Proceedings of the 51st Meeting of Project Approval Committee (PAC) of Technology Mission on Coconut held at Kochi on 19th January 2018

The 51st meeting of the Project Approval Committee (PAC) on Technology Mission on Coconut was held in the Board Room of Coconut Development Board, Kochi on **19th January 2018**. 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 50th Project Approval Committee Meeting held on 4th August 2017

The Committee confirmed the proceedings of the 50th Project Approval Committee meeting held on 04.08.2017**.**

AGENDA No. 2: Action Taken Report on Decisions of the 50th PAC Meeting

The committee perused the action taken on decisions of the 50th meeting of Project Approval Committee. Deputy Director (Tech) informed that out of 29 (8 research & 21 adoption) projects sanctioned by the 50th PAC, in 22 projects action has been taken, fund released and projects are progressing. Whereas out of 7 projects pending for action, in 3 research projects neither MoUs are received so far nor any communication is received from PIs. Whereas in 2 projects under Adoption, the financing institute is NABARD and the NABARD has suggested some modifications in the MoU. The modifications were explained by Smt Usha K., DGM, NABARD and it was decided that since NABARD is not a commercial bank the modifications may be further looked into and finalize amicably protecting the rights of CDB as well as NABARD.

Whereas in 2 other projects the FPOs have not submitted the signed MoU due to difficulties in availing sanctioned term loans. The committee decided that wherever the projects have not been started TMoC Secretariat may issue time bound letter to start the projects else their projects shall be treated as cancelled.

AGENDA No. 3: Approval of New Project Proposals:

1. **Bio-management of the Rugose Spiralling Whitefly (RSW), an Invasive Pest of Coconut Palm-ICAR-Central Plantation Crops Research Institute, Regional Station, Kayamkulam, P.O. Krishnapuram - 690 533, Kerala.**

The objectives of the project are as follows:

- Evolving effective mass production strategies of *Encarsia guadeloupae* and to develop conservatory and augmentative biological control of rugose spiraling whitefly infesting coconut.
- To promote habitat conservation and inoculative protocol of scavenger beetles devouring sooty mould in Rugose Spiralling Whitefly infested coconut gardens.
- Assessing the extent of damage induced by RSW in coconut and associated crops in the coconut based cropping system.

- To empower extension professionals and farmers on the biocontrol of Rugose Spiralling Whitefly.

PAC perused on the recommendations of the ISC and observed that a project with similar objectives has already been approved by 50th PAC to ICAR-National Bureau of Agricultural Insect Resources (ICAR-NBAIR), Bangalore and TNAU, Coimbatore jointly so this project will only be repetition. The PI may co-ordinate with the PI of ICAR-NBAIR, Bangalore and modify the project avoiding the repetition of the objectives and restricting the project to mass multiplication and distribution of the bioagent to farmers. **PAC decided that revised project may be placed in next PAC**.

2. **Integrated Disease Management Practices for Basal Stem Rot Disease of Coconut in East Coast Region of Tamil Nadu- A Farmer Participatory Demonstration cum Training Programme- Coconut Research Station, Tamil Nadu Agricultural University, Veppankulam-614 906, Thanjavur District, Tamil Nadu.**

The objectives of the project are as follows:

- Geomapping of Basal Stem Rot (BSR) disease incidence in major coconut growing areas of Tamil Nadu.
- To demonstrate the efficacy and feasibility of recommended technologies in coconut on a group action basis in BSR affected area.
- To motivate the farmers by designing and imparting need based trainings to different client groups related to BSR Management.
- Creating awareness among growers regarding BSR disease through mass media, field visits and also by personal communications.

PAC perused on the recommendations of the ISC and observed that a project with similar objectives has already been approved by the 50th PAC to the Horticulture Research and Extension Station, Arsikere, Karnataka so this project will only be repetition. PAC decided that the Principal Investigator may modify the project restricting to demonstration of proven integrated management technologies of basal stem rot disease in Thanjavur and neighboring affected districts of Tamil Nadu and the **revised project may be submitted in next PAC**.

3. **Production of Gasoline, Diesel from Coconut Shell via Pyrolysis, Hydrotreating aaand Catalytic Cracking- VIT University, Vellore - 632 014, TamilNadu.**

The objectives of the project are as follows:

- Using an alternative approach to produce efficient hydrocarbon from biomass using coconut shell.
- Simulation of the process using Aspen plus software for better product.
- Optimization of the process for cost-effective product.

PAC perused on the recommendations of the ISC and suggested that the project should be for production of shell oil from shell chips and not from shell powder as envisaged in the

project. In order to develop the viable technology for production of shell charcoal and shell oil, the studies on recovery of shell charcoal and shell oil must be carried out at lab scale. PI may co-ordinate with the University of Petroleum and Energy Studies, Dehradun, Uttarkhand and explore the possibility for processing of hydrocarbon initially by outsourcing so that expenses on costly machineries may be avoided. Based on the above experiments and findings project for further studies may be drawn. PAC decided that PI may work on the above observations and **submit revised project in next PAC**.

4. **Climate Smart Tissue Irrigation in Coconut - University of Horticultural Sciences, Bagalkot, Regional Horticultural Research & Extension Centre, UHS Campus, GKVK, Bengaluru -560 065, Karnataka.**

The objectives of the project are as follows:

- To study the water use efficiency of tissue irrigation.
- To study the nutrient and chemical use efficiency of tissue irrigation.
- To study the cost and returns of tissue and conventional method of irrigation.

Dr.Vishnuvardhana, Professor of Horticulture & ADRE, RHREC, UHSB Campus, GKVK, Bengaluru presented the project.

PAC discussed the project in detail and approved the project with a total financial assistance of **Rs. 50.00 lakh** for a project period of three years. PAC suggested to reduce the Field Officers and SRF numbers to one each instead of two each. PAC also suggested that the comparisons of cost benefit ratio with drip irrigation and saving of water in litres should also be done. PAC further suggested to identify two centers with extreme climatic conditions instead of 4 centres and hiring of consultant cannot be considered. Further the expenses on contingencies, vehicle hiring, labours may be relooked and worked out based on reality. Accordingly revised project may be submitted.

5. **Identification of Contamination through Automation and Removal in Coconut Desiccated Powder Industry- College of Engineering, Pathanapuram, Punalur, Kollam, Kerala.**

The objectives of the project are as follows:

- To build a system that ensures the quality of grated coconut.
- System that identifies the presence of testa and other foreign material from kernel.

PAC perused on the recommendations of the ISC and observed that the project has the gratted coconut as a study material rather than desiccated coconut powder as stated in project title. PAC suggested that the PI may visit the DC powder industries also and find out their production problems of similar nature and include solution for those problems also. PI should also include other odd materials such as excessive dried black DC and any other related problem reported by DC industry in addition to testa for identification by the sensor. PAC decided that PI may consult some of the DC industries and based on their inputs, **revised project may be submitted in next PAC.**

6. **Identification of Drought Tolerant Coconut Palms in Tamil Nadu and utilization for Developing Adaptive Gene pool- ICAR-Central Plantation Crops Research Institute, Kasargode-671 124, Kerala.**

The objectives of the project are as follows

- Identification of palms showing tolerance to low moisture stress in areas where deficit rainfall was recorded for three consecutive years.
- Characterization of local coconut populations, including identified drought tolerant palms.
- Collection of seed nuts from the identified palms and raising seedling progenies.
- Progeny testing and seedling selection.
- Distribution of selected seedling progenies for evaluation of low moisture stress tolerance in areas receiving low rain fall.

PAC perused on the recommendations of the ISC and observed that the envisaged objectives and purposes would not be possible to achieve during project period as it is a several year long process for progeny testing in coconut which may be carried out at CPCRI level in a continuous programme. Since the state of Tamilnadu and Karnataka faced severe drought situations and several coconut palms have died, a survey for identification and enlisting of palms shown tolerance to low moisture stress may be done for future studies as stated in objectives. PAC suggested to modify the project restricting the duration, cost and objectives as stated above and further basic studies may be taken up at CPCRI in their continuous research programmes. **PAC decided that the revised project may be submitted in next PAC.**

7. **Farming with Naturally Driven Microbes-Miklens Bio Pvt Ltd, Bengaluru, Vironagar, Avalahalli, Bengaluru-560049, Karnataka.**

The objectives of the project are as follows:

- To develop an organic package of practice recommendations catering to the overall management of coconut cultivation through AMT (Agri Microbial Technology)
- To combat the major problems being faced by our farmers in terms of low yield due to improper nutrition management and more maintenance cost.
- Pest and disease management.
- Non-acceptance of tender coconut in international market due to reports of harmful chemical residues.

PAC perused on the recommendations of the ISC and decided that project need not be considered for funding under TMoC and **did not approve the project for funding.**

8. **Characterization of Medicinally Important Compounds from Roots and Root Exudates of *Cocos nucifera* L. Seedlings for Treating Diabetic Foot Ulcers- Mar Athanasios College for Advanced Studies Tiruvalla (MACFAST), Pathanamthitta Dist, Kerala -689191.**

The objectives of the project are as follows:

- Isolation of Root exudates and root extracts of *C. nucifera* seedlings.
- Column chromatographic separation of exudates and extracts.
- *In vivo* and *In vitro* wound healing activity testing of root exudates and root extract of *C. nucifrea*.
- Bioprospecting using appropriate techniques such as GC/MS and NMR.
- Transcriptome sequencing to identity and characterize transcripts potentially contributing to the observed medicinal properties.

PAC perused on the recommendations of the ISC and decided that project need not be considered for funding under TMoC and **did not approve the project for funding.**

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9. **Improving Performance of Solar Greenhouse Drying of Copra nut- Kongunadu College of Engineering and Technology Namakkal-Trichy Main Road, Thottiam (Tk), Trichy District, Tholurpatti-621215, Tamil Nadu.**

The objectives of the project are as follows:

- Rack Type drying of Copra with forced circulation
- Recirculating the moist air
- Thermal Energy storage systems both sensible and latent heat storages
- Hybrid solar green house
- Drying kinetics of Copra
- Mathematical model development for Copra drying
- CFD analysis on moisture diffusion of Copra

PAC perused on the recommendations of the ISC and decided that project need not be considered for funding under TMoC and **did not approve the project for funding.**

10. **Development of Technology for Extraction of Fatty Acids in Coconut Through Fractionation Method- Don Bosco Institute of Technology Kumbalagodu, Mysore Road, Bangalore-560 074, Karnataka**

The objectives of the project are as follows:

- Extraction of coconut oil
- Fractionation of fatty acids in coconut oil
- Extraction of lauric acid from coconut copra oil
- Extraction of other fatty acids
- Effective usage of other fatty acid glycerides, conversion of these glycerides to respective acids or biodiesel on transesterification.
- Use of glycerol as raw material for soap production.

- Conversion of waste to biodiesel.

PAC perused on the recommendations of the ISC and observed that the project cost is very high and since it's a Private Institute, only 50% of the project cost may be funded by the Board so shares of Institute and Board are to be clearly stated. Though coconut fatty acids are among the highest imported coconut product in India, the PI was not able to explain the commercial utility of various fatty acids. PI was not confident about input output ratio and commercial viability of technology at industry level. PAC decided that the project is useful when we see from the import point of view of fatty acids and decided that PI may rework on the above suggestions **and submit the revised project in next PAC.**

11. Technology Development for Value Addition & Preservation of Coconut Water- CSIR-National Institute for Interdisciplinary Sciences and Technology (NIIST), Trivandrum, Kerala.

The objectives of the project are as follows:

- To develop a protocol for the preservation of coconut water in commercial level operations for addressing the issues related to the non-stability and spoilage.
- To design & set up a prototype rapid chilling & preservation unit for coconut water and optimize the process parameters based on trial runs.
- To develop innovative value added products from coconut water in pilot plant level.
- To establish the nutritional benefits of the developed products.

Dr. Venugopalan V. V., Principal Scientist, Agroprocessing Technology Division, CSIR-National Institute for Interdisciplinary Sciences and Technology (NIIST) Thiruvanathapuram, Kerala presented the project.

PAC discussed the project in detail and approved the project with a total project cost of **Rs 29.70 lakh and project duration of two years**. PAC suggested to include centrifugation process to avoid hydrolytic rancidity due to the presence of traces of oil in matured coconut water. Since there is no proper collection mechanism of matured coconut water, PAC suggested to study the collection method being followed by the units in Tamil Nadu and standardize the process. PAC further informed that the standardization part has to be undertaken at the collection point itself at industry level.

12. Value Addition of Coconut Syrup and Its Scientific Validation for Health Benefits- CSIR National Institute for Interdisciplinary Sciences and Technology (NIIST), Trivandrum, Kerala.

The objectives of the project are as follows:

- Standardization of neera syrup preparation procedure for facilitating incorporation of spices
- Development of novel spice formulations using the standardized syrup
- Sensory and shelf life studies

- Chemical characterization studies
- Toxicity studies
- Immunomodulation studies

Dr (Mrs.) Reshma M. V. (PI), Senior Scientist, Agro Processing and Technology Division, CSIR -National Institute for Interdisciplinary Science and Technology (NIIST) Thiruvanathapuram, Kerala presented the project.

PAC discussed the project in detail and approved the project with a total project cost of **Rs. 8.45 lakh with a project period of one year**. PAC suggested that the project should complete with first two objectives and further studies may be taken up under a separate project. PAC also suggested to include Glycemic Index (GI) and Glycemic Load (GL) studies.

Desiccated Coconut Powder Manufacturing Units

13. Setting up of Desiccated Coconut Powder Manufacturing Unit - M/s Mercury Coconut Products, SF No 302/1 A, Koolanaickenpatty Village, Lakshmapuram Post, Pollachi Taluk, Coimbatore Dist, Tamilnadu – 642 107.

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	Own	-	-
Building & Civil works	90.18	66.25	16.56
Plant & Machinery	134.57	134.57	33.64
Electrification	18.42	6.98	1.75
Generator	6.89	5.00	1.25
Weigh Bridge	12.77	12.77	3.19
ETP	5.56	5.40	1.35
Water purification system (R.O.)	5.40	5.40	1.35
Working Capital margin	10.00	…	….
TOTAL	**283.79**	**236.37**	**59.09 Limited to 50.00**

After detail discussion, PAC approved the project with a maximum eligible subsidy of **Rs. 50.00 lakh**.

14. Setting up of a Desiccated Coconut Powder Manufacturing Unit - M/s Blueen Food Products, XX/410, Chappa, Eachur Post Kannur Dist, Kerala.

The objective of the project is setting up of a 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	89.66	73.70	18.43
Plant & Equipments	87.19	87.19	21.80
Generator	8.38	5.00	1.25
ETP	11.74	10.00	2.50
RO water purification plant	4.00	4.00	1.00
Electrification	15.21	4.61	1.15
Borewell	1.50	-	-
Office stationery	1.00	-	-
Working Capital margin	25.51	-	-
TOTAL	**244.19**	**184.50**	**46.13**

After detail discussion, PAC approved the project with a maximum eligible subsidy of **Rs.46.13 lakh**.

15. Setting up of a Desiccated Coconut Powder Manufacturing Unit- M/s Sri Menakadevi Agro Products, SF. No. 177/2A 11, Opposite Sri Krishna Gardens, Nalluthukuli Post, Pollachi-642005, Coimbatore Dist, Tamil Nadu.

The objective of the project is setting up of a desiccated coconut powder manufacturing unit with a capacity to process 7500 coconuts per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. In lakh)		
Land	Own	-	-
Building & Civil works	30.00	26.63	6.66
Plant & Equipments	50.00	48.77	12.19
Electrification	3.00	2.44	0.61
Preliminary & Pre op. expenses	1.88	0.78	0.20
Working Capital margin	8.12	-	-
TOTAL	**93.00**	**78.62**	**19.66**

After detail discussion, PAC suggested that with the same plant and machinery processing of 10,000 coconuts is possible therefore entrepreneur should submit the modified project with processing capacity of 10,000 nuts with same project cost. PAC approved the project with a maximum eligible subsidy of **Rs.19.66 lakh**.

16. Expansion of the Existing Desiccated Coconut Powder Manufacturing Unit- M/s Maharaja Eco Products, Chukkamkonam, Thenkurissi, (Mahalikadam-Ethanur Byepass Road), Palakkad – 678 671, Kerala.

The objective of the project is to expand the Existing Desiccated Coconut Powder Manufacturing Unit with a capacity to process 22500 coconuts per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakh)		
Land	Own	-	-
Building & Civil works (renovation)	11.00	11.00	2.75
Plant & Equipments	42.50	41.50	10.38
Electrification	2.00	1.96	0.49
Preliminary & Pre op. expenses	1.00	0.54	0.13
Working Capital margin	10.29	-	
TOTAL	**66.79**	**55.00**	**13.75**

After detail discussion, PAC approved the project with a maximum eligible subsidy of **Rs.13.75 lakh.**

Tender Coconut Water Processing Units

17. Setting up of a unit for Processing and Packing of Tender Coconut Water - M/s Muthuvel Enterprises SF No.45/7, Vaguthampalayam Village, Kinathukadavu Tk, Coimbatore, Tamil Nadu – 642 120.

The objective of the project is setting up of a unit for processing and packaging of tender coconut water with a capacity to process 5000 tender coconuts per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakh)		
Land	Own	-	-
Building & Civil works	30.20	30.20	7.55
Plant & Equipments	90.50	86.49	21.62
Pre op. expenses	2.00	1.16	0.29
Working Capital margin	26.00	-	-
TOTAL	**148.70**	**117.85**	**29.46**

After detailed discussion, PAC noted that since this project is based on new technology developed by the entrepreneur but the entrepreneur was not able to explain the processing technology before the PAC, hence PAC decided that entrepreneur may come with the expert(s) who developed/guided in developing the technology in the next PAC and **deferred the project for next PAC meeting.**

18. Setting up of a unit for Processing and Packing of Tender Coconut Water Unit- M/s Kavi Agro Foods, 71 A, Palakkad Road, Pollachi -642 001, Tamil Nadu.

The objective of the project is setting up of a unit for processing and packaging of tender coconut water with a capacity to process 5000 tender coconuts per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakh)		
Land	Own	-	-
Building & Civil works	Own	-	-
Plant & Equipments	59.60	59.60	14.90
Preliminary & Pre op. expenses	4.00	0.59	0.15
Working Capital margin	5.00	-	-
TOTAL	**68.60**	**60.19**	**15.05**

After detailed discussion, PAC noted that here also the technology is developed by the entrepreneur with the assistance of some expert in this field. PAC asked the entrepreneur to explain the technological details. Entrepreneur explained the entire processing technology and after having been fully satisfied, PAC approved the project with a maximum eligible subsidy of **Rs. 15.05 lakh**.

Integrated Coconut Processing Units

19. Setting up of an Integrated Coconut Processing Unit for VCO & DC- M/s Samraj Wholesomeliving Pvt Ltd, Periasamy Guan, 6/5 Vahaiadi Perumal Koil St, Kottar, Nagercoil, Kanyakumari Dist, Tamilnadu – 629 002.

The objective of the project is to process 25,000 coconuts per day for making VCO & DCP

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. In lakh)		
Land	Own	-	-
Building & Civil works	63.50	39.00	9.75
Plant & Equipments	240.00	225.76	56.44
Electrical installation	10.00	4.46	1.11
Generator	5.00	5.00	1.25
Mineral Water Plant	2.68	2.68	0.67
Others	11.82	-	-
Preliminary & Pre op. expenses	25.00	2.76	0.69
Working Capital margin	70.00	-	-
TOTAL	**428.00**	**279.69**	**69.91 Limited to 50.00**

PAC noted that technology adopted for making of VCO is through DC. After detail discussion, PAC approved the project with a maximum eligible subsidy of **Rs. 50.00 lakh**.

20. Setting up of an Integrated Coconut Processing Unit for Coconut products like Coconut Milk Powder, Coconut Sugar - M/s De Alben, 6/49 B, K. Pungampalayam, Marudhur Post, Karamandai, Coimbatore, Tamilnadu – 641 104.

The objective of the project is setting up of an integrated unit for manufacturing of (i) Coconut Sugar (ii) Coconut Milk Powder (iii) Coconut Sugar based Chocolate (iv) Health mix using coconut sugar & coconut milk with a capacity to process 500 Kg coconut per day for producing 100 kg Coconut Milk Powder per day and 500 litres Coconut Neera per day for producing 100 kg Coconut Sugar per day.

Components	**Total Project Cost**	**Eligible Project Cost**	**Maximum Eligible Subsidy**
	(Rs. in lakh)		
Land	Own	-	-
Building & Civil works	31.50	15.42	3.85
Plant & Equipments	171.79	163.75	40.94
Contingencies	1.35	-	-
Pre op. expenses	10.00	1.79	0.45
Working Capital Margin	12.00	-	-
TOTAL	**226.64**	**180.96**	**45.24**

After detail discussion, PAC approved the project with a maximum eligible subsidy of **Rs. 45.24 lakh**.

21. Setting up of an Integrated Coconut Processing Unit for Coconut Vinegar, Nata-de-Coco and Coconut Chips- M/s Nata Nutrico Coconut Food Products; Office – Mundapuram, Narath Post, Kannur Dist, Kerala – 670 601.

The objective of the project is setting up of an integrated unit for manufacturing of Coconut Vinegar, Nata-de-Coco and Coconut Chip**s** with a capacity to process 1000 litres of coconut water per day for Coconut Vinegar, Nata-de-coco and to process 1,000 coconuts per day for Coconut Chips.

Components	**Total Project Cost**	**Eligible Project Cost**	**Maximum Eligible Subsidy**
	(RRs. in lakh)		
Land	Lease	-	-
Building & Civil works	26.00	26.00	6.50
Plant & Equipments	38.91	38.91	9.73
ETP	3.25	3.25	0.81
Electrification	3.99	1.95	0.49
Working Capital margin	2.72	-	-
TOTAL	**74.87**	**70.11**	**17.53**

After detail discussion, PAC approved the project with a maximum eligible subsidy of **Rs. 17.53 lakh**.

22. Setting up of an Integrated Coconut Processing Unit for Coconut Milk Packing, Extra Virgin Coconut Oil (Organic & Non Organic) and Tender Coconut Water Processing and Packing unit – M/s K.L.F Nirmal Industries (P) Ltd., Fr. Dismas Road, P.B.No. 40, Irinjalakkuda, Trissur(Dist), Kerala-680121.

The objective of the project is setting up of an integrated unit for Processing and Packing of Coconut Milk, Extra Virgin Coconut Oil (Organic & Non Organic) and Tender Coconut Water with a capacity to process 1000 nuts per day for Coconut Milk, 5000 nuts per day for Extra VCO (Organic & Non Organic) and 6400 No's of Tender Coconuts per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakh)		
Land	Own	-	-
Building & Civil works (renovation)	28.60	28.60	7.15
Plant & Equipments	187.66	187.66	46.91
Furniture & Fittings	1.50	-	-
Electrical & Electronic Installations	25.00	9.38	2.35
Preliminary & Pre op. expenses	8.28	2.25	0.56
Working Capital margin	59.98	-	-
TOTAL	**311.02**	**227.89**	**56.97 Limited to Rs.50.00**

After detail discussion, PAC observed that cost of homogenizer seems to be extremely high so the promoter should submit the specification details of homogenizer and approved the project with a maximum eligible subsidy of **Rs. 50.00 lakh**.

Ball Copra Units

23. Setting up of a Ball Copra Making Unit – Shri Sijinjith AP S/o Ashokan PK, Pandanpurath House, Karingad Post, Kavilumpara Via, Kozhikode Dist, Kerala – 673 513

The objective of the project is setting up of a ball copra making unit with a capacity to process 1,00,000 coconuts per year.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakh)		
Land	Own	-	-
Plant & Equipments	0.20	-	-
Platform Dryer	20.00	3.50	0.88
Other expenses	0.10	-	-
Working Capital	4.70	-	-
TOTAL	**25.00**	**3.50**	**0.88**

After detail discussion, PAC approved the project with a maximum eligible subsidy of **Rs. 0.88 lakh.**

24. Setting up of a Ball Copra Making Unit – Shri Francis KT S/o Shri Thomas Kaithakulam, Kaithakulath Boda Making Unit, Maruthonkara Post, Kavilumpara Via Kozhikode – 673 513, Kerala

The objective of the project is setting up of a ball copra making unit with a capacity to process 80,000 Coconuts per year.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakh)		
Land	Own	-	-
Plant & Equipments	0.20	-	-
Platform Dryer	20.00	3.50	0.88
Preliminary & Pre op. expenses	0.10	-	-
Working Capital margin	4.70	-	-
TOTAL	**25.00**	**3.50**	**0.88**

After detail discussion, PAC approved the project with a maximum eligible subsidy of **Rs. 0.88 lakh.**

25. Setting up of a Ball Copra Making Unit – Mrs. Prajisha P., Kunnil Boda Making Unit, Muthuvannacha Post, Kuttiady Via, Kozhikode Dist, Kerala – 673 508

The objective of the project is setting up of a ball copra making unit with a capacity to process 2.50 lakh coconuts per year.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakh)		
Land	Own	-	-
Plant & Equipments	0.20	-	-
Platform Dryer	20.00	6.25	1.56
Others	0.10	-	-
Working Capital margin	4.70	-	-
TOTAL	**25.00**	**6.25**	**1.56**

After detail discussion, PAC approved the project with a maximum eligible subsidy of **Rs. 1.56 lakh.**

26. Setting up of a Ball Copra Making Unit - Mr. Vummidi Venkata Satyanarayana S/o Satyanarayana and Mr. Vummidi Veera Raghavulu S/o Satyanarayana Mukkamula Village, Peravali Mandal, West Godavari Dist, Andhra Pradesh – 534 330

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	80.50	52.50	13.12
TOTAL	**80.50**	**52.50**	**13.12**

After detail discussion, PAC approved the project with a maximum eligible subsidy of **Rs. 13.12 lakh**.

27. Setting up of a Ball Copra Making Unit – Shri Kamisetty Suryachandradas S/o Ramayya, D. No. 6-64, Appanapalli,Mamidikuduru Mandal, East Godavai Dist, Andhra Pradesh – 533 247

The objective of the project is setting up of a ball copra making unit with a capacity to process 2.80 lakh coconuts per year.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakh)		
Land	0.30	-	-
Platform Dryer	15.00	9.80	2.45
Preliminary & Pre op. expenses	0.60	-	-
Working Capital margin	4.10	-	-
TOTAL	**20.00**	**9.80**	**2.45**

After detail discussion, PAC approved the project with a maximum eligible subsidy of **Rs. 2.45 lakh**.

28. Setting up of a Ball Copra Making Unit – Shri Vuyyuri Somaraju S/o China Suryanarayana Raju 1-79, Rajulapalem, Pothavaram, P. Gannavaram Mandal East Godavari Dist, Andhra Pradesh – 533 229

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	26.00	17.50	4.38
TOTAL	**26.00**	**17.50**	**4.38**

After detail discussion, PAC approved the project with a maximum eligible subsidy of **Rs. 4.38 lakh**.

29. Setting up of a Ball Copra Making Unit – S/Shri Kommula Srinivas & Kommula Vishnu Vardhan S/o Mr. Madhavarao D No. 3/229/1, Pedapatnamlanka Village , Mamidikuduru Mandal East Godavri Dist, Andhra Pradesh - 533 247

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	-	-	-
Platform Dryer	21.36	21.36	5.34
Pre op. expenses	-	-	-
TOTAL	**21.36**	**21.36**	**5.34**

After detail discussion, PAC approved the project with a maximum eligible subsidy of **Rs. 5.34 lakh**.

Coconut Shell Charcoal Manufacturing Units

30. Setting up of a Coconut Shell Charcoal Briquettes Manufacturing Unit – M/s VESP Energy, 41-Ramananda Nagar, Saravanampatti, Coimbatore, Tamilnadu – 641 035

The objective of the project is setting up of a coconut shell charcoal briquettes manufacturing unit with a capacity to produce 4.00 MT Coconut Shell Charcoal Briquettes per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(RRs. in lakh)		
Land	Lease	-	-
Building (Renovation) & Civil works	5.10	5.10	1.28
Plant & Equipments	76.00	75.40	18.85
Working Capital margin	1.00	-	-
TOTAL	**82.10**	**80.50**	**20.13**

After detail discussion, PAC approved the project with a maximum eligible subsidy of **Rs. 20.13 lakh**.

31. Setting up of a Coconut Shell Charcoal Manufacturing Unit – M/s Shellco Charcoals India, Pathaikkara Post, Perinthalmanna, Malappuram Dist, Kerala – 679 322

The objective of the project is setting up of a coconut shell charcoal manufacturing unit with a capacity to process 30.00 MT coconut shells per day for manufacturing 10.00 MT shell charcoal.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakh)		
Land	Leased	-	-
Civil works for Building and water harvesting structure	17.04	17.04	4.26
Plant & Equipments (Pits,Lids, Chimney)	25.53	25.53	6.38
Working Capital margin	7.51	-	-
TOTAL	**50.08**	**42.57**	**10.64**

After detail discussion, PAC approved the project with a maximum eligible subsidy of **Rs. 10.64 lakh**.

Market Promotional Projects

32. Market Analysis of Packed Tender Coconut Water in India - Institute of Agri Business Management, Swami Keshwanand, Rajasthan Agricultural University, Bikaneer-334 006

The objective of the project is to carry out Market Analysis of Packed Tender Coconut Water in India.

S.No.	Particulars	Amount in Lakh
1	Senior Research Fellow(1 Post) (@ Rs.25,000 pm +HRA)	2.10
2	TA/DA	2.00
3	Computer & Accessories	0.25
4	Analysis and Printing of report	0.65
5	Contingencies	0.50
	TOTAL budget for project	**6.00**

After detail discussion, PAC suggested that one major market from South India should also be included. Further sample size is very small so it should be increased to 100 per centre and seasonal variations should also be included. The export data from manufacturers with capacity may be included and strategy should also be included. **PAC approved the project for a period of one year with a total project cost of Rs. 5.00 lakh.**

Other Items :-

1. **Project for Modernisation of Coconut Oil Mill - M/s Rajas Oil and Flour Mill, 3/468 A, Poolakkode Post Choloor, NIT - Via, Kozhikode, Kerala (Proprietor- Shri. Aputty.P).**

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakh)		
Land	Own	-	-
Building & Civil works	2.50	2.50	0.63
Plant & Machinery	5.16	5.16	1.29
Working Capital Margin	3.00		
Total	**10.66**	**7.66**	**1.92**

After detail discussion, PAC approved the project with a total financial assistance of **Rs.1.92 lakh**. PAC authorised the Chairman CDB to release the subsidy in one installment after inspection based on the inspection report.

2. **Setting up of a Unit for the Production of Dietary Fibre From Coconut Flour- M/s. Vama Oil Private Ltd, 3/117, Peedampalli Main Road, Peedampalli Post, Coimbatore-641016: Deferred by 50th PAC for next PAC.**

The objective of the project is setting up of a unit for the Production of Dietary Fibre From Coconut Flour with a capacity to process 4.00 MT of coconut flour per day to produce 1.20 MT Dietary Fiber.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakhs)		
Land	Lease	-	-
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**

PAC noted that the project was deferred by 50th PAC for next PAC stating that the project is based on new technology endorsed by CFTRI, Mysore and neither representative of CFTRI nor the promoter was present in that PAC meeting to explain about the technology and the project.

After detail discussion, PAC approved the project with a total financial assistance of **Rs. 44.49 lakh.**

3. Ratification of Expenditure of Rs. 60,700/- incurred towards the Purchase of Desktop Computer

PAC perused on the matter and ratified the expenditure of **Rs. 60,700/-** (Rupees Sixty thousand seven hundred only) incurred for the purchase of one new desktop computer along with one TB external hard disk for the official use of MIDH Division, who monitors the activities of CDB in the Ministry.

PAC meeting concluded at 3:10 pm with vote of thanks from the Chief Coconut Development Officer, Shri Saradindu Das.

Date: 16.03.2018
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. P.K. Hameedkutty Deputy Agri. Marketing Advisor Directorate of Marketing & Inspection (DMI), Regional Officer, Block 'A', 6th Floor, Kendriya Bhavan, Kakkanad, Kochi-682 037 **Representative of:** The Joint Secretary & Agri. Marketing Adviser to Govt. of India, Krishi Bhavan, New Delhi-110 001.
3	Dr. Navin K Rastogi Senior Principal Scientist, Central Food Technological Research Institute (CFTRI), Mysore **Representative of:** The Director Central Food Technological Research Institute Mysore-570 020
4	Smt.Usha K. DGM, NABARD, R O, Thriuvananthapuram, Kerala **Representative of:** Chief General Manager, Technical Services Department, NABARD, Mumbai
5	Shri. Vasanthakumar P. Asst. General Manager Indian Overseas Bank Kochi-682 016 **Representative of:** Chief General Manager Indian Overseas Bank Bangalore
6	Shri Saradindu Das Chief Coconut Development Officer Coconut Development Board & Member Secretary, PAC

C	**Officials of CDB**
1	Shri. E. Aravazhi Deputy Director, 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.	Kum. Sharon Mariam Jacob Processing Engineer (on contract, CDB, Kochi)