA and cell lines, 2) Identify the actual radio protective compound in coconut water and characterize the same. The committee after detailed discussion approved the proposal with a duration of 18 months at a total cost of Rs.7.68 lakhs.

**4. *Desiccated Coconut Powder Manufacturing unit - Sri Saphthagiri Coconut Industry, Khatha No. 489, Eachanur, Tiptur at a total cost of Rs.150.00 lakhs***

The objective of the project is setting up of desiccated coconut powder manufacturing unit with a capacity to process 25000 nuts per day for producing 780 MT Desiccated Coconut Powder per year. The project was approved with an eligible cost of Rs.105.72 lakhs and eligible subsidy of Rs.26.43 lakhs as follows.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(₹ in lakhs)		
Land	26.95	-	-
Building & Civil works	44.65	44.65	11.16
Plant & Equipments	55.00	55.00	13.75
Other fixed assets	1.50	1.50	0.375
Electrification – as per estimates	2.00	2.00	0.50
BESCOM Deposits	1.50	-	-
Preliminary & Pre op. expenses	0.57	0.57	0.142
Margin for working capital	15.83	-	-
Provision for Contingencies	2.00	2.00	0.50
<b>TOTAL</b>	<b>150.00</b>	<b>105.72</b>	<b>26.43</b>

The project was approved in principle subject to the fulfillment of the condition that quotation for machineries should be from original manufactures instead of traders. Blanching and effluent Treatment Plant (coconut water and washed water) should be incorporated and blanching / steaming equipments to be included in the machineries list.

**5. Expansion of Desiccated coconut powder unit - M/s. Super Coco Company, 32-Sakthi Co-op Industrial Estate Udumalai Road, Pollachi, Coimbatore, Tamil Nadu at a total cost of Rs.42.09 lakhs**

The objective of the project is expansion of desiccated coconut powder unit with a capacity to process 60000 nuts per day for manufacturing of 6 tons of Desiccated Coconut Powder per day. The unit has earlier availed subsidy of Rs.19.118 lakhs for setting up of DC manufacturing Unit (31<sup>st</sup> PAC meeting). The project was approved with an eligible cost of Rs.27.826 lakhs and eligible subsidy of Rs.6.957 lakhs as follows.

Components	Existing Assets	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
		(₹ in lakhs)		
Land	15.00	Own	...	...
Building & Civil works	42.00 (10120 sq ft)	31.10 (4718 sqft)	16.836	4.209
Plant & Equipments	36.42	10.99	10.990	2.748
Working Capital margin	....	...	...	...
<b>TOTAL</b>		<b>42.09</b>	<b>27.826</b>	<b>6.957</b>

**6. Establishment of an Integrated Coconut Processing unit - Indus Bio Products, Near B Grows, Parpunja, Puttur, S. Kannara Dist., Karanataka at a total cost of Rs.102.40 lakhs**

The objective of the project is establishment of integrated coconut processing unit with a capacity to process 5000 nuts per day for producing 300 lts Virgin Coconut Oil per day, 350 kg

Coconut powder / day and 400 ltrs Vinegar / day. The project was approved with an eligible cost of Rs.71.52 lakhs and eligible subsidy of Rs.17.879 lakhs as follows.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(₹ in lakhs)		
Land	Own	-	-
Building & Civil works	46.45	35.00	8.75
Plant & Machinery	47.4	35.00	8.75
Technical know-how	0.55	0.55	0.137
Preliminary & Pre op. expenses	3.00	0.97	0.242
Working Capital margin	5.00	-	-
<b>TOTAL</b>	<b>102.40</b>	<b>71.52</b>	<b>17.879</b>

The committee approved the project subject to the fulfillment of the conditions viz, No Objection Certificate from Pollution Control Board and FPO license for vinegar has to be obtained and certificate of transfer of technology need to be furnished.

**7. Establishment of Virgin Coconut Oil unit - M/s. Asian Hi Tech Agro Exports, 1/71-B, Erukkadu Thottam, Nochipalayam Rd, Veerapandi Post, Tirupur, Tamil Nadu at a total cost of Rs.82.00 lakhs**

The objective of the project is establishment of virgin coconut oil unit with a capacity to process 20,000 nuts per day for producing 200 ltrs Virgin Coconut Oil per day and 1400 kg coconut powder per day. The project was approved in principle with an eligible cost of Rs.74.77 lakhs and eligible subsidy of Rs.18.689 lakhs as follows.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(₹ in lakhs)		
Land & building	Leased	-	-
Plant & Machinery	71.57	71.57	17.89
Technical know-how	0.55	0.55	0.137
Furniture & equipments	1.88	1.88	0.47
Preliminary & Pre op. expenses	3.00	0.77	0.192
Working Capital margin	5.00	-	-
<b>TOTAL</b>	<b>82.00</b>	<b>74.77</b>	<b>18.689</b>

The transfer of technology certificate should be produced before tripartite MoU is made.

**8. Setting up of Ball copra making unit- Shri. Maturi Narayana Murty, Rama Chandra Colony, Palakol at a total cost of Rs.33.00 lakhs**

The objective of the project is setting up of a unit for processing of Ball Copra with a capacity to process 5 lakhs nuts per batch for producing 13 lakhs ball copra per year. The project was approved with an eligible cost of Rs.32.50 lakhs and eligible subsidy of Rs.8.125 lakhs as follows.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
(₹ in lakhs)			
Land	Own	-	-
Building & Civil works	32.50	32.50	8.125
Working Capital	0.50	-	-
<b>TOTAL</b>	<b>33.00</b>	<b>32.50</b>	<b>8.125</b>

**9. Construction of Godown for making ball copra - Shri. Pedamallu Venkateswara Rao, S/o. Rama Murthy, D. No. 3-253, Pasarlapudilanka, Mamidikuduru Mandal, E. Godavari Dist, Andhra Pradesh at a total cost of Rs.12.80 lakhs**

The objective of the project is construction of a Godown for making ball copra with storage of 5.10 lakhs Coconuts per batch (15 lakhs ball copra per year). The project was approved with an eligible cost of Rs.12.80 lakhs and eligible subsidy of Rs.3.20 lakhs as follows.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
(₹ in lakhs)			
Estimate cost of Godown	12.80	12.80	3.20
<b>TOTAL</b>	<b>12.80</b>	<b>12.80</b>	<b>3.20</b>

**10. Expansion and Modernisation of the existing Coconut Vinegar Unit - M/s. Green Indus Group, X-188 Mathilakom, Kodungallur Thrissur at a total cost of Rs.102.00 lakhs**

The objective of the project is expansion and modernisation of coconut vinegar processing unit with a capacity to process 4000 litres of coconuts water per day for producing 3400 litres Vinegar. The project was approved with an eligible cost of Rs.67.00 lakhs and eligible subsidy of Rs.16.75 lakhs as follows.

Components	Existing asset details	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
		(₹ in lakhs)		
Land		8.00	-	-
Building & Civil works	4.00	29.00	29.00	7.25
Plant & Equipments	3.15	57.70	32.7	8.175
Technical Foundation	-	2.00	2.00	0.50
HACCP for quality control	-	1.00	1.00	0.25
Furniture & office equipments	-	1.30	1.30	0.325
Preliminary & Pre op. expenses	-	1.00	1.00	0.25
Working Capital margin	-	2.00	-	-
<b>TOTAL</b>	<b>7.15</b>	<b>102.00</b>	<b>67.00</b>	<b>16.75</b>

The committee approved the project subject to the fulfillment of the condition that the product maintains the FPO standards.

**11. Setting up a charcoal manufacturing unit - M/s. Elite Breads Pvt. Ltd Athani, Velappaya PO, Thrissur at a total cost of Rs.23.00 lakhs**

The objective of the project is setting up of coconut shell charcoal production unit by installing a Biomass Gasifier with a capacity to process 1.5 T shell per day (15000 – 20000 shell) to produce 500 kg shell charcoal per day. The project was approved with an eligible cost of Rs.22.95 lakhs and eligible subsidy of Rs.5.738 lakhs as follows, subject to the condition that the unit shall provide quarterly report on the production of charcoal.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(₹ in lakhs)		
Land	Own	-	-
Plant & Equipments	22.89	22.89	5.722
Pre op. expenses	0.06	0.06	0.015
Margin for Working capital	0.05	-	-
<b>TOTAL</b>	<b>23.00</b>	<b>22.95</b>	<b>5.737</b>

**12. Establishment of a Granulated Shell Charcoal manufacturing unit - M/s. Ashwin Exim India Pvt. Ltd, 111 N State Bank Colony, Nataraja Nagar, Polpettai at a total cost of Rs.32.80 lakhs.**

The objective of the project is establishment of granulated coconut shell charcoal manufacturing unit with a capacity to process 53 Tons of raw charcoal per day for producing 48

tons granulated coconut shell charcoal. The project was approved with an eligible cost of Rs.19.42 lakhs and eligible subsidy of Rs.4.855 lakhs as follows.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
(₹ in lakhs)			
Land & Building	Leased	-	-
Plant & Machinery	19.42	19.42	4.855
Working Capital margin	13.38	-	-
<b>TOTAL</b>	<b>32.80</b>	<b>19.42</b>	<b>4.855</b>

The committee approved the project subject to the condition that the promoter should obtain No Objection Certificate from Pollution Control Board.

**13. Establishment of Activated Carbon Unit - Kajah Enterprises (P) Ltd, 64, South Car Street Tirunelveli Town, Tamil Nadu at a total cost of Rs.375.00 lakhs**

The objective of the project is establishment of activated carbon manufacturing unit with a capacity to process 5 lakh shells per day for producing 5 tons activated carbon. The project was approved with an eligible cost of Rs.200.00 lakhs and eligible subsidy of Rs.50.00 lakhs as follows.

Components	Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
(Rs. In lakhs)			
Land	Leased	Limited to 200.00	limited to 50.00
Building & Civil works	150.00		
Plant & Machinery	170.00		
Other assets	5.00		
Working Capital Margin	50.00		
<b>Total</b>	<b>375.00</b>		

The committee approved the project subject to the condition that the lease period for the building to be revised for more than 40 years and a precision lab to be included in the project.

**14. Coconut processing cum oil milling unit - The Adat Farmers' Service Co-op. Bank Ltd, No. R.689, Puranattukara PO, Thrissur at a total cost of Rs.105.00 lakhs.**

The objective of the project is setting up of a Coconut processing cum Coconut Oil milling Unit with a capacity to process 25000 coconuts per day (4 tons of copra) for producing 2.5 MT oil.



The project was approved with an eligible cost of Rs.95.98 lakhs and eligible subsidy of Rs.23.995 lakhs as follows.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(₹ in lakhs)		
Land	Own	-	-
Building & Civil works	24.0	24.00	6.00
Plant & Equipments	68.0	68.00	17.00
Furniture & office equipments	3.0	3.00	0.75
Preliminary & Pre op. expenses	3.0	0.98	0.245
Working Capital margin	7.0	-	-
<b>TOTAL</b>	<b>105.0</b>	<b>95.98</b>	<b>23.995</b>

The committee approved the project subject to the condition that any type of adulteration / dilution in the quality shall be penalized under PFA Act. Subsidy kept in the subsidy reserve fund will be taken back with interest in such cases. Details viz. procurement of raw material, oil production, oil sold and oil cake sold per month has to be furnished to the Board on a monthly basis by email. The promoter has to undertake an Agreement in this regard in judicial stamp paper.

**15. Coconut Oil Manufacturing unit - Cocoguru Coconut Industries Pvt. Ltd, Door No. 5-122 B, Kallarpe, Aryapu Village, Puttur, D. Kannada, Karnataka at a total cost of Rs.215.00 lakhs**

The objective of the project is establishment of a stake of the art unit for production of branded coconut oil "Cocoguru <sup>TM</sup>" with a capacity to process 15 tons of copra per day for producing 9.4 T oil. The project was approved with an eligible cost of Rs.147.19 lakhs and eligible subsidy of Rs.36.80 lakhs as follows.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(₹ in lakhs)		
Land & land Development	25	-	-
Building & Civil works	63	63.00	15.75
Plant & Equipments	56	45.19	11.30
Electrical installation	34	34.00	8.50
Office systems	3	3.00	0.75
Pre op. expenses	19	2.00	0.50
Working Capital margin	15	-	-
<b>TOTAL</b>	<b>215</b>	<b>147.19</b>	<b>36.80</b>

The committee approved the project subject to the condition that any type of adulteration / dilution in the quality shall be penalized under PFA Act. Subsidy kept in the subsidy reserve fund will be taken back with interest in such cases. Details viz. procurement of raw material, oil production, oil sold and oil cake sold per month has to be furnished to the Board on a monthly basis by email. The promoter has to undertake an Agreement in this regard in judicial stamp paper.

**16. Setting up a Coconut Oil Milling Unit - M/s. Kalpamithra Oil & Kera Products, Room No.572, Ward No.II Kanichar Grama Panchayat, Kanichar PO, Kannur at a total cost of Rs.92.45 lakhs**

The objective of the project is setting up of coconut processing and coconut oil milling unit with a capacity to process 15000 nuts per day (5 tons copra) for producing 3.15 T of oil. The project was approved with an eligible cost of Rs.66.242 lakhs and eligible subsidy of Rs.16.56 lakhs as follows.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(₹ in lakhs)		
Land	8.00	...	...
Building & Civil works	45.82	34.636	8.659
Plant & Equipments	26.82	26.820	6.705
Furniture	0.50	0.500	0.125
Electronic equipments & Electrical installation	3.50	3.500	0.875
Preliminary & Pre op. expenses	1.95	0.786	0.196
Working Capital margin	5.86	...	...
<b>TOTAL</b>	<b>92.45</b>	<b>66.242</b>	<b>16.56</b>

The committee approved the project subject to the condition that any type of adulteration / dilution in the quality shall be penalized under PFA Act. Subsidy kept in the subsidy reserve fund will be taken back with interest in such cases. Details viz. procurement of raw material, oil production, oil sold and oil cake sold per month has to be furnished to the Board on a monthly basis by email. The promoter has to undertake an Agreement in this regard in judicial stamp paper.

**17. Coconut Oil Milling unit - Priyanka Industries Sikkarasam palayam, Kangayam, TN at a total cost of Rs.74.56 lakhs**

The objective of the project is establishment of coconut oil milling unit with a capacity to crushing 15 Tonne copra per day for producing 10 MT Coconut Oil. The project was approved with an eligible cost of Rs.63.19 lakhs and eligible subsidy of Rs.15.797 lakhs as follows.

Items	Total Project Cost (₹ in lakhs)	Eligible Project Cost (₹ in lakhs)	Maximum Eligible Subsidy (₹ in lakhs)
Land & Development	4.00	-	-
Plant & Equipments	27.40	27.40	6.850
Building & civil works	29.25	26.46	6.615
Electrical installation	8.67	8.67	2.167
Preoperative Expenses	0.85	0.66	0.165
Working capital	4.39	-	-
<b>Total</b>	<b>74.56</b>	<b>63.19</b>	<b>15.797</b>

The committee approved the project subject to the condition that any type of adulteration / dilution in the quality shall be penalized under PFA Act. Subsidy kept in the subsidy reserve fund will be taken back with interest in such cases. Details viz. procurement of raw material, oil production, oil sold and oil cake sold per month has to be furnished to the Board on a monthly basis by email. The promoter has to undertake an Agreement in this regard in judicial stamp paper.

**18. Coconut Oil Milling unit - Maruthy Oil Industries, Aalambadi P.O, Chennimalai Road, Kangayam, Tamilnadu at a total cost of Rs.193.11 lakhs**

The objective of the project is establishment of coconut oil milling unit with a capacity to crushing 20 MT copra per day for producing 3780 MT Coconut Oil per year. The project was approved with an eligible cost of Rs.116.87 lakhs and eligible subsidy of Rs.29.217 lakhs as follows.

Items	Total Project Cost (₹ in lakhs)	Eligible Project Cost (₹ in lakhs)	Maximum Eligible Subsidy (₹ in lakhs)
Land & Land Development	31.20	-	-
Building & Civil Works	79.50	57.86	14.465
Plant & Equipments	44.32	44.32	11.08
Electrical Installations	13.25	13.25	3.312
Preoperative Expenses	7.58	1.44	0.36
Working Capital Margin	17.26	-	-
<b>Total</b>	<b>193.11</b>	<b>116.87</b>	<b>29.217</b>

The committee approved the project subject to the condition that any type of adulteration / dilution in the quality shall be penalized under PFA Act. Subsidy kept in the subsidy reserve fund will be taken back with interest in such cases. Details viz. procurement of raw material, oil

production, oil sold and oil cake sold per month has to be furnished to the Board on a monthly basis by email. The promoter has to undertake an Agreement in this regard in judicial stamp paper.

**19. Coconut Oil milling unit - Samson coconut Oil Industries, Kangayam, Tiripur, Tamilnadu at a total cost of Rs.269.72 lakhs**

The objective of the project is establishment of coconut oil milling unit with a capacity to crushing 50 Tone copra per day for producing 30 Tons Coconut Oil. The project was approved with an eligible cost of Rs.200.01 lakhs and eligible subsidy of Rs.50.00 lakhs as follows.

Items	Total Project Cost (₹ in lakhs)	Eligible project cost (₹ in lakhs)	Maximum Eligible Subsidy (₹ in lakhs)
Land & Land Development	12.90	-	-
Building & Civil Works	82.33	60.94	15.235
Plant & Equipments	116.96	116.96	29.24
Electrical Installations	19.81	19.81	4.95
Preoperative Expenses	11.84	2.30	0.575
Working Capital Margin	25.88	-	-
<b>Total</b>	<b>269.72</b>	<b>200.01</b>	<b>50.00</b>

The committee approved the project subject to the condition that any type of adulteration / dilution in the quality shall be penalized under PFA Act. Subsidy kept in the subsidy reserve fund will be taken back with interest in such cases. Details viz. procurement of raw material, oil production, oil sold and oil cake sold per month has to be furnished to the Board on a monthly basis by email. The promoter has to undertake an Agreement in this regard in judicial stamp paper.

**20. Control of Black headed caterpillar in Krishnagiri District - Department of Agriculture, Chepauk, Chennai at a total cost of Rs.19.05 lakhs**

The project was submitted by the Department of Agriculture, Chepauk, Chennai. The committee approved the project at a total cost of Rs.19.05 lakhs and Board's share of Rs.5,61,885/-. The project period may be clarified from the Department of Agri. Chennai. Further Chairman informed the committee about the severe attack of Black headed caterpillar in Dindigul area and instructed Asst. Director, Regional Office, Coconut Development Board, Chennai to conduct an awareness programme in the affected areas in association with TNAU & Dept. of Horticulture.

**21. Establishment of seed gardens & large scale production of hybrid seedlings of coconut for the root (wilt) disease prevalent tract - CPCRI (RS) Kayankulam at a total cost of Rs.89.18 lakhs**

The project submitted by Central Plantation Crop Research Institute, Kasaragod was presented by the PI. The objective of the project is Identification of disease free Chowghat Green Dwarf (CGD) / Cowghat Orange Dwarf (COD) mother palms from 'hotspot' of disease using serodiagnostic technique, utilization of the disease free CGD / COD mother palms for large scale production of seedlings by Department of Agriculture and establishment of seed gardens of released dwarf in public and private sector.

The committee discussed in detail about the objectives, duration, cost of the project and the outcome with cost effectiveness and suggested the following:

1. Since the replanting and rejuvenation programme undertaken by the Board envisages supply of large numbers of quality seedlings (tall, dwarf & hybrid), there is a need to network the project with CPCRI, CDB- DSP Farms, Universities, Colleges (PG Departments of Botany, Zoology etc.) and other approved Pvt. Gardens.
2. At least 100 palms from each of the Krishibhavan areas (Panchayath) in the 3 districts Alleppey, Pathanamthitta and Kollam have to be identified.
3. The services of selected trained FOCT's and farmers of the CPS may be utilized for taking up hybridization and nursery programmes. The cryopreservation of pollens and application of zero diagnostic techniques shall be under taken by CPCRI.
4. The project staff may be limited to one SRF and five research assistants. It is desirable that the outcome of the project should be to produce and distribute at least 50000 quality hybrid seedlings per annum over a period of 3 years. The project has to be made cost effective with respect to the expected outputs. The committees advise the PI to appreciate the concept and mandate of CDB and advised the PI to revise the project so as to have an impact in the field. The project may be revised accordingly and resubmitted for consideration of PAC.

**22. Market promotional Programme – for construction and installation of Tender Coconut Stall at a total cost of Rs.1.201 lakhs**

The project submitted by Shri. George Thomas, Kavalangadu Coconut Producers Society, Kavalangadu, Ernakulam District to establish a tender coconut stall to market coconut based products was approved by the PAC. 50% of the expenditure incurred will be reimbursed on submission of original bills and vouchers after completion of the activities for the following:

Sl. no.	Component	Amount (In lakhs)	Amount of subsidy recommended (In lakhs)
I	Construction of stall (50sqm)	0.750	0.375
II	Office furniture's (table,chair,fan):	0.171	0.085
III	Machineries (,coconut cutting machine freezer, juicer/mixer, glassitems)	0.245	0.123
IV	Publicity expenses	0.035	0.017
<b>Total</b>		<b>1.201</b>	<b>0.600</b>

The committee also suggested that Tender Coconut Water, Tender Coconut Water pulp, soufflé etc. can be included to enhance profitability.

### **23. Market Promotional programme for processing and marketing of tender coconut water at a total cost of Rs.4.04 lakhs**

The project was submitted by Shri. Jose Pradeep, Proprietor, J.P.Traders, Konath house, Gothuruthu North Parur, Ernakulam. The installed capacity of the unit is to pack 300 nuts tender coconuts per day in pouches. The officers of Coconut Development Board who visited the unit have cast aspersions on the hygiene, quality and turnover projected. Committee opined the such units should be promoted only if recommended by Coconut Producers Society.

#### Other Items

##### **1. Synthesis and characterization of value added products from coconut oil - Indian Institute of Science, Bangalore –Pilot plant**

The Committee perused the progress of the project and approved the proposals for setting up of pilot plant for coconut oil based cutting fluids. The project is extended up to 18.3.2013. It was also suggested by the committee that for establishment of the pilot unit the services of two project assistants may be availed rather than a Senior Research Fellow. Accordingly an amount of Rs.10,13,100/- is additionally approved for completion of the study.

**2. Development of Processes and Herbal formulations based on Virgin Coconut Oil - AVT Institute for Advanced Research (AVTAR), Coimbatore – Extension of project**

The Committee approved the extension of the project period up to December 31<sup>st</sup> 2011.

**3. Impact of Coconut Oil as a cooking medium on cardiovascular risk factors and clinical outcomes in patients with coronary artery disease receiving standard medical care; A randomized case controlled study with polyunsaturated sunflower oil - Dr. K. K. Haridas, Department of Cardiology, AIMS, Kochi - extension of project period and ratification for oil purchase**

The progress and justification for extension of project period was presented by the Dr.Vijayakumar, Co-PI. The committee approved the last and final extension of project period up to November 2013 (with an additional 3 months for submission of final report) with an additional allocation of Rs.12.4075 lakhs and Rs.2.324 lakhs for purchase of oil for the study as CDB's share. The additional amount of Rs.11,567/- (incurred by CDB) for purchase of oil was also ratified.

**4. Setting up a new 20 MT Coconut Oil Manufacturing Unit- M/s. KLF Nirmal Industries Pvt. Ltd., Perundurai in Tamil Nadu**

The committee approved additional subsidy of Rs.4.065 lakhs towards 25% of the cost of additional equipments and machineries.

**5. Expansion of the existing coconut processing unit- M/s. Modern Oil Mills, Kozhikottiri, Ottappalam Taluk, Palakkad – Extension for completion for three months**

The committee approved the extension of the project up to February 2012.

**6. Demonstration of Technology for processing and packaging Neera (Sweet Toddy) in Karnataka- The Secretary (Horticulture), Government of Karnataka, Bangalore – Additional fund**

The committee approved the proposed revised costing of the project @ Rs.115 lakhs with 25% of the cost as CDB's share (Rs.28.75 lakhs).

**7. Setting up of Activated Carbon unit -M/s. Sundar Carbon, Fisheries College, Backside, Madurai Bypass Road, Tuticorin – Transfer of SRF & Term Loan Account**

The committee approved the transfer of Subsidy Reserve Fund from State Bank of Travancore, Tuticorin Branch to Indian Bank, Tuticorin Branch.

**8. Setting up of a Coconut Shell Powder Unit - M/s. VG Tinder Products (P) Ltd, Nagar Main Road, Reddiyur, Salem, Tamil Nadu - Transfer of SRF & Term Loan Account**

The committee approved the transfer of Subsidy Reserve Fund from State Bank of India, Hasthampati Branch to Indian Bank, Fairlands Main Road Branch.

**9. Revision of project cost in view of enhancement of wages of contract staff**

After detailed discussion the committee decided that enhancement of wages of contract staff need not be approved during the project period since the allocation of funds for TMOC is limited and mainly intended for creation of infrastructure for processing of diversified value added products.

**10. Allocation of fund for the year 2011-12 - Modernization of coconut Processing and Value addition by the introduction of Modern Copra Dryers**

The committee approved the allocation of Rs.10 lakhs for the scheme under TMOC Market Promotion head and also ratified the release of subsidy to the tune of Rs.1,42,078/- for 22 units.

**11. Adoption of Technology for Processing and Product Diversification- Providing subsidy on per project basis – Operational Guidelines**

The committee approved the proposed system of applying subsidy ceiling under TMOC on project basis for promoting large investments in coconut processing infrastructure especially for diversified and value added projects subject to the following:



1. Admissible limit of subsidy per project shall not exceed 25% of the project cost , maximum up to Rs.50.00 lakh.
2. The project should not be established on the same piece of land on which subsidy had already been availed. However, if the extent of area of a piece of land is larger than the area covered earlier for subsidy, the subsidy shall be admissible only for un-covered area.
3. New project should be altogether a complete project with separate term loan and viability worked out separately by the bank. It should not be willfully split part of any other project for the purpose of availing higher subsidy. Accordingly, an integrated part of a project split for the purpose of subsidy shall not be allowed.
4. First or any of the previous projects should techno-economically viable as standalone unit,
5. Subsequent project should not have been started nor has the loan for the same been applied for, prior to completion of, and release of subsidy for the first project.
6. Wherever subsidy is claimed for the 2nd project or subsequent project (s) by the same beneficiary, it would be essential that the previous project must be complete, successfully being operational and repayment to the bank / financial institution are prompt and unit has been submitting monthly return to CDB (in the prescribed proforma) regularly.

### ***12. Revision of cost for model project***

The committee approved the revision of upper ceiling on building and machinery cost for considering the eligible amount to extend subsidy for processing units as proposed.

The meeting concluded by 8.45 P.M

Dr. K. Muralidharan  
Director  
for Chairman

**Annexure I**

37<sup>th</sup> Meeting of PAC of TMOC held on 12<sup>th</sup> December 2011 at  
Kerabhavan, Kochi

**List of Participants**

<b>S.No.</b>	<b>Name and address</b>
<b>A</b>	<b>MEMBERS</b>
1	Shri. T.K. Jose IAS Chairman, Coconut Development Board
2	Shri. Pushpangadan. V.V, Additional Director Department of Agriculture, Government Secretariat, Thiruvananthapuram
3	Sri. K.B Dundi, Joint Director of Hort, (Plantation Crops & Plant Protection), State Horticulture Dept., Karnataka <u>Representative of</u> Secretary (Horticulture ) Government of Karnataka, Karnataka Government Secretariat, Multistoried building, IIIrd Stage, IVth Floor, Dr. Ambedker Veedhi, Bangalore.
4	Dr. R. Chandramohanam, Head Crop Protection Division, CPCRI, Kasargod <u>Representative of</u> Assistant Director General (Plantation crops) Indian Council of Agriculture Research (ICAR), Krishi Anusandhan Bhavan –II, Pusa, New Delhi
5	Shri. Venu S. Menon, Asst. General Manager (District Development) NABARD, Ernakulam <u>Representative of</u> Chief General Manager, Technical Services, Investment Credit Department, 3 <sup>rd</sup> Floor, B Wing, NABARD, Plot No. C –24, G Block Badra –Kurla Complex, Post Box No.8121, Bombay

6	<p>Shri. M.M. Jose, Senior Marketing Development Officer Directorate of Marketing &amp; Inspection, Kochi 6th floor, A Block, Agmark, Kendriya Bhavan Kakkand – 682 037</p> <p><u>Representative of</u></p> <p>Joint Secretary &amp; Agricultural Marketing Adviser to Govt. of India, Room No.237, Krishi Bhavan, New Delhi</p>
7	<p>Dr. KSMS Raghavarao, Head, Department of Food Engineering, Central Food Technological Research Institute (CFTRI), Mysore</p> <p><u>Representative of</u></p> <p>Director, Central Food Technological Research Institute, Mysore</p>
8	<p>Shri M Thomas Mathew, Chief Coconut Development Officer, Coconut Development Board, Kochi &amp; Member Secretary, PAC</p>
9	<p>Shri. D. Sarvothama Rao, Chief Manager, Indian Overseas Bank, Regional Office, Ernakulam</p>
<b>B</b>	<b>EXPERT</b>
10	<p>Dr.M.Aravindakshan Co-ordinator, Amritha School of Environmental Studies, Ettimedai, Coimbatore &amp; former Chairman, Coconut Development Board</p>
<b>C</b>	<b>OTHERS</b>
11	<p>Dr. K. Muralidharan, Director Coconut Development Board, Kochi</p>
12	<p>Dr. A.K.Nandi, Secretary, Coconut Development Board, Kochi</p>
13	<p>Sri. Sreekumar Poduval Junior Processing Engineer, CDB, Kochi</p>
14	<p>Smt.Cicily George, Finance Officer Coconut Development Board, Kochi</p>
15	<p>Smt. Jayashree A , Senior Technical Officer Coconut Development Board, Kochi</p>
16	<p>Smt. D.S. Resmi, Technical Officer Coconut Development Board, Kochi</p>