

Proceedings of the 41st meeting of Project Approval Committee (PAC) of Technology Mission on Coconut held at Kochi on 11th October 2013

The 41st meeting of the Project Approval Committee (PAC) on Technology Mission on Coconut (TMOC)) was held in the Board Room of Coconut Development Board, Kochi on 11th October 2013. Shri. T.K. Jose IAS, Chairman, Coconut Development Board and Chairman PAC chaired the meeting. List of participants enclosed

At the outset Chairman, welcomed the members of PAC and experts to the meeting. In his introductory remarks Chairman mentioned that the budget allocation for TMOC programmes (Rs. 10 crores) may not be sufficient for meeting the demand. Additional allocation of Rs. 5 crores has been sought from Ministry of Agriculture. He mentioned that there is a fall in coconut production in the major coconut growing states to the tune of 18% in Tamilnadu to 47% in Karnataka and upto 60% in Andhra Pradesh. Since the rupee value has depreciated, imported palm oil would also be costly. Thus, he said that TMOC support for establishment of units of value added products will help in maintaining the price. Chairman informed the members that the present PAC would consider 15 projects with an outlay of Rs.19.25 crores.

After the introductory remarks agenda items were taken up.

AGENDA No. 1: Confirmation of the Proceedings of 40th Project Approval Committee Meeting held on 25th & 26th June 2013

The Committee confirmed the proceedings of the 40th Project Approval Committee Meeting.

AGENDA No. 2: Action taken report of the 40th PAC Meeting

The committee perused the action taken on the decision of the 40th meeting of the Project Approval Committee. Regarding the project by M/s Nature's First India Ltd , Hosur for processing of Tender Coconut Water which was approved by the 40th Project Approval Committee Meeting, Dr. A.N Srivatsa, Retd Scientist, DFRL reminded to be watchful about the new technology adopted by the unit and suggested close monitoring of the product quality

AGENDA No. 3: Approval of new project proposals:

1. Development of *in vitro* culture techniques through somatic embryogenesis for propagation of elite coconut cultivars - Department of Plant Biotechnology, Centre for Plant Molecular Biology & Biotechnology (CPMB & B), TamilNadu Agricultural University, Coimbatore at a total cost of Rs 32.242 Lakhs.

The project was presented by Dr. Renuka Raman, Assistant Professor, Department of Plant Biotechnology, Centre for Plant Molecular Biology & Biotechnology (CPMB & B), TamilNadu Agricultural University, Coimbatore. She stated that it is attempted to develop *in vitro* culture techniques through somatic embryogenesis for propagation of elite coconut cultivars. She also made a comparison with the ongoing study of CPCRI and informed that somatic embryogenesis is more attractive than organogenesis as a plant regeneration system.

The objective of the project is to standardize the use of different explants and media components on induction of somatic embryogenesis from elite coconut palms, to standardize primary and secondary somatic embryogenesis, maturation and conversion into plantlets for clonal propagation and to evaluate the efficiency of the standardized protocols for multiplication of elite coconut seedlings.

The PAC after detailed discussion suggested that such studies on mass multiplication of elite coconut palms should be supported. One tall Variety, one Green variety and one yellow/orange variety may be selected from the available germplasm at TNAU for selection of explants in the study. The committee suggested to incorporate the following:

1. Title to be changed as “Standardization of *in vitro* culture techniques through somatic embryogenesis for propagation of elite coconut cultivars.
2. Institutional charges to be limited to 10% of recurring cost.
3. Review of literature should be exhaustive, so that standardised protocols already tested for somatic embryogenesis at CPCRI need not be repeated.

Committee approved the project in principle and authorized Chairman, Coconut Development Board to approve the revised proposal if found appropriate, after incorporating the above suggestions.

2. Development of concentrated extract of *Vyosakatvivaradi* (VKV) formulation in VCO and evaluation of its genotoxic and carcinogenic effects - AVP Research Foundation, 136/137, Trichy Road, Ramananthapuram P.O, Coimbatore, Tamil Nadu at a total cost of Rs 5.890 Lakhs

The objective of the project is to develop a concentrated extract of VKV formulation in VCO by repeated heating for 7 times so as to reduce the effective dose in humans from 25 ml to less than 4 ml., to evaluate the presence of polycyclic aromatic hydrocarbons in

concentrated extract of VKV in VCO as an indicator of genotoxicity and carcinogenicity and evaluation of genotoxicity of concentrated extract of VKV in VCO by Comet Assay method.

The committee after discussions approved the proposal at a total cost of Rs 5,88,850, the Boards share being Rs. 2,94,850 lakhs for a period of 6 months. Expert of the committee opined that the clinical studies should also be taken up as 3rd phase and there should be continuity for the project.

3. *Development of fermented and unfermented coconut milk based products - CFTRI, Mysore at a total cost of Rs 22.960 Lakhs*

The objective of the project is to standardize the preparation of coconut milk based fermented (curd/ shrikhand) and non fermented product like paneer at lab scale level, to determine the shelf life of the developed products by chemical and sensory analysis and to determine the functional attributes (antimicrobial activity/ antioxidant activity) of products developed

PAC approved the decisions of Internal Screening Committee (ISC) and suggested that such projects should be taken up by CDB Institute of Technology itself.

4. *Abstraction of Tender coconut water from coconut tree - Department of computer Science and Engineering, BMS College of Engineering, Bangalore at a total cost of Rs.16.320 lakhs*

The objective of the project is to estimate the quantity of coconut water present inside tender nut without breaking the nut, to develop correlation with different methods of estimating the quantity of fluid present in coconut at various stages growth and determine the best and optimal method of determination.

PAC approved the decisions of ISC not to fund the project since the committee observed that the study is not of much relevance and not of commercial utility and also estimating the tender nut water is not a critical handicap in tender nut water processing industry.

5. *Standardizing tissue culture procedure for coconut - Vanavarayar Institute of Agriculture, Pollachi Tamilnadu at a total cost of Rs. 28.593 lakhs.*

The objective of the project is to refine and improve the callus induction protocol through plumule culture, to produce plantlets through organogenesis as well as embryogenesis, and to assess the genotypic differences in their response to tissue culture.

PAC suggested that detailed discussion may be held with the PI to assess the institute's capability with regard to infrastructure and technical man power in the concerned discipline to take up such long term research which can produce fruitful results and also the possibility of taking up the study in amalgamation with TNAU (Centre for plant and molecular science and biotechnology). – (Agenda -3, para-1) considering similar nature of the study.

6. Setting up of a Tender coconut packing unit at Tirupur Dist - M/s. Pure Tropic, SF No. 220, Virumandam Palayam Village & Post, Chengapallai Via, Avinashi Tk, Tirupur Dist, Tamil Nadu at a total cost of Rs 686.000 lakhs.

The objective of the project is setting up of processing and packing of tender coconut water unit with a capacity to process 50000 tender coconuts per day for packing 12500 litres of tender water per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(₹ in lakhs)		
Land	Own	-	-
Plant & Equipments	400	127.45	31.86
Building & Civil works	200	150.00	37.50
Preliminary & Pre op. expenses	20.00	-	-
Working Capital margin	66.00	-	-
TOTAL	686.00	277.45	limited to 50.00 lakhs

The project was presented by the Promoter and it was informed that 60000 tender coconut tetra packs of 330 ml/day shall be produced. Committee opined that the byproducts like kernel and husk also may be commercially utilised.

The project was approved with a maximum eligible subsidy of Rs.50 lakhs.

7. Setting up of a unit for Preservation and packing of Tender coconut water at Maddur, Mandya Dist, Karnataka - M/s. Pamposh Foods India Pvt Ltd., Reg. Office – B1, B2, B3, Basement, 09, Locak Shopping Centre, Allied bhawan, Madangiri, New Delhi at a total cost of Rs 425.000 Lakhs.

The objective of the project is setting up of processing and packing of tender coconut water unit with a capacity to process 30000 tender coconuts per day for packing 7500 litres of tender water per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(₹ in lakhs)		
Land (5460 sq. mt.)	88.00	-	-
Plant & Machinery	205.00	205.00	51.25
Building & Civil works (6500 sq.ft.)	66.00	66.00	16.50
Technical know-how	3.90	3.90	0.975
Electrification	14.00	-	-
ISO Certification	2.00	-	-
Furniture & office equipments	3.10	-	-
Preliminary & Pre op. expenses	5.00	2.70	0.67
Working Capital margin	38.00	-	-
TOTAL	425.00	277.76	limited to 50.00 lakhs

Since the party has yet to avail the bank loan and technology transfer, the PAC authorized Chairman to sanction the eligible subsidy as and when all the required documents are submitted.

8. Setting up of a Desiccated Coconut Manufacturing unit at Thenkurissi, Palakkad Dist.- M/s. Maharaja Eco Products, Chukkamkonam, Thenkurissi, Palakkad, Kerala at a total cost of Rs.156.600 Lakhs

The objective of the project is setting up of a desiccated coconut powder manufacturing unit the capacity with a capacity to process 15000 coconuts per day for producing 1.5 MT desiccated coconut powder per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(₹ in lakhs)		
Land	27.84	-	-
Plant & Equipments	43.81	41.31	10.323
Building & Civil works	71.55	47.00	11.75
Preliminary & Pre op. expenses	4.30	1.12	0.28
Working Capital margin	9.10	-	-
TOTAL	156.60	89.43	22.353

The project was presented by the Promoter. Chairman suggested that the unit may be converted to a Private Limited Company for raising equity, tax exemption and to bring in efficiency and system in operation of the unit and also to take up measures for waste treatment.

However PAC advised to have a relook into the project cost with respect to capacity and compare costing with other DCP units and norms of TMOC. The project was approved in principle and authorized Chairman to sanction the eligible subsidy.

9. Setting up of Desiccated coconut powder manufacturing unit - M/s.Aishwarya Agro Products, Sy.No.138, Tiptur-Halkurke Road, Geddalahally, Near K.R.S. Products, Tiptur, Tumkur dist., Karnataka. at a total cost of Rs. 129.630 lakhs

The objective of the project is setting up of a desiccated coconut powder manufacturing unit with a capacity to process 50000 coconuts per day for producing 5 MT desiccated coconut powder per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(₹ in lakhs)		
Land	Own	-	-
Plant & Equipments	90.00	81.675	20.418
Building & Civil works	29.00	29.00	7.250
Other fixed assets	3.15	-	-
Other deposits	0.30	-	-
Preliminary & Pre operative. expenses	0.10	0.10	0.025
Working Capital margin	7.08	-	
TOTAL	129.63	110.775	27.693

The project was presented by the Promoter. Chairman suggested that the unit may be converted to a Private Limited Company for raising equity, tax exemption and to bring in efficiency and system in operation of the unit.

However PAC advised to have a relook into the project cost with respect to capacity and compare costing with other DCP units and norms of TMOC. The project was approved in principle and authorized Chairman to sanction the eligible subsidy.

10. Setting up of Desiccated coconut powder manufacturing unit - M/s. Prajwal Food Tech Sy No. 139/1, Gedlehally Village, Halkurke Road, Tiptur Tq., Tumkur Dist, Karnataka at a total cost of Rs. 133.600lakhs

The objective of the project is setting up of a desiccated coconut powder manufacturing unit the capacity with a capacity to process 50000 coconuts per day for producing 5 MT desiccated coconut powder per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(₹ in lakhs)		
Land	Own	-	-
Plant & Equipments	76.65	76.65	19.163
Building & Civil works	43.00	43.00	10.75
Pre op. expenses	0.10	0.10	0.025
Other fixed Assets	3.15	-	-
Deposits	0.30	-	-
Working Capital margin	10.40	-	-
TOTAL	133.60	119.75	29.938

The project was presented by the Promoter. Chairman suggested that the unit may convert to a Private Limited Company for raising equity, tax exemption and to bring in efficiency and system in operation of the unit.

However PAC advised to have a relook into the project cost with respect to capacity and compare costing with other DCP units and norms of TMOC. The project was approved in principle and authorized Chairman to sanction the eligible subsidy.

11. Setting up of a Desiccated Coconut powder unit - M/s.S.L.N.Agro Tech, Gedlehally, Halkurke Road, Sy.No. 144/1,KathaNo.177, Byranayakanahalli Post, Tiptur, Tumkur, Karnataka at a total cost of Rs. 73.500 lakhs

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(₹ in lakhs)		
Land & Land Dev.	-	-	-
Building & Civil works	30.00	30.00	7.50
Plant & Equipments	28.64	28.64	7.16
Furniture & fixture	1.00	-	-
Pre op. expenses	1.00	0.586	0.146
Deposits	2.00	-	-
Interest during implementation	1.86	-	-
Working Capital margin	9.00	-	-
TOTAL	73.50	59.226	14.806

Chairman suggested that the unit may convert to a Private Limited Company for raising equity, tax exemption and to bring in efficiency and system in operation of the unit.

However PAC advised to have a relook into the project cost with respect to capacity and compare costing with other DCP units and norms of TMOC. The project was approved in principle and authorized Chairman to sanction the eligible subsidy.

12. Setting up of a Coconut shell charcoal unit at Theni - M/s. Core Clay Pvt Ltd., 3/88A, Near Elliai Koil, Velayudhapuram, Gandamanur Post, Aundipati Taluk, Theni Dist, Tamil Nadu at a total cost of Rs. 45.540 lakhs

The objective of this project is setting up of a unit for manufacturing Granulated coconut shell charcoal from coconut shell.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(₹ in lakhs)		
Land	Own	-	-
Building & Civil works	11.54	11.54	2.885
Plant & Equipments	31.00	31.00	7.75
Preliminary & Pre op. expenses	2.00	0.425	0.106
Working Capital margin	1.00	-	
TOTAL	45.54	42.965	10.741

The project was approved with a maximum eligible subsidy of Rs.10.741 lakhs.

13. Setting up of Coconut Shell powder unit - M/s. Coco Shell Agro Product, 11-Sakthi Co-op. Industrial Estate, Udumalpet Road, Pollachi, Tamil Nadu. at a total cost of Rs.52.500 lakhs

The objective of this project is setting up of a unit for processing 7 MT of coconut shells per day for producing 6.60 MT of coconut shell powder.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(₹ in lakhs)		
Land	Lease	-	-
Building	Lease	-	-
Plant & Equipments	50.00	50.00	12.50
Preliminary & Pre op. expenses	-	-	-
Working Capital margin	2.50	-	
TOTAL	52.50	50.00	12.50

The project was approved with a maximum eligible subsidy of Rs.12.50 lakhs.

14. Setting up of ball copra making unit - S/Shri Appana Venkata Raju & Appana Sudhakar Rao, Machavaram Panchayath, Ambajipeta Mandal, E.G. Dist, A P. at a total cost of Rs.31.000 lakhs

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(₹ in lakhs)		
Land	Own	-	-
Building & Civil works	31.00	31.00	7.75
Total	31.00	31.00	7.75

The project was approved with a maximum eligible subsidy of Rs.7.75 lakhs.

15. Expansion of existing Desiccated Coconut manufacturing unit - M/s. Mahavir Coconut Industries, Factory – 9th KM, BH Road, Mallasandra, Tumkur, at a total cost of Rs. 90.00 lakhs

The objective of this project is setting up of a unit for Desiccated Coconut –to process from 80,000 to 1,10,000 coconuts per day (from 80 MT to 110 MT)

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(₹ in lakhs)		
Land	Own	-	-
Plant & Equipments	90.00	90.00	22.50
Building	-	-	-
Working Capital	-	-	-
TOTAL	90.00	90.00	22.50

The project was approved with a maximum eligible subsidy of Rs.22.50 lakhs

16. Market Promotional Programme - for promoting Coconut Kernel Products (Coconut milk, cream, desiccated coconut powder) under the brand names “Coco Magic and Arogya” - M/s Holista Tranzworld Ltd, 6/18, Casa Bianca, IVth Floor, Casa Major Road, Egmore Chennai – 600008 at a total cost of Rs. 24.46lakhs

S. No.	Component	Amount (In lakhs)	
		Cost	Eligible subsidy
I	Trademark registration (India).	00.36	-
II	Trademark registration (UAE, Indonesia, Vietnam, Malaysia, Thailand, Philippines).	17.00	-
III	Website.	2.00	1.00
IV	Catalogue	0.60	0.30
V	Free Trade Zone	2.50	-
VI	Certifications	2.00	1.00
Total		24.46	2.30

The project was approved with a maximum eligible subsidy of Rs.2.30 lakhs. However PAC opined that under market promotional programme of TMOC, more emphasis should be given for generic promotion of products in future rather than brand promotion.

Other Items

1. Proposal for reimbursement of Expenditure for participation in international Exhibition

PAC sanctioned Rs.46,455/- (Rupees Forty six thousand four hundred and fifty five only) under the head “TMOC-Market Promotion” towards reimbursement of 50% of the travel expenses to M/s Holista Tranzworld Ltd, Chennai for participation in Summer Fancy Food show, Washington, USA during 2012-13.

2. Manufacturing Carbonized shells lumps and granules - M/s. Vishnu Industries, Vinayakanagar, Tiptur at a total cost of Rs.34.57 lakhs

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(in lakhs)		
Land	5.00	-	-
Building	14.50	14.50	3.625
Machinery	23.517	15.156	3.789
TOTAL	34.57	29.656	7.414

The project was approved with a maximum eligible subsidy of Rs.7.414 lakhs. However PAC opined that henceforth revision of project cost/ addition of machineries need not be entertained from promoters till the original project approved by PAC is completed and the subsidy granted is fully availed.

3. Establishment of one tender coconut parlour and to sale tender nuts collected from the members of the Coconut Producers Society and other coconut- based products – ratification of the expenditure incurred

PAC ratified the expenditure of Rs. 52405/- incurred towards the expenditure incurred for establishment of tender coconut parlour and sale of tender nuts to Kerashree Coconut Producers Society, Trivandrum

4. Establishment of one tender coconut parlour and to sale tender nuts collected from the members of the Vanitha CPS –ratification of the expenditure incurred

PAC ratified the expenditure of Rs. 1,49,608/- incurred towards the expenditure incurred for establishment of tender coconut parlour and sale of tender nuts to Vanitha CPS, Pananchery Panchayat, Thrissur .

Other decisions:

1. Chairman briefed about the concept of Coconut Development Board Institute of Technology (CIT) to the committee members. Dr. Dr. M. Aravindakshan, Former Chairman, CDB and Coordinator, Centre for Environmental Studies Amrita Viswa Vidyapeetham University, Coimbatore welcomed the idea and stated that it is the need of the hour to undertake such trainings and certificate courses by the Board directly. He also ensured to explore the possibility for affiliation of such courses with Amritha School of Engineering and Management Studies.
2. Committee decided that for the small scale coconut products developed by CFTRI, pilot units can be set up at TDC, Vazhakulam or at CPF/ Company level for demonstration and training.
3. The pilot plant for the technology developed for effluent water treatment for desiccated coconut industry by Dept. of Chemical Engineering, IISc, Bangalore should be set up at one of the DC units.
4. It was decided that a standardised recommendation has to be formulated for Desiccated powder manufacturing unit cost for building and machinery based on the installed capacity of the unit.

5. Shri. C. P Appanna briefed the Farmers Technology Transfer Programme of NABARD wherein assistance can be availed by the entrepreneurs or farmer groups viz CPS/ CPF or companies for setting up of pilot plants for the technologies developed by various research institutions for demonstration. Details may be circulated among entrepreneurs and CPS/CPF.
6. Chairman informed that Kerala Financial Corporation, is also having a similar programme under KSEDm through which an interest free loan for 5 years is granted for a loan upto Rs. 20 lakhs. The scheme is for young entrepreneurs between the age group of 18-40 years with education qualification of 10+2 level. KFC also support new ventures with low interest loans ie upto 10 crores @ 8-9% and upto 20 crores with 9-10%. Details may be circulated among entrepreneurs and CPS/CPF.

The meeting concluded by 2.30 P.M with a vote of thanks.

Dr. K.Muralidharan
Director

List of Participants

S.No	Name and address
A	MEMBERS
1	Shri. T.K. Jose IAS Chairman, Coconut Development Board
2	Dr. D.L Maheswar Director of Horticulture, Deptt. of Hort, Karnataka <u>Representative of</u> Secretary (Horticulture) Government of Karnataka, Karnataka Government Secretariat, Multistoried building, IIIrd Stage, IVth Floor, Dr. Ambedker Veedhi, Bangalore.
3	Dr. V. Krishna Kumar Head, CPCRI (R.S) Kayamkulam <u>Representative of</u> Assistant Director General (Plantation crops) Indian Council of Agriculture Research (ICAR), Krishi Anusandhan Bhavan –II, Pusa, New Delhi-110 012
4	Sri. V.V. Pushpangadhan, Additional Director of Agriculture (Crop Production) Department of Agriculture, Government Secretariat, Thiruvananthapuram <u>Representative of</u> Secretary (Agri), Govt. of Kerala Thiruvananthapuram
5	Shri.C.P Appanna, General Manager, NABARD, Mumbai <u>Representative of</u> Chief General Manager, Technical Services, Investment Credit Department, 3 rd Floor, B Wing, NABARD, Plot No. C –24, G Block Badra – Kurla Complex, Post Box No.8121, Bombay
6	Sri.Dr. Anilkumar R, Asst. Agricultural Marketing Adviser, Directorate of Marketing & Inspection (DMI), Regional Office, Block 'A', 6 th floor, Kendriya Bhavan, Kakkanad, Kochi – 682 037. <u>Representative of</u> Joint Secretary & Agricultural Marketing Adviser to Govt. of India, Room No.237, Krishi Bhavan, New Delhi.

7	Dr. K.S.M.S Raghavrao, Chief Scientist, Deptt. of Food Engg., Central Food Technological Research Institute, Mysore.
8	Sri.B. Govindan Potty, Chief Manager, Indian Overseas Bank, Regional Office, M.G Road, Ernakulam- 682 016 <u>Representative of</u> Chief General Manager, Indian Overseas Bank, Bangalore city Branch, Gandhi Nagar, Bangalore.
9	Shri.Sugata Ghose, Chief Coconut Development Officer, Coconut Development Board, Kochi
B	EXPERTS
10	Dr. A.N. Srivatsa, Retd.Scientist(DFRL), 411, A & B Block, Navilu Road, Kuvempu Nagar, Mysore – 570 023.
11	Dr. M. Aravindakshan Former Chairman, CDB Coordinator, Centre for Environmental Studies Amrita Viswa Vidyapeetham University, Coimbatore
C	In Attendance
12	Dr. K. Muralidharan, Director Coconut Development Board, Kochi
13	Shri. Sreekumar Poduval Junior Processing Engineer, CDB, Kochi
14	Shri. Sabareenathan Finance Officer, CDB, Kochi
15	Smt. Jayashree A , Senior Technical Officer Coconut Development Board, Kochi
16	Smt. Resmi. D. S, Technical Officer, Coconut Development Board, Kochi

Shri.C.P Appanna, General Manager, NABARD, Head Office, Mumbai; Dr. K S M S Raghavrao, Chief Scientist, Deptt. of Food Engg., Central Food Technological Research Institute, Mysore; Dr. D.L Maheswar, Director of Horticulture, Govt. of Karnataka; Dr. V. Krishna Kumar, Head, CPCRI (R.S) Kayamkulam; Sri.V.V. Pushpangadhan, Additional Director of Agri (Crop. Production), Department of Agriculture, Govt. of Kerala; Dr. Anilkumar R, Asst. Agricultural Marketing Adviser, Directorate of Marketing & Inspection(DMI), Kakkanad, Kochi; Sri. B Govindan Potty, Chief Manager, Indian Overseas Bank, Regional Office, M.G. Road, Ernakulam , Shri. Sugatha Ghosh, Chief Coconut Development Officer, Coconut Development Board (CDB), Kochi, and Dr. K. Muralidharan, Director,CDB attended the meeting. Dr. A.N Srivatsa, Retd. Scientist (DFRL), & Dr. M. Aravindakshan Former Chairman, CDB attended the meeting as invited experts.

Proceedings of the 42nd meeting of Project Approval Committee (PAC) of Technology Mission on Coconut held at Kochi on 22nd April, 2014

The 42nd meeting of the Project Approval Committee (PAC) on Technology Mission on Coconut (TMOC) was held in the Board Room of Coconut Development Board, Kochi on 22nd April, 2014. Shri T.K. Jose IAS, Chairman, Coconut Development Board and Chairman PAC chaired the meeting. The list of participants is enclosed.

At the outset, Chairman welcomed the members of PAC and experts to the meeting. In his introductory remarks Chairman briefed about the concept of Farmer Producer Organizations (FPOs) and also enlightened the members about the growth of FPOs in Coconut sector. He also pointed out the various possibilities and avenues available for value addition in coconut sector especially Neera and Neera based products. He added that Board would support the generic promotion of Neera and neera products manufactured in India.

After the introductory remarks agenda items were taken up.

AGENDA No. 1: Confirmation of the Proceedings of 41st Project Approval Committee Meeting held on 11th October, 2013

The Committee confirmed the proceedings of the 41st Project Approval Committee Meeting.

AGENDA No. 2: Action taken report on decisions of the 41st PAC Meeting

The committee perused the action taken on the decisions of the 41st meeting of the Project Approval Committee.

AGENDA No. 3: Approval of new project proposals:

1. Health benefits of dietary intake of Virgin coconut oil on neural-immune network -School of Bioengineering, SRM University, Kattankulathur- Tamil Nadu at a total cost of Rs. 30.60 lakhs.

The objective of the project is to investigate the effects of dietary intake of virgin coconut oil on neuroendocrine-immune system in order to promote the health benefits of virgin coconut oil.

The project was presented by Principal Investigator Dr. Thygarajan, Professor and HOD, Department of Biotechnology, School of Bioengineering, SRM University, Tamil Nadu. PAC approved the project with a total project cost of Rs 26.29 lakhs for 2 years to be equally shared between CDB and SRM; with the following budget split up. (Institutional charges limited to 10% of project cost).

Particulars	CDB share (Rs in Lakhs.)	SRM share (Rs in Lakhs.)
Salary JRF Rs. 12,000/- P.M.	2.88	---
Recurring - Chemicals, Consumables, contingency	6.875	13.145
Travel	1.00	----
Institutional Charges	2.39	----
Total	13.145	13.145
Grand total	26.29	

2. Development of secondary metabolite based biocide for control of eriophyid mite (*Aceria guerreronis*) and red palm weevil (*Rhynchophorus ferrugineus*) infesting coconut plantations - Camson Bio Technologies Limited, Bangalore at a total cost of Rs. 90.00 lakhs.

The objectives of the project are: (1) Isolation and characterization of microorganism (2) Optimization of process for the extraction of secondary metabolites from microbes (3) Screening of metabolites against mites and red palm weevil (4) Development of effective and stable formulation with long shelf life (5) Bio-efficacy and field evaluation (6) Shelf life, storage stability and container compatibility studies.

The project was presented by the Principal Investigator Dr. Nisha. M. M, Scientist, Camson Biotechnologies, Bangalore.

After detailed discussions, PAC suggested the following:

1. The project may concentrate for the time being only on red palm weevil, which is most serious pest of Coconut
2. The duration of project may be limited to 2 years
3. The staff component may be limited to 1 SRF.
4. P.I. may submit the revised project proposal with the above modifications for consideration in the next PAC.

3. Management of Black Headed Caterpillar infestation in Mandya district of Karnataka - CDB, Regional Office, Bangalore at a total cost of Rs 126.71 lakhs.

The objective of the project is to control sudden outbreak of Black Headed Caterpillar infestation in Mandya District of Karnataka, covering 1,52,670 affected trees.

After detailed discussions PAC approved the decisions of Internal Screening Committee (ISC) and approved the project in principle. The committee has authorized Chairman, Coconut Development Board to approve the budget and manpower as per requirement and norms.

4. Scaling up the production of planting material from released varieties of coconut palms through plumule culture- Phase-2– CPCRI, Kasargod at a total cost of Rs 60.18 Lakhs.

The objectives of the 2nd phase of the project are : (1) To carry out studies for enhancing somatic embryos in coconut such as cell suspension culture and different media composition for maturation and normal development of plantlets (2) To conduct comprehensive research on coconut tissue culture in the area of transcriptomics and proteomics.

Dr Sherifa, Co-PI, presented the status of the 1st phase and also the proposal for second phase. It was informed that out of 12884 nuts utilized in the 1st phase, 195 plantlets were developed *in vitro* and 23 plantlets are available in polybag.

The expected outcome of the project phase-2 are (a) Identification of various genes involved in somatic embryogenesis of coconut and their expression levels and (b) Improvement of somatic embryogenesis to increase the plantlet production (at least upto 15 plantlets per shoot meristem) in coconut using knowledge gained through transcriptomic and proteomic studies.

Dr Aravindakshan, Foremr Chairman & Expert Member of PAC, stated that the optimal conditions for plantlet development are still to be identified. Further, Chairman pointed out that for a successful research there should be a dedicated team and proper networking with National and International researchers. CPCRI should explore the possibilities to take up ICAR fellowship projects/post doctoral research work in Coconut, and also collaborative research projects in association with DST, Department of Biotechnology and institutions like Biotechnology Industry Research Assistance Council(BIRAC).

After detailed discussions, PAC stated that CPCRI may arrange a brain storming session with the involvement of scientists and related institutions and an International workshop on the subject associating the scientists working on biotechnology aspects of palm propagation from various countries in India at the earliest. Co-P.I suggested that it can be conducted in January, 2015. The present project may be reappraised based on new information gathered in the brain storming session and the P.I. is informed to conduct the brain storming session at their earliest convenient date. CDB can extend support for the second phase on the basis of this.

5. Performance evaluation of selected cultivars/ varieties for tender coconut at DSP Farm cum Techno Park for Coconut, Neriya Mangalam, Ernakulam at a total cost of Rs.17.235 Lakhs.

The objectives of the project are : (1) To assess the coconut cultivars/ varieties suitable for tender coconut through biometric and biochemical analysis (2) To identify the best cultivar suitable for tender coconut among dwarf, tall and hybrids and (3) To study the association of different levels of maturity characters in relation to nut water in the promising types.

The present proposal was not approved. PAC advised that DSP farms can take up research related to cultivation and qualitative aspects of production of coconut seedlings; not projects of this nature and content.

6. Setting up of Neera Processing and Packing units- The following 12 Coconut Producer Companies formed in Kerala under the guidance of CDB had submitted the proposals for Neera Processing and Packing units:

1. M/s. Palakkad Coconut Producer Co. Ltd (PCPCL), Muthalamada, Palakkad, Kerala – 678 507
2. M/s. Kuttiady Coconut Farmers Producer Co. Ltd, Vadakara Taluk, Kuttiady Post , Kozhikode Dist, Kerala – 673 508
3. M/s. Thejaswini Coconut Farmers Producer Co. Ltd,, C.P.II-376/K7, Thattassery Building Cherupuzha Post, Kannur Dist, Kerala – 670 511
4. M/s. Kasaragod Coconut Producer Co. Ltd (KCPCL), Door No. KKP/10/601, Pachudu Building, Thekke Bazar, Vellarikkundu Post, Parappa Via, Kasaragod – 671 533, Kerala
5. M/s. Thirukochi Coconut Producer Co. Ltd, C/o Joseph Babu, Door No. 9/411, Chirakkuzhiyil House, Koothattukulam, Thirumarady PO, - 696 687 , Ernakulam Dist
6. M/s. Malappuram Coconut Producer Co. Ltd, (MCPC), Room No. VP/9/336Q, Edavannappara, Cheruvayoor Post, Vazhakkad Via , Malappuram Dist, Kerala – 673 645
7. M/s. Kozhikode Coconut Farmers Producer Co. Ltd, Kunnamangalam, Kozhikode - 673 571
8. M/s. Koyilandy Coconut Farmers Producers Co. Ltd, Vattoli Bazar–Post, Balussery, Kozhikode – 673 612
9. M/s. Kodungallur Coconut Producer Co. Ltd, G.D. Complex X-87, IInd Floor, Perinjalam Post ,Thrissur Dist, Kerala – 680 686
10. M/s. Karappuram Coconut Producer Co. Ltd, Kanjikuzhy Block Panchayat Premises, SN Puram Post, Alapuzha, Kerala – 688 582
11. M/s. Kaipuzha Coconut Producer Co. Ltd, (KCPCL), No. T.P./44, Kuttikkattuvilayil, Padinjattakkara, Thevalakkara, Kollam, Kerala – 690 524
12. M/s. Ananthapuri Coconut Producers Company Ltd (ACPCL), 845, Oottiyarathala, 2, Thalayal, Aralummodu – PO, Trivandrum – 695 123

The projects were presented before the Committee individually by the Chairman / Director / Board Member / Project Manager of the respective Companies. Each company presented their road map for processing Neera and marketing.

The PAC after detailed discussion approved the projects in principle and authorized Chairman, Coconut Development Board to approve the proposals subject

to submission of required documents, as per norms of TMOC. The PAC pointed out that M/s Ananthapuri Coconut Producer Company Ltd, Trivandrum whose representatives could not present their case in a proper manner should modify their Detailed Project Report and resubmit to Chairman for reconsideration in the next PAC. Representatives of Kasargod Producer Company were absent and hence their project is also deferred.

- 7. Setting up of Integrated Coconut processing unit-** The following Coconut Producer Companies registered with the Board submitted the proposals for Integrated Coconut processing unit:

- (a) M/s. Kaipuzha Coconut Producer Co. Ltd, (KCPCL), No. T.P./44, Kuttikkattuvilayil, Padinjattakkara, Thevalakkara, Kollam, Kerala – 690 524.
- (b) M/s. Kodungallur Coconut Producer Co. Ltd, G.D. Complex X-87, IInd Floor, Perinjanam Post, Thrissur Dist, Kerala – 680 686.

The PAC after detailed discussion approved the projects in principle and authorized Chairman, Coconut Development Board to approve the proposals subject to submission of required documents, as per norms of TMOC.

- 8. Setting up of an Oil Expeller unit at Kanjikuzhy Block- M/s. Karappuram Coconut Producer Co. Ltd, Kanjikuzhy Block Panchayat Premises, SN Puram Post, Alapuzha at a total cost of Rs 73.17 lakhs.**

The PAC after detailed discussion approved the project in principle and authorized Chairman, Coconut Development Board to approve the proposal subject to submission of required documents, as per norms of TMOC.

- 9. Setting up of Desiccated coconut powder manufacturing unit - M/s. Sri Basaveshwara Coconut Industries, BH Road, Huchhagondanahalli, Tiptur at a total cost of Rs. 25.00 lakhs.**

The objective of the project is setting up of a desiccated coconut powder manufacturing unit with a capacity to process 10,000 coconuts per day for producing 1.00 MT desiccated coconut powder per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakhs)		
Land	Own	-	-
Machinery & equipments	15.22	15.21	3.80
Building & Civil works	6.78	6.78	1.69
Working Capital margin	3.00
TOTAL	25.00	21.99	5.49

The project was approved with an eligible subsidy of Rs. 5.49 lakh; subject to the condition that the unit should obtain certificate from FSSAI; should include blanching and steaming in the process to improve quality and also install ETP.

10. Setting up of Desiccated coconut powder manufacturing unit - M/s. Vasudha Industries, 15/64A, Barathidasan Street, Avinashi TK, Tirupur Dt, Tamil Nadu at a total cost of Rs. 210.00 lakhs.

The objective of the project is setting up of a desiccated coconut powder manufacturing unit with a capacity to process 40000 coconuts per day for producing 4.00 MT desiccated coconut powder per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakhs)		
Land & Land Development	4.00
Factory building	91.55	68.62	17.155
Plant & Machinery	73.00	73.00	18.250
Electrification-Electric Accessories & HP Connection Charges	5.00
Preliminary & Pre-Operative Expenses-	2.00	1.70	0.425
Working Capital	34.45
TOTAL	210.00	143.32	35.830

The project was approved with an eligible subsidy of Rs. 35.83 lakh; subject to the condition that the unit should obtain certificate from FSSAI; should include blanching and steaming in the process to improve quality and also install ETP.

11. Setting up of a Desiccated Coconut powder unit - Sree Amman Agro Industries, D. No. 3/156 Perumapalayam, Kunnathur Road, Sullipalayam Post, Perundurai Tk, Erode Dist, Tamilnadu at a total cost of Rs. 115.37 lakhs.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakhs)		
Land	Own	-	-
Plant & Equipments	54.49	54.49	13.62
Building & Civil works	52.70	44.81	11.20
Effluent Treatment and Disposal system	4.85	4.85	1.21
Working Capital margin	3.33
TOTAL	115.37	104.15	26.03

The project was approved with an eligible subsidy of Rs. 26.03 lakh; subject to the condition that the unit should obtain certificate from FSSAI; should include blanching and steaming in the process to improve quality and also install ETP.

12. Setting up of a Desiccated Coconut powder unit M/s. Revathi Agro, Survey No. 62/2, Kalkere Road, Hucchanahatti, Halepalaya Post, Tiptur at a total cost of Rs. 179.74 lakhs.

The objective of the project is setting up of a desiccated coconut powder manufacturing unit with a capacity to process 32,000 coconuts per day for producing 3.20 MT desiccated coconut powder per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakhs)		
Land	Own	-	-
Plant & Equipments	58.65	52.33	13.08
Building & Civil works	70.05	51.48	12.87
Contingency	6.44	-	-
Working Capital margin	44.60	-	-
TOTAL	179.74	103.81	25.95

The PAC noticed that capacity and cost of ETP appears to be under estimated and should be relooked. The project was approved with an eligible subsidy of Rs. 25.95 lakh subject to the condition that the unit should obtain certificate from FSSAI; should include blanching and steaming in the process to improve quality and also install ETP of appropriate capacity.

13. Setting up of a Desiccated Coconut powder unit - M/s. SPKS Enrich Products Pvt Ltd Office – 21/22, TNP Building, Thadikombu Road, Dindigul, Tamil Nadu at a total cost of Rs. 550.00 lakhs.

The objective of the project is setting up of a desiccated coconut powder manufacturing unit with a capacity to process 80,000 coconuts per day for producing 8.00 MT desiccated coconut powder per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakhs)		
Land	Lease	-	-
Plant & Equipments	320.00	225.05	Limited to Rs. 50.00 lakhs
Building & Civil works (including electrification, ETP for Rs. 20.0 lakhs etc)	180.00	83.00	
Working Capital margin	50.00		
TOTAL	550.00	308.05	50.00

The project was approved with an eligible subsidy of Rs. 50.00 lakh. The PAC suggested for incorporation of blanching and steaming in the process to improve quality and to obtain both FSSAI and ISO certification. The PAC also advised to the

promoter to convert the unit into a Private Limited Company at the earliest and report.

14. Setting up of a Desiccated Coconut powder unit - M/s. Nanma Coconut Industries, Thiruvizhamkunnu, Palakkad Dist, Kerala at a total cost of Rs. 132.00 lakhs.

The objective of the project is setting up of a desiccated coconut powder manufacturing unit with a capacity to process 25,000 coconuts per day for producing 2.50 MT desiccated coconut powder per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakhs)		
Land	Own	-	-
Plant & Equipments	55.60	53.20	13.30
Building & Civil works (4081 sq.ft.)	46.60	34.81	8.70
ETP	4.00	4.00	1.00
Electrification	3.00	3.00	0.75
Generator	7.50	5.00	1.25
Laboratory equipments	2.00	2.00	0.50
Office equipments	1.30
Pre op. expenses	2.00	1.04	0.26
Working Capital	10.00		
TOTAL	132.00	103.05	25.76

The project was approved in principle. The PAC advised the promoter to revise the project in accordance with dryer capacity i.e. for processing 15000 nuts per day. The PAC also suggested for incorporation of blanching and steaming in the process to improve quality and should obtain certificate from FSSAI.

15. Modernisation & Expansion of existing Desiccated Coconut manufacturing unit - M/s. Century Coco Products, 7/175 B, Manassery Post, Muthalam, Kozhikode, at a total cost of Rs. 126.00 lakhs.

The objective of this project is expansion and modernisation of existing desiccated coconut powder unit to process from existing 2000 nuts capacity to 15000 nuts per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakhs)		
Land	Leased	-	-
Plant & Equipments	87.55	85.46	21.36
Building - - Existing renovation for 1000 sq.ft. - 4.0 - New for 2000 sq.ft.- 14.0 - ETP - 8.15	26.15	26.15	6.53
Furniture & office equipments	1.30
Pre op. expenses	2.00	1.10	0.27
Working Capital margin	9.00		
TOTAL	126.00	112.71	28.16

The project was deferred till next PAC. The financial parameters including working capital margin of the project were not in accordance with production capacity, so the Promoter was asked to revise the project and submit in next PAC.

16. Setting up of a Coconut Chips unit - M/s. Malabar Products, Muttithadi Post Mukundapuram Tk, Trichur Dist at a total cost of Rs. 29.21 lakhs.

The objective of the project is setting up of a coconut chips unit for processing 2000 coconuts per day to produce 150 kg chips per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakhs)		
Land	Own	-	-
Plant & Equipments	12.71	8.76	2.19
Building & Civil works	15.00	11.08	2.77
Working Capital	1.50
TOTAL	29.21	19.84	4.96

The project was approved with an eligible subsidy of Rs. 4.96 lakh. The unit should obtain FSSAI certification.

17. Setting up of a ball copra unit- Shri. Shekaran C. K., Cheriya Kunnu Parambath House Shekaran Boda making Unit, Cheruparambu Post, Kunnothparambu Via, Kannur Dist at a total cost of Rs 25.00 lakhs.

The objective of the project is setting up of a ball copra making unit for converting 1,70,000 coconuts in to 31.00 MT Boda (Ball Copra) per year.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakhs)		
Land	Own	-	-
Building & Civil works	20.00	16.48	4.12
Fixed Assets expenses	0.30	-	-
Working Capital	4.70	-	-
TOTAL	25.00	16.48	4.12

The project was approved with an eligible subsidy of Rs. 4.12 lakh.

18. Setting up of a Granulated Shell Charcoal Manufacturing Unit- M/s. Rathinamoorthy Traders, Periyar Nagar, Palladam – 641 664, Tirupur Dist. at a total cost of Rs. 93.80 lakhs.

The objective of the project is setting up of a unit for manufacturing Granulated coconut shell charcoal with installed capacity of 30.00 MT per day from coconut shell.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakhs)		
Land	Own	-	-
Building & Civil works	73.59	24.275	6.068
Plant & Equipments	20.21	19.99	4.997
TOTAL	93.80	44.265	11.065

The project was approved with an eligible subsidy of Rs. 11.065 lakh.

19. Setting up of a manufacturing unit of Coconut Shell Charcoal Briquettes- M/s. Global Infinite Green Power, Prayag', Konark Nagar, Vijapur Road, Jule Solapur, Solapur, Maharashtra at a total cost of Rs. 299.38 lakhs.

The objective of the project is setting up a manufacturing unit of Coconut Shell Charcoal Briquettes with a capacity to produce 16.00 MT briquettes per day from coconut shell.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakhs)		
Land	Lease	-	-
Plant & Machinery	220.0	220.00	Limited to Rs.50.00 lakhs
Building & Civil works	31.00	13.18	
Contingencies	4.00	...	
IDC	15.00	...	
Preliminary & Pre op. expenses	20.0	2.33	
Working Capital margin	9.38	...	
TOTAL	299.38	235.51	50.00

The project was approved with an eligible subsidy of Rs. 50.00 lakhs. The PAC advised to the promoter to convert the unit into a Private Limited Company at the earliest and report.

20. Expansion and Modernization of the Existing Activated Carbon Manufacturing Unit - M/s. Gowrishankar Chemicals (P) Ltd., K. B. Cross, Kibbanahalli- 572 114, Tumkur Dist, Karnataka at a total cost of Rs. 291.00 lakhs.

The objective of the project is modernization and expansion of existing Activated Carbon manufacturing unit from existing 1200 MT per year capacity to 3600 MT per year from coconut shell.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakhs)		
Land	Own	-	-
Plant & Equipments	222.50	115.96	28.990
Building & Civil works	60.00	48.00	12.000
Electrical installations	2.50	2.50	0.625
Foundations for machineries	6.00	...	----
TOTAL	291.00	166.46	41.615

The project was approved with an eligible subsidy of Rs. 41.615 lakhs.

Other Items

1. Proposal for reimbursement of Expenditure for participation in International Exhibition.

PAC sanctioned Rs. 65,661/- (Rupees Sixty five thousand six hundred and sixty one only) i.e. Rs.32,214/- & Rs.33,447/- to M/s Super Coco Company & M/s Surya Shobha respectively under the head “TMOC-Market Promotion” towards reimbursement of 50% of the travel expenses and hotel accommodation as per norms.

2. Standardization of Neera and Developing process for making value added products from coconut neera and Establishment of Neera Pilot plant – CDB Institute of Technology, Vazhakulam - Revision of Project cost & Extension of Project Period.

The PAC ratified the expenditure of Rs. 28.95 lakh incurred upto 31st March 2014. The Committee also approved the budget estimate of Rs. 43.83 lakh for 2014-15 extending the project period up to 31st May 2014. Chairman reiterated that the pilot plant should be operational by 22.05.2014.

3. Approval of the Project Proposal “Normalization of the modified harvesting protocol of coconut neera by field trials and development of a pilot plant for

neera processing, bottling and storage” by SIBB R& D, Kalamassery, Kochi, Kerala and Ratification of expenditure.

PAC approved the project proposal with a maximum eligible subsidy of Rs. 31.35 lakhs as share of the Board and ratified the release of first installment of Rs. 20.85 lakhs (Rupees twenty lakh eighty five thousand only) for the project.

4. Approval of Project proposal for establishment of Copra Making unit at Muthukulam, Alapuzha Dist - Ratification of expenditure.

PAC approved the project proposal with a maximum eligible subsidy of Rs. 6.00 lakhs and ratified the release of Rs 6.00 lakhs for the project.

5. Approval of Project proposal for establishment of Copra Making unit at Vettom, Tirur, Malappuram Dist - Ratification of expenditure.

PAC ratified the approval of project proposal with a maximum eligible subsidy of Rs. 6.00 lakhs.

6. Approval of Project proposal for establishment of Copra Making unit at Punnassery, Kozhikode Dist. - Ratification of expenditure.

PAC ratified the approval of project proposal with a maximum eligible subsidy of Rs. 6.00 lakhs and ratified release of Rs. 3.00 lakh in 1st installment.

7. Approval of Project Proposal “Control of Slug Caterpillar in Krishnagiri Dist. of Tamil Nadu” – Ratification of expenditure.

PAC approved the project proposal at a total cost of Rs. 74.98 lakh with Board’s share being Rs. 14.83 lakh for a period of 6 months and ratified the release of 1st installment of Rs. 4.94 lakh (Rupees Four lakh ninety four thousand only) for the project.

8. Performance evaluation of elite seedlings in Farmers fields of Alappuzha and Kollam districts - Kerala Agricultural University - Extension of project period – Ratification.

PAC ratified the extension of project period up to 14.5.2014 for completing and submitting the final report of the project.

9. Identifying the pheromone synergists of coconut red palm weevil *Rhyncophorus ferrugineus* – CPCRI, Kasargod - Extension of project period – Ratification.

PAC ratified the extension of project period up to 05.06.2014 for completing and submitting the final report.

10. Development of concentrated extract of Vyosakatvivaradi (VKV) formulation in VCO and evaluation of its genotoxic and carcinogenic effects – AVP Research Foundation, Ramanathapuram, Coimbatore - Extension of Project period – Ratification.

PAC ratified the extension of project period up to 12.09.2014 for completing and submitting the final report.

11. Proposal for fund requirement for the period from April 2014 to March 2015 for Quality Testing Laboratory (QTL), CDB at Vazhakulam.

The Chairman asked Director (Dev.) and Processing Engineer, CIT why the NABL accreditation of the QTL has expired and why Processing Engineer has not initiated timely action for renewal of NABL accreditation. It is a case of clear lapse from QTL side and Chairman expressed his dissatisfaction over this. However PAC approved the proposal of Rs. 35.00 lakh for the year 2014-15 subject to re-accreditation of the lab by NABL at the earliest. The expenditure of Rs. 7.82 lakh incurred during 2013-14 was ratified.

Other Decisions:

1. PAC decided that in future those Coconut Processing units manufacturing food items coming for assistance under TMOC must adhere to Food Safety Act and Regulations thereunder and get FSSAI certification.
2. The units with project cost more than 50.00 lakhs should be registered as Private Limited Company.
3. Dr Anilkumar, R, Asst. Agricultural Marketing Adviser, Regional Office, DMI, Kochi (Representative Member of the Directorate of Marketing and Inspection (DMI), Ministry of Agriculture, Govt. of India) informed the PAC that they have the scheme for supporting for infrastructure development in processing sector under their scheme "Agricultural Marketing Infrastructure for Storage or other Marketing Infrastructure".

Chairman pointed out that Coconut Processing units can avail benefit of the scheme of Directorate of Marketing & Inspection, especially for infra structure creation. CDB would discuss the mode of operation with DMI and NABARD.

M/s. Palakkad Coconut Producer Co. Ltd (PCPCL), Muthalamada who have submitted project for "Setting up of a Cold Chain and Sales Outlets for Selling Neera in Palakkad District and Surrounding Urban Centres" for funding under TMOC have been advised to approach DMI under the above scheme.

The meeting concluded by 8.30 PM with a vote of thanks.

Dr. K.Muralidharan
Director

List of Participants

Sl. No.	Name and Address
A	PAC MEMBERS
1	Shri. T.K. Jose IAS Chairman, Coconut Development Board PAC Chairman
2	Dr. V. Krishna Kumar Head, CPCRI (R.S) Kayamkulam <u>Representative of</u> Assistant Director General (Plantation crops) Indian Council of Agriculture Research (ICAR), Krishi Anusandhan Bhavan –II, Pusa, New Delhi-110 012
3	Sri. V.V. Pushpangadhan, Additional Director of Agriculture(Crop Production) Department of Agriculture, Government Secretariat, Thiruvananthapuram <u>Representative of</u> Secretary (Agri), Govt. of Kerala Thiruvananthapuram
4	Dr. Anilkumar R, Asst. Agricultural Marketing Adviser, Directorate of Marketing & Inspection (DMI), Regional Office, Block 'A', 6 th floor, Kendriya Bhavan, Kakkanad, Kochi – 682 037. <u>Representative of</u> Joint Secretary & Agricultural Marketing Adviser to Govt. of India, Room No.237, Krishi Bhavan, New Delhi.
5	Dr. K.S.M.S Raghavrao, Chief Scientist, Deptt. of Food Engg., Central Food Technological Research Institute, Mysore.
6	Sri.Jayapher, AGM, Indian Overseas Bank, Regional Office, M.G Road, Ernakulam- 682 016 <u>Representative of</u> Chief General Manager, Indian Overseas Bank, Bangalore city Branch, Gandhi Nagar, Bangalore
7	Shri.Sugata Ghose, Chief Coconut Development Officer, Coconut Development Board, Kochi

B	INVITED EXPERTS
10	Dr. M. Aravindakshan Former Chairman, CDB Coordinator, Centre for Environmental Studies Amrita Viswa Vidyalpeetham University, Coimbatore
11	Shri. C.R. Vijayakumar Consultant 40/2, Jain Temple Street Visweswara Puram, Bangalore – 560 004
C	In Attendance
12	Dr. K. Muralidharan, Director, Coconut Development Board, Kochi
13	Shri. Sreekumar Poduval Processing Engineer, CDB, Kochi
14	Sri. S.S.Choyal Asst. Director, CDB, Kochi
15	Smt. Resmi. D. S. Technical Officer, Coconut Development Board, Kochi

Proceedings of the 43rd meeting of Project Approval Committee (PAC) of Technology Mission on Coconut held at Kochi on 18th September, 2014

The 43rd meeting of the Project Approval Committee (PAC) on Technology Mission on Coconut (TMOC) was held in the Board Room of Coconut Development Board, Kochi on 18th September, 2014. Shri T.K. Jose IAS, Chairman, Coconut Development Board and Chairman PAC chaired the meeting. The list of participants is enclosed.

At the outset, Chairman welcomed the members of PAC and experts to the meeting. In his introductory remarks Chairman briefed about the present scenario of Coconut prices and he stated that the Coconut Processing units are affected by the price fluctuations. He also pointed out the various possibilities and avenues available for value addition in coconut sector especially Neera and value added products from Neera.

After the introductory remarks agenda items were taken up.

AGENDA No. 1: Confirmation of the Proceedings of 42nd Project Approval Committee Meeting held on 22nd April, 2014

The Committee confirmed the proceedings of the 42nd Project Approval Committee Meeting.

AGENDA No. 2: Action taken report on decisions of the 42nd PAC Meeting

The committee perused the action taken on the decisions of the 42nd meeting of the Project Approval Committee.

AGENDA No. 3: Approval of new project proposals:

1. Development of Secondary metabolite based biocide for control of Red Palm Weevil (*Rhynchophorus ferrugineus*) infesting Coconut Plantations – M/s. Camson Biotechnologies, Bangalore

The objective of the project is to develop a non-chemical, zero residue and effective secondary metabolite based biocide against Red palm weevil.

The project was presented by the Principal Investigator Dr. Nisha M, Scientist (Biocide Division) Research and Development Unit of Camson Biotechnologies, Bangalore. After detailed discussions, PAC opined that Toxicological studies are of recurring nature that may be included in the recurring expenses and Non-recurring expenses should be met by the implementing agency.

However, PAC has approved the project in principle and advised the P.I. to revise the budget as discussed above and resubmit for Chairman's approval.

2. Evaluation of the Nutritional and Medicinal properties of Neera and Neera Products - Amrita School of Pharmacy, Kochi

The objective of the project is to evaluate the medicinal and nutritional properties of Neera, Neera Sugar and Neera Honey.

The project was presented by the Principal Investigator Dr. Sabitha M, Principal, Amrita School of Pharmacy, Kochi. Dr. D.M.Vasudevan, Expert member of PAC, opined that this project should be considered as a pre-clinical study and clinical trials may be taken up as a second phase of the study.

After detailed discussions, PAC approved the project at a total cost of Rs 79.35 lakhs, with the Boards share being Rs.34.00 lakhs.

3. Virgin Coconut Oil as a Neuro Regenerative agent for Alzheimer's disease- Computational analysis Pharmacogenomic study – Computational Engineering and Networking Amrita Vishwa Vidyapeetham, Coimbatore.

The objective of the project are: Identification and characterization of genes and proteins responsible for Alzheimer's disease (AD), Identification of phytochemicals present in virgin coconut oil and study their pharmacophoric effect on neuro regenerative activity, to study the influence of coconut oil in the pharmacophoric binding of phytochemicals on AD targets, to study the effect of metabolites generated from phytochemicals of virgin coconut oil on controlling the AD targets, to study the genetic signature behind proneness of the disease as well as the susceptibility of the identified potential ligand molecules to control the disease, to conduct pharmacokinetic and pharmacodynamic study on the potential ligands identified and to study the possibility of identifying templates/potential drugs derived from the potential ligands present in Virgin coconut oil.

The project was presented by the Principal Investigator Dr. P. K. Krishnan Namboori, Associate Professor, Computational Engineering and Network, Amrita Vishwa Vidya Peetham, Coimbatore. The PAC appreciated the initiative taken up for the present study and suggested that this study may be linked with AIMS, Kochi and synergise the project.

After detailed discussions PAC suggested that the budget of the project has to be reworked and the cost is to be shared between CDB and Amrita Vishwa Vidya Peetham, Coimbatore on a 50:50 share basis subject to a maximum ceiling of Rs.35.00 lakhs from CDB. PAC has approved the project in principle and has authorized Chairman, CDB to sanction the project as and when revised project is received.

4. Effect of Virgin coconut oil as a Dietary supplement on lipid profile and oxidative stress in dislipidemic individuals with Low High density lipoproteins [HDL] – Amrita Institute of Medical Sciences, Kochi

The project was presented by the Principal Investigator Dr. M.Vijayakumar, Prof of Cardiology, AIMS, Kochi.

The **Primary** objectives of the project are to assess the HDL raising and LDL lowering property of Virgin coconut oil, to assess the antioxidant properties of virgin coconut oil, to assess the influence of virgin coconut oil on Apolipoproteins. The P.I. informed that the **Secondary objectives would include** assessment of the effect of virgin coconut oils on Diabetes and inflammatory markers also.

The PAC opined that Investigators fee and over head charges may be excluded from the project and salaries of Research fellow may be regulated in accordance with ICMR guidelines and budget revised accordingly showing share of CDB and AIMS, Kochi. CDB's share is 50% of the project cost with a ceiling of Rs.35.00 lakhs. However the PAC was of the opinion that VCO required for the studies may be supplied by the Board.

After detail discussion the project was approved in principle and PAC authorized Chairman to approve the project after receiving the revised budget as per the above suggestion of PAC.

5. Effect of fresh coconut in a balanced diet - a randomized comparative study – Swami Vivekananda Yoga Anusandhana Samsthana, Bangalore

The project was presented by Ms. Gouri Rokkam, Co-Principal Investigator of the study.

The objectives of the project is to investigate whether daily consumption of fresh coconut in a standardize Yoga based balanced diet impacts lipid profile, body mass, body composition, blood glucose, and inflammatory markers in healthy adults.

Dr. D.M.Vasudevan, Principal (Retd.), Amrita Institute of Medical Sciences, Kochi and expert member informed the PAC that though the consumption of raw coconut has been old tradition and stated as beneficial in ancient books as referred by the Co-P.I. but so far no scientific studies have been conducted. This could be the first such studies, however the Board has to see whether it could be supported under TMOC.

After detail discussion PAC opined that with the budget projected by the P.I. it is difficult to sponsor the study by CDB alone. However the Board and Swami Vivekananda Yoga Anusandhana Samsthana, Bangalore may approach jointly to ICMR for this study. Alternatively, the P.I. should talk with their management and submit a revised project where all analysis charges are based on actual cost basis and not as per the commercial rates fixed by the SVYAS or on 50:50 share basis. In addition engagement of personnel are to be rationalized to minimum. Over head charges needs to be excluded from the project as it is joint work of the Institute and the Board. The PAC advised the Co-P.I. to discuss with the Deputy Director, CDB and revise the project. The PAC approved the project in principle and authorized the Chairman to approve the revised project as and when submitted by the Institute.

6. Coconut wood furniture making through training for self help groups (SHG) – College of Forestry, KAU, Thrissur

The objectives of the project is to set up a modern Coconut Wood Workshop-cum-Training Centre, installing advanced machineries for carving and manufacture of utility items such as furniture, interior decorative items, building materials, handicraft items etc., based on coconut wood and to market the finished products so as to popularize the use of coconut wood and to impart training in manufacture of the above items to self help groups (SHG) of unemployed youth.

The project was not found useful by the ISC for funding under TMOC but placed before PAC for consideration.

The PAC decided that P.I. may be invited to present the project before next PAC.

7. Proposal for FSSAI Certification for the Coconut Neera Pilot Plant and Operation on a Self sustainable Basis - Coconut Development Board, Institute of Technology, Vazhakulam.

The objective of the project is to obtain FSSAI certification for the coconut neera pilot plant and to operate the pilot plant on a self-sustainable basis.

The project was presented by Principal Investigator Mr. Sreekumar Poduval, Processing Engineer, CIT, Vazhakulam

The PAC after detailed discussion approved the project allowing Non-recurring expenses of the project fully and limiting recurring expenses only to Rs.7.00 lakhs for two months i.e., October and November, 2014. Non-recurring expenses based on written recommendations of FSSAI consultant may be included in the project and all works should be completed within 3 months. The PAC approved the project in principle and authorized Chairman to approve the revised project.

8. Setting up of Neera Processing and packing unit and Neera based Value Addition Unit - M/s. Ananthapuri Coconut Producers Company Ltd (ACPCL) 845, Oottiyarathala, 2, Thalayal, Aralummodu – PO, Trivandrum, Kerala.

The project was presented by the company Directors Shri Wilfredson Vedanayagam Jemy and Shri Y. Joseph. The objective of the project is to set up a neera processing unit to process 9000 litres neera and pack as a nutrition drink and to convert 2000 litre raw neera into palm jaggery and palm sugar per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(` in lakhs)		
Land & Land Dev	101.00	-	-
Building & Civil works	138.00	138.00	34.50
Plant & Equipments	268.00	268.00	67.00
Electrical installation	15.00	15.00	3.75
Preliminary & Pre op. expenses	25.00	4.21	1.05
Working Capital margin	203.00	-	-
TOTAL	750.00	425.21	Limited to 50.00 lakhs

After detail discussion, PAC stated that equity of the company should be above one crore. PAC advised the CIT Vazhakulam team to redesign the plant with a capacity to process 2500 litres of neera per shift so that two shifts can be operated and in the lowest possible expenditure processing of neera can be done by the CPCs.

The PAC approved the project in principle subject to the condition that equity should be mobilised to one crore and neera technician training expedited so that trained technicians are available in accordance to the number of palms expected to be tapped. The PAC authorised Chairman to approve the project as and when documents as per TMOC norms are submitted and equity mobilisation and neera technician training is expedited.

9. Setting up of Neera Processing and packing unit and Neera based Value Addition Unit - M/s. Kasaragod Coconut Producer Co. Ltd (KCPCL), Door No. KKP/10/601, Pachudu Building, Thekke Bazar, Vellarikkundu Post, Parappa Via, Kasaragod, Kerala

The project was presented by Shri Baby M.P., Chairman, KCPCL, Kasargod. The objective of the project is to process 10,000 litres of neera for packing of nutritious drink and to making other value added product from neera.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(` in lakhs)		
Land (Lease)	...		
Building & Civil works (including ETP)	80.00	80.00	20.00
Plant & machinery	200.00	200.00	50.00
DG Set – 62.5 KVA	7.500	5.00	1.25
Refrigerated vans	10.00	-	-
Electrical installation	15.00	15.00	3.75
Laboratory equipments	1.00	1.00	0.25

Technical know how & consultancy	1.00	1.00	0.25
Furniture & fittings	2.00	-	-
Preliminary & Pre op. expenses	6.00	3.02	0.78
Working Capital margin	127.50	-	-
TOTAL	450.0	305.02	Limited to 50.00 lakhs

The PAC after detailed discussion approved the project in principle and authorized Chairman, CDB to approve the proposal subject to submission of required document as per TMOC norms.

10. Neera Marketing by Cold Chain - Muthalamada Federation of Coconut Producer Societies, Oorkulamkavu, Muthalamada Govindapuram P.O., Palakkad – 678507, Kerala

The project was presented by Sri Vinod Kumar, Chairman, PCPCL, Palakkad. After presentation of the project PAC appreciated the efforts made by the Federation for benefiting the farmers by providing an income of Rs.3500 - 4500 per tree per month for the neera produced and Rs.20,000 - 25,000 per month to neera technician.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(` in lakhs)		
Land	lease	-	-
Building- Alteration & Renovation works in AC Sheet Roof & RCC Roof Building	12.25	12.25	3.06
Plant & Equipments	53.57	53.57	13.39
Laboratory & Storage equipments	8.00	8.00	2.00
Logistics & Installation	2.00	2.00	0.50
Miscellaneous	1.00	-	-
Preliminary & Pre op. expenses	2.00	0.75	0.19
TOTAL	78.82	76.57	19.14

After detail discussion PAC decided that the objective of the project is production of 6000 litres of neera per day by using CPCRI technology and market the product in its natural condition by cold chain process.

The PAC advised the P.I. to revise the title and objective of the project suitably and approved the project in principle authorizing the Chairman to approve the revised project as and when received and documents as per TMOC norms are submitted.

11. Setting up of a Desiccated Coconut Powder Unit at Palakkad Dist - M/s. Nanma Coconut Industries, Thiruvizhamkunnu, Palakkad Dist, Kerala

The objective of the project is setting up of a desiccated coconut powder manufacturing unit with a capacity to process 15,000 coconuts per day for producing 1.50 MT desiccated coconut powder per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(` in lakhs)		
Land	Own		
Building & Civil works (4081 sq.ft.)	46.60	34.81	8.70
Plant & Equipments	55.60	53.20	13.30
Washing & blanching system including steam boiler	9.10	9.00	2.25
ETP	4.00	4.00	1.00
Electrification	3.00	3.00	0.75
Generator	7.50	5.00	1.25
Laboratory equipments	2.00	2.00	0.50
Office equipments	1.48	-	-
Pre op. expenses	2.00	1.11	0.28
Working Capital	12.72	-	-
TOTAL	144.00	112.12	28.03

The project was approved with an eligible subsidy of Rs 28.03 lakhs. The PAC advised the promoter to convert the unit into Private Limited Company.

12. Expansion, Modernisation and Technology Upgradation of Existing Desiccated Coconut Powder unit - M/s. Poojary Products, Sy. No. 29/2A Eachanur, Kasaba Hobli, Tiptur, Karnataka

The objective of the project is expansion, modernization and Technology upgradation of existing desiccated Coconut powder making unit from its capacity of 4.00 MT per day to 7.00 MT per day i.e., for processing of 70,000 nuts per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(` in lakhs)		
Land	Own	-	-
Building & Civil works	59.50	50.00	12.50
Plant & Equipments	57.35	57.35	14.34
Preliminary & Pre op. expenses	2.09	1.07	0.26
Working Capital margin	6.06	-	-
TOTAL	125.00	108.42	27.10

The project was approved with an eligible subsidy of Rs 27.10 lakhs. However the PAC asked the promoter to submit audited statements and production details of the existing unit for the last three years. The PAC advised the promoter to convert the unit in to a Private Limited Company.

13. Setting up of a Desiccated Coconut Powder Manufacturing Unit at Puthur, Thrissur – M/s. K. P. Shudh Coconut Products, Door No. 4/276/A, Pulinchode, Post – Vettukad, Thrissur, Kerala

The objective of the project is setting up of a desiccated coconut powder manufacturing unit with a capacity to process 10,000 coconuts per day for producing 1.00 MT desiccated coconut powder per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(in lakhs)		
Land	Own	-	-
Building & Civil works	35.00	13.20	3.30
ETP	2.00	2.00	0.50
Plant & Machinery	29.50	28.36	7.09
Electrification	2.00	1.30	0.33
Generator	3.50	3.50	0.87
Furniture & office equipments	1.70	-	-
Preliminary & Pre op. expenses	1.50	0.48	0.12
Working Capital margin	4.80	-	-
TOTAL	80.00	48.84	12.21

The project was approved with an eligible subsidy of Rs 12.21 lakhs. The promoter was advised to convert the unit into a Private Limited Company.

14. Setting up of a Desiccated Coconut Manufacturing Unit - M/s. Sri Sai Ram Agro Tech, Sl. No. 9013, 90/10 Harisamudra, Halkurke Road, Tiptur Tq. , Tumkur Dist, Karnataka

The objective of the project is setting up of a desiccated coconut powder manufacturing unit with a capacity to process 40,000 coconuts per day for producing 4.00 MT desiccated coconut powder per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(in lakhs)		
Land	...	-	-
Building & Civil works	60.00	56.21	14.05
Plant & Equipments	67.40	66.59	16.65
Electrical installation	3.00	-	-
Preliminary & Pre op. expenses	1.25	1.22	0.30
Working Capital margin	8.89	-	-
TOTAL	140.54	124.02	31.00

The project was approved with an eligible subsidy of Rs.31.00 lakhs. The promoter was advised to convert the unit into a Private Limited Company.

15. Modernisation of the existing Desiccated Coconut Powder Unit - M/s. Century Coco Products, 7/175 B, Manassery Post , Muthalam, Kozhikode, Kerala.

The objective of the project is expansion and modernization of existing desiccated coconut powder manufacturing unit to process 15,000 coconuts per day for producing 1.50 MT desiccated coconut powder per day from present production capacity of 0.20 MT per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(in lakh)		
Land	Leased	-	-
Building : Existing renovation for 1000 sq.ft. - 4.0 : New for 2000 sq.ft.- 14.0 ETP - 8.15 (limited to Rs.5.0 lahs)	26.15	23.00	5.75
Plant & Equipments	100.49	81.69	20.42
Furniture & office equipments	1.30
Pre op. expenses	2.00	1.04	0.26
Working Capital margin	14.81
TOTAL	144.75	105.73	26.43

The project was approved with an eligible subsidy of Rs 26.43 lakhs. The promoter was advised to convert the unit into a Private Limited Company.

16. Setting Up of a Manufacturing Unit of Desiccated Coconut Powder – M/s. Prominent Nucifera, 4/534, Churakkapallam, Vengodi, Palakkad Dist, Kerala

The objective of the project is setting up of a desiccated coconut powder unit to process 10,000 coconuts per day for manufacturing of 1.00 MT desiccated coconut powder per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(` in lakhs)		
Land & Land Dev.	-	-	-
Building & Civil works	35.00	28.28	7.07
Plant & Equipments	51.50	50.44	12.61
ETP	4.55	3.50	0.88
Bio Gas Plant	2.10	2.10	0.52
Electrification	2.50	2.23	0.56
Generator	4.70	4.68	1.17
Storage equipments (racks, almirahs etc)	2.60	-	-
Preliminary & Pre op. expenses	1.20	0.91	0.22
Working Capital margin	10.85	-	-
TOTAL	115.00	92.14	23.03

After detail discussion PAC decided to include the biogas plant also in the eligible project cost and eligible subsidy. After inclusion of biogas plant and recalculation of various components the PAC approved the project with an eligible project cost of Rs. 92.14 lakhs and with maximum eligible subsidy of Rs.23.03 lakhs. The PAC advised the promoter to convert the unit into a Private Limited Company.

17. Setting up of a Virgin Coconut Oil Manufacturing Unit at Pollachi - M/s. GNK Agro Products, No. 14 Sakthi Co-operative Industrial Estate Ltd, Pollachi, Tamil Nadu

The objective of the project is setting up of a Virgin coconut oil unit to process 5,000 coconuts per day for making 300 litres of Virgin coconut oil per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(` in lakhs)		
Land	lease	-	-
Building- Alteration & Renovation works in AC Sheet Roof & RCC Roof Building	24.60	24.60	6.15
Plant & Equipments	61.83	52.01	13.00
Technical know-how	0.60	0.56	0.14
Laboratory & Storage equipments	2.20	-	-
Preliminary & Pre op. expenses	2.50	0.77	0.19
Working Capital margin	1.55	-	-
TOTAL	93.28	77.94	19.48

The project was approved with an eligible subsidy of Rs 19.48 lakhs. The promoter was advised to convert the unit into a Private Limited Company.

18. Setting up of a Virgin Coconut Oil Manufacturing Unit and Value Added Ayurvedic Products with base as VCO - M/s. Pranathmaka Ayurvedics Pvt. Ltd, Kinfra Park, Elamannur, Adoor, Pathanamthitta Dist, Kerala

The objective of the project is setting up of Virgin coconut oil unit to process 10,000 coconuts per day for making of 600 litres of Virgin coconut oil per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(` in lakhs)		
Land	Lease	-	-
Land dev.	1.85		
Compound wall	4.75	-	-
Building & Civil works	59.27	49.00	12.25
Plant & Equipments	93.64	51.55	12.88
Technical know-how	0.60	0.56	0.14
Generator	7.50	4.95	1.24
Dehydrator	5.25	5.25	1.31
Electrification	5.39		
Laboratory & storage equipments	2.00	-	-
Preliminary & Pre op. expenses	2.00	1.11	0.27
Working Capital margin	16.00	-	-
TOTAL	198.25	112.42	28.09

After detail discussion PAC decided to include the cost of Dehydrator also in the eligible project cost and eligible subsidy. After inclusion of Dehydrator and recalculation of various components, the PAC approved the project with an eligible project cost of Rs. 112.42 lakhs and eligible subsidy of Rs.28.09 lakhs.

19. Setting up of Preservation and Packing of Tender Coconut Water unit at Palakkad - M/s. Agricoles Naturel Foods Pvt Ltd, 62, Gitanjali Heavently Villas, Kuttur – Post, Thrissur, Kerala

The objective of the project is setting up of a unit to process 15,000 coconuts per day for manufacturing Packaged Tender Coconut Water.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(` in lakhs)		
Land (96 cents)	10.20
Building (490.62 m ²)	91.00	48.00	12.00
Plant & Machinery	85.00	85.00	21.25
Technical know-how	3.90	3.72	0.93
Electrification	10.00
ISO-22000/ISO-Certifications	3.00

Furniture & Office equipments	1.90
Preliminary expenses	6.00	1.36	0.34
Working Capital margin	19.00
TOTAL	230.00	138.08	34.52

The project was approved with an eligible subsidy of Rs 34.52 lakhs.

**20. Setting up of Tender Coconut Water Preservation and Packaging unit –
M/s. Kumar Enterprises, Plot No. 1, Block No. 758, Atul Vasad Road, Parnera,
Valsad, Gujarat**

The objective of the project is setting up a unit for processing of 5000 tender coconuts per day for preservation and packaging of Tender coconut water.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(` in lakhs)		
Building & Civil works including Aluminum Section	16.08	16.05	4.01
Plant & Equipments	47.47	47.47	11.87
Automatic Sticker Labelling Machine	2.83	2.83	0.70
Electrical installation	2.00	1.51	0.37
Exhaust Fan	0.53	-	-
TV Surveillances system	0.61	-	-
Lab Equipments & Heat Monitoring system	2.00	2.00	0.50
Commercial Vehicle	4.66	-	-
Know- how fee	3.93	3.93	0.98
Contingency	0.63	-	-
Pre op. expenses	5.50	0.73	0.18
Working Capital margin	13.00	-	-
TOTAL	97.24	74.52	18.61

After detail discussion PAC accepted the request of the promoter to include the cost of Automatic Sticker Labelling Machine also which was purchased after submission of the DPR to the Board. After inclusion of Automatic Sticker Labelling Machine and recalculation of various components, the PAC approved the project with an eligible project cost of Rs.74.52 lakhs and eligible subsidy of Rs.18.61 lakhs. The promoter was advised to convert the unit into a Private Limited Company.

21. Setting up of a Fully Mechanised Coconut Shell Powdering unit - M/s. Sellas Agro Industries, , RSF- 82/4, Kommakkovil, Perundurai Block, Thenmugam Vellode Village, Perundurai RS Post, Erode Dist, Tamil Nadu

The objective of the project is establishment of a unit for manufacturing of coconut shell powder with a capacity of 20 MT per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(` in lakhs)		
Land & land Dev.	18.04	-	-
Building & Civil works	39.00	30.74	7.68
Plant & Equipments	109.17	107.30	26.82
Electrical installations	7.90	6.84	1.71
Furniture & fittings	1.05	-	-
Pre op. expenses	2.50	1.44	0.36
Working Capital margin	9.58	-	-
TOTAL	187.24	146.32	36.57

The project was approved with an eligible subsidy of Rs.36.57 lakhs. The promoter was advised to convert the unit into a Private Limited Company.

22. Setting up of Coconut Shell Powder Manufacturing unit - M/s. Sri Laaxmi Agro Product, 3/334-A, Madurakadu, Kuppanur Post – 637 301, Sankagiri Tk., Salem Dist, Tamil Nadu

The objective of the project is to establish a unit for processing of Coconut Shell for manufacturing of 16 MT shell powder per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(` in lakhs)		
Land	Own
Building & Civil works	40.35	27.88	6.97
Plant & Equipments	80.00	80.00	20.00
Furniture & fittings	1.65
Electrical installation	5.00
Pre op. expenses	5.00	1.07	0.26
Working Capital margin	8.00
TOTAL	140.00	108.95	27.23

The project was approved with an eligible subsidy of Rs.27.23 lakhs. The promoter was advised to convert the unit into a Private Limited Company.

23. Expansion of Existing Granulated Coconut Shell Charcoal unit for By-product Utilisation for the Production of Coconut Shell Charcoal Briquettes – M/s. Guru Raghavendra Char Products, Sy. No. 109/6/b, Y.T. Road, Saraswathi Nagar, Goragondanahalli, Tiptur, Karnataka

The objective of the project is to establish a unit to utilise waste shell carbon powder received in manufacturing of Coconut shell Charcoal for making Charcoal Briquettes with a capacity of 10 MT briquettes per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(₹ in lakhs)		
Land	Lease	-	-
Building & Civil works	15.00	12.70	3.17
Plant & Equipments	49.00	40.59	10.15
Preliminary & Pre op. expenses	1.00	0.53	0.13
Working Capital margin	4.00	-	-
TOTAL	69.00	53.82	13.45

The project was approved with an eligible subsidy of Rs.13.45 lakhs. The promoter was advised to convert the unit into a Private Limited Company.

24. Setting up of a Ball Copra Making unit – Shri. Pedamallu Venkata Ramanayya, S/o. Venkata Ratnam, D. No. 2-135, Pasarlupudilanka, Mamidikuduru Mandal, E.G. Dist, Andhra Pradesh

The objective of the project is to process 4.00 lakhs coconut per year to make ball copra.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(₹ in lakhs)		
Land	Own	-	-
Platform Dryer	12.00	12.00	3.00
TOTAL	12.00	12.00	3.00

The project was approved with an eligible subsidy of Rs.3.00 lakhs.

25. Setting up of a Ball Copra Making unit - Shri. Mriduljith C.I., Moolente Parambath Boda Making unit, Moolente Parambath House, Karandode Post, Kuttiady Via, Kozhikode Dist

The objective of the project is to process 1.60 lakhs coconuts per year for making ball copra.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(₹ in lakhs)		
Land	Own	-	-
Platform Dryer	30.00	19.60	4.90
Vessels, furniture, weighing machine	0.50	-	-
Working Capital margin	5.50	-	-
TOTAL	36.00	19.60	4.90

The project was approved with an eligible subsidy of Rs.4.90 lakhs.

26. Setting up of a Ball Copra Making Unit - Smt. Bhavaraju Manorama, W/o Suryaprakasa Rao, B. Doddavaram – 533 247, Mamidikuduru Mandal, East Gadavari Dist, Andhra Pradesh

The objective of the project is to process 8.00 lakhs coconuts per year for making ball copra.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(₹ in lakhs)		
Land	0.30
Land dev.			
Platform Dryer	14.70	14.70	3.67
Pre op. expenses	0.30
Working Capital	10.00
TOTAL	25.30	14.70	3.67

The project was approved with an eligible subsidy of Rs.3.67 lakhs.

27. Setting up of a Copra Making Unit at Beemanady, Kasaragod Dist. – M/s. Beemanady Mayoore Federation of Coconut Producer's Societies, Beemanady Post, Nileswaram Via, Kasaragod

The objective of the project is to process 3.00 Million nuts per year (10,000 nuts per day) for making copra.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(₹ in lakhs)		
Land	Leased	-	-
Building & civil works	12.00	12.00	3.00
Plant & Equipments	13.00	13.00	3.25
Pre op. expenses	1.00	0.25	0.06
Working Capital	4.00	-	-
TOTAL	30.00	25.25	6.31

The project was approved with an eligible subsidy of Rs.6.31 lakhs.

28. Setting up of an Integrated Coconut Processing Unit for Production of VCO & D.C. at KSIDC, Kuthuparamba, Kannur Dist - M/s. Livendo, PP-142/X, MLA Road, Panunda, Post – Eruvatty, Kannur, Kerala

The objective of the project is to establish a unit for processing of 20,000 nuts for making 1200 litres Virgin coconut oil and processing of 20,000 nuts for making 2.00 MT desiccated coconut powder per day

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(` in lakhs)		
Land	20.00	-	-
Building & Civil works	40.00	40.00	10.00
Plant & Equipments	110.00	110.00	27.50
Furniture & Fittings	5.00	-	-
Preliminary & Pre op. expenses	10.00	1.50	0.38
Working Capital	50.0	-	-
TOTAL	235.00	151.50	37.88

The project was approved with an eligible subsidy of Rs.37.88 lakhs. The promoter was advised to convert the unit into a Private Limited Company.

Other Items

1. Project for Setting up of a Coconut Processing unit at Chathamangalam, Kozhikode Dt by The Kozhikode Sahakarana Marketing Society Ltd. Chathamangalam, Kozhikode Dt.

The project was approved by 28th PAC held on 07.10.2008 for setting up of a coconut processing unit at Chathamangalam, Kozhikode, Kerala for processing of 20,000 coconuts per day for production of milling copra and to process 3 tons of copra per day for production of coconut oil and to process 1000 litres of coconut water per day for making vinegar.

Since then the project was pending, as only one of the three components i.e. installation of copra dryer could be completed by the Society due to financial hardship. While reviewing the pending projects it was decided that oil and vinegar should be excluded from the project and as per actual expenditure final subsidy could be regularized.

As decided, the society was instructed to submit the actual expenditure details and documents were submitted by them. Accordingly the recalculation of subsidy was done and placed before PAC for approval for release of balance subsidy of Rs.17,650/-.

The after detail discussion PAC approved the decision for regularizing the subsidy.

- 2. M/s. Global Associates, Manjeshwar, Badaje, Kasargod has submitted a project proposal for Setting up of Packed Tender coconut water unit at a total cost of Rs.110.40 lakhs – For information of PAC**

The 39th PAC approved the project subject to submission of necessary details. Accordingly details were submitted by the promoter and the project was approved by Chairman and as decided by the 39th PAC submitted for ratification of PAC.

The PAC ratified the decision taken by the Chairman.

- 3. Project “Generation of xylooligosaccharides from green coconut husk for augmenting gut health and function – National Institute of Animal Nutrition and Physiology, Bangalore - Extension of project period- Ratification.**

PAC ratified the extension of project period up to 30.04.2015.

- 4. Large scale procurement of seed nuts from superior dwarf by screening and identification in Southern Zone of Kerala - Extension of project period - KAU, Vellanikkara**

The objective of the project was screening and identification of superior dwarf mother palms and procurement of 30,000 seednuts from these identified mother palms during the project period 06.06.2011 and 06.06.2014.

Against the target of 30,000 seednuts, only 6349 seednuts could be procured during the project period. Reasons for delay in the project were attributed to administrative delay in the offices of KAU and internal issues within KAU.

After detailed discussions, PAC noted that even by granting an extension of one year, the final deliverables of the project are not likely to be achieved. As such no purpose will be served by giving another extension. Therefore, the PAC advised to wind up the project as of now and KAU may be requested to refund the unspent balance.

Other Decisions:

1. All the units with project cost more than 50.00 lakhs may be advised to convert their units into a Private Limited Company.
2. TMOC cell should ask all the units to submit their monthly production details till completion of the project regularly.

3. Expert member and former Chairman of CDB Dr. M. Aravindakshan opined that Quality Testing Laboratories of the Board may not be restricted to testing of only coconut products but it may be promoted for testing of all the agricultural food materials including pesticide residue tests.

After detail discussion the PAC decided that expert member Dr. M. Aravindakshan may visit the CIT, Vazhakulam and submit a feasibility report.

The meeting concluded by 8.30 PM with a vote of thanks to and from the Chair.

Chief Coconut Development Officer

List of Participants

Sl. No.	Name and Address
A	PAC MEMBERS
1	Shri. T.K. Jose IAS Chairman, Coconut Development Board Kochi, PAC Chairman
2	Dr. A.G. Gopalakrishna Scientist, Department of Lipid Science & Traditional Foods CFTRI (CSIR), Mysore <u>Representative of</u> Director, Central Food Technological Research Institute (CFTRI), Mysore
3	Dr. V. Krishna Kumar Head, CPCRI (RS), Kayamkulam <u>Representative of</u> Assistant Director General (Plantation Crops) Indian Council of Agriculture Research (ICAR), Krishi Anusandhan Bhavan –II, Pusa, New Delhi-110 012
4	Dr. P.Ushamani AGM, NABARD, Regional Office, Thiruvananthapuram <u>Representative of</u> Chief General Manager, Technical Services, NABARD, Mumbai
5	Dr. Anilkumar R, Asst. Agricultural Marketing Adviser, Directorate of Marketing & Inspection (DMI), Kochi <u>Representative of</u> Joint Secretary & Agricultural Marketing Adviser to Govt. of India, New Delhi.
6	Shri. Mathew N.M. Chief Manager, Indian Overseas Bank, MG Road, Ernakulam. <u>Representative of</u> Chief General Manager, Indian Overseas Bank, Bangalore City Branch, Gandhi Nagar, Bangalore

7	Shri. Sugata Ghose, Chief Coconut Development Officer, Coconut Development Board, Kochi
B	EXPERTS
1	Dr. M. Aravindakshan Former Chairman, CDB and Coordinator, Centre for Environmental Studies Amrita Vishwa Vidya Peetham University, Coimbatore
2	Dr. D.M. Vasudevan Principal (Retd.), Amrita Institute of Medical Sciences, Kochi
C	In Attendance
1	Dr. A.K. Nandi Secretary, CDB, Kochi
2	Shri. Hemachandra Deputy Director (Mkg), TMOC Incharge, CDB, Kochi
3	Shri. Sreekumar Poduval Processing Engineer, CDB, Kochi
4	Shri. P. Sabareenathan Finance Officer, CDB, Kochi
5	Shri. S.S. Choyal Assistant Director (TMOC), CDB, Kochi
6	Smt. Resmi. D. S. Technical Officer, CDB, Kochi

Proceedings of the 44th meeting of Project Approval Committee (PAC) of Technology Mission on Coconut held at Kochi on 20th January 2015

The 44th meeting of the Project Approval Committee (PAC) on Technology Mission on Coconut (TMOC) was held in the Board Room of Coconut Development Board, Kochi on 20th January 2015. Shri T. K. Jose IAS, Chairman, Coconut Development Board and Chairman PAC chaired the meeting. The list of participants is enclosed.

At the outset, Chairman welcomed the members of PAC thereafter agenda items were taken up.

AGENDA No. 1: Confirmation of the Proceedings of 43rd Project Approval Committee Meeting held on 18th September 2014

The Committee confirmed the proceedings of the 43rd Project Approval Committee Meeting.

AGENDA No. 2: Action taken report on decisions of the 43rd PAC Meeting

The committee perused the action taken on decisions of the 43rd meeting of Project Approval Committee and observed the following points.

- (1) The Action taken report must include a summary stating the number of projects sanctioned by previous PAC along with project cost and subsidy component, in how many projects procedure is completed and what actions are pending (if any).
- (2) Action taken report should be specific, to the point and with dates of each action taken.
- (3) PAC critically reviewed the progress of project of CIT, Vazhakulam for Neera Pilot Plant 2nd Phase “FSSAI Certification for Coconut Neera Pilot Plant and its Operation on a self sustainable basis” and noted that after approval, in spite of sufficient time the FSSAI certification could not be obtained. The Processing Engineer and PI informed that 70% of civil works are completed and the FSSAI Certification will be obtained within March 2015. The PAC recorded its displeasure and unhappiness in the way in which PAC decisions were implemented by Processing Engineer, CIT & PI of the project. PAC noted that way of doing the work of Project Engineer was very indifferent and passive.

AGENDA No. 3: Approval of new project proposals:

1. Coconut Water with Probiotic Properties and Value Addition for Rehydration & Balancing the Beneficial Gut Micro Flora – CSIR – Central Food Technological Research Institute (CFTRI), Mysore, Karnataka

Project Investigator could not present before PAC on health ground.

PAC directed to inform PI to revise the project in accordance with ISC decisions with project duration of 18 months. PI may present revised project in the next PAC.

2. Coconut wood furniture making through training for self help groups (SHG)- Dept. of Wood Science, College of Forestry, Kerala Agricultural University, Vellanikkara, Thrissur

The objectives of the project are as follows:-

- (1) To set up a modern Coconut Wood Workshop-cum-Training Centre, installing advanced machineries for carving and manufacture of utility items such as furniture, interior decorative items, building materials, handicraft items etc., based on coconut wood and to market the finished products so as to popularize the use of coconut wood.
- (2) To impart training in manufacture of the above items to self help groups (SHG) of unemployed youth.

The project was presented before PAC by the PI in detail. After detail discussion PAC decided that:-

- (1) This project could not be considered under Research Project, it could be considered under Training and Demonstration of Technology for making value added products from coconut wood.
- (2) Further the units established by the trainees of the centre could be assisted under adoption of technology for making value added products from coconut wood.
- (3) Centre could be helpful as demonstration plant for the candidates sponsored by the CPCs, CPFs and CPSs instead of SHG.
- (4) This Centre may also work in association with furniture cluster in Kerala and Furniture Consortium of Manufacturers of Wood items.

PAC felt it's a new and innovative idea and approved the project in principle under Technology Demonstration and Pilot Plant for Wood Furniture advising the PI to revise the project incorporating the above points and place in next PAC.

3. Studies on the uses of Coconut Water in Alzheimer's Disease (AD) – Metabolic Disorders Research Centre, Jagathy, Thiruvananthapuram

The objectives of the project are as follows:-

- (1) To carry out detail studies on the effect of coconut water in Alzheimer's patients attending the Metabolic Disorders Clinic of the center as compared to age, sex matched healthy controls.
- (2) Experimental animals in which AD has been induced by administration of Aluminium chloride will also be studied.
- (3) If the results of the studies are positive, it is planned to evolve a preparation from coconut water in a form which can be taken by the patients.

The project was presented before PAC by the PI in detail. After detail discussion PAC pointed out that:-

- (1) Project period is very long.
- (2) On clarification of ISC for key factor responsible for AD the PI informed that inositol is the key factor responsible for AD – PAC advised that PI may give reference for work on inositol.
- (3) PI may take up the project on VCO in 1st phase and then tender coconut water in 2nd phase.
- (4) Once the lab studies are over, project may be limited to animal studies and human studies may be taken up separately only after animal studies are completed and positive as a separate follow up project.

PAC decided that PI may change the title of the project by shifting emphasis on VCO and revise the project considering the above point of PAC, restricting the work on lab and animals studies and reducing the project period to 2 years.

4 Setting up of a Desiccated Coconut Powder manufacturing Unit - M/s. Global Food Products, N. S. Kalyana Mandapam, Padiyur (P.O), Kangayam Taluk, Tirupur District, Tamil Nadu

The objective of the project is setting up of a desiccated coconut powder manufacturing unit with a capacity to process 60,000 coconuts per day for producing 6.00 MT desiccated coconut powder per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakhs)		
Land	Own
Building & Civil works			
(a) New Construction	16.58	16.58	4.14
(b) Renovation of Building	17.59	17.59	4.40
(c) RO Plant	4.73	4.72	1.18
ETP	11.59	3.02	0.75
Plant & Equipments	131.00	125.79	31.45

Generator	11.20	5.00	1.25
Electrification	9.96	5.48	1.37
Furniture & office equipments	6.10
Preliminary & Pre op. expenses	5.00	1.78	0.44
Working Capital margin	33.25
TOTAL	247.00	179.96	44.98

The project was approved with an eligible subsidy of Rs. 44.98 lakhs. The PAC advised the promoter to convert the unit into a Private Limited Company.

5. Setting up of Virgin Coconut Oil Manufacturing Unit - M/s. Krishna Aura Coco Thyle Private Limited, 1/1 F3, Papanasam Road, Mela Ambur Village, Nr. Kila Ambur Railway Gate, Tirunelveli Dt., Tamilnadu

The objective of the project is setting up of Virgin Coconut Oil Manufacturing Unit for processing of 10,000 nuts per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakhs)		
Land	61.66	-	-
Building	36.90	36.90	9.22
Machinery	108.10	88.38	22.10
Know –how fee	0.60	0.56	0.14
Contingencies	10.00
Pre op. expenses	9.24	1.25	0.31
Working Capital	62.40
TOTAL	288.90	127.09	31.77

The project was approved with an eligible subsidy of Rs. 31.77 lakhs.

6. Setting Up of a Tender Coconut Water Preservation & Packing Unit at Andipalayam, Tirur Dist. - M/s. Ganesh Packing, 117 F, Thaneerpandal Road, BR Puram, Peelamedu, Coimbatore

The objective of the project is setting up of a Tender Coconut Water Preservation & Packing Unit with a capacity to process 5,000 coconuts per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakhs)		
Land	Lease	-	-
Building & Civil works - Renovation	20.35	20.35	5.08
Plant & Equipments	61.38	61.38	15.35

Technical know-how	3.90	3.71	0.93
ETP & Disposal system	2.65	2.65	0.66
Furniture & Office equipments	3.24
Preliminary & Pre op. expenses	1.00	0.88	0.22
Working Capital margin	6.80
TOTAL	99.32	88.97	22.24

The project was approved with an eligible subsidy of Rs. 22.24 lakhs. The promoter was advised to convert the unit into a Private Limited Company.

7. Setting up of a Tender Coconut Water & Value Added Products Unit - M/s. Zain Industrial Concern, Opp. Old Doons College, Karippol P.O., Malappuram Dist, Kerala

The objective of the project is Setting up of a Tender Coconut Water & Value Added Products Unit (Carbonated Tender coconut water in bottles), tender coconut Halwa and tender coconut Ice Cream with a capacity to process 3,000 tender coconuts per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakhs)		
Land	Leased
Building	Leased
Effluent Treatment system	1.00	1.00	0.25
Plant and Machinery	13.68	13.68	3.42
Electrification	0.45	0.44	0.11
Furniture & Office Equipments	0.25
Preliminary & Pre-Operative Expenses	0.10	0.10	0.02
Working Capital Margin	1.75
TOTAL	17.23	15.22	3.80

The project was approved with an eligible subsidy of Rs. 3.80 lakhs.

8. Setting up of an Activated Carbon manufacturing unit at Kallakinarpudur, Palladam Tirupur Dt, Tamilnadu - M/s. G.R. Carbon Pvt. Ltd., Office : 13(3) AB Towers, Police Line Street, Tirupur – Tamil nadu

The objective of the project is setting up of an Activated Carbon manufacturing unit for producing 6 MT Activated Carbon per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakhs)		
Land	Own	-	-
Building & civil works	90.00	90.00	22.50
Plant & Machinery	282.97	217.00	54.25
Generator	10.53	5.00	1.25
Electrification	16.92	12.50	3.12
Lab Equipments	7.59	7.59	1.89
Furniture & Equmt.	5.00
Working Capital margin	30.00
TOTAL	443.01	332.09	Limited to 50.00

The project was approved with an eligible subsidy of Rs. 50.00 lakhs.

9. Setting Up of a Coconut Shell based Activated Carbon manufacturing Plant at Perundurai, Tamil Nadu - M/s. SJN Energy Infrastructure Pvt.Ltd., H.O. - SNB-502, Shipra Neo, Indirapuram, Gaziabad – 201 014, U.P

The objective of the project is setting up of an Activated Carbon manufacturing unit for producing 16 MT Activated Carbon per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakhs)		
Land 5 acres	170.00
Site Development , Boundary Wall , Gate Road etc	27.00
Factory Building	551.40	180.00	45.00
Machinery	519.08	457.00	114.25
Pipe Fittings, ID Fan, Valves & Accessories	10.00
Laboratory Equipments	30.00	30.00	7.50
Technical know-how	65.00
Office furniture, Vehicles, equipments and other Misce. Assets	227.00
Preliminary & Pre op. expenses	40.00	6.67	1.66
Contingencies	50.00
Working Capital margin money	144.62
TOTAL	1834.10	673.67	Limited to 50.00

PAC approved the project with an eligible subsidy of Rs. 50.00 lakhs.

10. Setting Up of a Coconut Shell based Steam Activated Carbon manufacturing unit at Hassan, Karnataka - M/s Vision Advance Speciality Carbons Pvt. Ltd, Arasikere TK, Hasan Dist, Karnataka

The objective of the project is setting up of an Activated Carbon manufacturing unit to produce 22 MT Activated Carbon per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakhs)		
Land	36.35
Land Development	3.50
Building	285.00	180.00	45.00
Plant & Machinery	438.65	438.65	109.66
Fork Lift and Pallet Truck	18.72
DG Set	11.64	5.00	1.25
Transformer & Cescom Charges	19.50
Lab Equipment	6.25	6.25	1.56
Furniture and Fixture	3.52
Computer & Accessories	3.73
Pre-op Expenses	14.75	6.29	1.57
Contingencies	39.53
Working Capital Margin	60.00
Total	941.13	636.19	Limited To 50.00

The project was approved with an eligible subsidy of Rs. 50.00 lakhs.

11. Setting up of a Copra Making Unit at Thoduvakuzhy, Onakkor Village, Ernakulam Dist. – M/s Koothattukulam Federation of Coconut Producers Society Thirumarady P.O., Koothattukulam, Ernakulam Dist, Kerala

The objective of the project is setting up a Copra Making Unit at Thoduvakuzhy to process 10,000 coconuts per day to produce copra.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakhs)		
Land & Land Dev.(specify)	Leased
Building & Civil works	10.00	10.00	2.50
Plant & Equipments	14.00	14.00	3.50
Working Capital margin	1.00
TOTAL	25.00	24.00	6.00

PAC approved the project with an eligible subsidy of Rs. 6.00 lakhs.

12 Setting up of a Copra Making Unit at Thampankadavu, Thalikulam – M/s. Thalikulam Federation of Coconut Producers Societies, Valluvassery (H), Thambankadavu, Thalikulam, Trichur Dist.,Kerala

The objective of the project is setting up a Copra Making Unit at Thampankadavu to process 10,000 coconuts per day to produce copra.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakhs)		
Land	Leased
Building & Civil works	10.50	10.50	2.63
Chamber for Dryer (Civil works)	1.50	1.50	0.37
Plant & Equipments	8.55	8.55	2.14
Pre-operative Expenses	0.25	0.20	0.05
Working Capital margin	3.88
TOTAL	24.68	20.75	5.19

The project was approved with an eligible subsidy of Rs. 5.19 lakhs.

13 Setting up of a Ball Copra Making unit - Shri. Moosa S/o. Kuttu, Kottappurath house, Naduvannur Post , Kozhikode Dist., Kerala - 673614

The objective of the project is to process 160,000 Nos of coconuts per year for making ball copra.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakhs)		
Land	Own
Plant & Equipments	0.08
Platform Dryer	19.12	14.40	3.60
Preliminary expenses	0.10
Working Capital margin	5.70
TOTAL	25.00	14.40	3.60

The project was approved with an eligible subsidy of Rs. 3.60 lakhs.

Other Items

- 1. Establishment of one tender coconut parlour by M/s Kera Suraksha Federation of Coconut Producers Society, Malappuram- Ratification of expenditure incurred.**

The PAC ratified the expenditure of Rs.91,010/- reimbursed to M/s Kera Suruksha Federation of CPS, Malappuram for establishment of a tender coconut parlour.

- 2. Setting up of one tender coconut parlour by M/s Onattukara Federation of Coconut Producers Society, Alapuzha, Kerala - Ratification of expenditure incurred.**

The PAC ratified the expenditure of Rs.1,50,000/- reimbursed to M/s Onattukara Federation of CPS, Alapuzha for establishment of a tender coconut parlour.

- 3. Setting up of one tender coconut parlour by M/s Kerasamrudhy Vechoor Coconut Producers Society, Vechoor, Kottayam- Ratification of expenditure incurred.**

The PAC ratified the expenditure of Rs.96,265/- reimbursed to M/s Kerasamrudhy Venchoor CPS, Kottayam for setting up of one tender coconut parlour.

- 4. Project for Evaluating the performance of released coconut hybrids in farmers fields at different districts of Tamilnadu-CRS, Veppankulam – Extension of project period – Ratification – reg.**

The PAC ratified the extension of project period for one year up to 27.10.2015.

- 5. Proposal for Developing Technology for Bottling 100% Pure Tender Coconut Water – Non Thermal Process- reg.**

The project for developing technology for bottling 100% pure tender coconut water by non-thermal process was presented in detail the Shri M. N. Vardarajan, Coimbatore, PI of the project.

After detail discussion the PAC decided that:-

- (1) The Promoter may submit his proposal in a project form for consideration of PAC under Development of Technology.
- (2) Promoter may also establish a unit under Adoption of Technology.

6. Discussion permitted by the chair.

Request of M/s. Agricoles Naturel Foods, Thrissur, Kerala for enhancement of approved project cost

43rd PAC approved the project of M/s. Agricoles Naturel Foods Thrissur, Kerala at a total eligible project cost of Rs.138.08 lakh and eligible subsidy of Rs.34.52 lakh for setting up of Preservation and Packing of Tender Coconut Water unit at Palakkad to process 15,000 coconuts per day for manufacturing Packaged Tender Coconut Water as detailed below:

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakhs)		
Land (96 cents)	10.20
Building (490.62 m ²)	91.00	48.00	12.00
Plant & Machinery	85.00	85.00	21.25
Technical know-how	3.90	3.72	0.93
Electrification	10.00
ISO-22000/ISO-Certifications	3.00
Furniture & Office equipments	1.90
Preliminary expenses	6.00	1.36	0.34
Working Capital margin	19.00
TOTAL	230.00	138.08	34.52

Request received from M/s. Agricoles Naturel Foods, Thrissur, Kerala for enhancement of approved project cost to consider the components such as cost of ETP Rs.5.20 lakh, Water treatment plant (sand filter and UV unit) Rs.1.00 lakh, cost of Water Storage Tank Rs.2.00 lakh and cost of Electrification works Rs.6.18 lakh; those could not be included in the 43rd PAC. The total amount requested by promoter for consideration in the already approved project cost is Rs.14.38 lakh.

After detail discussion PAC decided that request of M/s. Agricoles Naturel Foods for inclusion of cost of ETP Rs.5.20 lakh, Water treatment plant (sand filter and UV unit) Rs.1.00 lakh, cost of Water Storage Tank Rs.2.00 lakh and cost of Electrification works Rs.6.18 lakh may be considered for inclusion in the project cost and accordingly eligible subsidy enhanced from Rs. 34.52 lakh to Rs. 38.15 lakh as detailed below:

Revised Project Approved by PAC

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakhs)		
Land (96 cents)	10.20
Building (490.62 m ²)	82.80	48.00	12.00

ETP	5.20	5.20	1.30
Water Treatment Plant (Cost of sand filter and UV unit)	1.00	1.00	0.25
Water Storage Tank	2.00	2.00	0.50
Plant & Machinery	85.00	85.00	21.25
Technical know-how	3.90	3.72	0.93
Electrification	10.00	6.18	1.54
ISO-22000/ISO- Certifications	3.00
Furniture & Office equipments	1.90
Preliminary expenses	6.00	1.51	0.38
Working Capital margin	19.00
TOTAL	230.00	152.61	38.15

The meeting concluded by 5.30 PM with a vote of thanks to and from the Chair.

Chief Coconut Development Officer

List of Participants

Sl. No.	Name and Address
A	PROJECT APPROVAL COMMITTEE
1	Shri. T.K. Jose IAS Chairman, Coconut Development Board Kochi, PAC Chairman
2	Dr. Vinayaka Hedge, Head, Crop Protection, CPCRI, Kasaragod <u>Representative of</u> Assistant Director General (Plantation Crops), ICAR, New Delhi
3	Shri. Venkatesh N Hubballi Director, Directorate of Cashewnut & Cocoa Dev., Kochi <u>Representative of</u> Horticultural Commissioner, Govt. of India, New Delhi
4	Shri. M.M. Jose Sr. Marketing Dev. Officer DMI, Kochi <u>Representative of</u> Joint Secretary & Agricultural Marketing Adviser, Govt. of India, New Delhi
5	Dr. A.G. Gopalakrishna Scientist, Department of Lipid Science & Traditional Foods CFTRI (CSIR), Mysore <u>Representative of</u> Director, Central Food Technological Research Institute (CFTRI), Mysore
6.	Smt. Usha K AGM, NABARD, Regional Office, Trivandrum <u>Representative of</u> Chief General Manager, Technical Services, NABARD, Bombay
7	Shri. Sugata Ghose, Chief Coconut Development Officer, Coconut Development Board, Kochi

B	In Attendance
1	Dr. A. K. Nandi Secretary, CDB, Kochi
2	Shri. Hemachandra Deputy Director (Mkg), TMOC Incharge, CDB, Kochi
3	Shri. Sreekumar Poduval Processing Engineer, CDB, CIT, Vazhakulam, Aluva
4	Shri. P. Sabareenathan Finance Officer, CDB, Kochi
5	Shri. K.S. Sebastian Marketing Officer, CDB, Kochi
5	Shri. S.S. Choyal Assistant Director (TMOC), CDB, Kochi
6	Smt. Resmi. D. S. Technical Officer, CDB, Kochi

Proceedings of the 45th meeting of Project Approval Committee (PAC) of Technology Mission on Coconut held at Kochi on 22nd May 2015

The 45th meeting of the Project Approval Committee (PAC) on Technology Mission on Coconut (TMOC) was held in the Board Room of Coconut Development Board, Kochi on 22nd May 2015. Shri T. K. Jose IAS, Chairman, Coconut Development Board and Chairman PAC presided over the meeting. The list of participants is enclosed.

At the outset, Chairman welcomed the members of PAC and informed that now more and more numbers of entrepreneurs are venturing in the Coconut processing sector and Coconut Development Board could utilize more than 100% of the fund allocated under TMOC in 2014-15. Chairman also informed the PAC members that year by year the export of coconut products is also increasing and in the case of Virgin Coconut Oil the export growth during 2014-15 was 404%. He added that there is tremendous scope for organic coconut products and it is high time to motivate farmers for organic method of cultivation and production of organic certified value added coconut products. There is huge scope for coconut value addition in states like Tamil Nadu and Karnataka, hence to provide more awareness about potential in coconut based industries, more 'Entrepreneurs Meet' is planned in Tamil Nadu, Karnataka, Andhra Pradesh and Kerala this year. After the introductory remarks, agenda items were taken up.

AGENDA No. 1: Confirmation of the Proceedings of 44th Project Approval Committee Meeting held on 20th January 2015

The Committee confirmed the proceedings of the 44th Project Approval Committee Meeting, held on 20.1.2015

AGENDA No. 2: Action taken report on decisions of the 44th PAC Meeting

The committee perused the action taken on decisions of the 44th meeting of Project Approval Committee.

AGENDA No. 3 : Presentation of Completed Research project –

- i) Region based recommendation to improve coconut production in Tamilnadu through remote sensing and GIS –Dr. Balaji Kannan, Principle Investigator, Asst Prof. , Dept. of Remote sensing and GIS, TNAU, Coimbatore:***

The findings of the project were presented by the P.I. before the PAC. Chairman CDB queried whether the GIS methodology developed is giving 99% accuracy in low density areas. He informed that the results of the study should be linked with Farmer Producer Organizations, markets and processing units. This data would be more helpful for processing industries to come up. More concentrated area means, more availability of raw material and will help to estimate production and productivity. Interaction between variables affecting the production also need to be assessed. The information has to be

disseminated among the Coconut Producer Federations (CPFs). He pointed out that CPFs are going to be critical organizations in Tamilnadu, so ultimately this will benefit the farmers.

After detailed discussions, PAC decided that PI may use the 3 tier systems of CPS, CPF and CPC and arrange seminar for disseminating the findings in 4-5 major coconut growing districts of Tamilnadu i.e., Coimbatore, Tiruppur, Thanjavur, Dindigul and Theni/ Madurai. The farming community of these areas may be properly made aware of these findings. The unspent balance fund may be utilized for this purpose.

ii) Evaluation of completed projects under TMOC

a) While discussing the presentation of completed research projects, Dr. Aravindhakshan, Expert invitee mentioned that CDB has undertaken several research projects under TMOC. Board should critically evaluate the findings of these completed projects and list out useful technologies for commercial use. Some of the projects may need to be pursued further and improved upon.

b) It was decided by PAC that a Project Review Committee of TMOC under the Chairmanship of Dr. Aravindhakshan may be formed to review completed projects in view of the above suggestion. It was also decided that Publicity wing may publish a book on TMOC success stories and a brochure with details of TMOC.

AGENDA No. 4: Approval of new project proposals:

1. Development of concentrated extract of Vyosakatvivaradi (VKV) formulation in VCO and evaluation of its genotoxic and carcinogenic effect (3rd phase) - AVP Research Foundation, ,Trichy Road, Ramanathapuram P.O., Coimbatore, Tamil Nadu.

The objectives of the project are as follows:-

1. To formulate a concentrated Vyosakatvivaradi (VKV) in Virgin Coconut Oil by repeated heating for 7 times so as to reduce the effective dose in humans from 25ml to less than 4 ml.
2. To evaluate the hypolipidemic activity of conc. Vyosakatvivaradi (VKV) in Virgin Coconut Oil in different doses and its effect in wistar rat model (rodent).
3. Effective dose in re-evaluated in the rabbit model (non-rodent).
4. Development of capsule with conc. Vyosakatvivaradi (VKV) in VCO for oral consumption for hypercholesterolemia.
5. To evaluate clinical efficacy of the developed capsules in humans through a randomized clinical trail

Dr Ram Manohar, P.I. of the project presented the results of 2nd phase and detailed programme of 3rd phase.

The committee decided that 3rd phase may be restricted to animal studies and if results are positive, human studies may be taken up as 4th phase. P.I. may explore the

possibilities of developing natural antioxidant also. The duration of 3rd phase may be reduced to 16 months restricting the studies to animals and budget may also be revised accordingly, clearly indicating 50:50 share of CDB and Institute. PAC approved the project in principle, with the above mentioned modifications. The revised project may be submitted to Chairman, CDB for approval.

2. Coconut wood furniture making through training for self help groups(SHG) - Dept. of Wood Science, College of Forestry, Kerala Agricultural University, Vellanikkara, Thrissur, KAU.

The objectives of the project are as follows:-

- I. To set up a modern Coconut Wood Workshop-cum-Training Centre, installing advanced machineries for carving and manufacture of utility items such as furniture, interior decorative items, building materials, handicraft items etc., based on coconut wood and to market the finished products so as to popularize the use of coconut wood.
- II. To develop a value chain model of cocowood extraction, conversion, design, manufacture and sale of cocowood furniture and other value added products in collaboration with the Kerala Furniture Consortium Pvt. Ltd., (KFPCL) and the Kodungallur Coconut Producer Co.Ltd. (KCPL).

After detailed discussions, PAC decided that unit may be developed as Training-cum-Technology Demonstration Centre for making value added products from coconut wood. Considering the need for sustaining the developed infrastructure, PAC suggested 2 options:

(a) The unit may be developed in KAU premises and after completion of 3 year project period, Kodungallur CPC may be allowed to utilize the machineries, equipments and building for commercial production and training for the next 10 years, for which an MoA will have to be signed between KAU and Kodungallur CPC.

(b) Alternatively P.I. may establish the unit on the site identified by Kodungallur CPC and after 3 years, the unit with machinery and equipments may be handed over to CPCs for commercial production-cum-Training & Demonstration.

PAC approved the project in principle and advised the P.I. to discuss the above options with University authorities and submit their decision on (a) or (b) above for Chairman's approval.

3. Build and Demonstrate a Power Assisted Coconut Tree Climbing Machine – GVR Manufacturing, G-20, Vishweswar Industrial Society, Bhosari, Pune

The primary objective of the project is to build and demonstrate a prototype power assisted coconut tree climbing machine. Dr. Krishnan Nair, P.I presented the project before PAC.

After detailed discussions, PAC decided that P.I. should reduce the cost on transportation and other heads like report writing, consumables and contingencies, so as

to minimize the total cost of the project. The project was approved in principle and PAC authorized Chairman to approve the revised project.

4. Protective Effect of Tender Coconut Water on whole Body Heat Stress Induced Oxidative Damage in Male Reproductive System of Rats - Serampore College, Department of Physiology, Serampore, Hooghly, West Bengal

Dr. Asima Das, P.I. presented the proposal. The objectives of the project are as follows:- Evaluation of degenerative and oxidative changes in male reproductive organs in response to acute whole body exposure to ambient heat

- Investigation of relationship between rise of ambient temperature, scrotal temperature and testicular endocrine activities.
- Evaluation of possible effect of acute whole body heat exposure on adrenal morphology and endocrine functions.
- Evaluation of heat stress induced disruption in the internal secretory system such as hypothalamic-pituitary-adrenal axis and hypothalamic-pituitary-testicular axis.
- Evaluation of physiological effect of tender coconut water on normal male reproductive organs of rats, if any.
- Evaluation of ameliorating action of natural antioxidant of coconut water on whole body heat stress induced antioxidant defence system.
- Evaluation of heat stress induced free radical impact on the modulation of redox regulated transcription factor and to evaluate how far the said phytochemical can overcome the adverse effect of free radicals on this transcription factor.
- Investigation of the effect of the tender coconut water on the expression of stress protein, heat shock protein (HSP), as a mode of cytoprotection during heat induced testicular damages in rats.

PAC decided that P.I. may exclude institutional charges from the project and indicate share of CDB and the Institute on 50:50 basis in revised budget. PAC suggested that the project may concentrate only on one aspect rather than considering too many objectives. PAC approved the project in principle and authorized the Chairman to approve the revised project on 50:50 cost sharing basis.

5. Setting up of a Desiccated Coconut Manufacturing unit - M/s. PAR Coco Products, 95/6 & 7, Periappa Nagar Extension, Palani – 624 601, Dindigul Dist., Tamil Nadu.

The objective of the project is setting up of a desiccated coconut powder manufacturing unit with a capacity to process 30,000 coconuts per day for production of 3.00 MT desiccated coconut powder.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakhs)		
Land	Lease	-	-
Building & Civil works	52.75	52.75	13.19
Plant & Equipments	85.80	85.80	21.45

ETP	5.50	5.50	1.38
Generator	6.87	5.00	1.25
Electrification	3.50	3.50	0.87
Furniture & Office Equipments	1.86	-	-
Preliminary & Pre op. expenses	2.00	1.53	0.38
Working Capital margin	25.72	-	-
TOTAL	184.00	154.08	38.52

The project was approved with an eligible subsidy of Rs. 38.52 lakhs. The PAC advised the promoter to convert the unit into a Private Limited Company, before availing the eligible subsidy.

6. Setting up of Desiccated Coconut Powder Manufacturing Unit -- M/s. M.S.C. Packaging, A/10, MIDC, Chincholi, Tal-Mohol, Dist. Solapur, Maharashtra

The objective of the project is setting up of Desiccated Coconut Powder Manufacturing Unit for processing of 20,000 nuts per day for production of 2.00 MT desiccated coconut powder.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakh)		
Land	Leased	-	-
Building	103.50	53.00	13.25
Plant & Machinery	93.70	93.70	23.43
Electrical installation	5.00	4.32	1.08
ETP	2.08	2.08	0.52
Generator	9.18	5.00	1.25
Pre-op. Expenses	3.00	1.58	0.39
Furniture & office equipments	1.54	-	-
Working Capital Margin	17.00	-	-
TOTAL	235.00	159.68	39.92

The project was approved with an eligible subsidy of Rs. 39.92 lakh. The PAC advised the promoter to convert the unit into a Private Limited Company, before availing the eligible subsidy.

7. Setting up of Desiccated Coconut Powder Manufacturing Unit - M/s. Sri Jayalakshmi Co-Co Products, Byranayakanahalli Village, Gudigondanahalli Panchayat Halkurke Road, Honnavally Hobli, Tiptur, Tumkur Dist, Karnataka.

The objective of the project is setting up of a Desiccated Coconut Powder Manufacturing Unit with a capacity to process 15,000 coconuts per day for production of 1.5 MT desiccated coconut powder.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rupees in lakhs)		
Land	Own	-	-
Building & Civil works	20.00	20.00	5.00
Plant & machinery	39.38	39.37	9.84
Electrical Installation	3.15	1.96	0.49
Deposits	0.30
Preliminary & Pre op. expenses	0.10	0.10	0.02
Working Capital margin	5.00
Contingencies	2.07
TOTAL	70.00	61.43	15.35

The project was approved with an eligible subsidy of Rs. 15.35 lakhs. The PAC advised the promoter to convert the unit into a Private Limited Company, before availing the eligible subsidy.

8. Setting up of a Desiccated Coconut Powder Manufacturing Unit - M/s. Sree Krishna Coconut Product Company, Vathipatti, Reddiyapatti Post, Natham Taluk, Dindigul Dist, Tamil Nadu.

The objective of the project is Setting up of a Desiccated Coconut Powder Manufacturing Unit with a capacity to process 15,000 nuts per day for production of 1.5 MT desiccated coconut powder.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakhs)		
Land	7.63	-	-
Building	76.50	43.00	10.75
Plant & Machinery	82.33	67.01	16.75
ETP	6.30	6.30	1.58
Working Capital margin	29.23	-	-
TOTAL	201.99	116.31	29.08

The project was approved with an eligible subsidy of Rs. 29.08 lakhs. The PAC advised the promoter to convert the unit into a Private Limited Company, before availing the eligible subsidy.

9. Expansion, Modernisation and Up gradation of Technology of Existing Desiccated Coconut Powder Manufacturing Unit- M/s. Mahavir Coconut & Agro Products Pvt. Ltd, Mahavir Nagar, 8th KM, Kunigal Rd, Hosur Village, Gulur, Tumkur.

The objective of the project is Expansion, Modernisation and Upgradation of Technology of Existing Desiccated Coconut Powder Manufacturing unit for processing 90,000 nuts per day for producing 9.00 MT desiccated coconut powder from existing capacity of processing 70,000 coconuts per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakhs)		
Building & Civil works	4.00	4.00	1.00
RO/UV plant	4.50	4.50	1.12
Plant & Machinery	89.00	85.21	21.30
Generator	9.50	5.00	1.25
Electrical Panel Board & Cables	2.00	2.00	0.50
TOTAL	109.00	100.71	25.17

The project was approved with an eligible subsidy of Rs. 25.17 lakhs.

10. Expansion & Modernisation of Existing Desiccated Coconut Powder Manufacturing Unit - M/s Maruthi Coconut Industry, Nagaraghatta Kaval, Kaidal Gate, Nonavinakere Hobli, Tiptur TQ, Tumkur Dist, Karnataka.

The objective of the project is Expansion and Modernisation of existing Desiccated Coconut Powder manufacturing unit for processing 30,000 coconuts per day to produce 2.80 MT Desiccated Coconut Powder from existing capacity of producing 1.40 MT D.C. powder.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakhs)		
Land	Own	-	-
Plant & Equipments	35.00	35.00	8.75
Building & Civil works	35.00	4.75	1.18
Working Capital margin	5.00
TOTAL	75.00	39.75	9.93

PAC approved the project with an eligible subsidy of Rs. 9.93 lakhs. The PAC advised the promoter to convert the unit into a Private Limited Company, before availing the eligible subsidy.

11. Setting up of Coconut Shell Charcoal Manufacturing Unit - M/s. Universal Coco Carb, Reg. Office- 6th Cross, Chamundeshwari Extention, Ghandhinagar, Tiptur, Tumkur Dist, Karnataka.

The objective of the project is setting up of a Coconut Shell Charcoal manufacturing unit to produce 16 .00 MT Coconut Shell Charcoal per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakhs)		
Land	Own	-	-
Building & Civil works	100.75	30.00	7.50
Plant & Equipments	94.86	84.18	21.04
Others	46.00	-	-
Working Capital margin	20.00	-	-
TOTAL	261.61	114.18	28.54

The project was approved with an eligible subsidy of Rs. 28.54 lakhs. The PAC advised the promoter to convert the unit into a Private Limited Company, before availing the eligible subsidy.

12. Setting Up of a Granulated Shell Charcoal Manufacturing Unit- M/s. Akanksha Agro Processing, Plot No.364, B.H.Road, Jajur, Arsikere, Hassan Dist., Karnataka.

The objective of the project is setting up of a Granulated Shell Charcoal Manufacturing unit to process 10.00 MT coconuts shell charcoal per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakhs)		
Land	Leased	-	-
Building & Civil works (Renovation of building)	15.00	15.00	3.75
Plant & Equipments	27.12	27.11	6.78
Generator	4.60	4.60	1.15
Electrification	2.00	0.86	0.21
Furniture, Computer	2.20	-	-
Preliminary & Pre op. expenses	1.00	0.47	0.12
Working Capital margin	15.72	-	-
TOTAL	67.64	48.04	12.01

PAC approved the project with an eligible subsidy of Rs. 12.01 lakhs. The PAC advised the promoter to convert the unit into a Private Limited Company, before availing the eligible subsidy.

13. Expansion of the Existing Coconut Shell Powder unit at Paramathi Velur, Namakkal District, Tamilnadu – M/s. Asian Industries, Office : D.No. 9^a Bye Pass Road, Padamudi palayam, Velur PO, Namakkal Dist, Tamilnadu.

The objective of the project is Expansion of the Existing Coconut Shell Powder Unit to produce 20.00 MT coconut shell powder per day from existing capacity of 10.00 MT coconut shell powder by installing another unit.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakhs)		
Land	Own
Building & Civil works	22.00	14.40	3.60
Plant & Equipments	85.07	82.70	20.68
Pre-operative Expenses	1.00	0.97	0.24
Working Capital margin	2.00
TOTAL	110.07	98.07	24.52

The project was approved with an eligible subsidy of Rs. 24.52 lakhs. The PAC advised the promoter to convert the unit into a Private Limited Company, before availing the eligible subsidy.

14. Setting up of a Ball Copra Making unit – Shri Bonam Suryanarayana Murthy, S/o. Paparao, Bonamvarimerake Lutukurru Village, Mamidikuduru Mandal, EG Dist, Andhra Pradesh.

The objective of the project is establishing a Ball Copra Making unit to process 12.00 lakh coconuts per year in two batches.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakhs)		
Land	15.00
Platform Dryer	22.70	22.70	5.67
Working Capital margin
TOTAL	37.70	22.70	5.67

The project was approved with an eligible subsidy of Rs. 5.67 lakhs.

15. Expansion of the Existing Virgin Coconut Oil Unit - M/s. Pavithra Kera Products, Kavassery, Padur, Alathur Taluk, Pin – 678 543, Palakkad District, Kerala

The objective of the project is Expansion of the Existing Virgin Coconut Oil Unit to process 15000 nuts per day from existing capacity of 10,000 nuts per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakhs)		
Land	Own	-	-
Building & Civil works	11.50	11.50	2.87
Plant & Equipments	37.95	33.95	8.49
Electrification	3.05
Pre op. expenses	1.00	0.45	0.11
Working Capital margin	6.50
TOTAL	60.00	45.90	11.47

The project was approved with an eligible subsidy of Rs. 11.47 lakh. The PAC advised the promoter to convert the unit into a Private Limited Company, before availing the eligible subsidy.

16. Expansion & Modernisation of existing Tender Coconut Water Packing Unit at Vendasandur, Dindigul Dist, Tamil Nadu - M/s.VSA Foods & Beverages Pvt. Ltd., Office: 21/22 TNP Building, Thadicombu Road, Near M.V.M. College, Dindigul, Tamilnadu.

The objective of the project is Expansion and Modernisation of existing Tender Coconut Water unit for processing of 20,000 nuts per day from its existing capacity of 10,000 nuts per day .

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakhs)		
Land & building	Own	-	-
Plant & Equipments	94.41	94.41	23.60
Preliminary & Pre op. expenses	1.00	0.94	0.23
Working Capital margin	22.00	-	-
TOTAL	117.41	95.35	23.83 Limited to 22.48

The project was approved with an eligible subsidy of Rs. 22.48 lakh.

17. Project for Modernisation and Expansion of Existing Unit for Preservation and Packing of Tender Coconut Pulp and Tender Coconut Water - M/s. Lands Flavour, Adyar Village, Mangalore Bantwal Highway, Adyar, Mangalore, Karnataka.

The objective of the project is Expansion and Modernisation of existing Tender Coconut Pulp Icecream manufacturing and Tender Coconut Water preservation unit for processing of 10,000 nuts per day from existing capacity of 2000 nuts per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(in lakhs)		
Land	Own	-	-
Building & Civil works (renovation)	64.70	36.00	9.00
Plant & Equipments	111.87	111.23	27.80
Preliminary & Pre op. expenses	3.23	1.47	0.37
Working Capital margin	10.20
TOTAL	190.00	148.70	37.17

The project was approved with an eligible subsidy of Rs. 37.17 lakh. The PAC advised the promoter to convert the unit into a Private Limited Company, before availing the eligible subsidy.

18. Market Promotion - Market Promotional Programme for “Establishment of 70 Integrated Coconut points by M/s. Palakkad Coconut Producer Company Ltd, Muthalamada, Palakkad, Kerala.

The proposal was presented by Shri Vinodkumar P., Chairman, Palakkad Coconut Producer Company, Palakkad, Kerala. The objective of the project is to establish a network of Coconut Points in different locations to sell and market coconut value added products.

Shri. Vinodkumar briefed about establishment of 70 Integrated coconut points in selected different locations in Kerala. The PAC asked about the performance of already established coconut points. He informed PAC that in all the coconut points neera is sold out by forenoon. As the value added coconut products namely VCO, DCP and other products are also being sold, these points are getting popular as a retail sales point for public to get various coconut products. The promoter has informed that advanced action was taken to establish 70 points by availing loan from the bank and all the Federations under CPC started neera production. He informed that they have already approached the bank for availing loan for establishment of coconut points and hence submitted the project to CDB for approval.

PAC directed that establishment of coconut points should be linked to and based on quantum of neera production and the number of coconut points could be increased in phased manner. PAC appreciated the action initiated by PCPCL for popularising neera and other coconut value added products through these coconut points.

The details of one coconut point is as under.

SL.NO	ITEM	COST (Rs.)	UNITS	TOTAL (Rs)
1	Fabrication	90,000	1	90,000
2	Juice Dispenser(20Ltrs)	42,000	1	42,000
3	Interior Design	40,000	1	40,000
4	Glass Door Fridge(350Ltrs)	36,000	1	36,000
5	Deep Freezer(200Ltrs)	30,300	1	30,300
6	Electrification, Plumbing, Fittings etc.	15,900	1	15,900
7	Water Purifier	9,600	1	9,600
8	Stabiliser Set (4KVA+1KVA+1KVA)	5,500	1	5,500
9	Heavy duty Mixer	4,000	1	4,000
10	Frame for hanging the nuts	3,000	1	3,000
11	Steel desks	3,000	1	3,000
12	Standee/Flex boards	4,000	2	8,000
13	Beach umbrellas	2,000	3	6,000
14	Drums for handling waste	1,000	2	2,000
15	Knives-Large	400	3	1,200
16	Chairs/Stools	300	10	3,000
17	Knives-Small	250	2	500
	Cost of One Coconut Point			3,00,000
	Total Cost of Project (70 Coconut Points)			210,00,000

The PAC approved the project in principle, considering the emergent requirement for setting up of coconut points and authorised the Chairman to reimburse 50% of the expenditure limited to Rs. 1.50 lakh per coconut point on case to case basis as and when the coconut points are established and bills /vouchers submitted by the promoter.

V. Other Items

1. Approval of Copra Dryer Unit and Oil Mill Unit:

The 37th PAC held on 12/12/2011 has approved the project of M/s. Kalpamithra Oil & Kera Products, Kannur, Kerala for Setting up of a Coconut Oil Milling Unit at a total project cost of Rs. 92.45 lakh and subsidy of Rs. 16.56 lakh. When the tripartite MoU was forwarded to the promoter for execution, the term loan lending financial institute, Kerala Financial Corporation, Kannur Br., Kerala informed that the promoter Shri. M.V Mathai, Moolechalil House, Kannur Dist has taken term loan for two separate units as detailed below:

- (a) **Copra Dryer Unit** – in the name of M/s. Kalikayam Coconut Processing, Kannur.
Term loan sanctioned Rs. 11.00 lakh by KFC, Kannur.
- (b) **Oil Mill Unit** – in the name of M/s. Kalpamithra Oil & Kera Products, Kannur.
Term loan sanctioned Rs. 30.00 lakh by KFC, Kannur.

On seeking clarification the promoter has submitted two separate project for Rs. 25.34 for Copra Dryer Unit and Rs. 67.11 lakh for Oil Mill Unit (with total project cost of Rs. 92.45 lakh) for financial assistance.

Since the projects under TMOC are considered based on the term loan sanctioned by the financial institute, therefore two separate projects were required to be sanctioned as per term loan, instead of one project as approved by 37th PAC held on 12/12/2011. Accordingly the project was split into two projects as per the loans sanctioned by KFC and submitted before PAC for approval.

After the discussion, PAC approved bifurcation of the project into 2 separate units viz (a) M/s. Kalpamithra Oil & Kera Products, Kannur for Setting up of a Coconut Oil Milling Unit and approved the projects with total project cost of Rs. 67.11 lakh and subsidy of Rs. 11.81 lakh and (b) M/s. Kalikayam Coconut Processing, Kannur for setting up of a Corpa dryer unit with a total project cost of Rs. 25.34 lakh and subsidy of Rs. 4.75 lakh as detailed below:

- a. **Copra Dryer Unit - M/s. Kalikayam Coconut Processing, Kannur, Kerala, Term loan sanctioned Rs. 11.00 lakh by KFC, Kannur**

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rupees in lakh)		
Land	5.00
Building & Civil works	14.93	14.93	3.73
Plant & Equipments	3.70	3.70	0.93
Furniture
Electronic equipments & Electrical installation	0.20	0.20	0.05
Preliminary & Pre op. expenses	0.51	0.18	0.04
Working Capital margin	1.00
TOTAL	25.34	19.01	4.75

- b. **Oil Mill Unit - M/s. Kalpamithra Oil & Kera Products, Kannur, Kerala, Term loan sanctioned Rs. 30.00 lakh by KFC, Kannur**

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rupees in lakh)		
Land	3.00
Building & Civil works	30.89	19.71	4.93
Plant & Equipments	23.12	23.12	5.78
Furniture	0.50	0.50	0.12
Electronic equipments & Electrical installation	3.30	3.30	0.83
Preliminary & Pre op. expenses	1.44	0.60	0.15
Working Capital margin	4.860
TOTAL	67.11	47.23	11.81

2. Establishment of one Coconut point by M/s. Kerasuraksha Federation of Coconut Producers Society, Malappuram, Kerala – ratification of the expenditure incurred.

The PAC ratified the expenditure of Rs. 1,44,148/- reimbursed to M/s Kerasuraksha Federation of Coconut Producers Society, Malappuram for setting up of one Coconut point at Maranchery, Malappuram, Kerala.

3. Setting up of one Coconut point by the M/s. Kadathanad Federation of Coconut Producers Society, Kozhikode, Kerala – ratification of the expenditure incurred.

The PAC ratified the expenditure of Rs. 1.50 lakh reimbursed to M/s Kadathanad Federation of Coconut Producers Society, Kozhikode for setting up of one Coconut point near Govt. Hospital, Vadakara, Kozhikode

4. Setting up of one Coconut point by M/s. Keraganga Coconut Producers Society, Ernakulam, Kerala – ratification of the expenditure incurred.

The PAC ratified the expenditure of Rs.1,07,117/-reimbursed to M/s Keraganga Coconut Producers Society, Ernakulam for setting up of one Coconut point at Njarakadu in Paingattur Panchayat, Ernakulam, Kerala.

5. Setting up of one Coconut point by M/s. Mananthawady Federation of Coconut Producers Society, Wayanad, Kerala – ratification of the expenditure incurred.

The PAC ratified the expenditure of Rs. 1.50 lakh reimbursed to M/s Mananthawady Federation of Coconut Producers Society, Wayanad for setting up of one Coconut point at Vallurkave, Mananthawady, Wayanad.

6. Setting up of one Coconut point by M/s. Tejaswini Coconut Producers Company, Kannur , Kerala – ratification of the expenditure incurred.

The PAC ratified the expenditure of Rs. 1.50 lakh reimbursed to M/s Tejaswini Coconut Producers Company, Kannur for setting up of one Coconut point at Bus Stand, Cherupuzha, Kannur, Kerala.

7. Setting up of two Coconut Points by M/s. Kaipuzha Coconut Producers Company, Kollam, Kerala – ratification of the expenditure incurred.

The PAC ratified the expenditure of Rs. 2,07,460/- reimbursed to M/s Kaipuzha Coconut Producers Company, Kollam for setting up of two Coconut points one at Karunagappaly Bus stand and another at Bishop Jerome Nagar, Kollam.

8. Project Proposal “Studies on the use of Virgin Coconut oil & Coconut water in Alzheimer’s disease (AD)” - Approval of project.

The project was presented before 44th PAC held on 20.01.2015 by Dr. Rony, Metabolic Disorders Research Centre, Jagathy, Thiruvananthapuram, Kerala at a total cost of Rs 91.38 lakhs for a period of 5 years.

The 44th PAC had advised to reduce the project period and to take up the 1st phase on VCO and 2nd phase on tender coconut water. It was also suggested to limit the present proposal to animal studies. It was suggested that human studies may be taken up separately only after animal studies are completed, as a separate follow up project.

Now the P.I. has furnished the revised proposal modifying the project giving emphasis for VCO and reducing the project period to 2 years with a total project cost of Rs 70.00 lakhs with Board share of Rs 35.00 lakhs.

PAC suggested to exclude the institutional charges and to assess the capability of the institute for conducting such research. Chairman, CDB was authorized to approve the project after institutional assessment and budget revision of the project excluding institutional charges.

VI. Any other items with the permission of Chairman

1. Project -“Investigations and development of technology for desiccated coconut industry effluent water treatment” sanctioned to the IISc, Bangalore

P.I.- Dr. J. R. Mudakavi, Dept. of Chemical Engineering, IISc., Bangalore

The project was approved by the 36th PAC held on 12th August 2011 at Kochi at a total cost of Rs. 11.572 lakh for a period of 2 years i.e. from October 2011 to October 2013. The objectives of the project were (i) To develop reliable treatment and monitoring methods for coconut processing industry effluent water (ii) To characterize the effluent water of the desiccated coconut industry. (iii) To develop an environment friendly effluent treatment process for desiccated coconut industry (iv) To explore alternate byproducts from coconut water and (v) To evolve good sanitary practices for the industry.

The results of the study were presented before 41st PAC on 11.10.2013 and PAC has approved extension for 12 months for continuing the project as phase 2 to design the scaled up industrial digester with an additional amount of Rs. 8.80 lakh. It was also decided to initiate action to set up one mini pilot plant at CDB Institute of Technology, Vazhakulam and another in any of the reputed D.C. units in Tumkur Dist., Karnataka. Accordingly P.I. proposed to set up a pilot plant in Tumkur.

After discussion PAC decided that P.I. may present the findings of phase 1 & 2 as well as fund requirement for establishment and demonstration of pilot plant at Tumkur before ISC. Based on ISC recommendation, Chairman may approve the fund required for setting up of pilot plant and for maintenance of the plant for 12 months.

2. Project- “Neera Cold Chain Projects- by Palakkad Coconut Producer Company Ltd,(PCPCL), Palakkad, Kerala

Shri Vinodkumar, Chairman, PCPCL along with Presidents of CPFs, presented the proposal of 3 CPFs under Palakkad Coconut Producer Company, for “Harvesting of neera through cold chain”.

As the proposals were not discussed in ISC, PAC suggested that the proposal may be discussed in detail by ISC and authorized Chairman to take suitable decision to meet the fund requirement under “Technical support and Emergent Requirements”, as it is an initiative by Farmer Producer Organizations, after assessing the need and ground situation.

Sd/-

Chief Coconut Development Officer

List of Participants

A.	Project Approval Committee
1	Shri T.K. Jose IAS Chairman, Coconut Development Board Kochi Chairman PAC.
2	Dr. V. Krishnakumar Head, ICAR, CPCRI, RS, Kayamkulam Representative of - Assistant Director General (Plantation Crops), ICAR, New Delhi
3	Dr. Anilkumar R. Assistant Agricultural Marketing Adviser, DMI, Kochi Representative of - Joint Secretary & Agricultural Marketing Adviser Govt. of India, New Delhi
4	Dr. KSMS Raghava Rao Chief Scientist, CFTRI Mysore Representative of - Director, CFTRI, Mysore
5	Smt. Usha K. AGM, NABARD, Regional Office, Thriuvananthapuram Representative of - Chief General Manager, Technical Services, NABARD, Bombay
6	Ms. Martina Yohannan Asst. Manager, Indian Overseas Bank, Kochi Representative of - AGM, Indian Overseas Bank, Bangalore
7	Shri Sugata Ghose Chief Coconut Development Officer, Coconut Development Board, Kochi Member Secretary PAC
B.	Experts
8	Dr. D.M. Vasudevan Principal(Retd), AIMS, Kochi
9	Dr. M. Aravindakshan Co-ordinator, Amrita School of Environmental Studies, Coimbatore & Ex-Chairman, CDB, Kochi
C	In Attendance
1	Dr A.K. Nandi Secretary, CDB, Kochi

2	Shri Rajeev P. George, Director, CDB, Kochi
3	Shri Hemachandra Deputy Director, CDB, Kochi
4	Shri K.S. Sebastian Assistant Director(Mkg.), CDB, Kochi
5	Shri S.S. Choyal, Assistant Director (TMOC), CDB, Kochi
6	Shri P. Sabareenathan Finance Officer, CDB, Kochi
7	Smt. Annie Eappen, Chemist, CDB, CIT, Vahzakulam, Aluva
8	Smt. Resmi D.S. Technical Officer, CDB, Kochi

**Proceedings of the 46th meeting of
Project Approval Committee (PAC) of Technology Mission on Coconut held at Kochi on
15th December 2015**

The 46th meeting of the Project Approval Committee (PAC) on Technology Mission on Coconut (TMOC) was held in the Board Room of Coconut Development Board, Kochi on 15th December 2015. Shri T. K. Jose IAS, Chairman, Coconut Development Board and Chairman PAC presided over the meeting. The list of participants is enclosed as Annexure-I. At the outset Chairman, welcomed all the PAC members and briefed the developments and innovations carried out by CDB since last PAC. Chairman informed the forum about the technology developed by CIT, Vazhakulam for making of Flavoured coconut milk. Thereafter agenda items were taken up by the PAC.

AGENDA No. 1: Confirmation of the Proceedings of 45th Project Approval Committee Meeting held on 22nd May 2015

The Committee confirmed the proceedings of the 45th Project Approval Committee Meeting held on 22.05.2015.

AGENDA No. 2: Action taken report on decisions of the 45th PAC Meeting

The committee perused the action taken on decisions of the 45th meeting of Project Approval Committee. The Committee observed the delay in signing the MoU and release of 1st instalment of subsidy in the some cases. Committee instructed AD (TMOC) that in the cases where more than one month delay is noticed, the reason for delay should also be recorded in the action taken report.

AGENDA No. 3: Approval of new project proposals:

**1. Development of processing technology for conversion of coconut neera to sugar –
M/s Mosons Edibles, Industrial Estate, Palayad, Thalassery, Kerala**

The objectives of the project are as follows:

1. To develop a processing technology to make sugar from neera
2. Understand and analyse the scope and limitations of traditional tapping methods and develop and standardize new technology.
3. Prevent the neera from quick and natural fermentation by using permitted food preservatives for minimum 24 hours in unchilled condition and standardize the procedure.
4. Develop processing technology to make sugar and allied products
5. Make use of test methods for quality analysis for various stages of operation

The project was presented by Shri Sajin Ahamed, Chief Operating Officer, Mosons Edibles in the absence of the PI. PAC discussed the project and informed that the objectives 2 and 3 are acceptable. As of now, there are 6 technologies for processing and preservation of neera and the presented process is not different from the existing processes.

Moreover for making sugar from neera, technologies are already available. But areas of study may be modified to explore the possibilities of making various food products in which cane sugar is replaced by Neera sugar/ Neera honey/ Neera concentrate and testing the nutritional aspects, taste, flavor and shelf life of such products. Products like cakes, Ice creams, biscuits, and various confectionary items including variety of sweets can be prepared by using by Neera sugar/ Neera honey/ Neera concentrate.

Hence PAC advised M/s Mosons Edibles to submit a revised project proposal for such a study. Such developed products may be tested for their quality, nutritional value and shelf life. The commercial production of neera sugar may be taken up as a separate commercial project, for which they can approach various Coconut Producer Companies.

2. Nutritionally Enriched Deoiled Coconut Based Innovative Foods Suitable For Industrial Production- CSIR-Central Food Technological Research Institute, Mysore-570020

The objectives of the project are as follows:

1. Identification and characterization of bioactive components like polyphenols, carotenoids and dietary fiber from the deoiled coconut and selected underutilized grain like amaranth.
2. Determination of the physical properties and changes occurring due to the processing of the grain and deoiled coconut with an emphasis on their nutritional, functional and technological characteristics related to product development.
3. Development of processes for ready-to-eat and ready-to-prepare health foods using processed coconut fiber and grain, and characterization of the products.

The Principal Investigator Dr. (Mrs.) Sila Bhattacharya, Sr. Principal Scientist, CFTRI, Mysore presented the project before PAC. PAC observed that 2 years project period is too long and it may be restricted to one year. Committee opined that amaranthus is neither a principal food grain nor a minor millet so amaranthus may be replaced with whole wheat/rice, sorghum, bajra, ragi or other popular food grains and minor millet for developing healthy and diabetic friendly food products from defatted desiccated coconut powder.

Neera sugar/palm sugar may be used instead of cane sugar to make the products diabetic friendly. PAC also observed that the PI is utilizing the lab equipments and machineries of CFTRI but cost of these is not included in the project. The cost of these facilities may also be reflected in project cost as contribution of CFTRI.

PAC advised the PI to revise the project on above suggestions and resubmit to PAC for consideration.

3. Utilization of Industrial Coconut Waste for Development of Foods with Anti-Diabetes properties -CSIR-Central Food Technological Research Institute, Mysore-570020

The objectives of the project are as follows:

1. To study the coconut cake polysaccharides and its anti diabetes property
2. To develop food(s) for diabetics and obesity using coconut cake as ingredients

The Principal Investigator Dr. G. Suresh Kumar, Scientist, CFTRI, Mysore presented the project in detail. The PAC observed that the PI intends to utilize the defatted desiccated coconut powder (DCP) for development of foods with anti diabetes properties and PAC pointed out that defatted DCP is not an industrial waste but it's a by-product of Virgin Coconut Oil (VCO) industries therefore the proposed title of the project does not seem appropriate. PAC opined that PI may develop new products from the whole coconut for healthy, anti-diabetic and anti-obesity product(s) from coconut with chemical, nutritional and biochemical analysis of the product(s).

PAC also observed that PI has not shown any contribution of CFTRI despite utilization of all the assets and lab facilities of the CFTRI and advised that PI may incorporate the contribution of CFTRI also in the form of assets used in this project. PI was advised to modify the project and resubmit before PAC for consideration.

4. Management of Obesity and Obesity associated Inflammation by Tender Coconut Water and its Active Components: Assessment of Molecular Mechanism -CSIR – Indian Institute of Chemical Biology, 4, Raja S.C., Mullick Road, Kolkata – 700032, West Bengal.

The objectives of the project are as follows:

1. To identify and characterize antioxidant activity of tender coconut water and its active components.
2. To evaluate the anti-adipogenic activity of tender coconut water and its active component (*in vitro* model).
3. To develop the suitable *in vivo* obesity model for the assessment of anti-obesogenic activity of tender coconut water and its active components.
4. To evaluate the potential role of tender coconut water and its active components (Shikimic acid and quinic acid) on high fat diet-induced obesity (*in vivo* model).
5. To determine the direct involvement of redox regulated transcription factor (NF- KB, AP-1 and STAT3) in the development of adipogenesis and thereby obesity associated inflammation and the potential role of tender coconut water and its active components on it.
6. To determine the possible involvement of the redox-sensitive transcription factor Nrf2 in the transcriptional regulation of diverse anti-oxidative enzymes induced by tender coconut water and its active components in the suppression of adipogenesis and obesity.
7. To determine the direct or indirect relation of tender coconut water and its active components in the activation AMPK (AMP-activated protein kinase).
8. Chief goal of this current project is to explore the potential benefits of tender coconut water in obesity management and also to develop a product that will suppress the obesity with known mechanism of action.

The project was presented by Dr. (Smt.) Krishna Das Saha, PI of the project through video conferencing. The PAC observed that objectives are too ambitious and its quite impossible to achieve in 3 years. Further the expert member Dr. D. M. Vasudevan briefed the PAC that the project is of a basic research.

After discussion PAC decided that CDB alone may not take up the project for basic research however CDB may support jointly with ICMR/Department of Science and

Technology. PAC advised the PI that the project may be submitted to ICMR/Department of Science and Technology for joint funding with CDB.

5. Regulation of Cancer associated MicroRNAs by active components from Coconut Water and Virgin Coconut Oil: Novel therapeutic strategy for cancer-All India Institute of Medical Sciences, Bhubaneswar, Patrapada, Odisha.

The objectives of the project are as follows:

Aim of the project is to explore the molecular basis of anticancer activities of coconut water (CW) and active compound isolated from virgin coconut oil (VCO).

1. Regulation of tumor suppressor and Oncogenic MicroRNA by Virgin Coconut oil and its active components in different cancer cells line.
2. Regulation of tumor suppressor and Oncogenic MicroRNA by Coconut water and its active components in different cancer cells line.

In the absence of PI the expert member Dr. D.M. Vasudevan briefed the PAC that the project is a basic research on the qualities of virgin coconut oil and tender coconut water.

It was decided by the PAC that basic research is not the mandate of TMOC scheme and the project cannot be supported. However, if the PI approaches ICMR or Department of Science & Technology a joint funding of the project may be considered. PI may submit the project to ICMR/Department of Science and Technology for joint funding with CDB.

6. Setting up of Neera Processing and Packing Unit and Neera Based Value Addition Unit-M/s Vadakara Coconut Farmers Producer Co. Ltd, Vatakara, Kozhikode, Kerala

The objective of the project is setting up of neera processing and packing unit and neera based value addition unit to process 4000 liters of neera per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakh)		
Land & Land Dev.	13.52	-	-
Building & Civil Works	67.89	32.00	8.00
Plant & Equipments	158.65	152.82	38.21
Electrification	9.00	9.00	2.25
Lab Equipments	6.75	6.00	1.50
D.G. set	5.16	5.00	1.25
Furniture & Office Eqpt.	1.00
Pre-operative Expenses	2.80	2.04	0.51
Contingency @ 5%	3.39
Working Capital (Margin Money)	1.96
Total	270.12	206.86	Rs. 51.72 Limited to Rs.50.00

The project was presented by Shri. M. Rajkumar Menon, CEO, Vadakara Coconut Farmers Producer Co. Ltd and the PAC approved the project with an eligible subsidy of Rs. 50.00 lakh.

7. Setting up of a Coconut Oil Manufacturing Unit and other Value Added Products at Muduvana- M/s Vadakara Coconut Farmers Producer Co. Ltd, Vatakara, Kozhikode, Kerala.

The objective of the project is setting up of a coconut oil manufacturing unit to process 4 tons of copra per day for producing 2700 liters of coconut oil. The unit will also process 10,000 coconut in to copra and balance copra will be outsourced from members.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakh)		
Land & Land Dev.	15.00
Building & Civil Works	30.00	30.00	7.50
Plant & Equipments	128.18	128.18	32.04
Pre-operative Expenses	4.27	1.58	0.39
Total	177.45	159.76	39.93

The project was presented by the CEO of the Company. The PAC observed that the building of the unit does not have proper industrial design and structure and needs to be improved for which CPC may contact an Engineer who has experience in designing the industrial buildings. PAC decided that the project may be postponed till next PAC and CPC may rework on design and structure of the building and present the project in next PAC with proper design of the building and layout of the machineries.

8. Setting up of a Flavoured Coconut Juice Manufacturing unit – M/s Pollachi Coconut Producer Company Limited, Palakad Road, Pollachi, Coimbatore (Dt) Tamilnadu:

The objective of the project is setting up of a flavoured coconut juice manufacturing unit to process 5000 coconuts/day to produce 4000 ltrs of flavoured coconut juice.

Components	Total Project Cost (Rs. in lakh)
Land & Land Dev	...
Plant & Equipments	111.00
Building & civil works	48.00
Electrical installation	3.00

Pre-operative Expenses	5.86
ETP	10.00
RO Plant	5.00
Working capital margin	18.40
Total	201.26

The project was presented by Shri Sabhapathi and team, Pollachi CPC. PAC discussed in detail the project and technology developed by CIT for flavoured coconut milk. The committee opined that the technology developed by CIT is only at laboratory level. Hence the proposal submitted by Pollachi CPC can be considered for up-scaling the production on a commercial level.

Pollachi CPC is a Farmer Producer Company registered under the section 581B of Indian Companies Act, 1956. As this is a Farmer Producer Company with farmers as the only share holders of the company, it is considered on par with cooperative societies.

PAC approved the project under “Development of Technologies for processing and product diversification” with a financial support, limited to Rs.75.00 lakh as per TMOC norms.

9. Expansion and Modernisation of the Existing Desiccated Coconut Powder Manufacturing Unit- M/s Star Desiccated Coconut Industries, Kenchanoor Village, Kundapura Taluk, Udupi Dist., Karnataka.

The objective of the project is expansion and modernisation of the existing desiccated coconut powder manufacturing unit to process 30,000 coconuts per day from the existing capacity of 5000 nuts per day .

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakh)		
Land	Own	-	-
Plant & Equipments	120.45	117.39	29.35
<u>Building & Civil works</u>			
i) Renovation of existing bldg(6200 sq.ft)	26.00	25.00	6.25
ii) New construction (2580 sq.ft)	18.00	18.00	4.50
ETP	22.00	10.00	2.50
Working Capital margin	19.63
TOTAL	206.08	170.39	42.60

The project is approved with an eligible subsidy of Rs. 42.60 lakh. PAC advised the promoter to convert the unit into a Pvt. Ltd. Company for raising equity, tax benefits and for effective governance systems and attracting professional staff for effective running of the

unit. Discussing on the project PAC felt that since it is an expansion of existing unit the promoter should furnish last three years audited statements of accounts before the release of subsidy.

10. Setting up of a Desiccated Coconut Powder Manufacturing Unit- M/s SKB Agro Tech, KN Halli Post, Tiptur Taluk, Tumkur Dist, Karnataka

The objective of the project is setting up of a desiccated coconut powder manufacturing unit to process 20,000 coconut per day for manufacturing of 2 tons of desiccated coconut powder per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakh)		
Land	Own	-	-
Plant & Equipments	50.95	50.95	12.74
Building & Civil works	95.00	34.00	8.50
Electrical Deposit	0.35	-	-
Office Eqpmt.	0.50	-	-
Preliminary & Pre op. expenses	0.25	0.25	0.06
Working Capital margin	2.07	-	-
TOTAL	149.12	85.20	21.30

The project is approved with an eligible subsidy of Rs.21.30 lakh. PAC advised the promoter to convert the unit into a Pvt. Ltd. Company for raising equity, tax benefits and for effective governance systems and attracting professional staff for effective running of the unit.

11. Expansion & Modernisation of Existing Desiccated Coconut Powder Unit- M/s Akram Coconut Industries, Keragodi Road, Gandhinagar, Tiptur, Tumkur Dist, Karnataka

The objective of the project is expansion and modernisation of existing desiccated coconut powder unit to process 30,000 coconuts per day to manufacture 3 tons of DCP per day from the existing capacity of 15,000 coconuts per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. In lakh)		
Plant & Equipments	4.00		
Building & Civil works	17.00		
Working Capital margin	12.00		
TOTAL	33.00	Not Applicable	

Ms. Geethu A.S, Food Processing Engineer, CIT, Vazhakulam inspected the unit on 04/11/2015 and reported that unit is more than 15 years old and in working condition. The promoter has replaced the machineries in 2013 but does not have the bills. Building is old and no renovation undertaken. Promoter has claimed 4 nos deshelling machines for expansion but only 2 machines were seen installed.

ISC observed that promoter has availed only 33% of the project cost as term loan and the proposed machinery does not justify the expansion of the project for capacity enhancement.

After detail discussion PAC decided not to approve the project.

12. Setting up of a Unit for Processing & Packing of Coconut Water (Matured and Tender) in Aseptic Bags at Beemandapalli, Krishnagiri Dist - M/s MCI Agro Industries, Reg. Office, Rajaji Nagar, Krishnagiri, Tamilnadu.

The objective of the project is setting up of a unit for processing and packing of coconut water (mature and tender) in aseptic bags with installed capacity of 3000 liters per day or 15,000 coconuts per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. In lakh)		
Land	Leased
Building- Lease Advance	10.00
Plant & Equipments	67.85	60.44	15.11
Working Capital margin	12.41
TOTAL	90.26	60.44	15.11

The project is approved with an eligible subsidy of Rs. 15.11 lakh PAC advised the promoter to convert the unit into a Pvt. Ltd. Company for raising equity, tax benefits and for effective governance systems and attracting professional staff for effective running of the unit. PAC observed that pollution certificate was obtained in 2007 for another unit by promoter, so PAC advised the promoter to apply afresh for pollution certificate for this unit.

13. Setting up of a Virgin Coconut Oil Manufacturing Unit- M/s Nivesh Oil Mill, Mylambadi, Bhavani Taluk, Erode Dist, Tamilnadu

The objective of the project is setting up of a virgin coconut oil manufacturing unit to process 10,000 coconuts per day for producing 600 liters of VCO per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. In lakh)		
Land .	Lease
Building - Renovation of existing building and construction of new building	12.00	12.00	3.00
Plant & Equipments	63.14	61.20	15.30
ETP	6.00	6.00	1.50
Electrification	4.00	2.80	0.70
Generator	4.50	4.50	1.12
Know-how fee	0.65	0.55	0.14
Working Capital margin	8.72
TOTAL	99.01	87.05	21.76

The project is approved with an eligible subsidy of Rs.21.76 lakh. PAC advised the promoter to convert the unit into a Pvt. Ltd. Company for raising equity, tax benefits and for effective governance systems and attracting professional staff for effective running of the unit.

14. Setting up of a Virgin Coconut Oil Manufacturing Unit at Ayyappanaickenpalayam, Tirupur Dist., Tamilnadu - M/s Thennai Agro Products, Meenachipuram, Pollachi, Coimbatore, Tamil Nadu.

The objective of the project is setting up of a virgin coconut oil manufacturing unit to process 2.20 lakh coconuts per day to make 13000 liters of VCO per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. In lakh)		
Land	Lease	-	-
Building & Civil works	87.00	78.60	19.65
Plant & Machinery	186.00	186.00	46.50
Electrification	12.00	9.30	2.32
Technical know-how	0.56	0.56	0.14
Furniture & office Eqpts	4.94	-	-
Preliminary & Pre op. Exp.	10.00	2.74	0.68
Working Capital margin	150.00	-	-
TOTAL	450.50	277.20	69.29
			Limited to 50.00

PAC approved the project with an eligible subsidy of Rs.50.00 lakh PAC advised the promoter to convert the unit into a Pvt. Ltd. Company for raising equity, tax benefits and for effective governance systems and attracting professional staff for effective running of the unit.

15. Setting Up of a Virgin Coconut Oil Manufacturing Unit- M/s ENBEE EXIM, Kattathara, Krishnan Road, Perumpadappu, Palluruthy, Cochin, Kerala.

The objective of the project is setting up of a virgin coconut oil manufacturing unit to process 5,000 coconuts per day for making 300 liters of VCO per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. In lakh)		
Land	Own	-	-
Plant & Equipments	26.23	26.23	6.56
Building & Civil works	33.32	23.84	5.96
Electrical installation	3.97	3.97	0.99
Generator	5.20	5.00	1.25
Technical know-how	0.56	0.56	0.14
Furniture & Office Eqp.	2.68	-	-
Preliminary & Pre op. expenses	2.00	0.59	0.15
Working Capital margin	4.04	-	-
Total	78.00	60.19	15.05

PAC approved the project with an eligible subsidy of Rs. 15.05 lakh. PAC advised the promoter to convert the unit into a Pvt. Ltd. Company for raising equity, tax benefits and for effective governance systems and attracting professional staff for effective running of the unit.

16. Setting up of a unit for Manufacturing of Coconut Charcoal (Granular) and Coconut Shell Charcoal Briquettes at Bellary - M/s Raghavendra Chemicals & Carbons, S.J. Complex, Bellary, Karnataka.

The objective of the project is setting up of a unit for manufacturing of coconut charcoal (granular) and coconut shell charcoal briquettes by processing of 30 MT coconut shell per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. In lakh)		
Land	17.37	-	-
Plant & Equipments	166.47	142.00	35.50
Building & Civil works	75.70	35.11	8.77
Electrical installation	20.46	7.10	1.78
Working Capital	110.00	-	-
TOTAL	390.00	184.21	46.05

PAC approved the project with an eligible subsidy of Rs. 46.05 lakh. PAC advised the promoter to convert the unit into a Pvt. Ltd. Company for raising equity, tax benefits and for effective governance systems and attracting professional staff for effective running of the unit.

17. Expansion of the existing Activated Carbon Manufacturing unit at Suryanallur Village, Tirupur Dist.- M/s Sam Carbons, Kundadam Post, Dharapuram Tk., Tirupur Dist, Tamil Nadu.

The objective of the project is expansion of the existing activated carbon manufacturing unit for manufacturing of 5 MT activated carbon per day from the existing capacity of 2.5 MT activated carbon per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. In lakh)		
Land	Own	-	-
Building & Civil works (4500 sq.ft.)	23.04	23.00	5.75
Plant & Equipments	130.60	125.00	31.25
Working Capital margin	14.00	-	-
TOTAL	167.64	148.00	37.00

PAC approved the project with an eligible subsidy of Rs. 37.00 lakh. PAC advised the promoter to convert the unit into a Pvt. Ltd. Company for raising equity, tax benefits and for effective governance systems and attracting professional staff for effective running of the unit.

18. Setting up of an Activated Carbon Manufacturing Unit- M/s Austro Carbon Pvt. Ltd., Kattalangulam Village, Tuticorin Dist., Tamil Nadu.

The objective of the project is setting up of a unit for manufacturing of 4 MT activated carbon per day from coconut shell charcoal.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. In lakh)		
Land	Lease	-	-
Plant & Equipments	174.74	156.00	39.00
Building & Civil works	97.50	91.60	22.90
Electrical installation	18.37	17.27	4.31
Pre-operative Expenses	31.14	2.64	0.66
Working Capital margin	32.72	-	-
TOTAL	354.47	267.51	66.87 Limited to Rs.50.00

The project is approved with an eligible subsidy of Rs. 50.00 lakh.

19. Setting up of Modern Copra Dryer Unit- M/s Kodungallur Coconut Producer Co. Ltd, G.D. Complex, Perinjanam Post, Thrissur Dist, Kerala.

The objective of the project is setting up of modern copra dryer unit for processing of 10,000 coconuts per day for making of copra.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
(Rs. In lakh)			
Land	Lease	-	-
Building (Shed for drying chamber)	2.80	2.80	0.70
Plant & Equipments	7.67	7.67	1.92
Preliminary & Pre op. expenses	0.18	0.10	0.03
TOTAL	10.65	10.57	2.65

The project is approved with an eligible subsidy of Rs.2.65 lakh.

20. Setting up of a Copra Making Unit at Maranchery, Malappuram Dist.- M/s Kera Suraksha Federation of Coconut Producers Societies, Maranchery Post, Malappuram Dist, Kerala.

The objective of the project is setting up of a modern copra dryer unit to process 10,000 coconuts per day for making of copra.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
(Rs. In lakh)			
Land	Lease	-	-
Plant & Equipments	12.80	12.80	3.20
Building & Civil works	10.20	10.20	2.55
TOTAL	23.00	23.00	5.75
Working Capital margin	6.19	-	-
Grand Total	29.19	23.00	5.75

PAC observed a considerable difference between the project cost of modern copra dryer project of M/s Kodungallur CPC, Trichur and M/s Kera Suraksha Federation of CPS, Maranchery, Malappuram and sought clarification. It was clarified that M/s. Kodungallur CPC is already having an existing building and only drying shed chamber is proposed as cost of building; whereas M/s Kera Suraksha Federation of CPS does not have any building. Therefore cost of the building was the major reason for considerable difference in the project costs of these two projects of modern copra dryer.

After discussion, PAC approved the project with an eligible subsidy of Rs. 5.75 lakh.

21. Setting up of a Ball Copra Making Unit- Shri Bonthu Srinivasa Rao S/o Shri Satyanarayana, Thotlapalem, Peruru Vill +Post, Amalapuram Mandal, EG Dist, Andhra Pradesh.

The objective of the project is setting up of a ball copra making unit to process 15.00 lakh coconuts per year for making ball copra.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. In lakh)		
Land	20.29	-	-
Platform Dryer	51.70	51.70	12.92
TOTAL	71.99	51.70	12.92

PAC approved the project with an eligible subsidy of Rs. 12.92 lakh.

22. Setting up of a Ball Copra Making Unit – Shri Bandi Satyanarayana S/o Shri Subba Rao, Pedamamidipalli Village, Digamarru- Rajolu Highway Rd, Nr. Primary Public School, Palakol Mandal, W.G. Dist, Andhra Pradesh

The objective of the project is setting up of a ball copra making unit to process 5.00 lakh coconuts per year for making ball copra.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakh)		
Land	Own	-	-
Platform Dryer	22.92	22.92	5.73
TOTAL	22.92	22.92	5.73

PAC approved the project with an eligible subsidy of Rs. 5.73 lakh.

23. A Market Study on Consumer Perception and Marketability of Packed Coconut Water in the State of Karnataka - M/s Christ University, Bengaluru..

The objective of the project is to identify if demographic factors / psychological factors are directly related to the buying behaviour of packed coconut water.

Duration of the study - One year.

Sl. No.	Activities Proposed		Project cost (Rs. In lakh)
1.	Salaries:		3.80
	Principal Investigator	2.00	
	Research Associate for one year @Rs.15,000 per month.	1.80	

2.	Travel expenses		1.20
	Travel to out station	0.50	
	Local conveyance at out station	0.25	
	Accommodation & Food	0.25	
	Travel local	0.20	
3.	Data processing		1.50
	Data collection	1.00	
	Data Analysis	0.50	
4	Printing / Communication etc.		0.35
	Report printing	0.25	
	Stationery	0.10	
5	Books, Journals, other Academic materials		0.75
6	Equipment - Computer & Printer		0.50
7	Contingency expenses		0.30
8	Overhead - Service charges to University @30%		3.60
	Total		12.00

The PAC discussed on the project and decided that one year duration for such projects is very high and suggested that 3 months for data collection and 3 months for other works including submission of final report altogether 6 months could be sufficient. The overhead charges should be limited to 10% of the project cost. As per TMOC norms 50% of the project cost is to be shared by the investigating organization. Questionnaire for the study may be finalized in consultation with CDB.

PAC suggested that PI may revise the project for 6 months duration restricting overhead charges to 10% of the project cost, showing share of the Board and share of Institute separately, limiting the share of Board to Rs. 4.00 lakh.

PAC authorized the Chairman to approve the revised project.

IV. Other Items

1. Project Proposal “Studies on the use of Virgin Coconut oil & Coconut water in Alzheimer’s disease (AD)” - Metabolic Disorders Research Centre (MDRC), Jagathy, Trivandrum, Kerala at a total cost of Rs.70.00 lakh:

As per decision of 45th PAC, Dr. Nevin K.G., Assistant Professor, School of Biosciences, M.G. University and Smt. Resmi D.S, Assistant Director, CDB visited MDRC on 12.9.2015 to assess the capability of the institute for conducting such research. It is reported that the centre is functioning in a rented house of about 2500 sq feet in a residential area with no adequate space for conducting animal experiments. The instruments available with the institute were more than 10 years old and were non-reliable. The instruments were also kept too close and there was no enough working space.

PAC discussed the project in detail. Dr D. M. Vasudevan, PAC expert member opined that MDRC is not in a position to take up the proposed research with the existing

equipments in the present building. Due to non-availability of sufficient infrastructural facilities for carrying out such research work, PAC decided not to approve the project .

2. Establishment of a Coconut point by M/s Kalpaka Coconut Producer Federation, Ernakulam, Kerala – Ratification of the expenditure incurred:

M/s Kalpaka Coconut Producer Federation has set up a Coconut point at Chemberaky Town Junction at a total cost of Rs. 1,39,523/- for the sale of various coconut products. The coconut point was inspected by Smt. Leenamol M.A, Market Promotion Officer and Shri. K.S Sebastian, Assistant Director, Marketing on 26.05.2015. It is reported that the infrastructure works was already done and outlet has started promoting neera and its value added products. An eligible subsidy of 50% Rs. 69,762/- was reimbursed to the Federation under Market Promotion.

After discussion PAC ratified the expenditure of Rs. 69,762/- reimbursed to M/s Kalpaka Coconut Producer Federation, Ernakulam, Kerala for setting up of a Coconut point at Chemberaky Town Junction, Aluva – Perumbavur Highway in Ernakulam Dist., Kerala.

3. Setting up of a Coconut point by M/s Changanacherry Regional Federation of Coconut Producers Society, Kottayam, Kerala – Ratification of the expenditure incurred:

M/s Changanacherry Regional Federation of Coconut Producers Society has set up a Coconut point at Nedumkunam at a total cost of Rs. 3,72,551.00 for the sale of various coconut products. The coconut point was inspected by Shri. K.S Sebastian, Assistant Director, Marketing on 19.06.2015. It is reported that the arrangements made by the CPF in kiosks were excellent. The supporting documents submitted by the CPF in proof of expenditure incurred for the outlet have been scrutinized and found to be in order. An eligible subsidy of 50% limited to Rs. 1.50 lakh was reimbursed to the Federation under Market Promotion.

After discussion PAC ratified the expenditure of Rs. 1.50 lakh reimbursed to M/s Changanacherry Regional Federation of Coconut Producers Society, Kottayam, Kerala for setting up of a Coconut point at Nedumkunam, Changanacherry, Kottayam, Kerala.

4. Setting up of a Coconut point by M/s Onchiyam Coconut Producers Federation, Vadakara, Kozhikode Dist, Kerala – Ratification of the expenditure incurred:

M/s Onchiyam Coconut Producers Federation, Vadakara has set up a Coconut point at Orkkatteri Town at a total cost of Rs. 3,45,650/- for the sale of various coconut products. The coconut point was inspected by ms. Mridula K, Technical Officer on 01.07.2015. It is reported tht the coconut point is functioning properly and the CPF is getting good sale from raw neera nd its by products. Hence an eligible subsidy of 50% limited to Rs. 1.50 lakh was reimbursed to the Federation under Market Promotion.

After discussion PAC ratified the expenditure of Rs. 1.50 lakh reimbursed to M/s Onchiyam Coconut Producers Federation, Vadakara, Kerala for setting up of a Coconut point at Orkkatteri Town, Onchiyam in Kozhikode Dist, Kerala.

5. Setting up of a Coconut point by M/s Mekkadampu Coconut Producers Society, Muvattupuzha, Ernakulam Dist, Kerala – Ratification of the expenditure incurred:

M/s Mekkadampu Coconut Producers Society has set up a Coconut point at Mekkadampu at a total cost of Rs. 2,67,307/- for the sale of various coconut products. The coconut point was inspected by the Smt. Leenamol M.A, Market Promotion Office on 19.09.2015. It is reported that the CPS has already created the infrastructure, started promoting neera and other coconut products and also submitted bills and vouchers for expenditure incurred. Hence an eligible subsidy of 50% of Rs. 1,33,654/- was reimbursed to the Society under Market Promotion.

After discussion PAC ratified the expenditure of Rs. 1,33,654/- reimbursed to M/s Mekkadampu Coconut Producers Society, Muvattupuzha, Ernakulam Dist, Kerala for setting up of a Coconut point at Mekkadampu, Muvattupuzha, Ernakulam Dist., Kerala.

6. Setting up of a Coconut point by M/s Kumarakam Federation of Coconut Producers Society, Kumarakam, Kottayam Dist, Kerala – Ratification of the expenditure incurred:

M/s Kumarakam Federation of Coconut Producers Society has set up a Coconut point at Kumarakam at a total cost of Rs.3,01,750/- for the sale of various coconut products. The coconut point was inspected by Shri. Sebastian K.S, Assistant Director, marketing on 15.10.2015. It is reported that the the cononut point is functioning very well and the supporting documents submitted by the CPF in proof id the expenditure incurred are found to be in order. Hence an eligible subsidy of 50% of Rs. 1,47,625/- was reimbursed to the Federation under Market Promotion.

After discussion PAC ratified the expenditure of Rs. 1,47,625/- reimbursed to M/s Kumarakam Federation of Coconut Producers Society, Kumarakam, Kottayam Dist, Kerala for setting up of a Coconut point at Thottichira Building, Puthen Road, Kumarakam, Kottayam Dist, Kerala.

7. Setting up of a Coconut Point by M/s Ramapuram Coconut Producers Federation, Kottayam Dist, Kerala – Ratification of the expenditure incurred:

M/s Ramapuram Coconut Producers Federation has set up a Coconut point at Ramapuram at a total cost of Rs. 3,67,366/- for the sale of various coconut products. The coconut point was inspected by Shri. K.S Sebastian, Assistant Director, Marketing on 31.10.2015 It is reported that the outlet is functioning properly and the supporting documents submitted by the CPF in proof of the expenditure incurred for the outlet was found to be in order. Hence an eligible subsidy of 50% limited to Rs. 1.50 lakh was reimbursed to the Federation under Market Promotion.

After discussion PAC ratified the expenditure of Rs.1,50,000/- reimbursed to M/s Ramapuram Coconut Producers Federation, Kottayam Dist, Kerala for setting up of a Coconut point at Ramapuram, Kottayam Dist, Kerala.

8. Setting up of a Coconut Point by M/s Kaipuzha Coconut Producers Company Ltd, Kollam Dist, Kerala – Ratification of the expenditure incurred:

M/s Kaipuzha Coconut Producers Company Ltd (KCPCL) has set up a Coconut point at Karugapally at a total cost of Rs. 1,93,000/- for the sale of various coconut products. The coconut point was inspected by the Mrs. Resmi D.S, Assistant Director, TMOC and reported that there is great demand for neera in these outlets, Hence an eligible subsidy of 50% of Rs.96,500/- was reimbursed to M/s KCPCL, Kollam under Market Promotion.

After discussion PAC ratified the expenditure of Rs. 96,500/- reimbursed to M/s Kaipuzha Coconut Producers Company Ltd, Kollam Dist, Kerala for setting up of a Coconut point at Karugapally, Thalavabhagam- Thevalakkara Road, Kollam Dist, Kerala.

9. Proposal for re-imbursement of Expenditure for participation in International Exhibition:

M/s Integral Coconut Products, Kozhikode Dist, Kerala participated in 9th Asian International Expo 2015 at Dhaka, Bangladesh from 10th to 14th June, 2015 as per the invitation of the Board for market promotion of coconut products. They have submitted a claim for a total expenditure of Rs.38,066/- towards their travel and hotel accommodation charges. As per the norms, manufacturer is eligible for 50% reimbursement of travel and hotel accommodation charges.

After discussion the PAC approved an amount of Rs.19,033/- for reimbursement to M/s Integral Coconut Products, Kozhikode Dist, Kerala towards the 50% expenses for travel and hotel accommodation charges incurred by the party for participation in the 9th Asian International Expo 2015 at Dhaka, Bangladesh from 10th to 14th June, 2015.

10. Establishment of 70 Integrated Coconut Points by M/s Palakkad Coconut Producer Company Ltd, Muthalamada, Palakkad, Kerala:

The 45th PAC held on 22nd May 2015 approved the proposal of M/s. Palakkad Coconut Producer Company Ltd (PCPCL), Muthalamada, Palakkad for setting up of 70 coconut points on case to case basis as and when the coconut points are established and bills and vouchers submitted by the promoter.

Accordingly, M/s PCPCL established 19 Nos. of coconut points with a total expenditure of Rs. 56.79 lakh. Smt. Resmi D.S, Assistant Director, TMOC inspected the coconut points on 18.8.15 and 9.9.15. It is reported that in all the stalls, fabrication and interior work was done and are functioning. Fresh neera and other value added products were selling in the points, Hence an eligible subsidy of Rs. 26,05,950/- was reimbursed to M/s. PCPCL.

In the proposal approved by 45th PAC the items of tablet and thermal printers were not included. Now a proposal has been submitted for the purchase of tablet and thermal printers as these are essential for the proper accounting of the sales in coconut points. ISC recommended for placing before PAC with details. Accordingly the proposal was placed before 46th PAC for reimbursement of Rs.2,29,214/- as details below:

Details of Coconut Points established by M/s PCPCL, Muthalamada

S. No.	Location of the coconut Point	Total Project cost (RS)	Exp incurred (RS)	Eligible subsidy Rs)	Subsidy Sanctioned (Rs) 50%	Balance subsidy to be released (Rs)
1	Kadambazhi-ppuram	2,94,918.00	2,94,918.00	147459.00	1,35,259.00	12200.00
2	Kollengode	2,99,436.00	2,99,436.00	149718.00	1,37,518.00	12200.00
3	Koduvayur	2,99,538.00	2,99,538.00	149769.00	1,37,569.00	12200.00
4	Kongadu	2,94,370.00	2,94,370.00	147185.00	1,34,738.00	12447.00
5	Cherpulassery	2,99,461.00	2,99,461.00	149730.50	1,37,530.50	12200.00
6	Edathanattukara	2,98,126.00	2,98,126.00	149063.00	1,36,863.00	12200.00
7	Nenmara	2,93,618.00	2,93,618.00	146809.00	1,34,609.00	12200.00
8	Thaneer panthal	2,94,251.00	2,94,251.00	147125.50	1,34,678.00	12447.50
9	Chirakkalppady	2,99,541.00	2,99,541.00	149770.50	1,37,570.50	12200.00
10	Vadakkanchery	2,99,011.00	2,99,011.00	149505.50	1,37,305.50	12200.00
11	Karinkulam	3,01,335.00	3,01,335.00	150000.00	1,38,467.50	11532.50
12	Mercy College	3,00,733.00	3,00,733.00	150000.00	1,37,919.00	12081.00
13	Mankada	3,00,196.00	3,00,196.00	150000.00	1,37,650.50	12349.50
14	Alathur	2,99,431.00	2,99,431.00	149715.50	1,37,515.50	12200.00
15	Chulliyarmedu	2,99,508.00	2,99,508.00	149754.00	1,37,554.00	12200.00
16	Mannarkkad	2,99,962.00	2,99,962.00	149981.00	1,37,781.00	12200.00
17	Pallassana	2,99,157.00	2,99,157.00	149578.50	1,37,131.00	12447.50
18	Malampuzha	3,04,763.00	3,04,763.00	150000.00	1,39,934.00	10066.00
19	Puthussery	3,01,609.00	3,01,609.00	150000.00	1,38,357.00	11643.00
	Total	56,78,964.00	56,78,964.00	2835164.00	26,05,950.00	2,29,214.00

After discussions PAC approved an amount of Rs.2,29,214/- for reimbursement to M/s Palakkad Coconut Producer Company Ltd (PCPCL), Muthalamada, Palakkad, Kerala towards the

expenditure incurred for the purchase of tablets and thermal printer for 19 Nos. of coconut points established by M/s PCPCL at different locations in Kerala as mentioned above.

Sd/-

Chief Coconut Development Officer

List of Participants

A	Project Approval Committee
1	Mr. T.K. Jose IAS Chairman, Coconut Development Board, Kochi & PAC Chairman
2	Dr. Anilkumar R. Assistant Agricultural Marketing Adviser, DMI, Kochi Representative of - Joint Secretary & Agricultural Marketing Adviser, Govt. of India, New Delhi
3	Dr. P. Vijayaraj, Scientist, CFTRI, Mysore Representative of - Director, Central Food Technological Research Institute, (CSIR), Mysore
4	Ms. Ushamani P. AGM, NABARD, Regional Office, Thriuvananthapuram Representative of- Chief General Manager, Technical Services Department, NABARD, Mumbai.
5	Shri. G. Mathew General Manager, IOB, Regional Office, Kochi Representative of- Chief General Manager, Indian Overseas Bank, Bangalore.
6	Mr. Rajeev P. George, Chief Coconut Development Officer i/c, Coconut Development Board, Kochi & Member Secretary, PAC.
B.	Technical Experts
1	Dr. D.M. Vasudevan Principal (Retd.), AIMS, Kochi
2	Dr. M. Aravindakshan Former Chairman, CDB & Co-Ordinator, Amritha School of Environmental Studies, Coimbatore.
C.	In Attendance
1	Dr. A.K. Nandi Secretary, CDB, Kochi
2	Mr. R. Jnanadevan Deputy Director, CDB, Kochi
3	Mr. K.S. Sebastian Assistant Director (Mkg.), CDB, Kochi
4	Mr. S.S. Choyal, Assistant Director (TMOC), CDB, Kochi

5	Ms. Resmi D.S. Assistant Director(TMOC), CDB, Kochi
6	Mr. V.C. Vasanthakumar, Assistant Director (Foreign Trade) CDB, Kochi
7	Mr. P. Sabareenathan Finance Officer, CDB, Kochi
8	Mr. G.M. Siddharameswara Swamy, Assistant Marketing Officer, CDB, Kochi
9	Mr. Sasikumar C, Technical Officer, CDB, Kochi
10	Ms. Jyothi K Nair, Processing Engineer (on Contract) CDB, Kochi
11	Ms. Geethu A. S., Processing Engineer (on Contract) CIT, Vahzakulam

**Proceedings of the 47th meeting of
Project Approval Committee (PAC) of Technology Mission on
Coconut held at Kochi on 4th February 2016**

The 47th meeting of the Project Approval Committee (PAC) on Technology Mission on Coconut (TMOC) was held in the Board Room of Coconut Development Board, Kochi on 4th February, 2016. Shri. T. K. Jose IAS, Chairman, Coconut Development Board and Chairman PAC presided over the meeting. The list of participants is enclosed as Annexure-I.

At the outset, Chairman welcomed all the PAC members and briefed about the vast scope available for value addition in coconut sector. He emphasized the possibility of bringing in more entrepreneurs into coconut sector which will ultimately benefit the coconut farmers and the farming community as a whole. He added that entrepreneurs from countries like Indonesia and Malaysia are interested in establishing coconut processing units in India, which highlights the enormous potential available for value added products throughout the world. Thereafter agenda items were taken up by the PAC.

AGENDA No. 1: Confirmation of the Proceedings of 46th Project Approval Committee Meeting held on 15th December 2015

The Committee confirmed the proceedings of the 46th Project Approval Committee Meeting held on 15.12.2015.

AGENDA No. 2: Action taken report on decisions of the 46th PAC Meeting

The committee perused the action taken on decisions of the 46th meeting of Project Approval Committee. CCDO informed that out of 15 projects approved during the last PAC, 1st installment of 12 projects was released.

AGENDA No. 3: Approval of new project proposals:

Neera Processing and Packing Units

1. Setting up of Neera Processing and Packing Unit – M/s Perambra Coconut Producer Co. Ltd, Chakkittapara P O, Kozhikode, Kerala. (Agenda S. No-6)

The objective of the project is to process 10,000 litres of neera per day. The project was presented by Shri. Unnikrishanan Nair, CEO, Perambra CPC. The CEO informed the PAC that their CPC has received the ISO 9001:2015 certificate.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakhs)		
Land	20.00	-	-
Plant & Machinery	200.00	200.00	50.00
Building	60.00	35.00	8.75
Electrification and Installation	36.50	10.00	2.5
Preliminary & Pre op. expenses	5.00	2.45	0.61
Others	1.00	-	-
Working Capital margin	127.50	-	-
TOTAL	450.00	247.45	61.86 Limited to 50.00

PAC appreciated the efforts taken by the CPC for getting ISO certification. After detailed discussion PAC approved the project.

2. Setting up of Neera Processing and Packing Unit- M/s Kadathanad Coconut Producer Company Ltd, P.O Mokeri, Kozhikode, Kerala (Agenda S .No - 7)

The project was presented by Shri Jinesh, CEO, M/s Kadathanad Coconut Producer Company Ltd. The objective of the project is to process 8000 litres of neera per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakhs)		
Land & Land Dev.	Leased land	-	-
Plant & Machinery	159.34	159.34	39.83
Building & Civil works	40.00	40.00	10.00
Electrical Installation	6.00	6.00	1.50
DG Set-62.5 kva	7.40	5.00	1.25
Refrigerated vans	6.59	-	-
Laboratory equipment	1.68	1.68	0.42
Furniture and office equipments	1.00	-	-
Preliminary &	4.00	2.12	0.53

Pre op. expenses			
Working Capital margin	102.00	-	-
Grand total	328.01	214.14	53.53 Limited to 50.00

After detailed discussion, PAC approved the project.

Virgin Coconut Oil Manufacturing Units

3. Setting Up of a Virgin Coconut Oil Manufacturing Unit at Perundurai Tk, Tamil Nadu- M/s KLF Nirmal Industries (P). Ltd, Fr. Dismas Road, Irinjalakuda, Thrissur, Kerala (Agenda S. No -23)

The objective of the project is setting up of virgin coconut oil manufacturing unit to process 6.25 metric ton (20,000 Nos) coconuts per day to produce VCO – 500 kg and partially deoiled DC powder – 750 kg.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakhs)		
Land & Land Development	2.10	-	-
Building & Civil works (Alteration and modification)	28.00	28.00	7.00
Plant & Equipments	142.19	142.19	35.55
Commissioning & Transportation charges	10.14	7.23	1.80
Construction of compartment, structural & platform	20.00	20.00	5.00
ETP	8.99	8.99	2.25
RO Plant	5.99	5.99	1.50
Furniture & Fittings	1.00	-	-
Electrical Installations	31.10	7.10	1.77
DG Set	16.60	5.00	1.25
Preliminary & Pre op. expenses	4.55	2.24	0.56
Working Capital Margin	40.70	-	-
TOTAL	311.36	226.74	56.68 Limited to 50.00

The project is approved with an eligible subsidy of Rs.50.00 lakh.

4. Setting up of a Virgin Coconut Oil Manufacturing Unit- M/s Wettree Extra Virgin Coconut Oil, Narasingapuram , Mannur Post, Pollachi Tk, Tamilnadu (Agenda S. No - 24)

The objective of the project is setting up of a unit to process 5000 coconuts/day for producing virgin coconut oil.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakhs)		
Building	26.00	26.00	6.50
Plant & Equipments	74.35	74.35	18.59
Preliminary & Pre op. expenses	2.00	1.00	0.25
Working Capital margin	15.00	-	
TOTAL	117.35	101.35	25.34

After detailed discussion, PAC approved the project. PAC advised the promoter to convert the unit into a Pvt. Ltd. company for raising equity, tax benefits and for effective governance system and attracting professional staff for effective running of the unit.

5. Setting up of a Virgin Coconut Oil Unit- M/s Perambra Coconut Producer Co. Ltd, Alankar Arcade, PP1/994F, State Highway, Perambra. Kozhikode, Kerala. (Agenda S. No -26)

The objective of the project is setting up of a virgin coconut oil unit to process 10,000 coconuts per day for making VCO.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakhs)		
Land Development	40.00	-	-
Plant & Machinery	180.00	180.00	45.00
Building including plumbing and fitting	63.00	17.50	4.38
Electrical installation	4.00	4.00	1.00
Laboratory Equipments	2.00	2.00	0.50
Preliminary & Pre op. expenses	1.00	1.00	0.25
Working Capital margin	60.00	-	-
TOTAL	350.00	204.50	51.13 Limited to 50.00

After detailed discussion, PAC approved the project.

Coconut Water Processing and Packing Unit

6. Setting up of Coconut Water Processing and Packing Unit- M/s Perambra Coconut Producer Co. Ltd, Alankar Arcade, State Highway, Perambra, Kozhikode Dist, Kerala (Agenda S. No -28)

The objective of the project is setting up of a unit to process 5000 litres of coconut water per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakhs)		
Land	10.00	-	-
Plant & Machinery	48.00	48.00	12.00
Building	30.00	12.50	3.13
Electrical installation	2.00	2.00	0.50
Furniture and Office Equipments	2.00	-	-
Preliminary & Pre op. expenses	2.00	0.62	0.15
Working Capital margin	6.00	-	-
TOTAL	100.00	63.12	15.78

After detailed discussion, PAC approved the project.

Desiccated Coconut Manufacturing Units

7. Setting up of a Desiccated Coconut Powder Manufacturing Unit- M/s H.M. Agro Product, Bommenahalli Village, Karadi Panchayat, Kotenayakanahalli Post, Tiptur Tk., Tumkur Dist, Karnataka. (Agenda S. No - 8)

The objective of the project is setting up of a desiccated coconut powder manufacturing unit to process 20,000 coconuts per day for manufacturing of 2.00 tons of desiccated coconut powder per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakhs)		
Land	Own	-	-
Plant & Equipments	44.10	44.10	11.03
Building & Civil works	100.00	29.40	7.35
Others	0.50	-	-
Preliminary & Pre op. expenses	0.35	0.35	0.08
Working Capital margin	6.00	-	-
TOTAL	150.95	73.85	18.46

The project is approved with an eligible subsidy of Rs.18.46 lakh. PAC advised the promoter to convert the unit into a Pvt. Ltd. company for raising equity, tax benefits and for effective governance system and attracting professional staff for effective running of the unit.

8. Setting up of a Desiccated Coconut Powder Manufacturing Unit- M/s Sri Ranga Agro Industries, Harisamudra Gate, Halkurke Road, Karnataka. (Agenda S. No -9)

The objective of the project is setting up of a desiccated coconut powder manufacturing unit to process 21,000 Coconuts/day to produce 2100 kg DC Powder per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakhs)		
Land	Own	-	-
Building & Civil works	65.00	27.43	6.86
Plant & Equipments	41.15	41.15	10.28
Working capital	20.00	-	-
TOTAL	126.15	68.58	17.14

The project is approved with an eligible subsidy of Rs.17.14 lakh. PAC advised the promoter to convert the unit into a Pvt. Ltd. company for raising equity, tax benefits and for effective governance system and attracting professional staff for effective running of the unit.

9. Setting up of a Desiccated Coconut Powder Manufacturing Unit- M/s Punith Coconut Industries, Hossahalli, Keragodi Road, Kasaba Hobli, Tumkur District, Karnataka (Agenda S. No -10)

The objective of the project is setting up of a desiccated coconut powder manufacturing unit to process 12000 coconuts per day to produce 1.20 MT desiccated coconut powder per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakhs)		
Land & Land Dev.	Own	-	-
Plant & Equipments	26.40	24.90	6.23
Building & Civil works	75.00	16.60	4.15
Electrical Deposit	0.50	-	-
Preliminary & Pre op. expenses	0.85	0.42	0.10
Office Equipments	1.25	-	-
Working Capital margin	8.00	-	-
TOTAL	112.00	41.92	10.48

The project is approved with an eligible subsidy of Rs.10.48 lakh. PAC advised the promoter to convert the unit into a Pvt. Ltd. company for raising equity, tax benefits and for effective governance system and attracting professional staff for effective running of the unit.

10. Setting up of a Desiccated Coconut Powder Manufacturing Unit- M/s Indian Coconut Products, Earipatty Village Post, Pollachi, Tamilnadu (Agenda S. No - 11)

The objective of the project is setting up of a desiccated coconut powder manufacturing unit to process 65,000 coconuts per day to produce 6.50 tons DC Powder per day

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakhs)		
Land	Own	-	-
Building & Civil works	127.00	52.15	13.04
Plant & Equipments	82.09	78.23	19.56
Preliminary & Pre op. expenses	6.86	1.30	0.32
Working Capital margin	30.00	-	-
TOTAL	245.95	131.68	32.92

The project is approved with an eligible subsidy of Rs.32.92 lakh. PAC advised the promoter to convert the unit into a Pvt. Ltd. company for raising equity, tax benefits and for effective governance system and attracting professional staff for effective running of the unit.

11. Setting up of a Desiccated Coconut Powder Manufacturing Unit- M/s Sri Thirumala Agro Processing, Gedlehalli, , Halepalya Post, Tiptur, Tumkur Dist, Karnataka (Agenda S. No -12)

The objective of the project is setting up of a desiccated coconut powder manufacturing unit to process 20,000 coconuts per day to produce 2.00 tons of desiccated coconut powder per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakhs)		
Land & Land Dev.	-	-	-
Plant & Equipments	45.26	45.26	11.32
Building & Civil works	118.00	30.17	7.54
Office Equipments	3.00	-	-
Deposits	0.35	-	-
Preliminary & Pre op. expenses	0.75	0.75	0.18
Working Capital margin	4.06	-	-
TOTAL	171.42	76.18	19.04

The project is approved with an eligible subsidy of Rs.19.04 lakh. PAC advised the promoter to convert the unit into a Pvt. Ltd. company for raising equity, tax benefits and for effective governance system and attracting professional staff for effective running of the unit.

12. Setting up of a Desiccated Coconut Powder Manufacturing Unit- M/s Kalleshwara Desiccated Coconut Industries, Bennayakanahalli, Kallegowdanapalaya Post, Tiptur, Tumkur Dist, Karnataka (Agenda S. No -13)

The objective of the project is setting up of a desiccated coconut powder manufacturing unit to process 10,000 coconuts per day to produce 1.00 ton of desiccated coconut powder per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakhs)		
Land	Own	-	-
Building & Civil works	50.00	21.16	5.29
Plant & Equipments	33.28	31.74	7.94
Preliminary & Pre op. expenses	0.25	0.25	0.06
Working Capital margin	2.84	-	-
TOTAL	86.37	53.15	13.29

The project is approved with an eligible subsidy of Rs.13.29 lakh. PAC advised the promoter to convert the unit into a Pvt. Ltd. company for raising equity, tax benefits and for effective governance system and attracting professional staff for effective running of the unit.

13. Setting Up of a Desiccated Coconut Powder Manufacturing Unit- M/s SMV Agro Industries, Kalkeri Road, Huchanahatti, Tiptur, Tumkur Dist., Karnataka (Agenda S. No -14)

The objective of the project is setting up of a desiccated coconut powder manufacturing unit to process 30,000 coconuts per day for making 3.00 tons of desiccated coconut powder per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakhs)		
Land	Own	-	-
Building & Civil works	70.00	40.50	10.12
Plant & Equipments	53.02	53.02	13.26
Deposit	1.00	-	-
DG Set	6.85	5.00	1.25
Electrical fittings	2.85	2.65	0.66
Preliminary & Pre op. expenses	1.00	1.00	0.25
Working Capital margin	8.00	-	-
TOTAL	142.72	102.17	25.54

The project is approved with an eligible subsidy of Rs.25.54 lakh. PAC advised the promoter to convert the unit into a Pvt. Ltd. company for raising equity, tax benefits and for effective governance system and attracting professional staff for effective running of the unit.

14. Setting up of a Desiccated Coconut Powder Manufacturing Unit- M/s Sri Dhanalakshmi Coconut Industries, Bagur Hobli, Karehally Road, Anathi Post, Channarayapatna Tq, Hassan Dist, Karnataka (Agenda S. No -15)

The objective of the project is setting up of a desiccated coconut powder manufacturing unit to process 16,000 coconut per day for producing 1.60 tons of desiccated coconut powder per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakhs)		
Land	Own	-	-
Plant & Equipments	30.03	30.03	7.51

Building & Civil works	35.00	11.66	2.92
Electrical Deposit	0.50	-	-
Office Equipments	3.00	-	-
Pre op. expenses	0.35	0.35	0.08
Working Capital margin	5.88	-	-
Total	74.76	42.04	10.51

The project is approved with an eligible subsidy of Rs.10.51 lakh. PAC advised the promoter to convert the unit into a Pvt. Ltd. company for raising equity, tax benefits and for effective governance system and attracting professional staff for effective running of the unit.

15. Setting Up of a Desiccated Coconut Powder Manufacturing Unit-M/s Rajarajeshwari AgroTech, Byranayakanahalli, Honnavali Hobli, Tiptur TK, Tumkur Dist, Karnataka (Agenda S. No -16)

The objective of the project is setting up of a desiccated coconut powder manufacturing unit to process 15,000 coconuts per day to produce 1.50 ton desiccated coconut powder per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakhs)		
Land	Own	-	-
Building & Civil works	46.80	13.50	3.38
Plant & Equipments	20.20	20.20	5.05
Deposits	1.03	-	-
Preliminary & Pre op. expenses	2.00	0.30	0.07
Working Capital margin	6.67	-	-
TOTAL	76.70	34.00	8.50

The project is approved with an eligible subsidy of Rs.8.50 lakh. PAC advised the promoter to convert the unit into a Pvt. Ltd. company for raising equity, tax benefits and for effective governance system and attracting professional staff for effective running of the unit.

16. Setting Up of a Desiccated Coconut Powder Manufacturing Unit- M/s Kairaly Eco Products, Meppayur, Via - Iringath, Koilandy Taluk, Kozhikode Dist, Kerala (Agenda S. No -17)

The objective of the project is setting up of a desiccated coconut powder manufacturing unit to process 10000 coconuts per day to produce 1.00 metric ton of desiccated coconut powder per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(` Rs. in lakhs)		
Land	Own	-	-
Building & Civil works	33.00	27.12	6.78
Effluent Treatment Plant	2.60	2.60	0.65
Plant & Equipments	39.57	38.81	9.70
Electrification	10.82	1.94	0.49
Generator	4.69	4.69	1.17
Technical knowhow	1.79	-	-
Preliminary & Pre op. expenses	2.00	0.75	0.19
Working Capital margin	8.53	-	-
TOTAL	103.00	75.91	18.98

The project is approved with an eligible subsidy of Rs.18.98 lakh. PAC advised the promoter to convert the unit into a Pvt. Ltd. company for raising equity, tax benefits and for effective governance system and attracting professional staff for effective running of the unit.

17. Expansion of Existing Desiccated Coconut Manufacturing Unit- M/s V.V. Industries, Vellalapalayam Pirivu (MILKA), Gopichettipalayam-638 476, Erode Dist, Tamil Nadu (Agenda S. No -18)

The objective of the project is expansion and modernisation of the existing desiccated coconut powder manufacturing unit to process 1,10,000 coconuts per day from the existing capacity of 30,000 coconuts per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakhs)		
Land	Own	-	-
Building & Civil works	57.60	47.54	11.88
Plant & Equipments	101.71	101.71	25.43
Electrification	1.94	1.94	0.49
Working Capital margin	24.00	-	-
TOTAL	185.25	151.19	37.80

The project is approved with an eligible subsidy of Rs.37.80 lakh. PAC advised the promoter to convert the unit into a Pvt. Ltd. company for raising equity, tax benefits and for effective governance system and attracting professional staff for effective running of the unit.

18. Expansion, Modernisation and Automation of the existing Desiccated Coconut Manufacturing Unit- M/s Swastika Coco Products Pvt. Ltd, Katbalthur, Hemmady, Kollur Sri Mookambika Temple Road, Kundapura, Udupi District , Karnataka (Agenda S. No -19)

The objective of the project is expansion and modernisation of the existing desiccated coconut powder manufacturing unit to process 60,000 coconuts per day from the existing capacity of 40,000 coconuts per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. In lakh)		
Land	Own	-	-
Building & Civil works	48.5	41.25	10.31
Effluent Treatment & Disposal System	19.50	10.00	2.50
Plant & Equipments	83.86	83.85	20.96
Electrification	6.00	-	-
Generator	7.00	-	-
Furniture & Office Equipments	1.95	-	-
Preliminary & Pre op. expenses	3.00	1.35	0.34
Working Capital margin	12.00	-	-
TOTAL	181.81	136.45	34.11 Limited to 26.095

The company has already availed an assistance of Rs. 23.905 lakh approved by 35th PAC held on 24.02.2011. Hence the PAC approved the project with an eligible subsidy of Rs.26.095 lakh only, limiting the total subsidy to Rs.50.00 lakh.

19. Setting up of a Desiccated Coconut Powder & Virgin Coconut Oil Manufacturing Unit- M/s Mahavir Coconut Products, Chandan - Chetan, Sadana Road, K.R Extension, Tumkur-572101, Karnataka (Agenda S. No -20)

The objective of the project is setting up of a desiccated coconut powder and virgin coconut oil manufacturing unit to process 50,000 coconuts per day for producing 4.60 metric ton desiccated coconut powder and 0.32 metric ton virgin coconut oil per day

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakh)		
Land & Land Dev.	45.00	-	-
Plant & Equipments	169.36	124.72	31.18
Building & Civil works	314.30	83.00	20.75

Preliminary & Pre op. expenses	10.00	2.07	0.51
Others	21.34	-	-
Working Capital margin	50.00	-	-
TOTAL	610.00	209.79	52.44 Limited to 50.00

The project is approved with an eligible subsidy of Rs.50.00 lakh. PAC advised the promoter to convert the unit into a Pvt. Ltd. company for raising equity, tax benefits and for effective governance system and attracting professional staff for effective running of the unit.

Integrated Coconut Processing Units

20. Setting up of an Integrated Coconut Processing Unit- M/s Noveeal Coconut Producer Co. Ltd, Reg. Office, Konkapalli, Amalapuram, E.G. Dist, Andhra Pradesh (Agenda S. No - 25)

The objective of the project is setting up of an integrated coconut processing unit to process 6.25 metric ton coconut/day to produce virgin coconut oil- 500 kg, partially defatted powder- 667 kg, coconut chips-300 kg, coconut water based drink – 750 litres and vinegar- 500 litres

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakhs)		
Land & Land Dev.	1.00	-	-
Building & Civil works	81.25	66.00	16.50
Plant & Equipments	149.64	149.64	37.41
Furniture & Fittings	1.00	-	-
Electrical & Electronic Installation	16.43	7.48	1.87
Preliminary & Pre op. expenses	4.55	2.23	0.56
Working Capital margin	23.63	-	-
TOTAL	277.50	225.35	56.64 Limited to 50.00

Shri D.R. Raju, Chairman, Noveeal Coconut Producer Co. Ltd presented the project in detail. Chairman, CDB suggested that the company should appoint

technical and managerial professionals for the effective running of the company. Chairman advised to explore the possibilities of financial support under schemes of NABARD mainly Farmers Producers Organization – Promotion Fund (FPO – PO) fund scheme.

After detailed discussions, PAC approved the project in principle and authorized the Chairman, CDB to approve the project on submission of relevant documents as per TMOC norms.

21. Establishment of an Integrated Coconut Processing Unit for the Production of Coconut Juice (Flavoured Coconut Milk) and Virgin Coconut Oil - M/s Tirur Coconut Producer Co. Ltd, Muttanur, Porathur, Malappuram Dist, Kerala (Agenda S. No -27)

The objective of the project is setting up of an integrated coconut processing unit to process 15000 coconuts per day out of which 5000 coconuts will be processed for flavoured coconut juice and 10000 coconuts per day will be processed for virgin coconut oil.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs in lakhs)		
Land	leased	-	-
Building (4042 sq. feet) & other civil works	45.00	36.42	9.11
Plant & Machinery	155.00	155.00	38.75
Effluent treatment plant	10.00	10.00	2.50
Electrification	10.00	7.75	1.94
Generator	6.30	5.00	1.25
Working Capital margin	23.70	-	-
TOTAL	250.00	214.17	53.55 Limited to 50.00

After detailed discussion, PAC approved the project.

22. Setting up of an Integrated Coconut Processing Unit for Virgin Coconut Oil & Desiccated Coconut Powder- M/s Kalco Agro Products Pvt Ltd, Temple View Apartments, Malaviya St, Ram Nagar, Coimbatore, Tamilnadu (Agenda S. No - 21)

The objective of the project is setting up of a virgin coconut oil and desiccated coconut powder manufacturing unit to process 75,000 coconuts per day, out of which 50,000 coconuts for making VCO and 25,000 coconuts for making desiccated coconut powder.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakhs)		
Land	Own	-	-
Building (Renovation)	60.00	44.38	11.10
Plant & Equipments	170.00	170.00	42.50

RO Plant	5.00	4.30	1.07
ETP	10.00	10.00	2.50
DG Set	8.50	5.00	1.25
Electrical Installation	5.00	-	-
TOTAL	258.50	233.68	58.42 Limited to 50.00

After detailed discussion, PAC approved the project.

23. Setting up of an Integrated Coconut Processing Unit for Virgin Coconut Oil, Coconut Milk Powder, Desiccated Coconut Powder and Vinegar- M/s Phalada Agro Research Foundations Pvt. Ltd, Segehalli Cross, Magadi Main Road, Bangalore, Karnataka (Agenda S. No -22)

The objective of the project is setting up of an integrated unit for processing of 5000 coconuts per day for producing virgin coconut oil, coconut milk powder, desiccated coconut powder and vinegar.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakhs)		
Land	Lease	-	-
Land Leveling and box drainage	6.00	-	-
Fencing, Compound Wall and Gates	8.00	-	-
Electrification	4.00	4.00	1.00
Plant & Equipments	104.45	81.97	20.49
Building & Civil works and Internal partition	61.00	36.00	9.00
RO water purifier	2.70	2.70	0.68
Staff salary	9.00	-	-
Preliminary and Pre-op. Expenses	4.85	1.24	0.31
TOTAL	200.00	125.91	31.48

The project is approved with an eligible subsidy of Rs.31.48 lakh.

Research Projects

24. Developing Healthy and Diabetic Friendly Products from Deoiled Desiccated Coconut Powder and Millets - CSIR-Central Food Technological Research Institute, Mysore-570020, Karnataka (Agenda S. No -2)

The objectives of the project are as follows:

- Identification and characterization of bioactive components like polyphenols, carotenoids and dietary fiber from the deoiled desiccated coconut powder and selected underutilized millets.
- Determination of the physical properties and changes occurring due to the processing of millet grains and deoiled coconut with an emphasis on their nutritional, functional and technological characteristics related to product development.
- Development of processes for ready-to-eat convenience health foods using processed coconut fibre and millet grains and characterization of the products.

The Principal Investigator Dr. Sila Bhattacharya, Senior Principal Scientist, CFTRI, Mysore presented the project. The Committee informed that the CIT Vazhakulam has already developed 6 types of cookies by using desiccated coconut powder and various types of millets and cereals. Therefore the project is deferred.

25. Preparation of Coconut Flour from Whole Coconut (Kernel) for Development of Foods with Anti-Diabetes Properties - CSIR-Central Food Technological Research Institute, Mysore-570020, Karnataka (Agenda S. No -3)

The objectives of the project are as follows:

- To study the coconut cake polysaccharides and its anti diabetes property
- To develop food(s) for diabetics and obesity using coconut cake as ingredients

The Principal Investigator Dr. G. Suresh Kumar, Scientist, CFTRI, Mysore presented the project before the PAC. PAC suggested that the project may be revised for only product development.

However for the clinical studies on anti-diabetes properties of coconut flour, CDB may support the project jointly with the Department of Science and Technology/ICMR.

26. Development of Innovative Value Added Products using Coconut Milk- PSG College of Arts & Science, Civil Aerodrome Post, Coimbatore, Tamil Nadu (Agenda S. No-1)

The objectives of the project are as follows:

- ❖ To formulate health mixes using coconut milk powder and coconut flour
- ❖ To calculate the nutrient content of the selected formula.
- ❖ To evaluate the growth promoting activity of the health mix
- ❖ To assess the immune enhancing activity of foods prepared using coconut flour.
- ❖ To find out the shelf life of the formulated products
- ❖ To evaluate the economic feasibility and compare the cost with commercial products.

The project was presented by the Principal Investigator Dr. S. Radhai Sri, Associate Professor, PSG College of Arts & Science, Coimbatore. The PAC suggested to reduce the project period to 12 months and to revise the project. PAC discussed on various components and cost and approved the project with a total cost of Rs. 30.558 lakh with Board's share of Rs. 12.232 lakh including 10% institutional charges.

S. No	Particulars	Share of CDB (Rs. in lakh)	S. No	Particulars	Share of PSG (Rs. in lakh)
1	Research Fellowship	3.120	1	Electronic Balance	0.330
2	Consumables	6.000	2	Pulveriser	0.280
3	Contingencies	2.000	3	Hammer mill	0.800
	Total	11.120	4	Pasteurizer	5.600
4	Institutional charges (10%)	1.112	5	Retort Processing Unit	3.450
	Total	12.232	6	Steam boiler	4.200
			7	Homogenizer	2.000
			8	Over head charges	1.666
				Total	18.326
	G. Total	30.558			

Chairman, CDB suggested that after 6 months, once the products are developed, PI may publish articles in Tamil and English journals about the wellness of coconut milk and innovative milk based products which will help to create more awareness, about the products.

27. Biochemical and Clinical Studies on Cardio Protective effect of health drink Neera- St. Thomas College, Pala, Arunapuram P O, Kottayam Dist, Kerala (Agenda S. No-4)

The objective of the project is evaluation of cardio protective effect of health drink Neera on Isoproterenol (ISO) induced myocardial infarction (MI) in experimental models and its clinical studies.

PAC perused the comments of experts Dr. Rajmohan, Professor (Retd), Kerala University and Dr. D.M. Vasudevan, Principal (Retd), AIMS, Kochi regarding the project. PAC agreed to the comments of the experts and opined that the project may not be accepted in the present form and PAC decided not to approve the project for funding under TMOC.

28. Coconut Wood Demonstration and Training Centre for Value Addition- M/s Kerala Furniture Consortium Pvt Ltd (KFCPL), Kodanad P, Perumbavoor, Ernakulam, Kerala (Agenda S. No- 5)

The objectives of the project are as follows:

- Conduct awareness programme to promote coconut wood products/furniture.
- Set up coconut wood demonstration and training centre to assist farmers in the product development training (CWDTC).

After the detailed discussion, PAC suggested to reduce the duration of the project to one year with clearly defined deliverables and revise the project cost accordingly.

PAC suggested that the revised proposal should clearly spell out the details of machineries involved and the design consultancy expenses. Also the final deliverables should contain standard planks/tiles and furniture made out of good quality coconut wood.

Activated Carbon Manufacturing Units

29. Setting up of a Coconut Shell Based Activated Carbon Unit- M/s Activecarb, Chinnaputhur village, Dharapuram Taluk, Tiruppur District, Tamil Nadu (Agenda S. No-29)

The objective of the project is to process 30.00 metric ton of coconut shell charcoal per day to produce 10.00 metric ton activated carbon per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs in lakhs)		
Land	30.00	-	-
Building & Civil works	400.00	140.00	35.00
Effluent treatment & Disposal System	2.50	2.50	0.62
Plant & Equipments	425.71	425.00	106.25
Electrical Installation	57.44	-	-
Generator	15.03	5.00	1.25
Furniture & Office Equipments	4.61	-	-
Preliminary & Pre op. expenses	10.00	5.72	1.43
Working Capital margin	125.00	-	-
TOTAL	1070.29	578.22	144.55 Limited 50.00

The project is approved with an eligible subsidy of Rs.50.00 lakh. PAC advised the promoter to convert the unit into a Pvt. Ltd. company for raising equity, tax benefits and for effective governance system and attracting professional staff for effective running of the unit.

30. Establishment of an Activated Carbon Manufacturing Unit- M/s Elite Carbon Creations Pvt. Ltd, Sriraman Narayan Nagar, Palladam Road, T. Kottampatti, Pollachi, Tamilnadu (Agenda S. No -30)

The objective of the project is to process coconut shell charcoal to produce 4.00 metric tons of activated carbon per day

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs in lakhs)		
Land	Leased	-	-
Building & Civil works	120.30	80.00	20.00
Plant & Equipments	228.99	213.27	53.31
Preliminary & Pre op. expenses	2.00	2.00	0.50

Furniture and office Equipments	2.96	-	-
Working Capital margin	25.75	-	-
TOTAL	380.00	295.27	73.81 Limited to 50.00

After detailed discussion, PAC approved the project.

31. Setting up of an Activated Carbon Manufacturing Unit- M/s Pandian Carbon, Uppalam, Thuppaspatti Street, Tuticorin – 628 002, Tamil Nadu (Agenda S. No -31)

The objective of the project is to produce 3.00 metric tons of activated carbon per day from coconut shell based charcoal.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs in lakhs)		
Land	Leased	-	-
Building & Civil works	50.00	50.00	12.50
Plant & Equipments	170.00	170.00	42.50
Working Capital margin	20.00	-	-
TOTAL	240.00	220.00	55.00 Limited to 50.00

The project is approved with an eligible subsidy of Rs.50.00 lakh. PAC advised the promoter to convert the unit into a Pvt. Ltd. company for raising equity, tax benefits and for effective governance system and attracting professional staff for effective running of the unit.

Coconut Oil Manufacturing Units

32. Setting up of a Coconut Oil Manufacturing Unit and other Value Added Products at Muduvana- M/s Vadakara Coconut Farmers Producer Co. Ltd, Al-Diyafa Complex, Vatakara, Kozhikode, Kerala (Agenda S. No –32)

The objective of the project is to process 4.00 metric tons of copra per day for producing 2.60 metric ton of coconut oil and 1.40 metric ton of coconut oil cake per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakhs)		
Land & Land Dev.	15.00	-	-
Building & Civil Works	30.00	30.00	7.50
Plant & Equipments	128.18	128.18	32.05
Pre-operative Expenses	4.27	1.58	0.39
Total	177.45	159.76	39.94

The project is approved with an eligible subsidy of Rs.39.94 lakh.

33. Setting up of a Coconut Oil Manufacturing Unit- M/s Perambra Coconut Producer Co. Ltd, Alankar Arcade, PP1/994F, State Highway, Perambra, Kozhikode, Kerala (Agenda S. No-33)

The objective of the project is to process 10.00 metric tons of copra per day for producing 6.40 metric tons of coconut oil and 3.60 metric ton of coconut oil cake.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakhs)		
Land	40.00	-	-
Plant & Machinery	180.00	180.00	45.00
Building and civil works	50.00	20.00	5.00
Electrical installation	14.00	9.00	2.25
Laboratory Equipments	2.00	2.00	0.50
Furniture and Office Equipments	3.00	-	-
Preliminary & Pre op. expenses	1.00	1.00	0.25
Working Capital	60.00	-	-
TOTAL	350.00	212.00	53.00 Limited to 50.00

After detailed discussion, PAC approved the project.

34. Setting up of Coconut Oil and Oil Cake Unit- M/s Kozhikode Coconut Farmers Producer Company, P O., Kunnamangalam, Kozhikode, Kerala (Agenda S. No-34)

The objective of the project is to process 10.00 metric tons of copra per day for producing 6.40 metric tons of coconut oil and 3.60 metric ton of coconut oil cake.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakhs)		
Land & Land Dev.	100.00	-	-
Plant & Equipments	150.00	150.00	37.50
Building & Civil works	71.00	35.30	8.83
Electrical & Electronic Installation	10.00	7.50	1.87
Furnitures	2.00	-	-
Preliminary & Pre	2.00	1.93	0.48

op. expenses			
Working Capital margin	150.00	-	-
TOTAL	485.00	194.73	48.68

After detailed discussion, PAC approved the project.

35. Setting up of Coconut Oil Unit- M/s Onattukara Coconut Producer Company Ltd, Kattanam, Pallickal P O, Alappuzha, Kerala (Agenda S. No-35)

The objective of the project is to process 10.00 metric tons of copra per day for producing 6.40 metric tons of coconut oil and 3.60 metric ton of coconut oil cake.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakhs)		
Land & Land Dev.	5.59	-	-
Plant & Equipments	93.91	93.91	23.48
Building & Civil works	109.00	65.74	16.43
Electrical Installation	31.00	4.70	1.18
Vehicles	7.50	-	-
Furniture and office equipments	6.10	-	-
Preliminary & Pre op. expenses	10.87	1.64	0.41
Working Capital margin	27.80	-	-
Grand total	291.77	165.99	41.50

After detailed discussion, PAC approved the project.

36. Setting up of Coconut Oil Unit- M/s Tirur Coconut Producer Company Ltd, Muttannur, Purathur, Tirur, Malappuram Dist, Kerala (Agenda S. No-36)

The objective of the project is to process 10.00 metric tons of copra per day for producing 6.40 metric tons of coconut oil and 3.60 metric ton of coconut oil cake.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(` Rs. in lakhs)		
Land & Land Dev.	Own	-	-
Plant & Equipments	146.73	146.73	36.68
Building	37.00	31.30	7.83
ETP	2.50	2.50	0.62
Generator	12.28	5.00	1.25
Electrification	12.72	7.33	1.83
Furniture, weighing scale, storage etc	1.99	-	-
Preliminary	3.00	1.93	0.48
Working Capital margin	32.78	-	-
Grand total	249.00	194.75	48.69

After detailed discussion, PAC approved the project.

Ball Copra Making Units

37. Setting up of a Ball Copra Making Unit- Shri Pabolu Venkata Narasimha Rao, Totlapalem, Peruru, Amalapuram Mandal, East Godavari Dist, Andhra Pradesh (Agenda S. No – 38)

The objective of the project is to process 10.00 lakh coconuts per year for making ball copra.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
(Rs. in lakhs)			
Land & Land Dev.	21.55	-	-
Platform Dryer	41.50	41.50	10.37
Preliminary & Pre op. expenses	3.00	-	-
Working Capital margin	9.00	-	-
TOTAL	75.05	41.50	10.37

The project is approved with an eligible subsidy of Rs. 10.37 lakhs.

38. Setting up of a Ball Copra Making Unit- Shri Sunkara V. V. Satyanarayana, Mamidikuduru Mandal, East Godavari Dist, Andhra Pradesh (Agenda S. No - 39)

The objective of the project is to process 4.00 lakh coconuts per year for making ball copra.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
(Rs in lakhs)			
Land & Land Dev.	10.00	-	-
Platform Dryer	15.00	15.00	3.75
Preliminary & Pre op. expenses	-	-	-
Working Capital margin	-	-	-
TOTAL	25.00	15.00	3.75

The project is approved with an eligible subsidy of Rs. 3.75 lakhs.

Copra Dryer Units

39 -59. Setting up of Copra Dryer Units by the FPOs as detailed below (Agenda S. No 37 and 40 to 59)

S. No	Name of FPO	Capacity of the unit	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
			(Rs in lakhs)		
1	M/s Ramamangalam Federation of Coconut Producer Society, Ramamangalam, Ernakulam Dist, Kerala	10,000 coconuts per day	22.95	22.95	5.73
2	M/s Athijeevana Ulpadana Society,P.O Etavarate, Perambra, Kerala.	10,000 coconuts per day	30.00	25.25	6.31
3	M/s Arikkulam Federation of Coconut Producer Societies, Karayad P O, Kozhikode, Kerala.	10,000 coconuts per day	30.00	25.25	6.31
4	M/s Koyilandi sagara Federation of Coconut Producer Societies, Muchukunnu P O, Kozhikode, Kerala.	10,000 coconuts per day	30.00	25.25	6.31
5	M/s Moodadi Federation of Coconut Producer Societies, Koyilandi, Kozhikode, Kerala.	10,000 coconuts per day	30.00	25.25	6.31
6	M/s Chakkittapara Federation of Coconut Producer Societies, Chakkittapara P O, Kozhikode, Kerala.	10,000 coconuts per day	30.00	25.25	6.31
7	M/s Ulliyeri Federation of Coconut Producer Societies, Ulliyeri P O, Kozhikode, Kerala.	10,000 coconuts per day	30.00	25.25	6.31
8	M/s Bapuji Federation of Coconut Producer Societies, Perambra P O, Kozhikode, Kerala.	10,000 coconuts per day	30.00	25.25	6.31
9	M/s Changaroth Federation of Coconut Producer Societies, Paleri town, Kozhikode, Kerala.	10,000 coconuts per day	30.00	25.25	6.31
10	M/s Atholi Federation of Coconut Producer Societies, Atholi P O, Kozhikode, Kerala.	10,000 coconuts per day	30.00	25.25	6.31

11	M/s Malanad Federation of Coconut Producer Societies, Chakkittapara P O, Kozhikode, Kerala.	10,000 coconuts per day	30.00	25.25	6.31
12	M/s Perambra Federation of Coconut Producer Societies, Perambra, Kozhikode, Kerala.	10,000 coconuts per day	30.00	25.25	6.31
13	M/s Nochad Federation of Coconut Producer Societies, Nochad P O, Kozhikode, Kerala.	10,000 coconuts per day	30.00	25.25	6.31
14	M/s Keezhariyoor Federation of Coconut Producer Societies, Keezhariyoor P O, Kozhikode, Kerala.	10,000 coconuts per day	30.00	25.25	6.31
15	M/s Chengottukavu Federation of Coconut Producer Societies, Koyilandi PO, Kozhikkode, Kerala.	10,000 coconuts per day	30.00	25.25	6.31
16	M/s Tirur Federation of Coconut Producers Societies, Chemba, Meemadathur Post, Tirur, Malappuram, Kerala.	10,000 coconuts per day	26.77	24.71	6.17
17	M/s Purathur Kera Karshaka Federation of CPS, Purathur, Muttanoor Post, Tirur, Malappuram, Kerala.	10,000 coconuts per day	26.77	24.71	6.17
18	M/s Vettom North Kera Karshaka Federation of Coconut Producers Societies, Pariyapuram, Tirur, Malappuram, Kerala.	10,000 coconuts per day	26.77	24.71	6.17
19	M/s Mangalam Kera Karshaka Federation of CPS, Chennara, Mangalam, Malappuram, Kerala.	10,000 coconuts per day	26.77	24.71	6.17
20	M/s Kunnamangalam Federation of Coconut Producer Society, Kunnamangalam PO, Kozhikode, Kerala.	10,000 coconuts per day	22.90	20.33	5.08
21	M/s Ollur Federation of Coconut Producers Societies, Surabhi Road, Kuttanellur P.O, Thrissur, Kerala.	10,000 coconuts per day	27.83	23.59	5.90

After detailed discussion, PAC approved the above 21 projects of FPOs for setting up of copra dryer units.

Other Items: Setting up of Coconut Points (Agenda 1-8)

The following FPOs have set up coconut points for sale of various coconut products. The points were inspected by the CDB officials and based on their recommendations, the eligible subsidy of 50% of the cost of the coconut points limited to Rs. 1.50 lakh was reimbursed to the FPOs as detailed in the table.

S. No	Name of FPO	Location of coconut point	Total Project Cost (Rs.)	Eligible Subsidy (Rs.)	Date of Inspection	Name of Inspecting Officer
1	M/s Onchiyam Grameena Nalikera Ulpadaka Federation, Nadapuram, Kozhikode, Kerala	Nadapuram Road, Vadakara	1,61,446	80,723	21.08.2015	Ms. Mrudula K, Technical Officer
2	M/s Purameri Federation of Coconut Producers Society, Purameri, Kozhikode, Kerala	Purameri Town, Kadathanad	2,22,884	1,11,442	21.08.2015	Ms. Mrudula K, Technical Officer
3	M/s Ramapuram Nalikera Ulpadaka Federation, Pala, Kottayam Dist, Kerala	Ramapuram, Kottayam	3,00,538	1,42,044	31.10.2015	Shri K.S Sebastian, AD (Mkg.)
4	M/s Kodungalloor Coconut Producers Company Ltd, Edavilangu Thrissur, Kerala	Edavilangu, Thrissur	2,23,611	1,11,806	24.08.15	Shri. Sajan T Varghese, Field Officer
5	M/s Kodungalloor Coconut Producers Company Ltd, Poyya, Thrissur, Kerala	Poyya Thrissur	1,58,703	79,352	22.12.15	Shri. Sajan T Varghese, Field Officer
6	M/s Kodungalloor Coconut Producers Company Ltd, Perinjanam, Thrissur, Kerala	Perinjanam Thrissur	1,75,160	85,480	14.12.15	Shri. Sajan T Varghese, Field Officer
7	M/s Kodungalloor Coconut Producers Company Ltd, Vellangallur, Thrissur, Kerala	Vellangallur Thrissur	84,572	42,286	10.9.15	Shri. Sajan T Varghese, Field Officer
8	M/s Purathur Kera Karshaka Federation of Coconut Producers Society, Malappuram Dist., Kerala	Alathiyoor, Tirur	3,09,316	1,50,000	30.12.15	Shri K.S Sebastian, AD (Mkg.)
	Total		16,36,230	8,03,133		

After detailed discussion, PAC ratified an expenditure of Rs. 8,03,133/- reimbursed to the above FPOs for setting up of eight coconut points.

Supplementary Agenda

60. Establishment of a Neera Processing Unit- M/s Tirur Coconut Producer Co. Ltd., Muttanur, Purathur, Malappuram Dist, Kerala.

The project was presented by Shri Ravindran, CEO, Tirur Coconut Producer Co. Ltd, Malappuram. The objective of the project is to process 5000 litres of Neera per day for making of Neera Beverage, Neera Sugar and Neera Honey.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs in lakhs)		
Land	-	-	-
Building & other civil works	31.40	30.00	7.50
Plant & Machinery	152.11	152.11	38.02
Effluent treatment plant	10.00	10.00	2.50
Electrification	12.00	7.60	1.90
Generator	6.50	5.00	1.25
Laboratory Equipments	3.00	3.00	0.75
Furniture	2.48	-	-
Preliminary Expenses	2.00	2.00	0.50
Working Capital margin	29.51	-	-
Total	249.00	209.71	52.42 Limited to 50.00

After detailed discussion, PAC approved the project.

Setting up of Copra Dryer Units

S.No	Name of FPO	Capacity of the unit	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
			(Rs. In lakhs)		
61	M/s Purameri Federation of Coconut Producer Societies, Vadakara, Kozhikode, Kerala.	10,000 coconuts per batch	24.00	16.44	4.11
62	M/s Patterpalam Federation of Coconut Producer Societies, Chelannur, Kozhikode, Kerala.	10,000 coconuts per day	28.79	16.68	4.17

After detailed discussion, PAC approved the above two projects.

Chief Coconut Development Officer

List of Participants

A	Project Approval Committee
1	Mr. T.K. Jose IAS Chairman, Coconut Development Board, Kochi & PAC Chairman
2	Dr. V. Krishna Kumar Head, Regional Station, CPCRI, Kayamkulam Representative of - Assistant Director General (Plantation Crops), ICAR, New Delhi
3	Dr. Bheemaraya Marketing Officer, O/o Assistant Agricultural Marketing Adviser, DMI, Kochi Representative of - Joint Secretary & Agricultural Marketing Adviser, Govt. of India, New Delhi
4	Dr. P. Vijayaraj, Scientist, CFTRI, Mysore, Karnataka Representative of - Director, Central Food Technological Research Institute (CSIR), Mysore
5	Ms. Usha K. Dy. General Manager, NABARD, Regional Office, Thriuvananthapuram Representative of – Chief General Manager, Technical Service Department, NABARD, Mumbai
6	Mr. Vasanthakumar P AGM, Indian Overseas Bank, Kochi Representative of – Chief General Manager, Indian Overseas Bank, Bangalore
7	Mr. Rajeev P. George, Chief Coconut Development Officer i/c, Coconut Development Board, Kochi & Member Secretary, PAC
B	Technical Expert
1	Dr. M. Aravindakshan Former Chairman, CDB
C	Officials of CDB
1	Mr. R. Jnanadevan Deputy Director, CDB, Kochi
2	Mr. S.S. Choyal, Assistant Director (TMOC), CDB, Kochi
3	Mr. K.S. Sebastian Assistant Director (Mkg.), CDB, Kochi

4	Ms. Resmi D.S. Assistant Director, CDB, Kochi
5	Mr. G.M. Siddharameswara Swamy, Assistant Marketing Officer, CDB, Kochi
6	Ms. Annie Eappen, Chemist, CDB, Vahzakulam
7	Mr. Sasikumar C, Technical Officer, CDB, Kochi
8	Ms. Jyothi K Nair, Processing Engineer (on Contract) CDB, Kochi
9	Ms. Geethu A. S, Processing Engineer (on Contract) CIT, Vahzakulam

**Proceedings of the 48th meeting of
Project Approval Committee (PAC) of Technology Mission on Coconut held
at Kochi on 15th June 2016**

The 48th meeting of the Project Approval Committee (PAC) on Technology Mission on Coconut (TMOC) was held in the Board Room of Coconut Development Board, Kochi on 15th June, 2016. Dr. A.K.Singh, Chairman, Coconut Development Board and Chairman PAC presided over the meeting. The list of participants is enclosed as Annexure-I.

At the outset, Chairman welcomed all the PAC members and briefed about the vast scope available for value addition in coconut sector. He also added that critical gaps should be identified and addressed through research projects in the sector so that ultimately farmers are benefited.

AGENDA No. 1: Confirmation of the Proceedings of 47th Project Approval Committee meeting held on 4th February 2016

The Committee confirmed the proceedings of the 47th Project Approval Committee meeting held on 04/02/2016.

AGENDA No. 2: Action taken report on decisions of the 47th PAC Meeting

The committee perused the action taken on decisions of the 47th meeting of Project Approval Committee. CCDO informed that out of 62 projects sanctioned in the last PAC, 1st installment of eligible financial assistance is released in 30 projects.

AGENDA No. 3: Approval of new project proposals:

1. Development of Coconut Shell Oil Based Pharmaceuticals- Karnataka Veterinary Animal & Fisheries Sciences University, Nandinagar, Bidar, Karnataka.

The objectives of the project are as follows:

- Extraction: To obtain bio oil from Coconut Shell by thermal pyrolysis.
- Isolation & Identification: To characterize the liquid fuel for their physical properties and chemical composition.
- Evaluation: To characterize the liquid fuel both *in vitro* and *in vivo* for their Pharmacological and Toxicological properties.
- Commercialization: To formulate shell oil based pharmaceutical drugs for commercial production.

Dr. Ravikumar P, Co-Principal Investigator presented the project. PAC discussed the project in detail. It was also informed that such studies were already taken up and literatures are available. Since CDB is focusing more on the direct product development from coconut, such project proposals cannot be funded under TMOC at this stage.

2. Value addition and phytochemical studies of Coconut Sap - CSIR-National Institute for Interdisciplinary Science & Technology (NIIST), Industrial Estate PO, Thiruvananthapuram.

The objectives of the project are as follows:

- To develop value-added products from the sap of coconut viz. Spice enriched Syrup, Spread, and Spray dried/lyophilized powder of sap fortified with selected juices.
- As a follow up of the above, it is also proposed to conduct shelf stability studies of the product with respect to its physicochemical composition and microbial load.
- Organoleptic evaluation of the formulated products.
- Characterization of chemical constituents in Coconut Sap and the base syrup used for product formulation.

Dr. Reshma M.V, Principal Investigator presented the project. PAC discussed the project in detail and the committee stated that similar studies are already taken up by CDB Institute of Technology, Vazhakulam. Therefore the project cannot be considered for funding under TMOC.

3. Process Optimization for Minimally Processed Tender Coconut Preservation Technology- Niranthara Scientific Solutions Private Limited, 13th Main RBI Colony Main Road, Ganganagar, Bangalore, Karnataka.

The objectives of the project are as follows:

- Process optimization for prevention of browning in de-husked tender coconuts.
- Screening inhibitors for prevention of browning in de-husked tender coconuts.
- Shelf life improvement studies on de-husked tender coconuts.
- To study the enzyme variations from different geographical locations in partial de-husked tender coconuts.
- To study the biochemical changes upon chemical treatment of de-husked tender coconuts.
- To study environmental parameters to prevent browning and microbial contamination of de-husked tender coconuts.
- Treating de-husked tender coconuts by food grade chemicals.
- To evaluate the compatibility of food grade chemicals in anti-browning process.
- To study the residual effects of anti-browning agents.

Dr. Veeranna S, Chief Research Officer, Niranthara Scientific Solutions Private Limited presented the project. PAC discussed the project in detail. It was observed that objectives proposed were too many and could not be completed in 2 years time period. PAC also commented that there was no clarity regarding the technical programme. Hence PAC decided that project need not be considered for funding under TMOC.

4. Coconut Wood Demonstration and Training Centre for Value Addition- Kerala Furniture Consortium Pvt Ltd (KFCPL), Kodanad P.O, Perumbavoor, Ernakulam, Kerala

The objectives of the project are as follows:

- Wood Inventory
- Machine demonstration and job work training
- On- site primary process training
- Seasoning and Preservation technology
- Products/ Furniture manufacturing

Deputy Director, TMOC, CDB, Kochi presented the project. It was informed that original proposal was presented in 47th PAC and it was requested to revise the project giving clearly defined deliverables. PAC discussed the project in detail and it was noted that the revised proposal did not contain the details of machineries and clearly defined deliverables as sought by 47th PAC. As the deliverables were not specific and similar project was taken up by Kerala Agricultural University, PAC decided that project need not be funded under TMOC.

5. Studies on the Therapeutic Effects of Coconut water for development of capsule for hypertensive, hyperglycemic and hypercholesterolemic subjects- Coconut Research and Development Centre, Pattom, Thiruvananthapuram.

The objectives of the project are as follows:

- Collection of materials
- Ethical committee approval (already cleared)
- Selection of human subjects- 300 Nos
- Experimental protocol- in 4 stages
- Bio chemical investigations
- Statistical investigations

Dr. Rajamohan, Principal Investigator presented the project. PAC discussed the project in detail. It was suggested that such clinical studies which involves human subjects should be taken up in association with Medical Colleges / Medical Institutions. Hence PAC decided not to support the project under TMOC.

6. Studies on the Therapeutic Effects of Coconut Inflorescence Sap (Neera) in experimentally induced cataract, Liver and Kidney damage- Kerala University, Kariavattom, Thiruvananthapuram.

The objectives of the project are

- To evaluate the hepatoprotective, nephroprotective and anticataractogenic effects of Neera in experimental animals.

Dr. Annie Abraham, Principal Investigator presented the project. PAC discussed the project in detail and observed that the proposed objectives could not be completed in 2 year time limit. Moreover PAC suggested that such projects which are not directly related to development of value added coconut products need not be supported at this stage.

7. Improving Coconut Production in Kerala using soil data through Remote Sensing and GIS Techniques- Amritha Viswavidhyapeetham University, Amritha Nagar PO, Ettimadai, Coimbatore.

The objectives of the project are as follows:

- To identify and map coconut growing areas of Kerala using Remote sensing and GIS techniques.
- To create soil database using GIS for coconut regions identified.
- To recommend production improvement measures based on soil database.

Deputy Director, TMOC, CDB, Kochi presented the project. PAC discussed the project in detail. It is observed that the results in 1st phase of the project had less practical utility in field at this stage and hence PAC decided that 2nd phase need not be considered for funding under TMOC.

8. Detection and estimation of arsenic and lead in coconut water- Dept. of Analytical Toxicology, Poison Control Centre, Amrita Institute of Medical Sciences & Research Centre, Kochi, Kerala.

The objectives of the project are as follows:

- To detect the presence of heavy metals, Arsenic and Lead and to quantitatively assess their levels in tender and mature coconut water of coconuts sold in Ernakulam district of Kerala.
- To detect the inter-zonal variations within Ernakulam district in the levels of the heavy metals in tender and mature coconut water.
- To detect the variations in levels of the metals between tender and mature coconut water.

Dr. Anup Sasidharan, Co-Principal Investigator presented the project. PAC commented that the proposal submitted did not contain the bio data of the principal investigator. Chairman stated that coconut is a perennial crop which is grown along with other crops and the heavy metal detection in coconut water alone does not have any relevance. PAC decided that the project need not be considered under TMOC.

Desiccated Coconut Manufacturing Units

9. Setting up of a Desiccated Coconut Powder Unit- M/s Sri Lakshmi Ranganath Coconut Industries, Gedlehalli, Halkurike Road Tiptur Taluk, Tumkur Dt, Karnataka.

The objective of the project is setting up of a desiccated coconut powder manufacturing unit to process 30,000 coconuts per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs in lakhs)		
Land	Own	-	-
Plant & Equipments	52.70	49.75	12.44
Building & Civil works	55.00	38.08	9.52
Electrical installation	4.00	2.38	0.59
DG Set	8.15	5.00	1.25
Preliminary & Pre op. expenses	0.30	0.30	0.07
Deposits & Contingencies	2.57	-	-
Working Capital margin	8.31	-	-
TOTAL	131.03	95.51	23.87

After detailed discussion, PAC approved the project with a maximum eligible subsidy of Rs. 23.87 lakh.

10. Setting up of a Desiccated Coconut Powder Manufacturing Unit- M/s Gangadhareswara Desiccated Coconut Industries, Guddenahalli Village, Kasaba Hobali, Anekere Grama Panchayath, Turuvekere Thumkur Dist, Karnataka.

The objective of the project is setting up of a desiccated coconut powder manufacturing unit to process 15,000 coconuts per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakhs)		
Land	Own	-	-
Plant & Equipments	25.66	19.23	4.81
Building & Civil works	76.00	12.82	3.20
Others	2.00	-	-
Pre-operative Expenses	0.60	0.32	0.08
Deposit	0.40	-	-
Working Capital margin	4.50	-	-
TOTAL	109.16	32.37	8.09

After detailed discussion, PAC approved the project with a maximum eligible subsidy of Rs. 8.09 lakh subject to the condition that promoter should submit undertaking on stamp paper regarding maintenance of hygienic standard as suggested by the ISC.

11. Setting up of a Desiccated Coconut Powder Manufacturing Unit- M/s Medapallil Foods Pvt Ltd, Reg. Office – CP 12/258 F, Chakkittapara Post, Via – Kayanna, Kozhikode Dist, Kerala.

The objective of the project is setting up of a desiccated coconut powder manufacturing unit to process 15,000 coconuts per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakhs)		
Land	Lease	-	-
Building & Civil works	32.00	28.17	7.04
Plant & Machinery	67.70	64.16	16.04
ETP	7.50	7.50	1.88
Electrification	8.02	3.20	0.80
Generator	7.50	5.00	1.25
Furniture & Office equipments	2.04	-	-
Preliminary & Pre op. expenses	2.00	1.08	0.27
Working Capital margin	13.24	-	-
TOTAL	140.00	109.11	27.28

After detailed discussion, PAC approved the project with a maximum eligible subsidy of Rs. 27.28 lakh.

12. Setting up of a Desiccated Coconut Powder Manufacturing Unit - M/s Sri Jeyam Foods, SF No. 189/1, Near Power House, Ariyakulandi Pudur, Ariyagoundampatty Post, Namagiripettai Via Rasipuram Tk, Namakkal Dist, Tamilnadu.

The objective of the project is setting up of a desiccated coconut powder manufacturing unit to process 25,000 coconuts per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakh)		
Land	Own	-	-
Building & Civil works	34.00	34.00	8.50
ETP	3.00	3.00	0.75

Plant & Machinery	87.11	86.20	21.55
Electrification	7.90	4.31	1.08
Furniture & Office Equipments	1.65	-	-
Working Capital margin	8.34	-	-
TOTAL	142.00	127.51	31.88

After detailed discussion, PAC approved the project with a maximum eligible subsidy of Rs. 31.88 lakh.

13. Expansion, Modernisation and Automation of the Existing Desiccated Coconut Manufacturing Unit - M/s Amrutha Coconut Products Madavana, Kodungallur, Thrissur Dist, Kerala.

The objective of the project is expansion, modernization and automation of the desiccated coconut powder manufacturing unit to process 15000 Coconuts/day from the existing capacity of 5000 coconuts/day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakhs)		
Land	Own	-	-
Building & Civil works (Renovation and New Construction)	29.00	21.78	5.44
Plant & Equipments	31.50	31.17	7.79
Lab. Equipments	1.50	1.50	0.38
TOTAL	62.00	54.45	13.61

After detailed discussion, PAC approved the project with a maximum eligible subsidy of Rs. 13.61 lakh.

Virgin Coconut Oil Manufacturing Units

14. Setting up of Virgin Coconut Oil Manufacturing Unit- M/s. Aadrics Agro Products, Room No.17/799, IInd Floor, Opp. Canara Bank, Pattambi Road, Cherpulassery – 676 503, Palakkad Dist, Kerala.

The objective of the project is setting up of a VCO unit to process 5,000 coconuts per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakhs)		
Land	Own	-	-
Building & Civil works	52.00	24.40	6.10
Plant & Equipments	40.00	39.91	9.98
ETP	3.00	0.97	0.24
Electrification	5.60	2.00	0.50
DG Set	5.50	5.00	1.25
Technical know-how	0.56	0.56	0.14
Furniture & Office eqpt.	1.12	-	-
Preliminary & Pre op. expenses	2.00	0.73	0.18
Working Capital margin	4.22	-	-
TOTAL	114.00	73.57	18.39

After detailed discussion, PAC approved the project with a maximum eligible subsidy of Rs.18.39 lakh.

15. Setting up of Virgin Coconut Oil Manufacturing Unit - M/s Aaral Exports, SF No. 341/B, Suguna Foods Road, Anthiyur Village, Udumalpet, Tirupur Dist, Tamilnadu.

The objective of the project is setting up of a VCO unit to process 10,000 coconuts per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakh)		
Land	Lease	-	-
Building & Civil works (Renovation & Extension)	18.00	18.00	4.50
Plant & Equipments	44.22	43.28	10.82
ETP	3.44	3.44	0.86
Electrification	4.42	2.16	0.54
Generator	3.90	3.90	0.97
Technical know-how	0.60	0.60	0.15
Preliminary & Pre op.	2.15	0.71	0.18

expenses			
Working Capital margin	11.34	-	-
TOTAL	88.07	72.09	18.02

After detailed discussion, PAC approved the project with a maximum eligible subsidy of Rs. 18.02 lakh.

16. Setting up of Virgin Coconut Oil Manufacturing Unit- M/s Sri Menakadevi Agro Products, SF.No.177/2A11, Opposite Sri Krishna Gardens, Nalluthukuli Post, Pollachi, Coimbatore Dist, Tamil Nadu.

The objective of the project is setting up of a VCO unit to process 20,000 coconuts per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakhs)		
Land	Own	-	-
Building & Civil works	44.00	29.72	7.43
Effluent treatment plant	6.49	6.49	1.62
Plant & Machinery	73.86	71.50	17.87
Electrification	6.43	3.57	0.89
Generator	7.50	5.00	1.25
Technical know-how	0.60	0.60	0.15
Preliminary & Pre op. expenses	2.16	1.16	0.29
Working Capital margin	15.96	-	-
TOTAL	157.00	118.04	29.50

After detailed discussion, PAC approved the project with a maximum eligible subsidy of Rs. 29.50 lakh.

Coconut Shell Charcoal Manufacturing Unit

17. Setting Up of a Coconut Shell Charcoal Unit - M/s Mahalakshmi Charcoal, A/P-Shahunagar (parite), Behind Mouli Cloth, Tal - Karveer, District- Kolhapur, Maharashtra.

The objective of the project is setting up of a coconut shell charcoal unit to produce one ton charcoal per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakhs)		
Land	1.08	-	-
Plant & Equipments	10.45	9.96	2.49
Building & Civil works	7.46	7.46	1.87
Electrical installation	2.76	0.50	0.12
Preliminary & Pre op. expenses	1.16	0.20	0.05
Furniture	0.18	-	-
Wall Fencing	0.28	-	-
Working Capital margin	10.80	-	-
TOTAL	34.17	18.12	4.53

After detailed discussion, PAC approved the project with a maximum eligible subsidy of Rs. 4.53 lakh.

18. Setting Up of a Coconut Shell Charcoal Manufacturing Unit- M/s Aspire Renoil Associates Company 4/123 A, Muthugounder Thottam, Pappampatti Road Peedampalli, Coimbatore, Tamilnadu.

The objective of the project is setting up of a coconut shell charcoal unit, to process 30 tons shell per day to produce 10 MT shell charcoal per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakhs)		
Land	Leased	-	-
Building & Civil works	12.00	12.00	3.00
Plant & Equipments	58.00	57.72	14.43
Working Capital margin	5.00	-	-
TOTAL	75.00	69.72	17.43

After detailed discussion, PAC approved the project with a maximum eligible subsidy of Rs. 17.43 lakh.

Copra Dryer Units

19. Setting up of a Copra Dryer Unit - M/s Keramithra Federation of Coconut Producers Society, Maruthonkara, Passukadavu PO, Kozhikode Dist, Kerala.

The objective of the project is setting up of a copra drier unit, to process 10,000 coconuts per day for making copra.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs in lakhs)		
Land	Own	-	-
Building	12.00	12.00	3.00
Fixed assets	10.80	7.88	1.97
Transporting expense	0.10	0.08	0.02
Preliminary & Pre op. expenses	0.10	0.10	0.025
Working capital	02.00	-	-
TOTAL	25.00	20.06	5.015

After detailed discussion, PAC approved the project with a maximum eligible subsidy of Rs. 5.015 lakh.

20. Setting up of a Copra Dryer Unit- M/s Perambra Federation of Coconut Producer Societies, Perambra P.O, Kozhikode, Kerala.

The objective of the project is setting up of a copra drier unit, to process 10,000 coconuts per day for making copra.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs in lakhs)		
Land	Leased	-	-
Plant & Machinery	13.00	13.00	3.25
Building	12.00	9.85	2.46
Preliminary & Pre op. expenses	1.00	0.23	0.057
Working Capital	4.00	-	-

margin			
TOTAL	30.00	23.08	5.767

After detailed discussion, PAC approved the project with a maximum eligible subsidy of Rs. 5.767 lakh.

Coconut Based Food Products

- 21. Setting up of a Coconut Based Food Products Unit - M/s Natural Foods, Shri Babu KV – Proprietor, Puthusseril House, Udyogamandal Post, Kalamassery Via, Ernkaulam Dist, Kerala.**

The objective of the project is setting up of a coconut based food products unit to produce coconut sweet balls and coconut chutney powder. The capacity of the unit is 600 coconuts per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakh)		
Land	Own	-	-
Building	Lease	-	-
Plant & Equipments	11.00	11.00	2.75
Electrification	0.26	0.26	0.06
Generator	0.74	0.74	0.19
Working Capital	0.86	-	-
TOTAL	12.86	12.00	3.00

After detailed discussion, PAC approved the project with a maximum eligible subsidy of Rs.3.00 lakh.

Supplementary Agenda

Ball Copra Making Units

- 22. Setting up of a Ball Copra Making Unit - Mr. Borsu VKD Moola Swamy, S/o Shri Suryanarayana, D. No. 3-175, Pasarlapudi Lanka Vill & Post, Mamidikuduru Mandal, EG Dist, Andhra Pradesh.**

The objective of the project is setting up of a ball copra making unit to process 10 lakh coconuts per year.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakhs)		
Land	11.82	-	-
Platform Dryer	25.00	25.00	6.25
TOTAL	36.82	25.00	6.25

After detailed discussion, PAC approved the project with a maximum eligible subsidy of Rs.6.25 lakh.

23. Setting up of a Ball Copra Making Unit - Smt. Kamisetti Kanaka Durga, W/o Rambabu, Appanapalli- 533247, Mamidikuduru Mandal, East Godavari Dist, Andhra Pradesh.

The objective of the project is setting up of a ball copra making unit to process 8 lakh coconuts per year.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakhs)		
Land & Land Dev. (Specify)	Own	-	-
Platform Dryer	20.60	20.00	5.00
Preliminary & Pre op. expenses	3.00	-	-
Working Capital margin	9.00	-	-
TOTAL	32.60	20.00	5.00

After detailed discussion, PAC approved the project with a maximum eligible subsidy of Rs. 5.00 lakh.

24. Setting up of a Ball Copra Making Unit - Sri Lingolu Satyanarayana Murthy S/o Sri L. Guru Murthy, RS No. 357/13, Allavaram Panahcayth, Allavaram Mandal, EG Dist, Andhra Pradesh.

The objective of the project is setting up of a ball copra making unit to process 6 lakh coconuts per year.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakhs)		
Land	Own	-	-
Platform Dryer	29.00	15.00	3.75
TOTAL	29.00	15.00	3.75

After detailed discussion, PAC approved the project with a maximum eligible subsidy of Rs. 3.75 lakh.

25. Setting up of a Ball Copra Making Unit - Shri Daivala Palamba Rao, S/o Shri Venkata Rao, Pedapatnam Lanka Panchayat, Mamidikuduru Mandal, Tatipaka, Razole Tk, E.G. Dist, Andhra Pradesh.

The objective of the project is setting up of a Ball Copra making unit to process 2 lakh coconuts per year.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakhs)		
Land	Own	-	-
Platform Dryer	6.00	5.00	1.25
Pre op. Expenses	-		
TOTAL	6.00	5.00	1.25

After detailed discussion, PAC approved the project with a maximum eligible subsidy of Rs. 1.25 lakh.

Pilot Testing of Flavoured Coconut Milk

26. Setting up of a Pilot Testing Plant for Flavoured Coconut Juice- CDB Institute of Technology (CIT), South Vazhakulam, Aluva, Ernakulam Dist, Kerala

The objective of the project proposal is to set up a pilot testing plant for flavoured coconut milk/juice with a minimum capacity of 100 coconuts per day to scale up the production of the product developed by CIT, Vazhakulam at the lab scale.

Sl. No	Particulars	Estimated Cost (Rs. in lakhs)
1	Non-Recurring Expenditure	
	(a) Pre-processing machineries	32.83
	(b) Sterilisation and Packing Machineries Retort Method (Autoclave and Canning)	14.00
2.	Recurring Expenditure	5.37
	Total Project Cost	52.20

After detailed discussion, PAC approved the project with a total subsidy of Rs. 52.20 lakhs.

Other Items

1: Revision of pay of JRF and SRF in the project and revision of project cost- TMOC project - “Standardization of *in vitro* culture techniques through somatic embryogenesis for propagation of elite coconut cultivars” sanctioned to TNAU.

PAC approved the proposal for sanctioning the additional amount of Rs. 1.56 lakhs towards the salary of project staff and enhanced project cost to Rs. 37.42 lakhs.

2: Permission for sanctioning fund under subcomponent “Technical support and Emergent requirements” TMOC project-“Training and Technology Demonstration Project for Making Value Added Products from Coconut Wood” sanctioned to Kerala Agricultural University.

After detailed discussion, PAC approved the inclusion of additional clause in the MoU between KAU and Kodungallur CPC as suggested by ISC and PAC also approved the proposal for sanctioning the funds under the subcomponent “Technical Support and Emergent Requirement’ of TMOC.

3: Ratification of expenditure incurred for Coconut Points established under “Market Promotion” of TMOC.

The details of 47 coconut points set up by the Farmer Producer Organizations (FPOs) for the sale of various coconut products such as coconut oil, neera, VCO etc in the states of Kerala (42 nos), Tamilnadu (4 nos) and Karnataka (1 no) is as follows:

Sl. No.	Name of the Promoter / FPO	Location of Coconut Point	District	No. of Coconut Points	Expenditure Incurred (Rs.)	Subsidy Amount Released (Rs.) 50%
	Kerala					
1	M/s Kavalangadu Coconut Producers Society, Mangattu House, Nellimattam, Ernakulam, kerala	Mangattupady	Ernakulam	1	104606	52303
2	M/s Changanassery Regional Federation of Coconut Producers Societies, Vadakkummuriyil, Nedumanni (PO), Karukachal, Kottayam, Kerala	Karukachal	Kottayam	4	300077	147788
3	M/s Nalikera Ulpadaka Federation Njeezhoor, Meyathuparambil, Njeezhoor (PO), Kottayam, Kerala	Njeezhur Town			317067	144778
4	M/s Federation Of Coconut Producers Societies Kadanad, Mattathilanikkal, Mattathipara PO, Kottayam, Kerala	Neeloor			303550	146775
		Kodumpidi			274500	129750
5	M/s Kaipuzha Coconut Producer Company Limited, Kanjiravilayil House Padinjattakkara P.O., Thevalakkara, Kollam, Kerala	Sasthamcotta	Kollam	2	135690	67845
		Neendakara			170690	85345

6	M/s Palakkad Coconut Producer Company Ltd, Mutthalamada, Palakkad, kerala	Vadavannur, Kannanur, Chittur,Sbt Jn., Chittur Anicode, Bigbazar, Palakkad Velamthavalam, Kanjikode, Kottayi	Palakkad	8	3062975	1199638
7	M/s Muthukulam Panchayath Federation of Coconut Producer's Societies, Muthukulam South PO, Alappuzha, Kerala	Muthukulam Town	Alappuzha	4	136242	68121
8	M/s Keragramam Federation of Coconut Producers Societies, Erezha Thekk, Chettikulangara PO, Mavelikara , Alappuzha, Kerala	Olakettiampalam			115550	57775
9	M/s Onattukara Coconut Producer Company Limited, Kattanam, Pallickal P.O, Alappuzha, Kerala	Kattanam			217197	123598.5
10	M/s Venmony Grama Panchayath Federation of Coconut Producers Societies, Poonthala PO, Alappuzha, Kerala	Kaliyathara Junction			158511	79255.5
11	M/s Kunnumal Nalikera Ulpadaka Federation, Thakkattil (PO), Vadakara, Kozhikode, kerala	Kakkattil Town			199600	99800
12	M/s Kozhikode Coconut Producer Company, Chairman, Samantha, Kannankara P.O, Chelannur, Kozhikode, kerala	Kummulliyil			250135	125068

13	M/s Patterpalam Coconut Producers Federation, Edakara (PO), Chellannur (via), Kozhikode, kerala	Patterpalam Town	Kozhikode	21	245522	122761
14	M/s Kunnamangalam Federation of Coconut Producers Societies, Kunnamangalam (PO), Kozhikode, kerala	Palayam			296374	148188
15	M/s Memunda Federation Of Coconut Producers Society, Khatheeja Building, Meenkandi, Memunda (PO), Vadakara, Kozhikode, kerala	Vadakara			239100	120335
16	M/s Perambra Federation of Coconut Producers Society, Nallassery, Menjaniam (PO), Perambra, Kozhikode, kerala	Kallottu			241400	120701
		Aavala			214900	107450
		Pannimukku			222060	111030
		Puttampoyil			349157	123856
17	M/s Bapuji Coconut Producers Federation, Thandora House, Thandopara (PO), Kayanna (Via), Perambra, Kozhikode, kerala	Valoor			142460	71230
		Koothali			202109	79450
		Eravattoor			213728	78501
		Thandorapara			232576	84810
18	M/s Ulliyeri Federation of Coconut Producers Societies, Narath, Ulliyeri (PO), Kozhikode, kerala	Ulliyeri			230974	115488
19	M/s Chenkottukavu Nalikera Ulpadhaka Federation, Anima House, Melur (PO), Koyilandy, Kozhikode, kerala	Kallayikadavu			270728	135364

20	M/s Atholi Federation of Coconut Producers Society, Meppally House, Atholi (PO), Kozhikode, kerala	Atholi	Kozhikode		320757	100291
21	M/s Chakkittappara Federation of Coconut Producers Societies, Kizhakkarakat House, Chembanode (PO), Peruvannamuzhy (Via), Kozhikode, kerala	Chakkittappara			225840	96170
22	M/s Onchiyam Federation of Coconut Producers Societies, Charutha, Onchiyam (PO), Chombala (Via), Kozhikode, kerala	Nadapuram			278402	139201
23	M/s Kaiveli Federation of Coconut Producers Societies, Nellikkunneel Veedu, Thinoor (PO), Kakkattil (Via), Kozhikode, kerala	Naripatta			273862	136931
24	M/s Payambra Federation of Coconut Producers Society, Pilatharil Veedu , Payambra (PO), Kunnamangalam, Kozhikode, kerala	Vengeri			260060	130030
25	M/s Changarothu Naliker Ulpadaka Federation, Ramapuram House, Kadiyangad (PO), Perambra(Via), Kozhikode, kerala	Palleri Town			256987	128494
26	M/s Ollukkara Block Federation Of Coconut Producers Society, Thattat House, Pattikkad PO, Thrissur, kerala	Ollukkara	Thrissur	2	121654	60827

27	M/s Valappad Federation Of Coconut Producers Societies, Panamparambil (H), Edamuttom PO, Thrssur, kerala	Edamutam			144881	72441
	Karnataka					
28	M/s Kalpavrutha Coconut Producer Company Ltd., Gavi Ranga Farming House, Bommanapalya Road, Hosadurga Town, Chitradurga	Hosadurga Town	Chitradurga	1	300000	150000
	Tamilnadu					
29	M/s Dindigul Coconut Producer Company Limited, H.O.1-16-25/H 45, Kalidasan Street, Gandhi Nagar, Batlangunda, Dindigul	Batlagundu	Dindigul		308720	150000
30	M/s Madathukulam Coconut Producers Company Limited, 5/74, Kongalakurichi, Kurichikottai P.O., Udumalpet (Tk), Tirupur Dist	Moonar Main Road	Tiruppur	4	271500	135750
		S.P. Building, No.46, Voc Street			250000	125000
31	M/s Udumalpet Coconut Producers Company Limited, No. 5, Santhosh Garden, Madathur Pirivu, Pallapalayam P.O., Udumalpet T.K., Tirupur Dist.	Santhosh Garden, Pallapalayam			301350	150000
	TOTAL			47	12,161,491.00	55,22,139.00

After detailed discussion, PAC ratified the total expenditure of Rs. 55,22,139 /- (Rupees Fifty Five Lakhs Twenty Two Thousand One Hundred and Thirty Nine only) reimbursed to the above FPOs for setting up of 47 coconut points.

Chief Coconut Development Officer

List of Participants

A	Project Approval Committee
1	Dr. A.K. Singh Chairman, Coconut Development Board & Chairman PAC
2	Ms. Jessy K X Joint Director of Agriculture, Govt. of Kerala, Thiruvananthapuram Representative of - Secretary (Agriculture), Government of Kerala
3	Mr. Venkatesh N Hubballi Director, Directorate of Cashew and Cocoa Development, Kera Bhavan, Kochi Representative of - Horticulture Commissioner, Dept. of Agri. Cooperation and Farmers Welfare, Govt. of India
4	Dr. V. Krishna Kumar Head, Regional Station, CPCRI, Kayamkulam Representative of - Assistant Director General (Plantation Crops), ICAR, New Delhi
5	Dr. Anil Kumar R. Asst. Agricultural Marketing Officer, O/o Assistant Agricultural Marketing Adviser, DMI, Kochi Representative of - Joint Secretary & Agricultural Marketing Adviser Govt. of India, New Delhi
6	Dr. P. Vijayaraj, Scientist, CFTRI, Mysore Representative of - Director, Central Food Technological Research Institute, (CSIR), Mysore
7	Dr. V. Rajaraman, AGM, NABARD, R O, Thiruvananthapuram Representative of - Chief General Manager, Technical Service Department, NABARD, Mumbai
8	Mr. B.A.R. Patro Chief Regional Manager, IOB, Kochi Representative of - Chief General Manager, Indian Overseas Bank, Bangalore
9	Dr. G. R. Singh, Chief Coconut Development Officer, Coconut Development Board & Member Secretary, PAC
B	Technical Expert

1	Dr. D.M. Vasudevan, Former Principal, AIMS, Kochi
C	Officials of CDB
1	Dr. A.K. Nandi Secretary, CDB, Kochi
2	Mr. R. Jnanadevan Deputy Director, CDB, Kochi
3	Mr. S.S. Choyal, Deputy Director, CDB, Kochi
4	Mr. A. Jeyapandi Deputy Director (Mkg), CDB, RO, Chennai
5	Mr. K.S. Sebastian Assistant Director (Mkg.), CDB, Kochi
6	Ms. Resmi D.S. Assistant Director, CDB, Kochi
7	Mr. V.C. Vasanthakumar, Statistical Officer, CDB, Kochi
8	Mr. P. Sabareenathan Finance Officer, CDB, Kochi
9	Mr. G.M. Siddharameswara Swamy, Assistant Marketing Officer, CDB, Kochi
10	Ms. Annie Eappen, Chemist, CIT, Vahzakulam
11	Mr. Sasikumar C, Technical Officer, CDB, Kochi
12	Ms. Jyothi K Nair, Processing Engineer (on Contract) CDB, Kochi
13	Ms. Geethu A. S, Processing Engineer (on Contract) CIT, Vahzakulam

**Proceedings of the 49th Meeting of
Project Approval Committee (PAC) of Technology Mission on
Coconut held at Kochi on 23rd January 2017**

The 49th meeting of the Project Approval Committee (PAC) on Technology Mission on Coconut (TMOC) was held in the Board Room of Coconut Development Board, Kochi on 23rd January 2017. Dr. A.K.Singh, Chairman, Coconut Development Board and Chairman PAC presided over the meeting. At the outset he welcomed all the members of the PAC and agenda were taken up. The list of participants is enclosed as Annexure-I.

**AGENDA No. 1: Confirmation of the Proceedings of 48th Project Approval
Committee Meeting held on 15th June 2016.**

The Committee confirmed the proceedings of the 48th Project Approval Committee meeting held on 15/06/2016.

AGENDA No. 2: Action Taken Report on Decisions of the 48th PAC Meeting

The committee perused the action taken on decisions of the 48th meeting of Project Approval Committee. Deputy Director (Tech) informed that out of 18 projects sanctioned in the last PAC, 17 projects action has been taken and projects are progressing. One project of M/s Medapallil Foods Pvt Ltd, Chakkittapara Post, Kozhikode, Kerala is yet to be commenced. The promoter informed that they are in the process of changing the bank. So after changing the bank, further action will be taken by the promoter.

AGENDA No. 3: Approval of New Project Proposals:

1. Establishment of Parasitoid Breeding Lab - Coconut Development Board, DSP Farm, Pitapalli, Odisha

The objective of the project is as follows:

- To establish a Parasite Breeding Lab for the Production of *Goniozus nephantidis* (5 lakh parasitoid) at DSP Farm, Pitapalli, Odisha for Controlling Black Headed caterpillar in Coconut Plantations

Shri Mukund Kumar Singh, Assistant Director, DSP Farm, Pitapally, Coconut Development Board, Odisha presented the project.

PAC discussed the project in detail and approved the project with a total project cost of **Rs. 7.45 lakh.**

2. Standardization of Protocol for the Preparation of Frozen Coconut Delicazy – ICAR-Central Plantation Crops Research Institute (CPCRI), Kasargode, Kerala

The objectives of the project are as follows:

- To optimize the level of ingredients, machine and process parameters for the preparation of frozen coconut delicacy.
- To undertake techno-economical evaluation of the optimized product.
- To undertake demonstration on the developed technology.

Dr. Shameena Begum P.P, Principal Investigator (P.I) presented the project. PAC discussed the project in detail and it was observed that the technologies for developing coconut based ice creams are already available in other countries. It is not available in the country so the common entrepreneur cannot approach for the technology. So we should have our own technology for training to prospective entrepreneur.

The PAC agreed in principle to approve the project but due to fund constraints and decided to defer the project to the next PAC.

3. Development of Ready-to-Eat Extruded Snacks from Co-products of Coconut Processing – ICAR-Central Plantation Crops Research Institute (CPCRI), Kasaragod, Kerala

The objectives of the project are as follows:

- To investigate the effect of co-products of coconut processing on the physical, functional, textural and biochemical properties of ready to eat extrudate as a function of extrusion conditions.
- To optimize the feed composition and machine parameters for the production of ready to eat extrudates at pilot level.
- To evaluate the storage stability of the optimized ready to eat extrudate.

Shri M.R. Manikantan, Senior Scientist and Principal Investigator (P.I) presented the project.

PAC discussed the project in detail and approved the project with a total project cost of Rs. **37.70 lakh**.

4. Coconut Wood Preservation for Aquatic Purposes Using Nano Biocides and Assessment of Ecotoxicity – ICAR - Central Institute of Fisheries Technology (CIFT), CIFT Junction, Matsyapuri P.O, Cochin, Kerala

The objectives of the project are as follows:

- To investigate the effect of nano biocides on the durability of the coconut wood for terrestrial and aquatic applications of treated wood.
- To assess the resistance of treated wood to biodegradation.
- To assess the ecotoxicity of nano biocides on the environment.

Dr. Leela Edwin, Principal Scientist and Principal Investigator presented the project. PAC discussed the project in detail about the commercial viability and marketability of the project. Since CDB is focusing on the direct product development

from coconuts and this project is not directly based on value addition in coconut; hence PAC decided that the project need not be considered for funding under TMOC.

5. Detection of Spoiled Coconut at Pre-Processing Stage by Portable Wireless Electronic Sensor - Indian Institute of Technology (IIT), Roorkee, Uttarakhand

The objectives of the project are as follows:

- Nutritional profiling of healthy and diseased coconut and its co-relation with overall changes in the permittivity of the coconut in relation to RF- signals.
- Volatile profile of spoiled coconut to find out most abundant diseased associated volatile metabolites.
- Development and validation of a portable wireless electronic sensor prototype for early detection of spoiled coconuts at pre-processing stage.

Dr. Debabrata Sircar, Assistant Professor and Principal Investigator (P.I) presented the project. PAC discussed the project in detail. It was suggested to procure coconuts from Tiptur in Karnataka and nearby CDB farms for the research studies.

PAC approved the project with a total project cost of **Rs. 54.00 lakh**.

6. Cocobot - A Coconut Tree Climber - M/s Fennec Fox Technologies, 3/3/3B Marva, Yashashree Colony, Cummins College Road, Near Rajaram Bridge, Karvenagar, Pune, Maharashtra

The objective of the project is as follows:

- To build a tree climbing machine which can bear a loading capacity upto 100-150 Kg.

Shri Prasad Dixit, Principal Investigator (P.I) demonstrated the prototype and presented the project. PAC discussed the project in detail and the committee decided to purchase 5 numbers of cocobot machines for the CDB, DSP Farms and see the field level performance and feasibility and get the feedback. The Chairman further suggested to make a demonstration at CDB DSP Farm at Mandya and also suggested to visit CPCRI to carry out a comparative study with the existing machine.

Desiccated Coconut Manufacturing Unit

7. Setting up of Desiccated Coconut Powder Manufacturing Unit - M/s Asian Coconut Mills, 144, Karur Road, Kangayam, Tirupur, Tamil Nadu

The objective of the project is setting up of desiccated coconut powder manufacturing unit with capacity to process 27,000 coconuts per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakh)		
Land	Own	-	-
Building & Civil works	50.00	30.66	7.66
ETP	4.90	4.90	1.22
Plant & Equipments	47.70	46.00	11.50
Electrical fittings	4.49	2.30	0.58
Working Capital Margin	12.50	-	-
TOTAL	119.59	83.86	20.96

PAC suggested that the promoter should procure raw material as far as possible from the nearby FPOs registered with Board.

After detailed discussion, PAC approved the project with a maximum eligible subsidy of **Rs. 20.96 lakh**.

8. Setting up of Desiccated Coconut Powder Manufacturing Unit - M/s Maruthi Coconut Industries, Sy. 31, Kalkere Road, Hucanahatti, Tumkur , Karnataka

The objective of the project is setting up of a desiccated coconut powder manufacturing unit with a capacity to process 25,000 coconuts per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakh)		
Land	Own	-	-
Building & Civil works	57.50	21.85	5.46
Plant & Machinery	32.77	32.77	8.19
ETP	8.50	8.50	2.13
Preliminary & Pre op. expenses	1.23	0.63	0.16
Working Capital margin	7.00	-	-
TOTAL	107.00	63.75	15.94

PAC suggested that the promoter should procure raw material as far as possible from the nearby FPOs registered with Board.

After detailed discussion, PAC approved the project with a maximum eligible subsidy of **Rs. 15.94 lakh**.

9. Setting up of Desiccated Coconut Powder Manufacturing Unit - M/s Maharani Agro Products, Iringallur Post, GA College, Kozhikode, Kerala

The objective of the project is setting up of a desiccated coconut powder manufacturing unit with a capacity to process 30,000 coconuts per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakh)		
Land	Lease	-	-
Building & Civil works	106.23	53.00	13.25
Plant & Equipments	120.77	120.77	30.19
ETP	15.00	-	-
Electrification	15.00	-	-
Generator	5.77	4.75	1.19
Office equipments	3.75	-	-
Preliminary & Pre op. expenses	2.72	1.78	0.44
Working Capital margin	15.76	-	-
TOTAL	285.00	180.30	45.07

PAC suggested that the promoter should procure raw material as far as possible from the nearby FPOs registered with Board.

After detailed discussion, PAC approved the project with a maximum eligible subsidy of **Rs. 45.07 lakh**.

10. Setting up of Desiccated Coconut Powder Manufacturing Unit – M/s Hasmuk Food Processing Pvt. Ltd, No. 641 III Main, Kengeri Satellite Town, Bangalore, Karnataka

The objective of the project is setting up of a desiccated coconut powder manufacturing unit with a capacity to process 40,000 coconuts per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakh)		
Land	Lease	-	-
Building & Civil works	Lease		
Plant & machinery	88.59	65.95	16.49
ETP	23.83	10.00	2.50

RO Plant for water purification	7.58	7.58	1.89
Working Capital margin	12.00	-	-
TOTAL	132.00	83.53	20.88

PAC suggested that the promoter should procure raw material as far as possible from the nearby FPOs registered with Board.

After detailed discussion, PAC approved the project with a maximum eligible subsidy of **Rs. 20.88 lakh**.

11. Setting up of Desiccated Coconut Powder Manufacturing Unit – M/s S.A. Exports, 4/135, Kumarapalayam, Muthunaickenpatty, Palani Tk, Dindigul, Tamil Nadu

The objective of the project is setting up of a desiccated coconut powder manufacturing unit with a capacity to process 60,000 coconuts per day in two shifts.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakh)		
Land	Own	-	-
Building & Civil works	62.30	53.00	13.25
Plant & Equipments	102.35	100.15	25.04
ETP	8.25	8.25	2.06
Electrification	12.00	5.00	1.25
Generator	6.10	5.00	1.25
Preliminary & Pre op. expenses	2.80	1.71	0.43
Working Capital margin	33.20	-	-
TOTAL	227.00	173.11	43.28

PAC suggested that the promoter should procure raw material as far as possible from the nearby FPOs registered with Board.

After detailed discussion, PAC approved the project with a maximum eligible subsidy of **Rs. 43.28 lakh**.

12. Expansion of the Existing Desiccated Coconut Powder Manufacturing Unit- M/s A.M. Coconut Industries, 1179/2, Kulathupalayam, Kangayam, Tirupur, Tamil Nadu

The objective of the project is expansion of existing desiccated coconut powder manufacturing unit with a capacity to process 33,000 coconuts per day from the existing capacity of 16,300 coconuts per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakh)		
Land & Land Dev.	-	-	-
Building & Civil works	26.00	21.02	5.26
Plant & Equipments	31.53	31.53	7.88
Electrical installation	0.67	0.67	0.17
Pre op. expenses	1.00	0.53	0.13
Working Capital margin	19.46	-	-
TOTAL	78.66	53.75	13.44

PAC suggested that the promoter should procure raw material as far as possible from the nearby FPOs registered with Board.

After detailed discussion, PAC approved the project with a maximum eligible subsidy of **Rs. 13.44 lakh**.

Virgin Coconut Oil Manufacturing Units

13. Setting up of Virgin Coconut Oil Manufacturing Unit – M/s Green Valley Oils, Irumbakachola, Kanjirapuzha, Palakkad, Kerala

The objective of the project is setting up of a virgin coconut oil manufacturing unit with a capacity to process 20,000 coconuts per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakh)		
Land	Own	-	-
Building & Civil works	53.35	45.08	11.27
Effluent Treatment & Disposal system	11.00	11.00	2.75
Plant & Equipments	104.95	91.42	22.86
Generator	10.47	5.00	1.25
Electrification	3.00	2.86	0.71
Technical know-how	0.58	0.58	0.14

Furniture & Office equipments	1.04	-	-
Working Capital margin	15.61	-	-
TOTAL	200.00	155.94	38.98

PAC suggested that the promoter should procure raw material as far as possible from the nearby FPOs registered with Board.

After detailed discussion, PAC approved the project with a maximum eligible subsidy of **Rs. 38.98 lakh**.

14. Setting up of Virgin Coconut Oil Manufacturing Unit – M/s Vasudha Industries, 15/64A, Barathidasan Street, Avinashi TK, Tirupur, Tamil Nadu

The objective of the project is setting up of a virgin coconut oil manufacturing unit with a capacity to process 5,000 coconuts per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakh)		
Land	Own	-	-
Plant & Equipments	20.00	20.00	5.00
Technical know-how	0.60	0.60	0.15
Electrification	2.00	1.00	0.25
Preliminary & Pre op. expenses	1.00	0.21	0.05
Working Capital margin	6.00	-	-
TOTAL	29.60	21.81	5.45

PAC suggested that the promoter should procure raw material as far as possible from the nearby FPOs registered with Board.

After detailed discussion, PAC approved the project with a maximum eligible subsidy of **Rs. 5.45 lakh**.

15. Setting up of Virgin Coconut Oil Manufacturing Unit – M/s Stessa Super Foods, Mudappallur Post, Palakkad, Kerala

The objective of the project is setting up of virgin coconut oil manufacturing unit with a capacity to process 2,370 coconuts per day by adopting CPCRI developed technology.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakh)		
Land	Own	-	-
Building & Civil works (including ETP)	33.00	15.75	3.94
Plant & Equipments	19.48	19.48	4.87
Electrification	0.90	0.90	0.23
Generator	3.25	3.25	0.81
Preliminary & Pre op. expenses	1.62	0.39	0.09
Working Capital margin	3.75	-	-
TOTAL	62.00	39.77	9.94

PAC suggested that the promoter should procure raw material as far as possible from the nearby FPOs registered with Board.

After detailed discussion, PAC approved the project with a maximum eligible subsidy of **Rs. 9.94 lakh**.

16. Setting up of a Virgin Coconut Oil Manufacturing Unit & Processing of by-product - Matured Coconut Water- M/s Sun Bio Naturals (India) Pvt Ltd., Sun Tower, Super A7, TVK Industrial Estate, Guindy, Chennai, Tamilnadu

The objective of the project is setting up of a virgin coconut oil manufacturing unit & processing of by-product matured coconut water with a capacity to process 1 lakh coconuts per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs in lakhs)		
Land	20.00	-	-
Plant & Equipments	239.00	238.44	59.61
Building & Civil works	155.00	71.86	17.96
Electrical Installation	75.00	-	-
Preliminary & Pre op. expenses	15.00	3.10	0.78
Miscellaneous Fixed Assets	20.00	-	-
Working Capital margin	30.00	-	-

TOTAL	554.00	313.40	78.35 Limited to 50.00
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PAC suggested that the promoter should procure raw material as far as possible from the nearby FPOs registered with Board.

After detailed discussion, PAC approved the project with a maximum eligible subsidy of **Rs. 50.00 lakh**.

17. Setting up of Virgin Coconut Oil Manufacturing Unit – M/s Priya Agro, Illathuzhazhe, Thalassery, Kannur Dist, Kerala

The objective of the project is setting up of a virgin coconut oil manufacturing unit with a capacity to process 5,000 coconuts per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakh)		
Land	Lease	-	-
Building & Civil works	19.20	19.20	4.80
Plant & Equipments	29.58	29.58	7.39
ETP	0.40	0.40	0.10
Technical know-how	0.60	0.60	0.15
Electrification	1.53	1.48	0.37
Working Capital margin	5.69	-	-
TOTAL	57.00	51.26	12.81

PAC suggested that the promoter should procure raw material as far as possible from the nearby FPOs registered with Board.

After detailed discussion, PAC approved the project with a maximum eligible subsidy of **Rs. 12.81 lakh**.

18. Setting up of Virgin Coconut Oil Manufacturing Unit – M/s Vama Oil Private Ltd, 3/117, Peedampalli Main Road, Peedampalli Post, Coimbatore, Tamil Nadu

The objective of the project is setting up of virgin coconut oil manufacturing unit with a capacity to process 8 Metric Tons of desiccated coconut powder to produce 4 tons of VCO per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakhs)		
Land	Leased	-	-
Building & Civil works (Including ETP)	35.00	20.00	5.00
Plant & Machinery	73.23	73.07	18.27
Electrification	8.00	3.12	0.78
Generator	7.00	5.00	1.25
Furniture & Office equipments	1.50	-	-
Working Capital margin	40.27	-	-
TOTAL	165.00	101.19	25.30

After detailed discussion, PAC approved the project with a maximum eligible subsidy of **Rs. 25.30 lakh**.

19. Setting up of Virgin Coconut Oil Manufacturing Unit – M/s K.L.F Nirmal Industries (P) Ltd., Fr. Dismas Road, P.B.No. 40, Irinjalakkuda, Thrissur, Kerala

The objective of the project is setting up of virgin coconut oil manufacturing unit with a capacity to process 2 Metric Tons of desiccated coconut powder per day to make VCO-1MTs/day and partially defatted DC Powder -0.92 MTs/day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakh)		
Land	Own	-	-
Building & Civil works	13.82	-	-
Plant & Equipments	319.44	312.08	78.02
Furniture & Fittings	1.00	-	-
Electrical & Electronic Installations	14.17	14.17	3.54
Preliminary & Pre op. expenses	2.80	2.80	0.70
Working Capital margin	45.84	-	-

TOTAL	397.07	329.05	82.26 Limited to Rs. 50.00
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After detailed discussion, PAC approved the project with a maximum eligible subsidy of **Rs. 50.00 lakh**.

Neera Processing and Packaging Unit

20. Setting up of Unit for Processing and Packaging of Neera and Neera Based Value Added Products - M/s Palakkad Coconut Producer Co. Ltd (PCPCL) , 10/728A, Little Tree, Urkulam, Muthalamada, Palakkad, Kerala

The objective of the project is setting up of unit for processing and packaging of neera and neera based value added products with a capacity to process 3,200 liters per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakh)		
Land	16.65	-	-
Building & Civil works	38.46	38.46	9.61
Plant & Equipments	191.47	168.01	42.00
Preliminary & Pre op. expenses	11.44	2.06	0.52
Working Capital Margin	20.07	-	-
TOTAL	278.09	208.53	52.13 Limited to Rs. 50.00

After detailed discussion, PAC approved the project with a maximum eligible subsidy of **Rs. 50.00 lakh**.

Integrated Coconut Processing Units

21. Setting up of Integrated Coconut Processing Unit for the production of DC, Chips and Vinegar - M/s Kalliath Agro Tech, Chembankunnu, Kyttichira Post, Chalakudy (Via), Thrissur, Kerala

The objective of the project is setting up of an integrated coconut processing unit with a capacity to process 25,000 coconuts per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakh)		
Land	Own	-	-
Building & Civil works	48.35	24.00	6.00
Plant & Equipments including Generator	77.70	69.69	17.42
Preliminary & Pre op. expenses	2.80	0.93	0.23
Working Capital margin	16.15	-	-
TOTAL	145.00	94.62	23.65

PAC suggested that the promoter should procure raw material as far as possible from the nearby FPOs registered with Board.

After detailed discussion, PAC approved the project with a maximum eligible subsidy of **Rs. 23.65 lakh**.

22. Setting up of Neera Processing & Its Value Added Products and Coconut Oil Extraction Unit - M/s Malappuram Coconut Producer Co. Ltd, (MCPC), Room No. VP/9/336Q, Edavannappara, Cheruvayoor Post, Vazhakkad Via , Malappuram, Kerala

The objective of the project is setting up of neera processing and its value added products and coconut oil extraction unit with a capacity to process 10,000 litres of neera and 20,000 coconuts for coconut oil per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakh)		
Land (Lease)	50.00	-	-
Building & Civil works (including ETP)	127.14	51.17	12.79
Plant & machinery (including electrical installation)	206.09	192.79	48.20
Preliminary & Pre op. expenses	12.97	2.43	0.60
Working Capital margin	32.20	-	

TOTAL	428.40	246.39	61.59 Limited to 50.00
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PAC suggested that the promoter should procure raw material as far as possible from the nearby FPOs registered with Board.

After detailed discussion, PAC approved the project with a maximum eligible subsidy of **Rs. 50.00 lakh**.

Coconut Shell Charcoal Manufacturing Units

23. Setting up of Coconut Shell Charcoal Manufacturing Unit – M/s Actichar, 13th Cross, Opp. Central Bank of India, Someshwara Extension, Tumkur, Karnataka

The objective of the project is setting up of a coconut shell charcoal manufacturing unit with a capacity to process 30 Tons of coconut shells per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakh)		
Land	Lease	-	-
Building & Civil works (Renovation)	15.25	15.25	3.81
Plant & Equipments	52.70	52.70	13.18
Working Capital Margin	8.88	-	-
TOTAL	76.83	67.95	16.99

PAC suggested that the promoter should procure raw material as far as possible from the nearby FPOs registered with Board.

After detailed discussion, PAC approved the project with a maximum eligible subsidy of **Rs. 16.99 lakh**.

24. Setting up of Coconut Shell Charcoal Manufacturing Unit – M/s Shellco Carbons, Palayad Post, Pathiyookara, Vadakara, Kozhikode, Kerala

The objective of the project is setting up of a coconut shell charcoal manufacturing unit with a capacity to process 10 Tons of coconut shells per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakh)		
Land	Leased	-	-

Building & Civil works	25.50	17.15	4.29
Plant & Equipments	42.57	42.57	10.64
Pre op. expenses	1.83	0.59	0.15
Working Capital Margin	5.10	-	
TOTAL	75.00	60.31	15.08

PAC suggested that the promoter should procure raw material as far as possible from the nearby FPOs registered with Board.

After detailed discussion, PAC approved the project with a maximum eligible subsidy of **Rs. 15.08 lakh**.

25. Setting up of Coconut Shell Charcoal, Charcoal Granulation & Briquetting Unit – M/s Active Char Products Pvt Ltd, Near Marico Industries, Kanjikode, Palakkad, Kerala

The objective of the project is setting up of a shell charcoal, charcoal granulation and briquetting unit with a capacity to produce 20 metric tons of charcoal and 120 metric tons of granulised charcoal per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. In lakh)		
Land	89.32	-	-
Building & Civil works	270.54	30.00	7.50
Plant & Equipments	611.18	262.92	65.73
Vehicle	45.00	-	-
Preliminary & Pre op. expenses	98.95	2.92	0.73
Working Capital margin	75.00	-	-
TOTAL	1189.99	295.84	73.96 limited to 50.00

PAC suggested that the promoter should procure raw material as far as possible from the nearby FPOs registered with Board.

After detailed discussion, PAC approved the project with a maximum eligible subsidy of **Rs. 50.00 lakh**.

Coconut Waste Briquette Manufacturing Unit

26. Setting up of Coconut Waste Briquette Manufacturing Unit - M/s MnM Bio-Agro Pvt. Ltd, 52, Gunjur, Tubagere Hobli, Doddaballapur Tk, Bangalore, Karnataka

The objective of the project is setting up of coconut waste briquette manufacturing unit with a capacity to process 9,000 tons per year.

Components	Total Project Cost	Eligible Project Cost	Maximum eligible Subsidy
	(Rs. in lakh)		
Land	Own	-	-
Building & Civil works	40.00	18.76	4.69
Plant & Equipments	80.00	64.11	16.03
Electrical installation	9.00	2.37	0.59
Preliminary & Pre op. expenses	20.00	0.85	0.21
Working Capital margin	50.00	-	-
TOTAL	199.00	86.09	21.52

PAC discussed the project in detail and the committee observed that the raw material utilized for making the product is farm waste which adds a lot of organic matter in the soil. Hence **PAC did not approve the project.**

Activated Carbon Manufacturing Unit

27. Setting up of Coconut Shell Based Activated Carbon Unit – M/s Clean Carbons Pvt. Ltd, Kinfra Industrial Park, Nadukani, Pallivayal Post, Thaliparamba, Kannur Dist, Kerala

The objective of the project is setting of a activated carbon unit with a capacity to produce 5 tons of activated carbon per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakh)		
Land	Lease	-	-
Building & Civil works	55.50	55.50	13.87
Plant & Equipments	225.75	193.67	48.42
DG Set	14.18	5.00	1.25
Electrification	15.00	9.93	2.48
Furniture & Office eqp.	4.05	-	-
Preliminary & Pre op.	3.00	2.64	0.66

expenses			
Working Capital margin	32.52	-	-
TOTAL	350.00	266.74	66.68 Limited to 50.00

After detailed discussion, PAC approved the project with a maximum eligible subsidy of **Rs. 50.00 lakh**.

Copra Dryer Making Units

28. Setting up of Copra Making Unit – M/s Changaramkulam Federation of Coconut Producers Societies, Othalur Post, Near APJ Nagar, Malappuram, Kerala

The objective of the project is setting up of copra making unit with a capacity to process 10,000 coconuts per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakh)		
Land	Lease	-	-
Building & Civil Works	10.20	10.20	2.55
Plant & Machinery	12.80	12.80	3.20
Working Capital margin	6.19	-	-
TOTAL	29.19	23.00	5.75

After detailed discussion, PAC approved the project with a maximum eligible subsidy of **Rs. 5.75 lakh**.

29. Setting up of Modern Copra Drier Unit – M/s Mahima Coconut Producer Company Ltd, Mori Padmathipalem, Sakhinetipalli Mandal, East Godavari, Andhra Pradesh

The objective of the project is setting up of copra making unit with a capacity to process 10,000 coconuts per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakh)		
Land	Lease	-	-
Plant & Equipments	11.50	11.50	2.88

Civil work for Dryer	10.00	10.00	2.50
DG Set	3.50	3.50	0.87
Working Capital margin	5.00	-	-
TOTAL	30.00	25.00	6.25

Being FPO as a special case, PAC decided to consider the term loan limit on the basis of eligible project cost instead of total project cost.

After detailed discussion, PAC approved the project with a maximum eligible subsidy of **Rs. 6.25 lakh**.

Ball Copra Making Units

30. Setting up of a Ball Copra Making Unit - Shri Challa Bala Raju S/o Shri Subba Rao, Sakhinetipally Village & Mandal, East Godavari, Andhra Pradesh

The objective of the project is setting up of a ball copra making unit with a capacity to process 5.00 lakh coconuts per year.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakh)		
Land	Own	-	-
Platform Dryer	19.20	12.50	3.125
TOTAL	19.20	12.50	3.125

PAC suggested that the promoter should procure raw material as far as possible from the nearby FPOs registered with Board.

After detailed discussion, PAC approved the project with a maximum eligible subsidy of **Rs. 3.125 lakh**.

31. Setting up of a Ball Copra Making Unit – Smt Nayanala Satyadevi W/o Venkata Ramana, Cenal Road, Mamidikuduru, East Godavari , Andhra Pradesh

The objective of the project is setting up of ball copra making unit with a capacity to produce 8.00 lakh coconuts per year.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakh)		
Land	Own	-	-
Platform Dryer	14.60	14.60	3.65
Preliminary &	0.30	-	-

Pre op. expenses			
Working Capital margin	10.00	-	-
TOTAL	24.90	14.60	3.65

PAC suggested that the promoter should procure raw material as far as possible from the nearby FPOs registered with Board.

After detailed discussion, PAC approved the project with a maximum eligible subsidy of **Rs. 3.65 lakh**.

32. Setting up of a Ball Copra Making Unit – Shri Bokka Dora Bhaskara Srihari S/o Shri Narasimha Murthy, Thotlapalam, Peruru Post, East Godavari, Andhra Pradesh

The objective of the project is setting up of ball copra making unit with a capacity to produce 10.00 lakh coconuts per year.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakhs)		
Land	1.00	-	-
Platform Dryer	46.50	25.00	6.25
Preliminary & Pre op. expenses	1.00	-	-
Working Capital margin	15.00	-	-
TOTAL	63.50	25.00	6.25

PAC suggested that the promoter should procure raw material as far as possible from the nearby FPOs registered with Board.

After detailed discussion, PAC approved the project with a maximum eligible subsidy of **Rs.6.25 lakh**.

Market Promotion

1. Ratification of Expenditure Reimbursed for Coconut Point by Changaroath Federation of Coconut Producers Society, Kozhikode.

The Changaroath Federation of Coconut Producers Society has set up a coconut points at Paleri Town, Kozhikode, Kerala for sale of various coconut products such as coconut oil, virgin

coconut oil, neera and neera based products. The point was inspected by the CDB official and based on their recommendations, the eligible subsidy of 50% of the cost of the coconut points limited to Rs.1,28,494/- (Rupees One Lakh Twenty Eight Thousand Four Hundred and Ninety Four only) has been reimbursed to the federation.

After detailed discussion, PAC ratified the expenditure of **Rs.1, 28,494/-** (Rupees One Lakh Twenty Eight Thousand Four Hundred and Ninety Four only) reimbursed to Changarothe Federation of Coconut Producers Society, Kozhikode for setting up of Coconut Point at Palleri, Town, Kozhikode, Kerala.

2. Setting up of Coconut Points under ‘Market Promotion’ of TMOc

The following nine Coconut Producer Federations (CPFs) have set up coconut points for sale of various coconut products such as coconut oil, virgin coconut oil, neera and neera based products in the state of Kerala. The points were inspected by the CDB officials and based on the recommendations, the eligible subsidy of 50% of the cost of the eligible components for the coconut points limited to Rs. 1,50,000/- (Rupees One Lakh Fifty Thousand only) per coconut pint has been recommended for reimbursement to the FPOs as detailed below:

Sl. No.	Name of the Promoter FPO	Location of Coconut Point	District	Expenditure Incurred (Rs.)	Admissible Expenditure	Subsidy Amount Recommended for Released (Rs.)
1	Perambra Federation of Coconut Producers Society, Menjaniam (PO), Perambra, Kozhikode, Kerala– 673525	Chenayi	Kozhikode	325933	233646	1,16,823
2	Moodadi Federation of Coconut Producers Societies, Moodadi North (PO) Koyilandy Kozhikode, Kerala - 673307	Muchukunnu	Kozhikode	326159	139007	69,504
3	Moodadi Federation of Coconut Producers Societies, Moodadi, Koyilandy Kozhikode , Kerala 673307	Moodadi	Kozhikode	332427	60200	30,100

4	Nochad Federation of Coconut Producers Societies, Nochad (PO), Kozhikode, Kerala - 673614	Koothali	Kozhikode	220899	193799	96,900
5	Malanad Federation of Coconut Producers Societies, Kuttiadi (PO), Kuttiadi Kozhikode, Kerala -673508	Narikottumchal	Kozhikode	303687	292742	1,46,371
6	Payyoli Nalikera Ulpadaka Federation, Malady Block, Purakad (PO), Kozhikode, Kerala - 673522	Payyoli Angadi	Kozhikode	283600	251800	1,25,900
7	Kalpaka Nalikera Ulpadaka Sangam affiliated under Payyoli CPF.O.T Muraleedas, Ottathengil House, Ayanikkad (PO), Kerala - 673521	Kuttiyilpeedika Ayanikkad	Kozhikode	280914	220500	1,10,250
8	Mahathma Federation of Coconut Producers Societies, Perumpadappu (PO), Malappuram, Kerala – 679580	Vannery	Malappuram	300989	268064	1,34,032
9	Karappuram Coconut Producer Company Ltd S,N Puram P.O Alappuzha, , Kerala Pin.688582	Kanjikuzhi	Alappuzha	159560	159560	79,780
Total				25,34,168	18,19,318	9,09,660

After detailed discussion, PAC approved setting up of nine coconut points and reimbursement of an amount of **Rs. 9, 09,660/-** (Rupees nine Lakh nine thousand six hundred and sixty only) towards the 50% of the eligible cost of the expenditure incurred to the FPOs.

Supplementary Agenda

Processing Units:

1. Setting up of Desiccated Coconut Powder Manufacturing Unit- M/s Hill Gold Agro Products , 2/516, Manjapra, Near Angamali, Ernakulam ,Kerala

The objective of the project is setting up of desiccated coconut powder manufacturing unit with a capacity to process 50,000 coconuts per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakh)		
Land	Own	-	-
Building & Civil works	93.05	64.18	16.05
Plant & Equipments	157.40	141.63	35.41
ETP	19.05	10.00	2.50
Electrification	10.00	7.08	1.77
Furniture & office equipments	1.72	-	-
Preliminary & Pre op. expenses	5.00	2.22	0.55
Working Capital margin	33.78	-	-
TOTAL	320.00	225.11	56.28 Limited to 50.00

PAC suggested that the promoter should procure raw material as far as possible from the nearby FPOs registered with Board.

After detailed discussion, PAC approved the project with a maximum eligible subsidy of **Rs. 50.00 lakh**.

2. Setting up of Virgin Coconut Oil & Desiccated Coconut Powder Manufacturing Unit - M/s KCK Agro Products Pvt Ltd, Plot No. 18, KSIDC Industrial, Growth Centre, Kinalur, Kozhikode, Kerala

The objective of the project is setting up of virgin coconut oil and desiccated coconut powder manufacturing unit with a capacity to process 30,000 coconuts per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakh)		
Land (Lease for 30 years)	20.00	-	-
Building & Civil works	65.00	57.00	14.25
Plant & Equipments	126.50	126.50	31.63
Electrical installation	6.50	6.32	1.58
ETP	8.00	8.00	2.00
DG Set	5.45	5.00	1.25
Installation charges	1.25	1.25	0.31
Preliminary & Pre op. expenses	2.00	2.00	0.50
Working Capital margin	80.00	-	-
TOTAL	314.70	206.07	51.52 Limited 50.00

PAC suggested that the promoter should procure raw material as far as possible from the nearby FPOs registered with Board.

After detailed discussion, PAC approved the project with a maximum eligible subsidy of **Rs. 50.00 lakh**.

3. Setting up of a Coconut Oil Manufacturing Unit – M/s Kottayam Coconut Proudcer Company Ltd, Pattithannam Post, Ettumanoor, Kottayam , Kerala

The objective of the project is setting up of coconut oil manufacturing unit with a capacity to process 5,500 coconuts per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakh)		
Land	Leased	-	-
Building & Civil works	6.21	6.21	1.55
Plant & Equipments	23.06	20.95	5.24
Working Capital margin	8.00	-	-
TOTAL	37.27	27.16	6.79

PAC discussed the project in detail. Further committee suggested that in order to maintain the quality of the product, company should obtain quality certification like AGMARK from Directorate of Marketing and Inspection, Government of India.

PAC approved the project with a maximum eligible subsidy of **Rs. 6.79 lakh**.

4. Setting up of a Copra Making Unit – M/s Sri Rama Krishna Coconut Producers Company Ltd, Near Railway Station Road, Tedepalligudem, West Godavari, Andhra Pradesh

The objective of the project is setting up of copra making unit with a capacity to process 10,000 coconuts per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
(Rs. in lakhs)			
Land	Leased		
Building	10.00	10.00	2.50
Plant & Machinery	11.50	11.50	2.88
DG Set – 10 KVA	3.50	3.50	0.87
Working Capital margin	5.00	-	-
TOTAL	30.00	25.00	6.25

Being FPO as a special case, PAC decided to consider the term loan limit on the basis of eligible project cost instead of total project cost.

After detailed discussion, PAC approved the project with a maximum eligible subsidy of **Rs. 6.25 lakh**.

5. Setting up of a Copra Making Unit – M/s Chaitanya Coconut Producer Co. Ltd, 126/2, Antaravedi Gondi, Sakhinetipalli, East Godavari Dist, Andhra Pradesh

The objective of the project is setting up of copra making unit with a capacity to process 10,000 coconuts per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
(Rs. in lakh)			
Land	Leased		
Building	10.00	10.00	2.50
Plant & Machinery	11.50	11.50	2.88
DG Set – 10 KVA	3.50	3.50	0.87
Working Capital margin	5.00	-	-

TOTAL	30.00	25.00	6.25
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Being FPO as a special case, PAC decided to consider the term loan limit on the basis of eligible project cost instead of total project cost.

After detailed discussion, PAC approved the project with a maximum eligible subsidy of Rs. **6.25 lakh**.

6. Setting up of a Copra Making Unit – M/s Noveeal Coconut Producer Company Ltd, 2nd Floor, Beside LIC Office, Konkapalli, Amalapuram, East Godavari, Andhra Pradesh

The objective of the project is setting up of copra making unit with a capacity to process 10,000 coconuts per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakh)		
Land	Leased		
Building	10.00	10.00	2.50
Plant & Machinery	11.50	11.50	2.88
DG Set – 10 KVA	3.50	3.50	0.87
Working Capital margin	5.00	-	-
TOTAL	30.00	25.00	6.25

PAC approved the project with a maximum eligible subsidy of Rs. **6.25 lakh**.

7. Setting up of a Ball Copra Making Unit – Shri Bandiguptapu Sriramakrishna, S/o Shri Panduranga, Market Street, Allavaram, East Godawari, Andhra Pradesh

The objective of the project is setting up of ball copra making unit with a capacity to process 6.00 lakh coconuts per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakh)		
Land	Own	-	-
Platform Dryer	30.00	15.00	3.75
Preliminary & Pre op. expenses	-	-	-
Working Capital margin	5.00	-	-
TOTAL	35.00	15.00	3.75

After detailed discussion, PAC approved the project with a maximum eligible subsidy of **Rs. 3.75 lakh.**

Market Promotion

1. Setting up of Coconut Points under ‘Market Promotion’ of TMOC

The following Farmer Producers Organization have submitted application for setting up of coconut points for marketing of value added products.

Sl. No	Name of the Promoter FPO	Location of Coconut Point	District	Project Cost (Rs.)
1	Payyoli Nalikera Ulpadaka Federation , Benzaan P.O., Purakkad, Kozhikode, Kerala – 673522	Payyoli Bus stand	Kozhikode	155200
2	Mahima CPS affiliated under Ulliyeri CPF, Ulliyeri P.O., Kozhikode, Kerala – 673323,	Ulliyeri Town	Kozhikode	330000
3	Federation of Ulliyeri Coconut Producers Societies, Ulliyeri P.O., Kozhikode, Kerala – 673323	Ollur North	Kozhikode	328000
4	Cherandathur Federation of Coconut Producers Societies, Ettankulil House, Maniyur P.O., Kozhikode, Kerala – 673523,	Kuruthodi	Kozhikode	180000
5	M/s Vadakara CPC , Vadakara Farmers Producer Company Ltd., 19/408, Al-Diyafa Complex, Kozhikode, Kerala – 673101,	Chemarathur	Kozhikode	235556
6	M/s Kodungallur Coconut Producer Company Ltd. , Perinjanam, Thrissur, Kerala – 680686	Poribazar	Kozhikode	66500
7	M/s Kodungallur Coconut Producer Company Ltd. , Perinjanam, Thrissur, Kerala – 680686	Kothaparambu	Kozhikode	79800
8	M/s Kottayam coconut producer	Pattithanam	Kottayam	327000

	company limited, Pattithanam P.O, Ettumanoor, Kottayam, Kerala			
9	M/s Kottayam coconut producer company limited, Pattithanam P.O, Ettumanoor, Kottayam, Kerala	Arunapuram	Kottayam	305750
10	Kalpaka Nalikera Ulpadaka Sangam, Manimala P.O, Kottayam, Kerala -686543	Manimala	Kottayam	312603
11	M/s Kaipuzha Coconut Producer Company Limited, Kanjiravilayil House, Padinjattakkara P.O, Thevalakkara, Kerala – 690 524	Pathanamthitta	Kollam	199000
12	M/s Kaipuzha Coconut Producer Company Limited, Kanjiravilayil House, Padinjattakkara P.O, Thevalakkara, Kollam, Kerala – 690 524	KSRTC	Kollam	259000
13	M/s Econut Coconut Producer Company Ltd., At TCS TECH Park, Bangalore, Karnataka	Bangalore	Bangalore	470280
Total (Rupees Thirty Two Lakh Forty Eight Thousand Six Hundred and Eighty Nine Only)				32,48,689

After detailed discussion, PAC approved the proposal for establishment of coconut points and authorized the Chairman, CDB to reimburse 50% of the eligible cost limited to Rs.1.50 lakhs after completion of the work and inspection of points by the Board officials.

Other Item

Sub: Request from Keramithra Federation of Coconut Producers Society, Maruthonkara, Passukadavu P. O, Kozhikode, Kerala for the subsidy for actual expenses incurred for purchase of 30 KVA DG Set – reg.

After detailed discussion, PAC decided to consider the actual expenses for purchase of DG set and sanctioned the additional amount of Rs. 0.48 lakh; enhancing the total subsidy to Rs. 5.495 lakh.

Annexure-I**List of Participants**

A	Project Approval Committee
1	Dr. A.K. Singh Chairman, Coconut Development Board & Chairman PAC
2	Shri Ramesh T. Deputy Secretary, Dept of Agriculture, Govt of Kerala, Representative of - Secretary (Agriculture), Government of Kerala
3	Shri Venkatesh N Hubballi Director, Directorate of Cashew and Cocoa Development, Kera Bhavan, Kochi Representative of - Horticulture Commissioner, Dept. of Agri. Cooperation and Farmers Welfare, Govt. of India
4	Dr. P.Chowdappa Director, CPCRI, Kasaragod Representative of - Assistant Director General (Plantation Crops), ICAR, New Delhi
5	Dr. Anil Kumar R. Assistant Agricultural Marketing Adviser, O/o Assistant Agricultural Marketing Adviser, DMI, Kochi Representative of - Joint Secretary & Agricultural Marketing Adviser Govt. of India, New Delhi
6	Dr. P. Vijayaraj, Scientist, CFTRI, Mysore Representative of - Director, Central Food Technological Research Institute, (CSIR), Mysore
7	Smt. Usha K, DGM, NABARD, R O, Thriuvananthapuram Representative of - Chief General Manager, Technical Service Department, NABARD, Mumbai
8	Shri B.A.R. Patro Chief Regional Manager, IOB, Kochi Representative of - Chief General Manager, Indian Overseas Bank, Bangalore
9	Shri Saradindu Das Chief Coconut Development Officer Coconut Development Board & Member Secretary, PAC

B	Officials of CDB
1	Dr. A.K. Nandi Secretary, CDB, Kochi
2	Shri R. Jnanadevan Deputy Director, CDB, Kochi
3	Shri S.S. Choyal, Deputy Director, CDB, Kochi
4	Shri K.S. Sebastian Assistant Director (Mkg.), CDB, Kochi
5	Shri P. Sabareenathan Finance Officer, CDB, Kochi
6	Shri G.M. Siddharameswara Swamy, Assistant Marketing Officer, CDB, Kochi
7	Ms. Mridula K, Technical Officer, CDB, Kochi
8	Ms. Jyothi K Nair, Processing Engineer (on Contract) CDB, Kochi
9	Ms. Geethu A. S, Processing Engineer (on Contract) CIT, Vahzakulam

**Proceedings of the 50th Meeting of
Project Approval Committee (PAC) of Technology Mission on
Coconut held at Kochi on 4th August 2017**

The 50th meeting of the Project Approval Committee (PAC) on Technology Mission on Coconut (Tech) was held in the Board Room of Coconut Development Board, Kochi on **4th August 2017**. Dr. B.N.S. Murthy, Chairman, Coconut Development Board and Chairman PAC presided over the meeting. At the outset Chairman welcomed all the members of PAC and agenda were taken up. The list of participants is enclosed as *Annexure-I*.

AGENDA No. 1: Confirmation of the Proceedings of 49th Project Approval Committee Meeting held on 23rd January 2017

The Committee confirmed the proceedings of the 49th Project Approval Committee meeting held on 23.01.2017.

AGENDA No. 2: Action Taken Report on Decisions of the 49th PAC Meeting

The committee perused the action taken on decisions of the 49th meeting of Project Approval Committee. Deputy Director (Tech) informed that out of 35 (3 research & 32 adoption) projects sanctioned by the 49th PAC, in 28 projects action has been taken, fund released and projects are progressing. Where as in 7 projects the promoter could not avail 50% of the term loan so funds could not be released. The Promoter informed that the project work is in progress and they are in the stage of construction of building.

While reviewing the Projects approved by 49th PAC, Chairman suggested that good projects like project of IIT Roorkee needs to be given publicity now itself. Chairman instructed TMoC secretariat to obtain a concept note for publishing in the Board's Journals on the project "**Detection of Spoiled Coconut at Pre-Processing Stage by Portable Wireless Electronic Sensor**" with detail objectives and expected outcome.

AGENDA No. 3: Approval of New Project Proposals:

1. *Demonstration of Integrated Management Practices for Basal Stem Rot Disease and Black Headed Caterpillar in Coconut Growing Regions of Karnataka-* Horticulture Research and Extension Station, Arsikere, Karnataka.

The objectives of the project are as follows:

- Survey of Basal Stem Rot (BSR) disease incidence and Black Headed Caterpillar (BHC) infestation in major coconut growing areas of Karnataka (Hassan, Tumkur, Mysore, Chickmagalur and Shivamogaa).
- Identification of locations with higher incidence of Basal Stem Rot Disease and higher infestation of Black Headed Caterpillar.
- Demonstration of integrated management practices for Basal Stem Rot Disease and Black Headed Caterpillar in identified areas.
- Creating awareness among growers regarding pest and disease through trainings, and mass media.

Dr. Manjunath Hubballi, Assistant Professor (Plant Pathology) and Principal Investigator (PI), University of Horticulture Sciences, Horticulture Research and Extension Station, Arsikere, Karnataka presented the project.

PAC discussed the project in detail and approved the project with a total project cost of **Rs. 25.00 lakh** for a project period of 2 years. PI requested to permit two Field Assistants instead of one JRF. PAC agreed for two Field Assistants instead of one JRF with the same financial implications.

2. Quantification of Diversity, Evaluation and Conservation of Potential Natural Enemies of Invasive Rugose Spiraling Whitefly *Aleurodicus Rugioperculatus* of Coconut- ICAR- National Bureau of Agricultural Insect Resources (ICAR-NBAIR) P.B No.2491, H.A. Farm Post, Bellary Road, Hebbal, Bengaluru – 560 024, Karnataka and Coconut Research Station (CRS), Tamil Nadu Agricultural University, Aliya Nagar, Pollachi, Tamil Nadu

The objectives of the project are as follows:

- Standardization of viable mass production techniques for the aphelinid parasitoid, *Encarsia guadeloupae* rugose spiraling whitefly.
- Large scale field validation of *Encarsia guadeloupae* and their conversation.

Dr. K. Selvaraj, Scientist (Entomology), ICAR-NBAIR, Bangalore and Principal Investigator (PI) presented the project.

PAC discussed the project in detail and approved the project with a total project cost of **Rs 25.00 lakh** and project duration of two years.

3. Detection System for Red Palm Weevil Infesting Coconut- ICAR- Central Plantation Crops Research Institute (CPCRI), Regional Station, Kayamkulam, Krishnapuram – 680 533, Alappuzha, Kerala (Lead Center) and M/s Resnova Technologies Pvt. Ltd, IV/40D, Marottichodu Road, Edappally Post, Kochi- 682 024, Kerala (Collaborating Center)

The objectives of the project are as follows:

- Development of an affordable system for early detection of Red Palm Weevil.
- Laboratory simulation and field evaluation of the gadget.

Dr. A. Joseph Rajkumar, Pr. Scientist and Principal Investigator (PI), ICAR-Central Plantation Crops Research Institute (CPCRI), Regional Station, Kayamkulam, Krishnapuram, Alappuzha, Kerala presented the project.

PAC discussed the project in detail and decided that CPCRI and M/s Resnova may undergo MoU that the technology developed under the project will have a joint patenting with CDB, CPCRI and M/s Resnova. Since the concept is through CPCRI, the project shall be implemented by CPCRI. CPCRI may execute MoU with M/s Resnova as per their terms and conditions. The project was approved with a total project cost of **Rs. 45.60 lakh** for a period of two years.

4. Development and Launching of Tetra Packed Neera in Kerala- M/s Palakkad Coconut Producers Company Ltd (PCPCL), 10/728 A, Little Tree, Urkulam, Govindapuram, (PO), Muthalamada, Palakkad- 678007 Kerala

The objectives of the project are as follows:

- Product Development: Neera and Neera blends with Fruit juices in tetra packs.
- Evaluation of Shelf life.
- Consumer Acceptability Tests of Product.

Shri Vinod Kumar P., Chief Executive Officer and Principal Investigator (PI), Palakkad Coconut Producers Company Ltd (PCPCL) presented the project.

PAC discussed the project in detail and Chairman suggested that the PI may include two more flavours of 'passion fruit' and 'cranberry'. Further PAC discussed on the availability of infrastructure facilities with the PCPCL.

PCPCL informed that they will take up the product standardization works in facilities available with M/s Tetra pack, Pune, Maharashtra. M/s Tetra pack does not have the raw material neera for standardization. Therefore the PCPCL and Tetra pack will jointly carry out the product development and shelf life studies.

PAC further noted that the design of tetra pack cover, printing of first run, packing of first run are not the part of product development, whereas Bill boards, Dangers, Stickers etc are the part of marketing and cannot be considered under product development. In this regard, PI informed that as far as tetra pack cover and its related activities, as pointed out by PAC are concerned they are part of the project as the product developed will have its shelf life in tetra pack cover only.

After detail deliberations PAC noted that since the project is being carried out in association with M/s Tetrapack, therefore the financial assistance applicable to other nongovernmental organizations can only be considered, limiting to 75% of the project cost with a maximum ceiling of **Rs 35.00 lakh** only. PAC decided that a committee may visit the PCPCL and verify the infrastructure facilities for production, storage and transportation of neera to processing place at Tetrapack Pune and **deferred the project for next PAC.**

5. Prevalence of Coconut Mite Problem in 8 Coconut Producing Coastal States of India (Odisha, West Bengal, Andhra Pradesh, Tamil Nadu, Karnataka, Kerala, Goa and Maharashtra) M/s R.G. Foundation, U-212, IInd Floor, Shakarpur, Near Laxmi Nagar Metro Station, New Delhi

The objectives of the project are as follows:

- Estimate the extent of coconut mite damage on coconut farms in eight shortlisted coastal states of India.
- Assess the variability of coconut mite infestation among trees on a single farm.
- Compare the extent of coconut mite damage on different coconut varieties.
- Suggest remedial measures for eradicating this problem.

PAC observed that the mandate of the implementing agency is socio-economic research on wide range social issues which does not suits the project submitted by the agency. Moreover the similar studies have already been conducted earlier, therefore PAC decided that the project need not be supported under TMOC scheme and **did not approve the project.**

6. Wastewater Treatment of Desiccated Coconut Industry – Full Scale Demonstration Plant- CSIR- National Institute for Interdisciplinary Science and Technology (NIIST), Thiruvananthapuram, Kerala

The objectives of the project are as follows:

- Setting up of an ETP and Demonstration of ET process at a coconut factory site.
- Performance monitoring, analysis and demonstration to prospective users.

Dr. Ajit Haridas, Director, NIIST, Thiruvananthapuram presented the project.

PAC discussed the project in detail and approved the project with a total project cost of Rs. **25.00 lakh** with a project period of two years. PAC suggested that NIIST may identify the unit in consultation with CDB and entrepreneur's contribution should also be indicated.

7. Coconut Shell Oil Based Ecofriendly Therapeutic Products- Veterinary College, Karnataka Veterinary Animal & Fisheries Science University, Hassan, Karnataka

The objectives of the project are as follows:

- **Physical and chemical characterization:** To characterize the coconut shell and the liquid bio oil for their physical properties and chemical composition.
- **Pharmacological evaluation:** To characterize the coconut shell bio oil both *in vitro* and *in vivo* for their pharmacological and toxicological properties.
- **Standardization of therapeutic formulations and commercialization:** To formulate coconut shell oil based therapeutic products for commercial production.

Dr. Hemanna Gowda K, Assistant Professor and Principal Investigator (PI), Veterinary College Hassan, Karnataka presented the project.

PAC discussed the project in detail and approved the project with a total project cost of **Rs 23.19 lakh** for a period of two years.

8. Design, Development and Field Demonstration of an Air Blast Sprayer for Coconut- ICAR-Central Plantation Crops Research Institute, Kasaragod, Kerala

The objectives of the project are as follows:

- Design and fabrication of an air blast sprayer for coconut.
- To evaluate the performance of the prototype of the sprayer developed.
- Modification of the prototype, if required.
- Field Demonstration of the sprayer.

Dr. A C Mathew, Principal Scientist and Principal Investigator (PI) ,CPCRI, Kasargod, Kerala presented the project.

PAC discussed the project in detail and approved the project with a total project cost of **Rs. 9.00 lakh** and project duration of two years.

9. Design and Fabrication of Tender Coconut Minimal Processing Machine- ICAR-Central Plantation Crops Research Institute, Kasaragod, Kerala

The objectives of the project are as follows:

- Design and fabrication of tender coconut minimal processing machine.
- Performance evaluation of developed tender coconut minimal processing machine.

Dr. A C Mathew, Principal Scientist and Principal Investigator (PI), CPCRI, Kasargod, Kerala presented the project.

PAC observed that this type of machines are already available in the market. Hence PAC suggested to study the efficiency of the existing machines and conceptualize for improvising the existing machines or innovative prototype and **project submitted accordingly for consideration of forthcoming PAC meetings.**

10. Higher Productivity and Profitability from Coconut Gardens through Soil Health Management in Tuber Crops- ICAR – Central Tuber Crops Research Institute, Sreekariyam, Thiruvananthapuram, Kerala

The objectives of the project are as follows:

- Promotion of customized fertilizers in tropical tuber crops intercropped in coconut gardens through farmers' participatory site specific nutrient management (by demonstrations and on-farm trials) in cassava, elephant foot yam and yams.
- Validation and popularization of organic production technologies in cassava, elephant foot yam and yams intercropped in coconut gardens (through demonstrations and on-farm trials) and produce safe-to eat food.
- Capacity building of farmers, SHGs and NGOs for the promotion of these technologies in these crops and overall development and sustainable livelihood of coconut growers.

Dr. G. Byju, Principal Scientist and Principal Investigator (PI), CTCRI, Thiruvananthapuram, Kerala, presented the project.

PAC discussed the project in detail and approved the project with a total project cost of **Rs. 25.00 lakh** and project duration of 3 years.

11. Technology Demonstration for Eriophyid Mite Control in Coconut Farm at CDB, Pitapalli, Bhubaneswar, Odisha- Coconut Development Board, State Centre, Odisha

The objectives of the project are as follows:

- To demonstrate the process technology for Eriophyid mite control in coconut farm at CDB, Pitapalli, Bhubaneswar.
- To demonstrate the efficacy of coir pith enriched with herbal plants for mite control at CDB, DSP Farm, Pitapalli, Bhubaneswar.
- To demonstrate bio-efficacy of the formulated organic manure for controlling other associated pathogens, insect-pests in coconut farm.
- To assess enhancement of micronutrient and soil moisture content by the proposed technology concept of coir pith compost and its impact on coconut productivity.

Dr. Rajat Kumar Pal, Deputy Director and Principal Investigator (PI), CDB Odisha, presented the project.

PAC discussed the project in detail and technically approved the project with the decision to examine the project as one of the activity of the farm and **place before the next PAC.**

12. Kera Coconut Harvesting Machine- Government Engineering College, Thrissur, Kerala

The objective of the project is to design, develop and test the robotic harvesting machine.

Dr. Manesh K.K. Associate Professor and Principal Investigator (PI), Govt Engineering College, Thrissur, Kerala presented the project.

PAC discussed the project in detail and approved the project with a total project cost of Rs. **2.97 lakh** and project duration of one year.

Desiccated Coconut Powder Manufacturing Units

13. Setting up of Desiccated Coconut Powder Manufacturing Unit - M/s Vandana Coco Products, Sy. No. 123 & 124, Kalkere Road, Tiptur Kasaba, Tumkur Dist, Karnataka

The objective of the project is setting up of a desiccated coconut powder manufacturing unit with a capacity to process 20, 000 coconuts per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakh)		
Land	Leased	-	-
Building & Civil works	Leased	-	-
Plant & Equipments	67.24	61.11	15.28
Others	1.00	-	-
Working Capital margin	44.53	--	-
TOTAL	112.77	61.11	15.28

After detail discussion, PAC approved the project with a maximum eligible subsidy of **Rs 15.28 lakh**.

14. Setting up of a Desiccated Coconut Powder Manufacturing Unit - M/s Pollachi Coconut Producer Co. Ltd 70/2 Palaghat Road, Pollachi, Coimbatore Dist, Tamil Nadu

The objective of the project is setting up of a desiccated coconut powder manufacturing unit with a capacity to process 40,000 coconuts per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakh)		
Land	Own	-	-
Building & Civil works	62.40	46.03	11.51
Plant & Equipments	136.10	136.10	34.02
Electrification	22.61	6.51	1.63
ETP	9.56	9.56	2.39
Preliminary & Pre op. expenses	2.33	1.98	0.49
Working Capital Margin	30.00	-	-
TOTAL	263.00	200.18	50.04 Limited to 50.00

After detail discussion, PAC approved the project with a maximum eligible subsidy of **Rs. 50.00 lakh**.

15. Setting up of a Desiccated Coconut Powder Manufacturing Unit - M/s Sharavati Agrotech Pvt Ltd, 'Saraswati, Sy. No. 968 in Karki-1 Village, Prabhat Cross 4, Honavar Tq, Karnataka

The objective of the project is setting up of a desiccated coconut powder manufacturing unit with a capacity to process 25,000 coconuts per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakh)		
Land	-	-	-
Building & Civil works	34.00	19.29	4.82
Plant & Equipments	35.00	28.94	7.24
Electrical Installation	5.00	1.45	0.36
Pre op. expenses	2.00	0.50	0.13
Working Capital Margin	10.00	-	-
TOTAL	86.00	50.18	12.55

After detail discussion, PAC approved the project with a maximum eligible subsidy of Rs. 12.55 lakh.

Frozen Shredded Coconut Manufacturing Unit

16. Setting up of a Frozen Shredded Coconut Manufacturing Unit – M/s Jacob and Richard International Pvt Ltd, X/233 A, Kadanadu Post, Ramapuram, Kottayam Dist, Kerala

The objective of the project is setting up of a frozen shredded coconut manufacturing unit with a capacity to process 5.00 MT coconuts per day for producing 1.60 MT of frozen shredded coconut.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakh)		
Land	Own	-	-
Building & Civil Works	56.50	43.00	10.75
Plant & Equipments	92.20	92.20	23.05
Electrification	5.20	4.61	1.15

ETP	9.00	9.00	2.25
DG Set	7.90	5.00	1.25
Preliminary & Pre op. Expenses	2.80	1.54	0.39
Working Capital Margin	6.00	-	-
TOTAL	179.60	155.35	38.84

After detail discussion, PAC approved the project with a maximum eligible subsidy of Rs **38.44 lakh**.

Integrated Coconut Processing Units

17. Setting up of a Virgin Coconut Oil & Desiccated Coconut Powder Manufacturing Unit – Dr. Shekar & Sadashiva Agri. Pvt. Ltd, Durga Krupa, Kaluvina Bagilu, Near Vijaya Bank, Gulvady Post, Kundapura Taluk, Udupi Dist, Karnataka

The objective of the project is setting up of a Virgin Coconut Oil & Desiccated Coconut Powder manufacturing unit with a capacity to process 20,000 coconuts per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakh)		
Land	Own	-	-
Plant & Equipments	105.36	89.89	22.47
Lab Equipments	1.20	1.20	0.30
ETP	7.47	6.33	1.58
Generator	7.32	5.00	1.25
Building & Civil Works	55.00	26.00	6.50
Electrical Installation	11.35	4.80	1.20
Technical Know-How	0.57	0.57	0.14
Working Capital Margin	90.00	-	-
TOTAL	278.27	133.79	33.44

After detail discussion, PAC approved the project with a maximum eligible subsidy of **Rs. 33.44 lakh**.

18. Setting up of an Integrated Coconut Processing unit for the production of VCO, DC & Coconut Milk - M/s Anjarakandy Farmers' Co-op Bank Ltd, Kavinmoola, Manba, Kannur Dist, Kerala

The objective of the project is to process 4.00 MT of coconuts per day for producing VCO and 1.00 MT coconuts per day for the manufacturing of Coconut Milk and defatted DC Powder (Processing of total 12,000 coconuts per day)

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakh)		
Land	Own	-	-
Building & Civil Works	76.24	24.30	6.08
Plant & Equipments	110.98	110.98	27.74
Installation & Commissioning	3.50	1.11	0.28
DG Set	9.00	5.00	1.25
ETP	7.50	7.50	1.88
Electrical Installation	38.28	5.58	1.39
Others	26.99	-	-
Preliminary & Pre op. Expenses	2.00	1.54	0.38
Working Capital Margin	60.00	-	-
TOTAL	334.49	156.01	39.00

After detail discussion, PAC approved the project with a maximum eligible subsidy of **Rs. 39.00 lakh.**

Tender Coconut Water Processing Units

19. Setting up of a Bottled Tender Coconut Water Unit – M/s MS Cocopani, No. 216, Chattaradahosahalli, Maddur – Malavalli Road, Chikkarasinakere Hobli, Maddur Taluk, Mandya Dist, Karnataka

The objective of the project is setting up of a unit for processing and packaging of tender coconut water with a capacity to process 15,000 coconuts per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakh)		
Land	Own	-	-
Building & Civil Works	34.65	28.24	7.06
ETP	10.00	10.00	2.50
RO Plant for Water	1.89	1.89	0.47

Purification			
Plant & Equipments	66.24	66.24	16.56
Electrification	5.95	3.31	0.83
Technical Know-How	3.50	3.50	0.88
Generator	4.50	4.50	1.12
Preliminary & Pre op. Expenses	1.25	1.17	0.29
Working Capital Margin	13.62	-	-
TOTAL	141.60	118.85	29.71

After detail discussion, PAC approved the project with a maximum eligible subsidy of Rs. **29.71 lakh**.

20. Setting up of a unit for Preservation and Packaging for Tender Coconut Water – M/s Varrun Aquaa Beverages Pvt Ltd, Plot No. 22/A, Industrial Park, Bhongir Village & Mandal, Nalgonda Dist, Telangana

The objective of the project is setting up of a unit for processing and packaging of tender coconut water with a capacity to process 10,000 nuts per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakh)		
Land	Leased	-	-
Building & Civil Works	Leased	-	-
Plant & Equipments	103.00	102.39	25.60
Electrical Installation	2.00	2.00	0.50
Technology Transfer Fee	3.75	3.75	0.94
Preliminary & Pre op. Expenses	1.25	1.08	0.27
Working Capital Margin	15.00	-	-
TOTAL	125.00	109.22	27.31

After detail discussion, PAC approved the project with a maximum eligible subsidy of **Rs. 27.31 lakh**.

Coconut Flour Based Dietary Fibre Making Unit

21. Setting up of a Unit for Production of Dietary Fibre from Coconut Flour – M/s Vama Oil Private Ltd, 3/117, Peedampalli Main Road, Peedampalli Post, Coimbatore, Tamil Nadu

The objective of the project is to process 4.00 MT of coconut flour per day to produce 1.20 MT Dietary Fibre.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakh)		
Land	Leased	-	-
Building & Civil Works (Including ETP)	35.00	20.00	5.00
Plant & Equipments	150.60	150.42	37.61
Electrification	8.00	7.52	1.88
Furniture & Office Equipments	1.72	-	-
Working Capital Margin	10.68	-	-
TOTAL	206.00	177.94	44.49

After detail discussion, PAC decided since this project is based on new technology endorsed by CFTRI, Mysore and neither representative from CFTRI nor the promoter was present in the meeting to explain in detail about the project, therefore **the project is deferred for next PAC.**

Coconut Oil Manufacturing Units

22. Setting up of Coconut Oil Manufacturing Unit -M/s Thejaswini Coconut Farmers' Producer Company Ltd, C.P.II-376/K7, First Floor, Thattassery Building Cherupuzha PO, Kannur, Kerala

The objective of the project is setting up of a unit for manufacturing of coconut oil with a capacity to process 15,000 coconuts per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakh)		
Land	Own	-	-
Building	44.60	41.00	10.25
Plant & Machinery	143.15	143.14	35.78
Generator	7.35	5.00	1.25
Electrification Works	30.00	7.40	1.85
ETP	12.00	12.00	3.00
Weighing Scale	0.12	0.12	0.03
Furniture and Office Equipments	2.11	-	-
Preliminary & Pre op. Expenses	3.00	2.00	0.50
Working Capital Margin	19.19	-	-
TOTAL	261.52	210.66	52.66 Limited to 50.00

After detail discussion, PAC approved the project with a maximum eligible subsidy of **Rs. 50.00 lakh**.

23. Setting up of Coconut Oil Manufacturing Unit – M/s Pollachi Coconut Producer Co. Ltd, 70/2 Palaghat Road, Pollachi, Coimbatore Dist, Tamil Nadu

The objective of the project is setting up of a unit for manufacturing of coconut oil with a capacity to process 15.00 MT of copra per day to produce 9.50 MT of coconut oil and 5.50 MT cake.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakh)		
Land	Own	-	-

Building & Civil Works	34.70	34.70	8.68
Plant & Equipments	149.60	149.60	37.40
Electrification	14.38	7.48	1.87
DG Set	4.50	4.50	1.12
Preliminary & Pre op. Expenses	1.00	1.00	0.25
TOTAL	204.18	197.28	49.32

After detail discussion, PAC approved the project with a maximum eligible subsidy of **Rs. 49.32 lakh**.

Copra Making Units

24. Setting up of Copra Making Unit – M/s Ubhaya Godavari Coconut Producer Co. Ltd, Medapadu (v), Yelamanchili Mandal, West Godavari Dist, Andhra Pradesh

The objective of the project is setting up of copra making unit with a capacity to process 10,000 coconuts per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakh)		
Land	Leased	-	-
Plant & Equipments	11.50	11.50	2.88
Building	10.00	10.00	2.50
DG Set	3.50	3.50	0.87
TOTAL	25.00	25.00	6.25

After detail discussion, PAC approved the project with a maximum eligible subsidy of **Rs 6.25 lakh**.

25. Setting up of Copra Making Unit – M/s Vattamkulam Federation of Coconut Producers Societies, Vattamkulam, Chekanur Post, Malappuram Dist, Kerala

The objective of the project is setting up of a copra making unit with a capacity to process 10,000 coconuts per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakh)		

Land	Leased	-	-
Plant & Equipments	12.80	12.80	3.20
Building	10.20	3.47	0.87
Working Capital Margin	0.75	-	-
TOTAL	23.75	16.27	4.07

After detail discussion, PAC approved the project with a maximum eligible subsidy of **Rs. 4.07 lakh**.

26. Setting up of Copra Making Unit – M/s Wayanad Federation of Coconut Producers Societies, Panamaram Post, Pandichira Village, Sulthan Bathery Tk, Wayanad Dist, Kerala

The objective of the project is setting up of a copra making unit with a capacity to process 10,000 coconuts per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakh)		
Land	Leased	-	-
Plant & Equipments	5.40	5.40	1.35
Building & Civil Works	12.20	12.20	3.05
Generator	2.65	2.65	0.66
Working Capital Margin	4.00	-	-
TOTAL	24.25	20.25	5.06

After detail discussion, PAC approved the project with a maximum eligible subsidy of **Rs. 5.06 lakh**.

27. Setting up of Copra Making Unit – M/s Kalpavruksha Coconut Federation, Aralam North, Keezhapally Post, Kannur Dist, Kerala

The objective of the project is setting up of a copra making unit with a capacity to process 10,000 coconuts per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakh)		
Land	Leased	-	-

Plant & Equipments	7.06	7.06	1.76
Building & Civil Works	18.00	18.00	4.50
TOTAL	25.06	25.06	6.26

After detail discussion, PAC approved the project with a maximum eligible subsidy of **Rs. 6.26 lakh.**

Ball Copra Making Units

28. Setting up of a Ball Copra Making Unit - Shri Koppiseti Swami Naidu S/o Shri Venkateswarlu, D.No. 1-300/1, Mattaparru Village, Malikipuram Mandal, East Godavari Dist, Andhra Pradesh

The objective of the project is setting up of a ball copra making unit with a capacity to process 1.50 lakh coconuts per year.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakh)		
Land	0.30	-	-
Platform Dryer	15.00	5.25	1.31
Preliminary & Pre op. Expenses	0.30	-	-
Working Capital Margin	5.00	-	-
TOTAL	20.60	5.25	1.31

After detail discussion, PAC approved the project with a maximum eligible subsidy of **Rs. 1.31 lakh.**

29. Setting up of a Ball Copra Making Unit – Shri Pabolu SVSRK Kumar S/o Suryanarayana, 105, Ranalayam Veedhi, Veluvalapalli, Inavalli Mandal, East Godavari Dist, Andhra Pradesh

The objective of the project is setting up of a ball copra making unit with a capacity to process 8.00 lakh coconuts per year.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakh)		
Land	Own	-	-
Platform Dryer	40.00	28.00	7.00

Working Capital Margin	10.00	-	-
TOTAL	50.00	28.00	7.00

After detail discussion, PAC approved the project with a maximum eligible subsidy of **Rs. 7.00 lakh**.

30. Setting up of a Ball Copra Making Unit – Shri Arigela Papa Rao S/o Shri Surya Rao, M/s Om Vignesware Coconut Traders, Tottaramudi Panchayat, Ainavilli Mandal, East Godavari Dist, Andhra Pradesh

The objective of the project is setting up of a ball copra making unit with a capacity to process 15.00 lakh coconuts per year.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakh)		
Land	Own	-	-
Platform Dryer	25.00	25.00	6.25
TOTAL	25.00	25.00	6.25

After detail discussion, PAC approved the project with a maximum eligible subsidy of **Rs. 6.25 lakh**.

31. Setting up of a Ball Copra Making Unit – Shri Batchu Sri Rama Chandra Murthy S/o Shri Naga Subrahmanyam, D. No. 1-88, Kappulaveedhi, Mukkamala, Ambajipeta Mandal, East Godavari Dist, Andhra Pradesh

The objective of the project is setting up of a ball copra making unit with a capacity to process 12.50 lakh coconuts per year.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakh)		
Land	22.50	-	-
Platform Dryer	43.50	31.50	7.87
Pre-operative Expenses	4.55	-	-
Working Capital Margin	9.50	-	-
TOTAL	80.05	31.50	7.87

After detail discussion, PAC approved the project with a maximum eligible subsidy of **Rs 7.87 lakh.**

32. Setting up of a Ball Copra Making Unit – Shri Adabala Satynarayana Murthy S/o Shri Narasimha Murthy, D. No. 3-134, Kapulapalaem, Achanta Village & Mandal, West Godavari Dist, Andhra Pradesh

The objective of the project is setting up of a ball copra making unit with a capacity to process 4.00 lakh coconuts per year.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakh)		
Land	0.60	-	-
Platform Dryer	38.00	14.00	3.50
Preliminary & Pre op. Expenses	0.60	-	-
Working Capital Margin	10.00	-	-
TOTAL	49.20	14.00	3.50

After detail discussion, PAC approved the project with a maximum eligible subsidy of **Rs 3.50 lakh.**

Coconut Shell Charcoal Manufacturing Units

33. Setting up of Coconut Shell Charcoal Manufacturing Unit – M/s Apan Carbon Pvt. Ltd, Reg. Office, 9 2 B, South Raja Street, Tuticorin, Tamil Nadu

The objective of the project is setting up of a coconut shell charcoal manufacturing unit with a capacity to produce 10.00 MT Shell Charcoal per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakh)		
Land	Own	-	-
Building & Civil Works	44.02	5.10	1.28
Plant & Equipments	114.61	104.76	26.19
Electrical Installation	6.49	2.90	0.72
Preliminary & Pre op.	4.88	1.12	0.28

Expenses			
Working Capital Margin	100.00	-	-
TOTAL	270.00	113.88	28.47

After detail discussion, PAC approved the project with a maximum eligible subsidy of **Rs. 28.47 lakh**. PAC suggested that after a period of two years of successful running of the unit, the promoter may patent the technology and provide to promising entrepreneurs on payment basis.

34. Setting up of Coconut Shell Charcoal Manufacturing Unit – M/s Maruthi Charcoal, Industry, Sy No. 13/2, Nagaraghatta Kaval, Kaidal Gate, Nonavinakere Hobli, Tiptur Tk, Tumkur Dist, Karnataka

The objective of the project is setting up of a coconut shell charcoal manufacturing unit with a capacity to process 6.00 lakh coconut shells per day to produce 20.00 MT Charcoal per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakh)		
Land	Own	-	-
Building & Civil Works	67.25	36.75	9.19
Plant & Equipments	55.19	55.09	13.77
Others (Deposit)	0.35	-	-
Working Capital Margin	5.00	-	-
TOTAL	127.79	91.84	22.96

After detail discussion, PAC approved the project with a maximum eligible subsidy of **Rs. 22.96 lakh**.

Market Promotional Projects

35. Market Promotional Programme by M/s Vadakara Coconut Farmers Producers Company Limited (VCFPC), 19/408 K, M&L, Al- Diyafa Complex, Co-operative Hospital Road, Karimanapalam, Vadakara, Kerala

The objective of the project is to carry out market promotional programme for coconut products through electronic and print media, brochures, dangles and mini hoardings etc.

Sl. No.	Activities Proposed	Cost		Eligible Cost
		(Rs. in lakh)		
1	Brand publicity through electronic media: Advertisement through Mathrubhumi News	18.00	18.00	12.50 Limited to max. eligibility
2.	Brand publicity through print media:			
	1. Advt.through Mathrubhumi News Paper	5.67		
	2. Advt. in Mathrubhumi Onam Pathippu	0.50	6.17	6.17
3	Purchase of Vehicle (3 Nos.):			
	1. Tata Ace Zip	3.00		
	2. Tata Ace Mini	5.24	13.82	1.00
	3. Mahindra Supro	5.58		
4	Preparation of POP materials :			
	1. Product Brochure	0.30	0.50	0.50
	2. Notice	0.10		
	3. Dangers	0.10		
5	Mini Hoardings – 50 nos.	0.50	0.50	0.50
	TOTAL	38.99	38.99	20.67

36. Market Promotional Programme by M/s Thejaswini Coconut Farmers Producer Company Ltd., C.P.II-376/K7, First Floor, Thattassery Building, Cherupuzha P.O., Kannur, Kerala

The objective of the project is to carry out market promotional programme for coconut products through electronic and print media, brochures and mini hoardings etc.

S. No	Activities Proposed	Cost	Admissible Cost
		(Rs. in lakh)	

1	Brand publicity through electronic media: Advertisement through Mathrubhumi News and Manorama News		17.325	12.50
2.	Brand publicity through print media:			
	1. Advt. through Mathrubhumi Arogya Masika	2.00	5.10	5.10
	2. Manorama Karshakasree	1.00		
	3. Mathrubhumi Daily	0.55		
	4. Manorama Daily	0.30		
	5. Kerala Karshakan	1.25		
3	Purchase of Vehicle:			
	1.Mahindra Pick Up	8.00	17.00	1.00
	2.Force Traveler	9.00		
4	Participation in Buyers Seller Meet: Fair Trade Summit 2018 at Germany		6.00	-
5	Product Quality Certification:			
	1. HACCP	1.50	2.49	-
	2. FSSAI	0.09		
	3. AGMARK	0.15		
	4. BARCODE	0.60		
	5. TRADE MARK	0.15		
6	Label and package design: Label Design		0.50	-
7	Preparation of POP materials :			
	1. Notice	0.125	0.925	0.925
	2. Product Brochure	0.500		
	3. Boards	0.100		
	4. Posters	0.200		
8	Mini Hoardings – 50 nos.		0.500	0.500
	TOTAL		49.84	20.025

37. Market Promotional Programme by M/s Palakkad Coconut Producer Company Limited, Urkulam, Muthalamada, Palakkad, Kerala

The objective of the project is to carry out market promotional programme for coconut products through electronic and print media, brochures, dangles, outdoor advertising and quality management.

Sl. No.	Activities Proposed	Cost	Admissible Cost
		(Rs. In lakhs)	
1	Branding- Label re designing	10.48	-
2	Brand publicity through electronic media	10.00	10.00
3	Brand publicity through print media	10.00	10.00
4	Preparation of POP materials	10.00	10.00
5	Outdoor Advertising	10.08	10.00
6	Product Quality Certification	10.00	-
	TOTAL	60.56	40.00 Limited to 25.00

38. Market Promotional Programme by M/s Onattukara Coconut Farmers Producer Company Ltd., Vetticodu, Kattanam P.O., Alappuzha District, Kerala

The objective of the project is to carry out market promotional programme for coconut products through electronic and print media, brochures, dangles and mini hoardings.

Sl. No	Activities Proposed	Cost	Eligible Cost
		(Rs. in lakh)	
1	Brand publicity through electronic media: Including Web site and Publicity through All India Radio	13.50	12.50
2.	Brand publicity through print media	5.00	5.00
3	Purchase of Vehicle	6.50	1.00
4	Preparation of POP materials	4.00	4.00
5	Hoardings	7.00	7.00

6	Acquisition of Quality Certification	4.00	-
	TOTAL	40.00	29.50 Limited to 25.00

PAC Decision for Project No 35-38:-

After detail discussion PAC decided that

1. The projects need to be examined and reviewed by a subcommittee consisting of PAC members with some specialist in the field of marketing and formulate the guidelines with components to be considered under the market promotional projects.
2. The market promotional activities to be taken up through social media may be also be included.
3. The market promotional activities should be taken up through regional as well as national level news papers also.
4. A common market promotional campaign may be formulated for the FPOs.
5. The comments of the PAC as well as ISC should be communicated to entrepreneurs.

PAC decided to defer all the four projects to place before next PAC with action/recommendations of the subcommittee.

Other Items:-

1. **Approval of the Project ‘Standardization of Protocol for the Preparation of Frozen Coconut Delicazy’ of CPCRI, Kasaragod deferred by 49th PAC held on 23rd Jan 2017 for next PAC due to fund constraint.**

After discussion, PAC approved the project for **Rs. 40.60 lakh with project period of 18 months.**

2. **Setting up of an integrated coconut processing unit for the production of Desiccated Coconut & Virgin Coconut Oil at Campbell Bay, Great Nicobar, A & N Islands by M/s. Reflex Industries Pvt. Ltd, Junglighat, Port Blair, A &N Island**

PAC noted that the modifications have been duly certified by the Bank therefore PAC approved the modified project for making DCP only restricting the eligible cost of plant and machinery to **Rs. 63.78 lakh** as approved by 36th PAC.

3. **Request of the Bank to waive the interest in the case of refunded subsidy amount**

PAC discussed in detail about the terms and conditions of the MoU and decided to recommend the cases of waiving of interest to the National Steering Committee (NSC) with the suggestions for suitable modification in the MoU clauses related to recovery of interest where subsidy is refunded in the cases where the projects are abandoned midway/term loan closed prematurely.

Any other items with the permission of Chairman

- 1. Request from M/s Onattukara Coconut Producer Co. Ltd, Kattanam, Pallickal Post, Alappuzha Dist, Kerala towards the subsidy for excess expenses incurred for Setting up of Coconut Oil Manufacturing Unit – reg.**

PAC noted that the excess expenditure is not endorsed by the bank therefore suggested to CPC to submit the excess expenditure duly certified by the bank. On submission of certificate duly signed by the bank for excess expenditure, the eligible additional subsidy, limiting to maximum subsidy of Rs 50.00 lakh may be released to CPC.

Date: 28.08.2017
Place: Ernakulum

Chief Coconut Development Officer
Member Secretary, PAC

Annexure-I

A	Project Approval Committee
1	Dr.B.N.S.Murthy Chairman, Coconut Development Board & Chairman PAC
2	Shri K.T.Shibu Deputy Secretary, Dept of Agriculture, Govt of Kerala, Representative of - Secretary (Agriculture), Government of Kerala
3	Dr. Hebbbar K.B Scientist, CPCRI, Kasaragod, Kerala Representative of - Assistant Director General (Plantation Crops), ICAR, New Delhi
4	Shri P.K.Hameed Kutty Assistant Agricultural Marketing Adviser, O/o Assistant Agricultural Marketing Adviser, DMI, Kochi, Kerala Representative of - Joint Secretary & Agricultural Marketing Adviser Govt. of India, New Delhi
5	Smt.Usha K. DGM, NABARD, R O, Thriuvananthapuram, Kerala Representative of - Chief General Manager, Technical Services Department, NABARD, Mumbai
6	Shri S. Ayyappan Chief Manager, IOB, Kochi, Kerala Representative of - Chief General Manager, Indian Overseas Bank, Bangalore, Karnataka

7	Shri Saradindu Das Chief Coconut Development Officer Coconut Development Board & Member Secretary, PAC
B	Technical Expert
1	Dr. M.Aravindakshan Former Chairman, CDB and Director Research(Retd), KAU, Thrissur, Kerala
C	Officials of CDB
1	Dr.A.K.Nandi Secretary, CDB, Kochi
2	Shri R. Jnanadevan Deputy Director, CDB, Kochi
3	Shri S.S. Choyal Deputy Director, CDB, Kochi
4.	Shri Sreekumar Poduval Processing Engineer, CIT, Vazhakulam, Aluva
5.	Shri K.S.Sebastian Assistant Director (Mkg.), CDB, Kochi
6.	Shri P.Sabareenathan Finance Officer, CDB, Kochi
7.	Shri V.C.Vasanthkumar Statistical Officer, CDB, Kochi
8.	Shri G.M. Siddharameswara Swamy Assistant Marketing Officer, CDB, Kochi
9.	Ms. Mridula K. Technical Officer, CDB, Kochi