

Proceedings of the 31st meeting of PAC of Technology Mission on Coconut held at Kochi on 8th and 9th October 2009

The 31st meeting of the Project Approval Committee (PAC) on Technology Mission on Coconut was held at the Board Room of Coconut Development Board, Kochi on 8th October 2009 at 2.00 PM to 6 PM and continued on 9th October from 9.30 AM under the Chairmanship of Smt. Minnie Mathew IAS, Chairman, CDB and Chairman of PAC. Dr. M. Aravindakshan, former Chairman, CDB, Dr. A.N.Srivatsa, Retd. Scientist, DFRL, Mysore and Dr.C.P.R Nair, former Jt. Director and Head CPCRI, Regional Station Kayamkulam and Shri Vijayakumar Integrated Industries, Bangalore attended the PAC as Expert Members. Dr.Appanna, General Manager (Tech), NABARD, Dr. K V. Kasthuri Bai, Principal Scientist & Head of the Division of Plant Physiology & Post harvest Technology, CPCRI, Kasaragod representing ADG (Plantation Crops), ICAR and Shri. Thomas Mathew, CCDO, Member Secretary were present. The list of participants in the meeting is annexed.

The following Agenda items were taken up for consideration:

AGENDA No. 1: Confirmation of the Proceedings of 30th Project Approval Committee Meeting held on 25.05.2009

The Committee approved the proceedings of the 30th PAC Meeting

AGENDA No. 2: Action taken report of the 30th PAC Meeting

The committee perused the action taken on the decision of the 30th meeting of the PAC. While reviewing the action taken report, Shri. Thankaraj Asst, Marketing Adviser stated that the Modern oil mill to which first installment of subsidy was released under TMOG have not submitted application for Agmark certificate to DMI. Dr.K.Muralidharan, Director stated that the promoter has informed that the unit has applied for Agmark certification. The Committee decided to recheck with the promoter and remind him to submit application immediately if not done already. This should be insisted as one of the conditions for grant of subsidy. The Committee suggested that Agmark /BIS certification also should be insisted for Desiccated coconut units. Sri Vijayakumar opined that BIS standards are more useful for Desiccated Coconut Powder (DCP)

AGENDA No. 3: Approval of new project proposals:

I. PEST AND DISEASE MANAGEMENT

1. Farmer participatory assessment of integrated management practices of leaf rot disease of Coconut.. – Dr. N. Srinivasan, Principal Scientist (Plant Pathology), CPCRI, Regional Station, Kayamkulam, at a total cost of Rs.25.231lakhs

The project was submitted by Plant pathology division, CPCRI, Regional station Kayamkulam and presented by Dr. N. Srinivasan, Principal investigator. The objective of the project is a) to assess and demonstrate latest technologies on integrated management of coconut leaf rot disease with farmer participation, b) to document the impact of the technology demonstration on coconut palm and farmer profile.

Dr.M.Aravindakshan enquired whether there are any research recommendations on the use of bio-control agents. He also enquired about the economics and cost to the farmers. The cost of both the biocontrol measures and chemical methods should be worked out and comparative assessment made.

The committee after detailed discussion made the following suggestions:

1. The title of the project should be changed as field level demonstration of IDM technology for management of coconut leaf rot disease including bio- control agents.
2. A comparative analysis of bio-control and chemical method should be included under the project.
3. Both contingencies and 10% overhead (institutional charges) cannot be included. Contingency charges should not exceed 2% of the project cost.
4. Training component to be deleted from the project cost as same may be met by CPCRI from their own funds.
5. Since the project envisages field level demonstration IDM package engagement of one JRF will be sufficient.
6. The budget proposed for consumables should be limited to Rs.3.75 lakhs. Further the split up of expenditure proposed under this head should be furnished.

Accordingly the PI was requested to revise and resubmit the project. The committee authorized the Chairman to approve the revised proposal.

2. Net work project on “Large scale demonstration of bio-control based integrated disease management package against basal stem rot (Ganoderma wilt) disease in coconut.” Dr.B.Srinivasulu, Controller of Examinations, Andhra Pradesh Horticultural University, West Godavari District, AP, at a total cost of Rs. 24.95lakhs

The project was submitted by Dr.B.Srinivasulu, Controller of Examinations, Andhra Pradesh Horticultural University, West Godavari District, AP. The objectives of the project are 1) large scale demonstration of bio-control based integrated disease management package against basal stem rot (Ganoderma wilt) disease in coconut in East Godavari, West Godavari, Srikakulam, Chittoor Districts of Andhra Pradesh and 2) to develop early diagnosis methods for Basal stem rot i.e., detection of Basal stem rot pathogens infection before expression of symptoms.

The joint consultative meeting of ICAR and CDB held on 17th March 2009 at ICAR identified, among other aspects, large scale demonstration of bio-control based integrated disease management package against basal stem rot (Ganoderma wilt) diseases, by ARS Ambagipeta. The PAC observed that bio-control based IDM package, ie basal application of talc formulation of *Trichoderma viride* 50g in combination with 5 kg neem cake / palm / year is a nationally accepted recommendation. The disease is reported to be spreading in the state of AP and hence large scale demonstration of the above package is essential to convince the farmers of the need for adopting the same.

The committee suggested that the title project should be changed to Mass Multiplication and Demonstration of bio-control based integrated disease management package against basal stem rot (Ganoderma wilt) disease in coconut.

The committee observed that an amount of Rs.8.25 lakhs earmarked in the project as non-recurring expenditure for the purchase of a fermenter, for large scale production of bio agents. The committee expressed its apprehension in purchasing a fermenter with such a large capacity. Field level demonstration of the bio control package covering 100 Ha area only is envisaged in the project.

Therefore (1) The capacity of fermenter should be in proportion to the requirement of bioagents for the study.

(2) The possibilities of reducing the capacity of the fermenter to the minimum for production of bio-agents at lab scale should be examined. Purchase shall be approved only if the station is not having a fermenter already.

(3) Development of sero diagnostic techniques need not be included as objective. Validation of the technique in the field is to be included.

Accordingly the PI may be requested to revise the project costing and resubmit . The committee authorized the Chairman to approve the revised proposal.

3. Development of nutrient management strategy for improving health of the palm to build resistance to pests - Dr. H.P. Patnaik, Professor, Department of Entomology, College of Agriculture, Bhubaneswar, at a total cost of Rs. 5.98 lakhs

The project was submitted by Dr. H.P. Patnaik, Professor, Department of Entomology, College of Agriculture, Bhubaneswar.. The objectives of the project are 1) to study the efficacy of coir pith based vermi-compost enriched with bio-agents / biofertilizers, on incidence of insect pests & diseases, 2) to study the nutrient status in the enriched coir pith based vermicompost and to manifest its effect on the plant through the analysis of nutrient profile in leaves and nuts of coconut plant and also through assessment of copra oil content and 3) to evolve a cost-effective nutrient management strategy for adoption in the IPM of major pests of coconut and for enhancing the production of healthy coconuts.

The committee observed that the project envisages developing a nutrient management strategy by the application of vermin-compost, neemcake and bio-fertilizers along with recommended doze of fertilizers for improving the soil nutrient status and health of the palm so as to build up natural resistance of palm against pest & diseases. As suggested by the ISC irrigation component also should be included in the INM package proposed to be developed under the projects. The committee also suggested that the objective should specify the pest as Eriophyid mite. The PAC approved the project at a total cost of Rs. 5.98 lakhs for a period of three years subject to above modifications.

4. Project proposal for the management of Black Headed caterpillar (BHC) menace on coconut in Karnataka. Dept. of Horticulture, Karnataka, at a total cost of Rs.1881.85lakhs

The project was presented by Shri. Sreekanth Jt. Director of Horticulture(Plantation crops), Department of Horticulture Karnataka. The objectives of the project is management of Black Headed caterpillar (BHC) menace in coconut in Karnataka by adoption of IPM package recommended by UAS, Bangalore.

The committee approved the proposal in principle for implementing the project on a pilot scale only in an area of 6800 ha in the District of Tumkur. If the implementation and impact is found to be satisfactory, the programme can be extended to other disease affected Districts. However, the following conditions have to be strictly adhered to:

1. The technical programme will be as per the recommendation of UAS.
2. The assistance from Coconut Development Board will be limited to 50% of the cost of inputs - neem cake @ 1 kg palm, Azadirachtin 5% @ 15 ml / palm and parasites [*Goniozus nephantidis*] for 2 times release @ 15 parasites per palm or 25% of the total project cost whichever is less. Balance fund shall be the share of State Government / farmers. The quantity of various inputs worked out for 6800 ha [10.20 lakh palms @ 150 palms/ha] in Tumkur Dt. is as follows:

<u>Neem cake @ 1 kg palm</u>	<u>-1020000 kg</u>
<u>Azadirachtin 5% @ 15 ml / palm</u>	<u>-15300 litres</u>
<u>Parasites [<i>Goniozus nephantidis</i>] for 2 times release @ 15 parasites per palm</u>	<u>-306 lakh nos.</u>

3. Out of the total parasite requirement of 306 lakhs (6800 ha x 150 palms / ha x 15 parasites x 2 time release), purchase should be made from only reputed and reliable sources which should be clearly indicated in the project proposal. About 24 lakh parasites as well as eggs for the multiplication of parasites in Department Labs can be spared from Parasite Breeding Laboratory of Coconut Development Board at Regional Office, Bangalore.
4. Duration of the project shall be 1 year and release of parasites shall begin from November 2009 onwards. Since application of treatment for a minimum period of 2 years is necessary for successful management of the pest, in principle approval is accorded for 2 years. The fund allotment for the second year will be subject to furnishing of a separate proposal and commitment of funds by the State Government during 2010 – 11.
5. A monitoring committee consisting of Deputy Director, Coconut Development Board, Regional Office, Bangalore, Representative of the Department of Horticulture and a Senior Entomologist nominated by UAS shall monitor the progress of implementation.

6. Impact analysis shall be conducted by the Department of Horticulture and detailed report with list of beneficiaries furnished on completion of the programme..
7. A revised proposal for the pilot project on the above lines indicating revised budget and GO shall be submitted to the Board.
8. Final approval for the project will be communicated only after submission of revised proposal by the Department of Horticulture along with the Government Order indicating share of various agencies.

II. TECHNICAL SUPPORT AND EMERGENT REQUIREMENTS:

5. A qualitative and quantitative study of coconut in Andhra Pradesh in terms of output of copra, oil, coconut water, shell and husk. Smt.. M. Kalpana, Scientist(Horticulture), Horticultural Research Station, Ambajipeta -Andhra Pradesh

The project was submitted by Director of Research Andhra Pradesh Horticulture Universality. The objective of the project is to study the quantitative and qualitative parameters of coconut in major coconut growing districts (East Godavari, West Godavari and Srikakulam) of Andhra Pradesh. Survey will be conducted in three major coconut growing districts of Andhra Pradesh (having a share of 81% area under coconut in Andhra Pradesh) during peak harvesting in summer months. Data on fruit components such as whole nut weight, dehusked nut weight, husk weight, length and breadth of the nut, thickness of the husk ,weight of fresh kernel, thickness of the kernel, weight of copra ,weight of coconut water, weight of shell and recovery percentage of oil from copra etc.will be collected under the study. Besides quality parameters (as per BIS standards) of copra / oil with respect to maturity of nut (10, 11, 12 month old) and season (summer, autumn, and winter) will also be studied.

The committee observed that no basic study on quality of copra has been under taken in AP so far. Hence the committee approved the project at a total cost of Rs.2.50 lakhs. The committee also suggested that palms randomly selected for nut collection from each holding should be of ECT variety.

6. Production of Disease free Elite planting material for improving the productivity of coconut in Bay islands; Dr Krishnakumar, Senior Scientist(Plant Pathology), Central Agricultural Research Institute (ICAR), Port Blair, A N Islands.

The project was submitted by Director, Central Agricultural Research Institute (ICAR), Port Blair, AN Islands. The objectives of the project are: 1)Survey and

identification of high yielding disease resistant/free elite coconut genotypes from palm growing areas and from World Coconut Germplasm Centre. 2) Multiplication and distribution of elite genotypes to the farmers. 3) *Ex-situ* conservation of naturally occurring palm bio-resources. 4) Establishment of demonstration plots with elite palm at experimental station and farmers fields for seed production (Seed Garden). 5) transfer of production technology to the farmers with multistory cropping system.

The technical programme involves Survey of major palm growing areas of South Andaman, Middle and North Andaman and Car Nicobar districts for selection and collection of elite coconut genotypes; Evaluation of germplasm for high yielding traits of palms from World Coconut Germplasm, CARI, Sippighat, Port Blair, at established Govt./ private farms and farmers fields for screening of germplasm against diseases and pest; multiplication of superior germplasm for distribution among farmers, release of resistant varieties through State Varietal Release Committee and National Varietal Release Committee; *ex-situ* conservation of naturally regenerated coconut palms; establishment of coconut gene garden at Experimental Farms of CARI, Port Blair for further improvement/ breeding programme and transfer of scientific production technology of coconut through training, demonstration and *Kisan Mela* in each district of Andaman and Nicobar Islands.

The committee after detailed discussion decided that project shall be:

1. Restricted to identification of elite mother palms and production of seedlings alone.
2. The objectives number 3,4 and 5 establishment of demonstration plots with elite palm at experimental station and farmers fields for seed production (Seed Garden) & Transfer of production technology to the farmers with multistory cropping system] shall be deleted.
3. Distribution of seedlings should be linked with the Rejuvenation and replanting /Area expansion programme of the Board.
4. Personnel proposed in the project shall be limited to one JRF.
5. Cost of production of seedlings should be clearly indicated in the project cost.
6. Budget proposed for plant protection, training, demonstration etc. may be deleted.
7. Travel expenses may be limited to Rs.50000- per year.
8. Lumpsum provision of Rs.30, 000/- per year may be shown as maintenance cost of nursery.

The project should be revised and resubmitted accordingly. The committee authorized the Chairman to approve the revised proposal.

III. a) DEVELOPMENT OF TECHNOLOGY FOR PROCESSING AND PRODUCT DIVERSIFICATION:

7) College of Agricultural Engineering and Technology, Dr. B.S. Konkan Krishi Vidyapeeth, Dapoli; Er. Kishor Purushottamrao Kolhe, Asst. Professor of Mechanical Engineering, Dept. of Farm Machinery and Power, College of Agricultural Engineering and Technology, Dapoli.

The project was submitted by Dean, College of Agricultural Engineering and Technology, Dr. B.S. Konkan Krishi Vidyapeeth, Dapoli. The objectives of the project are to develop and modify tractor mounted hydraulic elevator (TMHE); conduct the component testing of TMHE and conduct the field demonstration and testing of TMHE in university farm and farmers field. Technical programme involves, selection of suitable tractor (specification, power, speed etc.) for necessary study, comparative study of mechanical properties of materials like steel, fibre, composite material from the market for making the light weight machine, development of prototype lifting arms by considering the height of the coconut tree up to 15 m, development of prototype hydraulic mechanism for lifting elevator, development of lifting platform for coconut harvesting, study of suitability of hydraulic elevator for higher factor safety etc.

The committee after detailed discussion approved the project in principle subject to the condition that cost of tractor proposed in the project should be deleted and the PI may be asked to ascertain possibility of hiring tractor for this purpose. The experiments should be conducted with tractors of four major tractor companies. The hydraulic elevator developed in the study should be easy to fit and versatility of the equipment for use should be ensured. The provision for non recurring expenditure may be limited to Rs.4.25 lakhs, out of which Rs.2.00 lakhs may be included as hire charges for tractor. The technology developed in the study should be linked with machinery / equipment manufacturers for commercialization. The Committee authorized Chairman to approve and release funds subject to the above conditions.

III.b) ADOPTION OF TECHNOLOGY FOR PROCESSING AND PRODUCT DIVERSIFICATION

**8. Setting up of a Desiccated Coconut Powder(DCP) manufacturing unit -
M/s. Jaimatha Agro Industries, Tiptur, Karnataka at a total cost of Rs.65.93 lakhs**

The project was submitted by M/s. Jaimatha Agro Industries, Tiptur Karnataka. The project was presented by the promoter before the PAC. The objective of the project is to set up a DC Powder manufacturing unit with a capacity to process 1 lakh coconut per day.

The committee after detailed discussion approved the project and sanctioned 25% of the project cost by limiting building cost as per norms approved by PAC. The following conditions are stipulated:

1. The promoter should go in for HACCP/ISO quality certification. The product should conform to BIS Standards.
2. Machineries installed should be made up of food grade stainless steel type (SS304) especially in the product contact points.
3. Blanching and steaming equipment should be added in the process equipments to improve the quality of the product.
4. Provision for effluent treatment for the disposal of coconut water should be adopted in the unit.

The costing may be reworked and the revised project should be submitted by the promoter. Financial assistance will be released only after initiating action on above suggestions. The product samples have to be tested regularly for quality at Coconut Development Board, Quality Testing Laboratory.

The committee opined that there is considerable potential for export of the product to the International market. The Committee suggested that Mr. Vijayakumar, Integrated Industries, Bangalore, Karnataka may be engaged as a consultant to study the present status of the DC Industry and to suggest measures for upgrading the units so as to make the product competitive in the International market. The Committee also suggested that products sample should be taken from the market for analysis of its quality. The Committee also suggested that all processing units assisted by Coconut Development Board should register with Coconut Development Board by paying an initial registration fee of Rs.5000/-.

9. *Setting up of Desiccated Coconut Powder Manufacturing unit. - M/s. Dhanalakshmi Agro Products, Tiptur, Tumkur at a total cost of Rs.52.44 lakhs.*

The project was submitted by M/s. Dhanalakshmi Agro Products, Tiptur, Tumkur. The promoter proposes to set up a Desiccated Coconut Powder manufacturing unit with a capacity to process 10,000 nuts per day.

Components	Project Cost (lakhs)	Eligible cost (lakhs)	Eligible subsidy (lakhs)
Land	1.12	1.12	0.28
Building (12800 sq ft)	35.00	25.00	6.25
Plant & Machinery	25.80	25.80	6.45
Advances & Deposit – BESCOM	1.50	-	
Preliminary & Pre-op. Expenses	0.58	0.52	0.13
Working capital	2.00	-	
Contingencies	6.00	-	
Total	72.00	52.44	13.11

The committee after detailed discussion approved the project and decided to extend 25% of eligible cost as back ended capital subsidy to the unit limited to maximum of Rs.13.11 lakhs subject to the condition that:

1. The unit should acquire HACCP Certification
2. Machineries installed should be made up of food grade stainless steel type (SS304), especially for the contact points in the process equipment trays, etc.
3. Blanching and steaming equipment to be incorporated to improve the quality of the product,
4. Provision for effluent treatment for the disposal of coconut water should be adopted in the unit.
5. The DCP should conform to BIS/Agmark standards.

10. Expansion and modernisation of the existing Vinegar unit for increasing the production capacity from 1000 litres to 5000 litres per day. - M/s. Jaimatha Estates, Monippally.P.O., Kottayam District at a total cost of Rs.135.50 lakhs.

The project was submitted by M/s. Jaimatha Estates, Monippally.P.O., Kottayam District. The objective of the project is expansion and modernisation of the existing unit for increasing the production capacity from 1000 liters to 5000 litres of vinegar per day. The Committee observed that an amount of Rs.4.01 lakhs was earlier sanctioned to the

promoter to set up coconut water based vinegar production unit with a capacity to process 500 liters of coconut water per day.

The committee after discussion approved the project and decided to extend 25% of eligible cost as back ended credit capital subsidy to the unit limited to maximum of Rs.33.875 lakhs. The committee also suggested that proforma invoice / bills for the machineries have to be obtained before grant of eligible subsidy.

Components	Project Cost (Original)	Project Cost (Expansion)	Eligible cost	Eligible subsidy
	(Rs. in lakhs)			
Land	2.50	13.00	13.00	3.25
Building	7.36	45.00	45.00	11.25
Technical Foundation for machinery	-	2.00	2.00	0.50
Plant & Machinery	8.50	72.50	72.50	18.125
HACCP System for Quality control of the product	-	1.00	1.00	0.25
Furniture & Office Equipment	1.50	1.00	1.00	0.25
Preliminary and Pre-operative Expenses	0.50	1.00	1.00	0.25
Working Capital Margin	2.00	2.00	-	-
TOTAL	22.36	137.50	135.50	33.875

11. Establishment of Coconut Processing Unit at Punnackal, Thiruvambady, Kozhikode Dt - M/s. Taj Oil Mills, Punnackal.P.O., Thiruvambady, Kozhikode District at a total cost of Rs. 20.40 lakhs.

The project was submitted by M/s. Taj Oil Mills, Punnackal.P.O., Thiruvambady, Kozhikode. The objective of the project is to set up a coconut processing unit with a capacity to process 10,000 nuts per day into coconut oil with Agmark standard.

Components	Project Cost	Eligible cost	Eligible subsidy
	(Rs. in lakhs)		
Land (10 cents)	1.50	1.50	0.38
Building 1500 sq.ft.	7.00	7.00	1.75
Plant and Machinery	11.75	11.75	2.94
Furniture & Office Equipments	0.05	0.05	0.012
Preliminary & Pre-Operative Expenses	0.10	0.10	0.025
Working Capital Margin	1.00	-	-
TOTAL	21.40	20.40	5.1

The committee after detailed discussion approved the project and decided to extend 25% of eligible cost as back ended credit capital subsidy to the unit limited to a maximum of Rs.5.10 lakhs subject to the unit taking up branding, packaging and obtaining agmark certification.

12. Setting up of Virgin Coconut Oil Unit - M/s. Vigneswara Shell Charcoal, 11C2 Vedapatti Road, Coimbatore, Tamilnadu at a total cost of Rs.23.80 lakhs.

The project was submitted by M/s. Vigneswara Shell Charcoal, Coimbatore, Tamilnadu .The objective of the project is to set up a Virgin coconut oil Manufacturing unit with a capacity to process 3000 - 5000 nuts per day by adopting the technology developed by the CFTRI through sponsored research programme of the Board.

Components	Amount (Rs. in lakhs.)	Eligible Cost (Rs. in lakhs.)	Eligible Subsidy (Rs. in lakhs.)
Land and Building	Rented Premises	-	-
Plant and Machinery	23.00	23.00	5.75
Technology	0.50	0.50	0.125
Furniture & Office Equipments	0.20	0.20	0.05
Preliminary & Pre-Operative Expenses	0.10	0.10	0.025
Working Capital Margin	0.90	-	-
TOTAL	24.70	23.80	5.95

The committee observed that the promoter has availed the technology transfer for VCO from the Board / CFTRI. The committee after detailed discussion approved the project and decided to extend 25% of eligible cost as back ended capital subsidy to the unit limited to a maximum of Rs.5.95 lakhs. The project should envisage processing 5000 nuts per day capacity. The unit should obtain HACCP certification.

13. Expansion of Existing Coconut Oil Unit M/s. Geedee Mills, Elenthikara.P.O., Ernakulam District at a total cost of Rs. 28.083 lakhs

The project was submitted by M/s. Geedee Mills, Elenthikara.P.O. Ernakulam District. The objective of the project is expansion of the existing coconut oil unit.

The committee suggested that the sales turn over and audited statement for the existing unit for the last two years has to be obtained and verified before grant of subsidy for the expansion. The unit should acquire Agmark certification for the product. The committee authorized Chairman, PAC to approve the project and sanction eligible subsidy of Rs.7.02 lakhs.

Components	Existing	Proposed	Total	Eligible cost	Eligible subsidy
	(Rs. in lakhs)				
Land (32.899 cent)	Own	Own	Own	-	-
Building (920 Sq.ft.)	1.48	5.60	7.008	7.008	1.752
Furniture	0.0025	-	0.0025	0.0025	0.0006
Plant & Machinery	2.968	15.792	18.76	18.76	4.69
Equipment	0.022	-	0.022	0.022	0.0055
Electrification	0.013	2.00	2.013	2.013	0.503
Deposits and Advances	0.224	0.250	0.474	-	-
Preliminary & Pre-operative Expenses	-	1.00	1.00	0.277	0.069
Working Capital Margin	9.974	12.491	22.47	-	-
TOTAL	14.6115	37.133	51.7495	28.083	7.020

14. Setting up of Coconut Oil Manufacturing unit - M/s. Al-Jazeerath Industries and Trading Company, Androth, Lakshadweep at a total cost of Rs.23.659 lakhs.

The project was submitted by M/s Al-Jazeerath Industries and Trading Company, Androth, Lakshadweep. The objective of the unit is production of branded packed coconut oil with agmark standard and marketing the product in bulk and small packs and in brand name. The installed capacity of the unit is to produce 1.25 MT of coconut oil per day.

Components	Project Cost (lakhs)	Eligible cost (lakhs)	Eligible subsidy (lakhs)
Land & Land Development	3.45	2.627	0.656
Building & Civil Works	8.00	8.00	2.00
Plant & Equipments	10.726	10.726	2.682
Furniture & Fittings	0.50	0.59	0.125
Electrical Installations	1.543	1.544	0.386
Pre-operative Expenses	2.06	0.262	0.065
Working Capital Margin	2.64	-	-
TOTAL	28.91	23.659	5.914

The committee approved the project and decided to extend 25% of eligible cost of Rs.5.914 lakh as back ended capital subsidy to the unit subject to the condition that the

unit should produce packed branded coconut oil with agmark certification. Before release of 2nd instalment of subsidy the promoter should submit application for agmark certification. Since organic management practices only are adopted by the farmers in Lakshadweep Island, organic certification for the product may be explored.

15. Setting up of Coconut Oil Processing unit - M/s. Amman Oil Mills, Kallankadu, Arthanaripalayam, Veeranampalayam Village at a total cost of Rs.20.084 lakhs.

The project was submitted by M/s. Amman Oil Mills, Kallankadu, Arthanaripalayam, Veeranampalayam Village The objective of the project is to set up a coconut oil production unit with a capacity to process 1.5 Ton Copra per day.

Components	Project Cost (Rs. in lakhs)	Eligible cost (Rs. in lakhs)	Eligible subsidy (Rs. in lakhs)
Land & Land Development	20.00	3.704	0.926
Building & Civil Works	5.25	5.25	1.313
Plant & Equipments	9.36	9.36	2.34
Furniture & Fittings	0.15	0.15	0.037
Electrical Installations	1.25	1.25	0.312
Electronic Equipments	0.50	-	-
Pre-operative Expenses	1.025	0.37	.092
Working Capital Margin	10.00	-	-
TOTAL	47.54	20.084	5.021

The committee after detailed discussion approved the project and decided to extend 25% of eligible cost as back ended capital subsidy to the unit limited to a maximum of Rs.5.021 lakhs subject to the unit taking up branding, packaging and obtaining agmark certification.

16. Setting up of Coconut Oil Extraction unit - M/s. KCM Industries, Chennimalai Road, Kangayam, Erode Dt. T.N at a total cost of Rs. 91.184 lakhs.

The project was submitted by M/s. KCM Industries, Chennimalai Road, Kangayam, Erode Dt. T.N. The objective of the project is to set up a coconut oil production unit with a capacity to process 3 Ton Copra per day.

Components	Project Cost (Rs. in lakhs)	Eligible cost (Rs. in lakhs)	Eligible subsidy (Rs. in lakhs)
Land & Land Development	12.00	9.84	2.46
Building & Civil Works	43.40	39.36	9.87
Plant & Equipments	30.94	30.94	7.73
Furniture & Fittings	0.75	0.75	0.18
Electrical Installations	9.31	9.31	2.32
Electronic Equipments	0.50	-	-
Pre-operative Expenses	2.00	0.984	0.246
Working Capital Margin	7.26	-	-
TOTAL	106.16	91.184	22.776

The committee after detailed discussion approved the project and decided to extend 25% of eligible cost as back ended capital subsidy to the unit limited to a maximum of Rs.22.776 lakhs subject to the unit taking up branding, packaging and obtaining agmark certification.

17. Setting up of Coconut Oil Processing unit Shri Joy Kuriakose, , Lords Oil Extractions Karimkuttippuram House, Vadattupura, Kothamangalam at a total cost of Rs.206.158 lakhs.

The project was submitted by M/s. Lords Oil Extractions, Vadattupura, Kothamangalam. The objective of the project is to set up a coconut processing unit with a capacity to process 20 tons of copra per day and to install a copra processing unit with a capacity to process 25000 nuts per day in to quality copra.

The committee observed that the Bank appraisal report and term loan sanction letter is not produced by the promoter. Hence committee suggested to ask the bank for a critical appraisal of the project particularly with regard to the raw material availability at an economic cost. Manufacturing of herbal oil will not be considered at this stage.

18. Setting up of Coconut Shell Powder Manufacturing unit M/s. Sri Raman Agro Products, Tiruchengode Taluk, Namakkal District, Tamilnadu- at a total cost of Rs.139.56 lakhs.

The project was submitted by M/s. Sri Raman Agro Products, Navalikadu, Kollapatty, Tiruchengode Taluk, Namakkal District, Tamilnadu. The objective of the project is to set up coconut shell powder manufacturing unit with a capacity to process 18Tons of Shell powder per day.

Components	Total Project Cost (Rs. in lakhs)	Eligible Project Cost (Rs. in lakhs)	Maximum Eligible (Rs. in lakhs)
Land & Land Development	14.10	14.10	3.525
Building & Civil Works	30.22	30.22	7.555
Plant & Equipments	80.275	80.275	20.068
Furniture & Fittings	0.50	0.50	0.125
Bore Well and accessories	1.055	1.055	0.263
Electrical Installations	11.98	11.98	2.995
Pre-operative Expenses	5.50	1.43	0.357
TOTAL	143.629	139.56	34.89

The Committee after detailed discussion approved the project to extend 25% of eligible cost as back ended capital subsidy to the unit limited to a maximum of Rs.34.89 lakhs subject to the condition that the unit should obtain a clearance certificate from the Tamil Nadu Pollution Control Board.

19. Manufacturing of D.C Powder and marketing the products in small packs in the brand name of “V&V Desiccated Coconut Powder.” - M/s. V&V Agro Foods, Plot No.4, SIDCO Industrial Park, Kulappully, Shornur, Palakkad.

The project was submitted by M/s. V&V Agro Foods, Plot No.4, SIDCO Industrial Park, Kulappully, Shornur, Palakkad. The objective of the project is to set up DC powder manufacturing unit with a capacity to process 12000 nuts per day.

Components	Total Project Cost (Rs. in lakhs)	Eligible Project Cost (Rs. in lakhs)	Maximum Eligible (Rs. in lakhs)
Land & Land Development	7.04167	-	-
Building & Civil Works	39.00	30.424	7.606
Plant & Equipments	19.50	19.50	4.875
Furniture & Fittings	0.75	0.75	0.187
Electrical Installations	9.02	9.02	2.255
Pre-operative Expenses	0.75	0.75	0.187
Working Capital Margin	3.0679	-	-
TOTAL	79.13	60.444	15.11

The committee after detailed discussion approved the project and decided to extend 25% of eligible cost as back ended capital subsidy to the unit limited to

maximum of Rs.15.11 lakhs subject to the condition that the unit should acquire HACCP Certification and quality Standards of Agmark / BIS for the desiccated coconut powder. Machineries installed should be made up of food grade stainless steel type (SS304), especially the product contact points. Blanching and steaming are to be adopted to improve the quality of the product, Provision for effluent treatment for the disposal of coconut water should also be adopted in the unit.

20. Setting up of a new Desiccated Coconut Powder Manufacturing Unit M/s. Super Coco Company, N.12, Sakthi Co-op Industrial Estate Udumalai Road, Pollachi-642 003 Coimbatore Dt. T.N at a total cost of Rs.76.475 lakhs

The project was submitted by M/s. Super Coco Company, N.12, Sakthi Co-op Industrial Estate Udumalai Road, Pollachi,. Tamil Nadu. The objective of the project is to set up Desiccated Coconut Powder Manufacturing Unit by constructing up a new building and installing latest machineries with an installed capacity of production of 5 Tons of DC per day.

Components	Total cost (Rs. in lakhs)	Eligible cost (Rs. in lakhs)	Eligible subsidy (Rs. in lakhs)
Land	15.00	8.815	2.703
Building & Civil Works	41.25	35.26	8.815
Plant & Machinery	31.00	31.00	7.750
Furniture & Fittings	0.90	0.90	0.225
Preliminary Expenses	0.50	0.50	0.125
Working capital	20.00	-	-
Total	108.65	76.475	19.118

The committee after detailed discussion approved the project and decided to extend 25% of eligible cost as back ended capital subsidy to the unit limited to maximum of Rs.19.118 lakhs subject to the condition that the unit should acquire Agmark / BIS certificate for desiccated coconut powder. Machineries installed should be made up of good grade stainless steel type (SS304) especially the product contact points. Blanching and steaming to the adopted to improve the quality of the product, Provision for effluent treatment for the disposal of coconut water should be adopted in the unit.

21. Project for Manufacturing of Coconut Oil, Virgin coconut oil & Oil cake - M/s. Sterling Coconut Products, Edapetta Post, Melattur, Malappuram at a total cost of Rs.47.68 lakhs.

The project was submitted M/s. Sterling Coconut Products, Edapetta Post, Melattur, Malappuram. The objective of the project is to set up a coconut processing unit with a capacity to process 25000 nut per day in to in to quality coconut oil with Agmark standard.

Components	Project Cost	Eligible cost	Eligible subsidy
	(Rs. in lakhs)		
Building	21.50	21.50	5.38
Machinery & Fixed Assets	23.43	23.43	5.86
Electrification	2.00	2.00	0.50
Miscellaneous Fixed Assets	0.30	-	-
Transporting and Erection	0.27	0.27	0.068
Preliminary Expenses	0.50	0.48	0.12
Working Capital	12.00	-	-
TOTAL	60.00	47.68	11.92

The committee after detailed discussion approved the project and decided to extend 25% of eligible cost as back ended capital subsidy to the unit limited to a maximum of Rs.11.92 lakhs subject to the unit taking up branding, packaging and Agmark certification

22. Setting up of Coconut Oil Processing unit - M/s. MRT Oil Industries, S.F.No.200/1,

Kanjampatti Village, Pollachi, Coimbatore at a total cost of Rs.115.75 lakhs

The project was submitted by M/s. MRT Oil Industries, Pollachi, Coimbatore. The objective of the project is to set up a coconut processing unit for the production of good quality coconut oil with a capacity to process 10 MT of copra per day.

Components	Project Cost (in Rs.)	Eligible cost (in Rs.)	Eligible subsidy (in Rs.)
Land & Land Development	12,00,000.00	11,14,905.00	2,78,726.25
Building & Civil Works	35,00,000.00	35,00,000.00	8,75,000.00
Plant & Equipments	51,43,512.00	57,43,512.00	14,35,878.00
Furniture & Fittings	75,000.00	75,000.00	18,750.00
Electrical Installations	10,30,545.00	10,30,545.00	2,57,636.25
Electronic Equipments	50,000.00	----	----
Pre-operative Expenses	2,00,000.00	1,11,490.00	27,872.50
Working Capital Margin	11,57,000.00	-----	-----
TOTAL	1,23,56,057.00	1,15,75,452.00	2893863.00

The committee after detailed discussion approved the project and decided to extend 25% of eligible cost as back ended capital subsidy to the unit limited to a maximum of Rs.28.938 lakhs subject to the unit taking up branding, packaging and Agmark certification

23. To setup a coconut processing unit for production of good quality coconut oil with agmark standard and fresh coconut milk- M/s. Vettathunadu Coconut Products, Door No. IX/425C, Vettom, Thirur Taluk , Malappuram at a total cost of Rs.34.00 lakhs.

The project was submitted by M/s. Vettathunadu Coconut Products, Door No. IX/425C, Vettom, Thirur Taluk Malappuram. The objective of the project is to set up a coconut processing unit for the production of good quality coconut oil with a capacity to process 10000 nuts per day into copra and coconut oil

Components	Project Cost (in lakhs)	Eligible cost (Rs. in lakhs)	Eligible Subsidy (Rs. in lakhs)
Land	3.50	3.50	0.875
Building	12.00	12.00	3.000
Plant & Machinery	18.00	18.00	4.50
Office Furniture	0.30	0.30	0.075
Perl & Pre-op	0.20	0.20	0.050
Working Capital	1.50	----	----
TOTAL	35.50	34.00	8.50

The committee approved the project and decided to extend 25% of eligible cost as back ended capital subsidy to the unit limited to a maximum of Rs.8.50 lakhs subject to the unit taking up branding, packaging and obtaining agmark certification

24. For Setting up of a New copra dryer and Coconut Oil Manufacturing Unit - The Inchakundu Service Co-operative Bank Ltd. No.R.197, Inchakundu.P.O., Muppliyam Village, Mukundpuram Taluk, Thrissur at total cost of Rs.35.304 lakhs.

The project was submitted by M/s. Inchakundu Service Co-operative Bank Ltd. No.R.197, Inchakundu.P.O., Muppliyam Village, Mukundpuram Taluk, Thrissur The objective of the project is to set up a coconut processing unit for the production of good quality coconut oil with a capacity to process 10000 nuts per day into copra and coconut oil and market the same in Thrissur District.

Components	Project Cost (in Rs.)	Eligible cost (in Rs.)	Eligible subsidy (in Rs.)
Land & Land Development	7,25,000.00	4,02,972.00	1,00,743.00
Building & Civil Works	14,10,000.00	14,10,000.00	3,52,500.00
Plant & Equipments	15,29,727.40	15,29,727.00	3,82,431.75
Furniture & Fittings	50,000.00	50,000.00	12,500.00
Electrical Installations	97,500.00	97,500.00	24,375.00
Pre-operative Expenses	2,17,500.00	40,297.00	10,074.25
Working Capital Margin	2,58,792.00	----	----
TOTAL	42,88,519.40	35,30,496.00	8.82624

The committee after detailed discussion approved the project and decided to extend 25% of eligible cost as back ended capital subsidy to the unit limited to a maximum of Rs.8.82624 lakhs subject to the unit taking up branding, packaging and Agmark certification. The promoter should explore markets out side their jurisdiction also.

IV : MARKET RESEARCH AND PROMOTION

25. Market Promotional Programme for ‘Indu Lekha” and “At Heart” brand VCO M/s. Mosons Extractions, Industrial Estate, Palayad, Thalasserry - at a total cost of Rs.26.00 lakhs

The objective of the project is to carry out various market promotional programme for ‘Indu Lekha” Virgin Coconut Oil and “At Heart” brand Coconut Oil in consumer packs. The Committee approved the project and agreed to extend 50% of the expenditure incurred for Market Promotion activities limited to a maximum of Rs.10.00 lakhs on reimbursement basis as per the norms of TMOC as shown below. However the assistance shall not exceed 10% of the annual sales turn over.

Sl. No.	Eligible Activities	Maximum eligible assistance for each of the components as per the norms of the scheme.(Rs. In lakhs)	Recommended assistance (Rs. in Lakhs)
1	Brand publicity through print media	5.00	5.00
2.	Website development / upgradation + Brand publicity through electronic media (internet)	5.00	5.00
3	Printing of leaflets, pamphlets, brochures	5.00	1.50
4	Hiring of display facilities in major food chain markets	3.00	1.00
	Total	limited to Rs.10.00 lakhs	Limited to Rs.10.00 lakh

26. Market Promotional Programme for ‘Anu Coco’ brand packed tender coconut water - M/s.Anu Coco Food Products, D 47/48, Phase I, IDA Jeedimelia, Hyderabad Rs.26.00 lakhs

The objective of the project is to carry out various market promotional programme for ‘Anu Coco’ brand packed tender coconut water. The committee approved the project and agreed to extend 50% of the expenditure incurred for Market Promotion activities limited to a maximum of Rs.10.00 lakhs on reimbursement basis as per the norms of TMOG. However the assistance shall not exceed 10% of the annual sales turnover. The turn over details from April 2008 to March 2009 should be obtained and based on the turnover the eligible subsidy may be worked out and reimbursed to the promoter.

Sl. No.	Eligible Activities	Maximum eligible assistance for each of the components as per the norms of the scheme. (Rs. In lakhs)	Recommended assistance (Rs.in Lakhs)
1	Brand publicity through electronic media	5.00	3.75
2.	Brand publicity through print media	5.00	1.75
3	Printing of leaflets, pamphlets, brochures	5.00	5.00
4	Arranging seminars, business meet etc.	3.00	1.50
	Total	(limited to Rs.10.00 lakhs)	(limited to Rs.10.00 lakhs)

27. Market Promotional Programme for ‘ Genuine Shell Carb ‘ brand Activated Carbon - M/s.Genuine Shell Carb(P) Ltd., Coimbatore.- at a total cost of Rs.10.70 lakhs.

The objective of the project is to carry out various market promotional programme for ‘Genuine Shell Carb’ brand Coconut shell based Activated Carbon. The committee approved the project and agreed to extend 50% of the expenditure incurred for Market Promotion activities limited to a maximum of Rs.5.35 lakhs on reimbursement basis as per the norms of TMOG as shown below. However the assistance shall not exceed 10% of the annual sales turn over.

Sl. No.	Eligible Activities	Maximum eligible assistance for each of the components as per the norms of the scheme. (Rs. In akhs)	Recommended assistance (Rs.in kahs)
1	Printing of leaflets, pamphlets, brochures, postures etc.	5.00	2.00
2.	Website development / upgradation+ Brand publicity through electronic media (internet)	5.00	2.35
3	Participation in buyer-seller meet	3.00	1.00
	Total	(limited to Rs.10.00 lakhs)	5.35

28. Market Promotional Programme for ‘ A-One Supreme ‘brand Coconut Oil . M/s.Anand Oil Mills, Thrikkalathur P.O., Muvattupuzha - at a total cost of Rs.14.00 lakhs.

The objective of the project is to carry out various market promotional programme for ‘A-One Supreme‘ brand Coconut Oil in consumer packs. The committee approved the project and agreed to extend 50% of the expenditure incurred for Market Promotion activities limited to a maximum of Rs.10.00 lakhs on reimbursement basis as per the norms of TMOC as shown below. However the assistance shall not exceed 10% of the annual sales turnover.

Sl. No.	Eligible Activities	Maximum eligible assistance for each of the components as per the norms of the scheme (Rs. In lakhs)	Recommended assistance (Rs.in Lkaks)
1.	Brand publicity through electronic and print media(ad film making and release in local TV)	5.00	4.50
2.	Establishment of a retail outlet with the facility of vending machine for selling the product.	5.00	1.50
3.	Erection of hoardings at strategic places(100 hoardings @Rs.2000/- per piece)	5.00	2.00
4.	Printing of posters, pamphlets, leaflets, danglers, POP sales aid material	5.00	1.00
5.	Brand New transportation vehicle	1.00	1.00
	Total	(limited to Rs.10.00 lakhs)	(limited to Rs.10.00 lakh)

29. Market Promotional Programme - for promoting product ‘COCO - COOL – N - FRESH -100 % Tender Coconut Water-The Managing Partne,M/s Sri. Jayalakshmi Food, West Godavari District,, Andhra Pradesh .

The objective of the project is to carry out various market promotional programme by M/s Sri. Jayalakshmi Food Products, Andhra Pradesh for promoting their product ‘COCO - COOL – N - FRESH -100 % Tender Coconut Water’ The committee approved the project and agreed to extend 50% of the expenditure incurred for Market Promotion activities limited to a maximum of Rs.10.00 lakhs on reimbursement basis as per the norms of TMOC as shown below. However the assistance shall not exceed 10% of the annual sales turn over.

Sl No.	Eligible Activities	Maximum eligible assistance for each of the components as per the norms of the scheme. (Rs. In lakhs)	Recommended assistance (Rs.in Lakhs)
1.	Brand publicity through electronic and print media(ad film making and release in local TV)	5.00	3.00
2.	Brand publicity through print Media- Advertisement in News paper / Weeklies.	5.00	2.50
3.	Printing of Leaflets, Pamphlets, Dangers, Posters, POP sales aid materials etc.	5.00	2.50
4.	Erection of Hoardings at important junctions in cities / towns.	5.00	1.00
5.	Brand New transportation vehicle	1.00	1.00
	Total	(Over all limited to Rs.10.00 lakhs)	(Over all limited to Rs.10.00 lakhs)

30 . Market Promotional Programme - for promoting the sale of Tender Coconut Water in most hygienic atmosphere through retail out let Mr. Jude Martin,Proprietor, Karikku park, Shop No. A 3, Holy Tuesday shopping mall, Kaloor, Ernakulam

The objective of the project is to carry out various market promotional programme by Mr. Jude Martin, Proprietor, Karikku park for promoting the sale of Tender Coconut Water in most hygienic atmosphere through retail out let. The committee approved the project and agreed to extend 50% of the expenditure incurred for Market Promotion activities limited to a maximum of Rs.1.454 lakhs on reimbursement basis as per the norms of TMOC as shown below. However the assistance shall not exceed 10% of the annual sales turn over.

Sl. No.	Eligible Activities	Maximum eligible assistance for each of the components as per the norms of the scheme. (Rs. In lakhs)	Recommended assistance (Rs.in Lakhs)
1.	Advertisement in news paper / weeklies	0.500	0.2500
2.	Printing of Posters, brochures & Leaflets	0.500	0.2500
3.	Setting up of retail outlet		
a	Freezer- (320 liters capacity)	0.200	0.1000
b	Fridge- (320 liters capacity)	0.240	0.1200
c	Grinder	0.059	0.0295
d	Mixi with Jar (2 Nos.)	00.08	0.0400
e	Glass, Knife, Steel Tray, SS Drum, etc.,	0.030	0.0150
f	Working table	0.200	0.1000
g	Rubber floor mat	0.010	0.0050
h	Name board & Display board	0.050	0.0250
i	Beach umbrella – 3 no @ Rs.1,500/- each	0.045	0.0225
i	Table & chairs for serving	0.200	0.1000
	Sub Total (a to j)	1.114	0.5570
	Grand Total	2.114	1.0570

OTHER ITEMS

1. Proposal for providing financial assistance for purchasing equipments for Post Harvest operations, Plant Protection operations, Harvesting

The Committee suggested that only those machineries which are available in the market should be included for extending financial assistance. Hence Tractor mounted and self propelled coconut climber, Telescopic sprayers, Tractor mounted basin operator etc. are deferred for the time being. The PAC approved the proposal to extend 25% of the cost of the following machineries in view of the need for mechanization in post harvest operations viz; harvesting, dehusking, deshelling, plant protection devices etc.

1. Coconut palm climber
2. Coconut dehusking / de-shelling machines.
3. Solar copra dryers.
4. Chipper / Shredder for converting coconut waste in to small pieces for composting.
5. Adjustable poles / Telescopic poles
6. Power operated coconut tree cutter.
7. Power / rockers sprayers
8. Mechanical weed cutter

The price list of the above machineries should be collected from minimum 2-3 firms and maximum limit of subsidy to be worked out for each equipment and got approved by Chairman.

2. Approval of revised project “Quick Detection of root wilt diseases of coconut using molecular kit”

The PAC did not agree to sanction the revised project cost of Rs.57.508 lakhs and book the expenditure under the component “technical support and emergent requirement” since there is no immediate result to be obtained from the project, ie; development of molecular kit takes minimum period of three years. The PAC agreed to extend maximum assistance of Rs.50.00 lakhs to the project by considering it as a research project for validation of technology for quick detection of root wilt disease under the sub component “Development of Technology for Management of Pest and Diseases”. The Director, CPCRI may be asked to revise the project by limiting the cost to Rs.50.00 lakhs including the cost of the ELISA reader and authorized Chairman to approve the project limiting the assistance to Rs.50.00 lakhs. .

3. Ratification of revision of target for multiplication of embryo under the project, ‘Scaling up the production of planting material from released varieties of coconut palms through plumule culture’ sanctioned to CPCRI Kasaragod.

The PAC ratified the action taken by the Chairman, PAC to approve the revised project ‘Scaling up the production of planting material from released varieties of coconut palms through plumule culture’ at a total cost of Rs.43.172 lakhs and release of first installment of RS., 20.422 lakhs to CPCRI for implementing the project. The PAC also accepted the revised multiplication rate of 5-10 plantlets per embryo in the plumule culture technology to be developed in the study. The PAC also accepted the deletion of the varieties Kalyani coconut1, Gouthami Ganga, Kera Keralam, Kera Bastar, Kahi Kuchi Hybrid 1 etc. in view of the lack of sufficient mother palms for collecting embryo available with CPCRI.

4. Extension of the project period for Dietary Coconut Oils (VCO&CO) and their Health Implication -.

The project was scheduled to be completed by 03.04.2009 and the final report of the study should have been submitted by 03.07.2009. Due to the delay in supply of animals and kits containing chemicals for analysis there was a delay in completing the identified parameters of the human metabolic study and animal experimentation. However, the PI has requested to extend the project up to 31st December 2009 and

sanction an additional amount of Rs.64,450/-for engagement of 3 research staff for the extended period of three months to complete the study. Due to enhancement of project staff salary as per the revision of ICMR norms fund earmarked under the salary head is not sufficient to meet the salary of 3 project staff to be engaged for 3 months to complete the study. In view of the justification furnished by the PI , the Chairman, PAC approved the extension of the project period for 3 months and sanctioned an additional amount of Rs.69,450/- for meeting the salary of 3 project staff for 3 months. The PAC ratified the action taken by the Chairman, PAC.

5. Proposal for Development of technology for production of Virgin coconut oil by wet Processing.

PAC observed that as per the TMOG guidelines there is provision to extend 100% financial assistance to Govt. Institutions for research projects limited to a maximum of Rs.75.00 lakhs. The total expenditure incurred for the above project is Rs.13.761 lakhs which is within the total limit of the financial assistance that can be extended under TMOG. Accordingly reply was given to the audit to drop the outstanding para.

Therefore in view of the clarification received from CFTRI the PAC approved the proposal for including the amount released towards the cost of man days as well as intellectual fee ie. Rs.3.791 lakhs also in the total project cost as share of the Board and the pattern of assistance under the project was revised accordingly.

6. Revised project for Development of existing coconut fibre peeling (Dehusking) machine – Process Equipments

The PAC noted that the project was approved in principle by the 10th PAC held on 19.5. 2004, ie. 5 years back and authorized the Chairman to approve the revised project. The committee after detailed discussion approved the revised project and sanctioned 50% of the project cost Rs.2.823 lakhs as eligible financial assistance as per the norms of the TMOG.

Sl. No	Tech. Programme	Cost as per the project (Rs. in lakh)	Actual expenditure	Eligible financial assistance (50%)
1.	Designing & Drafting	0.540	0.533	0.266
2.	Manufacturing cost of Prototype	2.620	2.627	1.313
3	Taking Idle Trials	0.280	0.285	0.140
4	Put in Massive field Trials	1.120	1.120	0.560
5.	Establishing Parts Life	1.100	1.094	0.547
	Total	5.660	5.659	2.826

The Committee also suggested that the patent of the prototype of the machinery developed should be filed jointly with the Board. The promoter should provide a unit of the machinery developed to CDB for demonstration. If the developed technology is transferred to other entrepreneurs, 50% of the Technology Transfer Fee should be paid to CDB and this should be included as one of the conditions of the MoU.

Other decisions

a. Quality standards such as BIS / Agmark for coconut oil, virgin coconut oil, desiccated coconut powder, etc., should be insisted for all processing units assisted by CDB (TMOC). For all food processing units HACCP certifications should be insisted. For bigger units ISO certification should be acquired. This should be insisted as one of the conditions for grant of subsidy. The units assisted by Coconut Development Board under TMOC should be directed to send samples to the TDC, Vazhakulam for quality testing regularly.

b. All processing units assisted by CDB should be registered with the Board by paying an initial registration fee of Rs.5,000/-.

c. For DC units blanching/steaming equipments should be added to the process system. The use of machineries / equipments made up of food grade stainless steel (SS 304) especially in contact points like trays, basins, buckets, etc. should be insisted to improve the quality of the product.

The meeting came to an end by 2.00 P.M on 09.10.2009.

Director
For Chairman

31st Meeting of PAC of TMOC on 8th and 9th October 2009 at Kerabhavan, Kochi

List of Participants

Sl. No	Name and address
A	MEMBERS
1	Smt. Minnie Mathew, IAS, Chairman, Coconut Development Board, Kochi – 11
2	Dr. K V. Kasthuri Bai, Principal Scientist & Head of the Division of Plant Physiology & Post harvest Technology, CPCRI, Kasaragod -671 124. <u>Representative of</u> Assistant Director General (Plantation crops), ICAR
3	Shri.C.P.Appanna General Manager, Technical Services Department, 3rd Floor, B Wing, NABARD, Plot No. C –24, G Block Badra -KurIa Complex, Post Box No.8121, Bombay - 400 051
4	Shri. Thangaraj, Asst. Agricultural Marketing Adviser, DMI, Kochi, 6 th floor, A Block, Agmark, Kendriya Bhavan, Kakkand <u>Representative of</u> Joint Secretary & Agricultural Marketing Adviser to Govt. of India
5	Shri. Sreekanth, Joint Director of Horticulture, (Plantation crops), Lalbagh, Bangalore. <u>Representative of</u> Secretary, Horticulture Department, Government of Karnataka.
6	Shri M Thomas Mathew, Chief Coconut Development Officer & Member Secretary, PAC Coconut Development Board, Kochi – 11
B	EXPERTS
7	Dr. M. Aravindakshan, Chairman, CDB (Retd.), 17 / 794, Green Park Thiruvambadi P.O, Thrissur-680 022
8	Dr. A.N.Srivatsa, Retd. Scientist, 411, A & B Block, Navilu Road, Kuvempu Nagar, Mysore – 570 023.

9	Dr. Radhakrishnan Nair,C.P Head, CPCRI(Retd.) Souparnika [Souparnika Pattakotta] Cutcherry P.O
10	Shri. C.R.Vijayakumar Integrated Industries 30/2, Jain Temple Road Visweswarapuram <i>Bangalore – 4</i>
C	OTHERS
11	Dr. K. Muralidharan, Director , Coconut Development Board, Kochi – 11
12	Shri. A.N. Muraleedharan Achari Secretary, Coconut Development Board, Kochi
13	Shri Sreekumar Poduval, Jr. Processing Engineer, Coconut Development Board
14	Shri. R. Jnanadevan, Assistant Director (TMOC), Coconut Development Board, Kochi

Proceedings of the 32nd meeting of PAC of Technology Mission on Coconut held at Kochi on 8th January 2010

The 32nd meeting of the Project Approval Committee (PAC) on Technology Mission on Coconut was held at the Board Room of Coconut Development Board, Kochi on 8th January 2010 under the Chairmanship of Smt. Minnie Mathew IAS, Chairman, CDB and Chairman of PAC. Dr. M. Aravindakshan, former Chairman, CDB attended the PAC as Expert Member. The list of participants in the meeting is annexed.

The following Agenda items were taken up for consideration:

AGENDA No. 1: Confirmation of the Proceedings of 31st Project Approval Committee Meeting held on 8th and 9th October 2009

The Committee approved the proceedings of the 31st PAC Meeting

AGENDA No. 2: Action taken report of the 31st PAC Meeting

The committee perused the action taken on the decision of the 31st meeting of the PAC while reviewing the action taken report, Shri. Thankaraj Asst, Marketing Adviser stated that out of 36 projects sanctioned under TMOC for setting up coconut oil production units only, ten unit have been granted Agmark licence and 23 promoters are yet to apply for license. Dr.K.Muralidharan, Director informed that most of the projects mentioned have been sanctioned during the 30th and 31st PAC meetings and MoUs and first installments have been released only recently. The Committee decided that before release of the second installment the promoter should submit application for Agmark certificate. This should be insisted as one of the conditions for grant of second installment subsidy.

AGENDA No. 3: Approval of new project proposals:

II. PEST AND DISEASE MANAGEMENT

- 1. Synthesis and characterization of value added products from coconut oil - Prof. Satish. V. Kailas, Dept. of Mechanical Engineering, Indian Institute of Science, Banglore at a total cost of Rs.65.72 lakhs.***

The project was submitted by Dept. of Mechanical Engineering, Indian Institute of Science, Bangalore. The project was presented to the PAC by Prof. Satish. V. Kailas, Principal Investigator of the project. The objective of the project is to develop and deliver marketable, completely biodegradable coconut oil based value added industrial lubricants like Grease and Metal cutting fluids. In addition to the proposed work, 2-stroke and 4-Stroke lubricants work would be explored further for local markets.

The PI stated that one of the perceived disadvantages of Coconut oil is high pour point. This property can be converted into an advantage by developing Grease and Cutting fluids. Additives proposed for modification of the coconut will also be biodegradable materials.

The PAC perused the expert comments on the project received from Dr. A.K.Singh, Scientist IIP Dehradun. He has stated that the subject of the project is good and is as per the present requirement. He has also stated that there is no need of extensive basic research on this subject. Application and commercialization of technology should be given more importance.

The PAC after detailed discussions and deliberations with the PI opined that the study would be highly useful so as to diversify the uses of the coconut oil as bio-degradable products for industrial applications in future. No studies have been conducted so far to produce biodegradable Grease and Hydraulic oils from coconut oil. Since a reputed institution like the Indian Institute of Science have come forward to take up the study and deliver a marketable product, the committee approved the proposals subject to the following conditions.

- a. Duration of the project should be reduced to 2 years
- b. Midterm review will be undertaken by the Board and if the process for development of the products are found feasible, concurrent action should be initiated by the PI for setting up of a pilot plant so as to demonstrate the technology for commercial application to the prospective entrepreneurs by the end of the project period.
- c. The pilot plant could be attached to any of the oil milling units in the public / co-operative sector.
- d. The institutional charges should be reduced to 10% of the project cost.
- e. Item wise cost of capital equipment and accessories should be furnished. The cost of the project may be revised accordingly.

2. *Development of technology for preparation of particle boards & diversified products from tender coconut waste - Shri. Dr.U.S. Sarma, Director, R.D.T.E. CCRI, Kalavoor at a total cost of Rs.12.08 lakhs.*

The project was presented by Shri Dr.U.S.Sarma, Director, R.D.T.E. CCRI, Kalavoor. The objectives of the project are:

1. Develop a technology for production of particle boards from tender coconut fiber.
2. Develop and standardize a process for pulping of tender coconut fiber for production of diversified products.
3. Explore the possibility of utilization of tender coconut husk in bio-fuel production.

Dr.U.S.Sarma also stated that salient findings of research carried out under a former project, 'Design and development of process for pulverization of coconut husk and conversion into a compost' revealed the potential of utilization of tender coconut husk for production of particle boards. Preliminary experiments were carried out to prepare particle boards out of the tender coconut husk by application of pressure and heat using hydraulic press which yielded encouraging results. It is proposed to design and fabricate different types of moulds for making particle boards and conduct trials and to conduct experimental study with these moulds to make variety of particle boards for production of diversified products. Trial runs of the machines are proposed followed by field demonstrations. Studies carried out on development of an organosolv treatment of the tender coconut fibre for pulping provided an initial proprietary organosolv process for the production of pulp and other value added products from tender coconut fiber. It is proposed to optimize the process to determine the best pulping conditions. Dr.U.S.Sarma also stated that since 40% of the biomass is wasted, there is good scope for recovering ethanol at a reasonable cost. One MT of dry biomass can yield about 80 gallons of ethanol.

The committee after detailed discussion approved the project at a total cost of Rs12.08 lakhs. The committee also suggested that in the budget particulars, item no.2 (materials and equipments) may be changed as fabrication cost and consumables and item no.3 (supervision and consultancy) as contingency.

3. *Proposal for coconut processing unit - Little flower oil mills and coconut processing unit, Edapetta P.O., Malappuram at a total cost of Rs.13.44 lakhs*

The project was submitted by Little flower oil mills and coconut processing unit, Edapetta Malappuram. The objective of the project is to set up a copra processing unit with a capacity to process 7500 coconuts per day.

Components	Total Project (Rs. in lakhs)	Eligible Project Cost (Rs. in lakhs)	Maximum Eligible (Rs. in lakhs)
Building	6.00	5.60	1.40
Machinery and Fixed Assets	7.20	7.20	1.80
Transporting and Erections	0.20	0.20	0.05
Electrification	0.30	0.30	0.075
Preliminary Expenses	0.30	0.14	0.035
Working Capital	3.00	-	-
TOTAL	17.00	13.44	3.36

The committee after detailed discussion approved the project and decided to extend 25% of eligible cost as back ended capital subsidy to the unit limited to maximum of Rs.3.36 lakhs subject to the condition that the unit should be inspected by an officer of the Board before release of subsidy.

4. Proposal for expansion of the existing coconut processing unit- Kotachery Co-operative marketing society, Kanhangad, Kasargod at a total cost of Rs.19.49 lakhs

The project was submitted by Kotachery Co-operative marketing society, Kanhangad, Kasargod. The objective of the project is to modernize and expand existing coconut processing unit with capacity to process 30000 nuts per day for the production of milling copra, Edible ball copra and filtered coconut oil by providing additional facilities. The facilities proposed to be created under the project are godown for storage and space for packaging, providing pouch packing machine for packaging of coconut oil, production of ball copra, reconstruction of drying yard (6000 Sq. ft) and rectifying drying system by replacing two heat exchangers.

Components	Total Project (Rs. in lakhs)	Eligible Project Cost (Rs. in lakhs)	Maximum Eligible (Rs. in lakhs)
Building & Civil Works	8.00	7.80	1.95
Plant & Machinery	11.50	11.50	2.875
Preliminary & Pre-operative Expenses.	0.20	0.19	0.047
TOTAL	19.70	19.49	4.87

The committee approved the project and decided to extend 25% of eligible cost as back ended capital subsidy limited to a maximum of Rs.4.87 lakhs subject to the condition that the unit be inspected by an officer of the Board and ascertain the existing infrastructure and capacity utilization assessed. The proposal for rectifying drying system by replacing two heat exchangers may be sanctioned after assessing the need for replacement.

5. Proposal for production of coconut oil manufacturing unit- M/s. Georgeson oil mills, Adatukara Building, ST Nagar, Trichur, at a total cost of Rs.60.17 lakhs

The project was submitted by M/s. Georgeson oil mills, Trichur. It was proposed to set up a coconut oil production unit with a capacity to process 11000 nuts per day. The committee after detailed discussion suggested that the Junior Processing Engineer of the Board may inspect the unit and critically go through the plant & machinery proposed in the project and recommend based on actual requirement. The project may be resubmitted to next PAC with the feasibility report.

6. Proposal for setting up an mechanized copra dryer at Tamilnadu- Srinivas coconut products, Pushpaka nagar, Srirangam, Trichi at a total cost of Rs.4.739 lakhs

The project was submitted by Srinivas coconut products. The objective of the project is to set up a copra processing unit with a capacity to process 10000 coconuts per day.

Components	Amount (Rs. in lakhs)	Eligible project cost	Eligible subsidy
Land & Land Development-Lease	0.50	-	-
Building & Civil Works – Lease	-	-	-
Plant & Equipments	3.889	3.889	0.972

Furniture & Fittings	-	-	-
Electrical Installations	0.50	0.50	0.125
Pre-operative Expenses	0.35	0.35	0.013
Working Capital Margin	1.805	-	-
TOTAL	7.04	4.739	1.110

The committee after detailed discussion approved the project and decided to extend 25% of eligible cost as back ended capital subsidy limited to a maximum of Rs.1.110 lakhs.

7. Setting up of shell based Activated carbon unit - M/s. Coco Carbons (India) Pvt. Ltd., #44, Dobaspet 1st Phase, Industrial Area, Sompura Hobli, Nelmangala Taluk, Bangalore at a total cost of Rs.398.374 lakhs

The project was submitted by M/s. Coco Carbons (India) Pvt. Ltd., Bangalore. The objective of the project is to set up Coconut Shell Activated Carbon Manufacturing Unit with the capacity to produce 2400 MT activated carbon per annum.

Components	Project cost (Rs in lakhs)	Eligible cost (Rs in lakhs)	Eligible subsidy (Rs in lakhs)
Land	On lease -	----	
Building & other Civil Works	215.96	175.524	
Plant & Machinery (Including duties & tax)	203.85	203.85	
Electrical works	19.00	19.00	
Working capital	100.00	-	
Total	538.81	398.374	50.00 Max ceiling of Rs 50 lakh

The committee after detailed discussion approved the project and decided to extend 25% of eligible cost as back ended capital subsidy limited to a maximum of Rs.50.00 lakhs. The committee suggested that the unit should be inspected by officers of the Board twice during the period of establishment, since the investment under the project is high.

8. Expansion and modernization of existing Activated Carbon unit- M/s. Gowrishankar Chemicals, Karnataka at a total cost of Rs.55.00 lakhs

The project was submitted by M/s. Gowrishankar Chemicals, Karnataka. The committee observed that the expansion proposed under the project was completed in May

2007. The committee did not approve the proposal since the promoter could not submit the claim within the normal period of 18 months after completion of the expansion work.

9. Establishment of an Integrated Coconut Processing Unit - M/s. Kattippara coconut Industries, Kattippara.P.O., Calicut, at a total cost of Rs.44.55 lakhs

The project was submitted by M/s. Kattippara coconut Industries, Kattippara. P.O., Calicut,. The objective of the project is to set up an integrated coconut processing unit for the production of double filtered coconut oil, coconut vinegar, bio gas from coconut water and coconut shell charcoal etc. with a capacity to process 13000 coconut per day into milling copra, 2 tons of copra per day into coconut oil, 100 lts of coconut water into vinegar and 1.3 tons of coconut shell into shell charcoal.

Components	Amount (in lakhs.)	Eligible project cost (Rs.)	Eligible subsidy(Rs)
Land (30 Cents)	4.00	4.00	1.00
Building	17.00	17.00	4.25
Plant & Machinery	23.80	22.80	5.70
Furniture and Office Equipments	0.50	0.50	0.125
Preliminary Expenses & Pre-operative Expenses	0.25	0.25	0.625
Working Capital	4.45	-	-
TOTAL	50.00	44.55	11.70

The committee after detailed discussion approved the project in principle to extend 25% of eligible cost as back ended capital subsidy to the unit. However the cost of setting up of the biogas plant should be deleted from the total project cost and the costing reworked accordingly. The committee authorized the Chairman to approve the revised budget and sanction the eligible subsidy.

10. Establishment of Coconut Oil Unit- M/s. Sri Balaji Oil Industries, Onthibettu, Pernankila road, Bommarabettu Village, Hiriyadka Post, Udupi, Karnataka, at a total cost of Rs.28.66 lakhs

The project was submitted by M/s. Sri Balaji Oil Industries, Udupi, Karnataka. The objective of the project is to set up a coconut oil production unit with a capacity to process 2 tons of copra per day into coconut oil.

The committee observed that the promoter's contribution @ 8.6% of this project is very low. The committee suggested that the promoter's contribution should be 25% of the total project cost. Hence the committee did not approve the project. The promoter may be advised to resubmit the project after enhancing the promoter's contribution.

11. Expansion and Modernization of Existing Coconut Processing Unit. - M/s.Cheekanal Industries & Trading Company, Omalloor, Pathanamthitta, at a total cost of Rs.13.25 lakhs

The project was submitted by M/s. Cheekanal Industries & Trading Company, Omalloor, Pathanamthitta. The objective of the project is for expansion / modernization of the existing coconut processing units.

Components	Amount (in lakhs.)	Eligible project cost(Rs.)	Eligible subsidy(Rs)
Land & Building	Own	-	-
<i>Plant & Machinery</i>			
Horizontal Multi Tubular	8.00	10.25	2.562
Boiler Erection charges	2.25		
Cost of expeller	2.90	3.00	0.75
Erection charges	0.10		
<i>TOTAL</i>	13.25	13.25	3.312

The committee approved the project and decided to extend 25% of the eligible project cost ie. Rs.3.312 lakhs as subsidy to the unit. The committee suggested that the unit should be visited and the existing facilities and capacity utilization assessed before release of the 1st installment of subsidy.

12. Pilot project for coconut wood utilisation for joineries production at forest industries (travancore), Forest Industries (Travancore) Limited at a total cost of Rs.19,93,500/-

This project was submitted by Forest Industries (Travancore) Limited Aluva. The Forest Industries (Travancore) Limited which is a Government Company established in the year 1946 with 77% Govt. share is engaged in the manufacture of wooden furniture and joineries (Windows, Doors, Ventilators etc.) located at Aluva in a 9 acre campus. There are about 120 people working in the unit. The unit processed about 150 cft logs per day and converts them into various finished products. The objective of the project is to

setup a pilot project for the successful utilization of coconut wood for manufacture of joineries ie. window and door frames in addition to staircase fittings and ventilators.

FIT is having existing infrastructure facilities and technical / skilled persons for processing of wood. The existing saw mill, production machineries seasoning plant etc available with them will be utilized for setting up this pilot plant after upgrading machineries and repairing the existing seasoning plant so as to make it suitable for coconut wood processing.

The committee after detailed discussion approved the project under the subcomponent “Acquisition, training and demonstration of technologies for processing and product diversification” with 100% financial assistance from the Board for setting up a pilot plant for demonstrating the coconut wood processing by FIT subject to the following conditions:

1. Renovation / up gradation of machineries and purchase of equipments as shown in the project report has been approved.
2. At least 6 truckloads of coconut wood should be processed in the demonstration unit. (About 180 logs)
3. The duration of the project should be limited to 4 months.
4. Deliverables should be quantified.
5. The size of coconut wood has to be revised as 5 meter length instead of 10 meter length shown in your project report. The cost of the wood per feet has to be worked out accordingly.
6. Charges for cutting, handling and transportation appear to be high. This may be limited to the minimum.
7. An indicative cost estimate of the finished products may be given so as to assess the marketability of the products on a commercial scale.
8. Samples of primary processed wood should be made available to the Board for arranging testing and standards formulation.

The project cost should be reworked on the above lines and submit a detailed project report by FIT. The PAC authorized the Chairman PAC to approve the revised project.

13. Assessing the techno commercial feasibility of converting softwood waste from coconut trees into value added particle boards, Ecoboard Industries Limited, 65/1A, Akarshak Building, Opp.Nal Stop, Karve Road Pune

Shri.M.Thomas Mathew, Chief Coconut Development Officer presented the project submitted by Ecoboard Industries Limited, Pune. He also visited the Ecoboard Industries Limited, Pune and discussed the issue on utilization of coconut wood with the Chief Managing Director. The Ecoboard Industries Limited is a private limited company engaged in the manufacture of particle board using sugarcane bagasse as raw material. They have 2 factories in the State of Maharashtra with a combined capacity 300 M3 / day. They are the oldest and largest agro waste base particle board manufacturing company in India with in house facility of production for required resins. They also have a partially operating plant at Islampur, Dist. Sangli, Maharashtra where trials with coconut waste wood could be undertaken immediately.

The objective of the project is to establish whether the waste soft wood from coconut trees can be chipped to desired size with desired geometry and whether it can be bonded with resins in use, to determine the yield of fibre from felled coconut trees and also to determine the moisture level in coconut trees, to see whether the chipped wood from coconut tree can be boned into raw particle boards, to see whether particle boards can be laminated, to evaluate whether particle boards meets the norms of IS specifications & also study how the market accept them and to prepare techno commercial feasibility report.

The committee after detailed discussion approved the project to extend financial assistance under the subcomponent 'Technical Support and emergent Requirements' in view of the urgent need for development of technology for utilization of coconut wood.

14. Setting up of coconut wood based furniture making unit - Shri. P.P.George, M/s.Three star industries, Marottichode, Mattur, Kalady at a total cost of Rs.10.048 lakhs.

The project was submitted by Shri. P.P.George, M/s.Three star industries, Marottichode, Mattur, Kalady. The objective of the project is to set up coconut wood processing unit for making coconut wood furniture and coconut wood based packing box (carton) for export of vegetable and fruits.

Components	Amount (Rs. in lakhs)	Eligible project cost	Eligible subsidy
Land & Land Development	2.00	0.964	0.241
Building & Civil Works	2.00	2.00	0.50
Plant & Equipments	4.043	4.04	1.01
Furniture & Fittings	0.375	0.375	0.094
Electrical Installations	0.50	0.50	0.125
Pre-operative Expenses	0.72	0.096	0.024
Working Capital Margin	0.41	-	-
TOTAL	10.048	1.975	1.994

The committee approved the project and to extend financial assistance @ 25% of the project cost limited to Rs.1.994 lakhs.

15. Proposal for enhancement of rate subsidy, under the sub-component processing and product diversification for setting up of coconut wood processing units under TMOC

Chairman explained the background of the proposal for providing financial assistance for setting up of coconut wood processing units. She stated that Govt. of India has sanctioned a project for Rejuvenation and Replanting Coconut Gardens in the districts of Trivandrum, Kollam and Trichur. The implementation of the scheme involves cutting and removal of senile and disease affected unproductive palms. As per the programme nearly 145 lakhs palms will be cut and removed during the XIth Plan period and 7% of the total palms is estimated to be more than 60 years old. This would provide substantially large quantities of timber for utilization. There is no traditional organized industry at present for wood processing and its commercial utilization. If the cut and removed palms are allowed to remain in the field, the incidence of pest and disease will become a serious problem for the farmers. Therefore it was felt that the opportunities for utilization of coconut wood have to be seriously pursued. Coconut timber yields good quality wood for structural applications, furniture and panel boards.

In this context a meeting was held on 26.05.2009 by the Chairman, CDB with various agencies involved in coconut wood processing and it was decided to set up a pilot plant for coconut wood processing for demonstration and training in coconut wood processing in the land owned by KSCDC (Kerala State Coconut Development Co-operation) offered by Kerafed.

However, since alienation of the proposed land for setting up of the pilot plant is getting delayed and since cutting and felling of palms have already commenced in the project areas, and since timber or not disposed would create ecological problems, it is

proposed to explore possibilities of utilizing the facilities available in the existing saw mills / wood processing industries by providing enhanced financial assistance for expansion / modernization, infrastructure and machineries etc for processing of coconut timber under TMOC with the approval of PAC, since the cost of equipments and machineries are very high. Besides, several wood manufacturers have evinced interest for setting up of commercial processing units for primary and secondary processing of coconut wood into value added products by scaling up machineries.

The committee discussed the possibilities for enhancing the rate of financial assistance extended under different components of TMOC for promoting processing and product diversification for supporting entrepreneurs for setting up of commercial units for large scale processing of coconut wood, in view of the gravity of problem faced by the farmers in the project areas for disposal of coconut wood. The PAC observed that maximum financial assistance that can be extended under the subcomponent 'Adoption of technology for processing and product diversification' is 25% of the project cost limited to Rs.50.00 lakhs, where as the maximum financial assistance that can be extended to private entrepreneurs under the subcomponent 'Acquisition, training and demonstration of technologies for processing and product diversification' is Rs.75.00 lakhs for Govt institutions and cooperative societies and Rs.35.00 lakhs for NGO's, Individual entrepreneurs and other organizations.

After detailed discussion the committee noted that as per the original guidelines of TMOC there was no ceiling for the maximum subsidy that can be extended under the subcomponent 'Acquisition, training and demonstration of technologies for processing and product diversification', ie 100% of the cost to all the Govt. institutions and cooperative societies 50% of the cost for the NGO's, Individual entrepreneurs and other organizations (OG page no 9 item no 2.2-B)

However in the Second Meeting of National Steering Committee of Technology Mission on Coconut held at Kochi on 9.9.2004 the Committee agreed to the revision proposed by the secretariat to fix a ceiling of Rs.75.00 lakhs for Govt institutions and cooperative societies and Rs.35.00 lakhs for NGO's, Individual entrepreneurs and other organizations as it is a supplementary financial limit within the existing pattern of assistance approved by the EFC norms. Therefore the committee decided that a note may be placed in the National Steering Committee to remove the financial limits and restore the original provision earmarked in the Technology Mission on Coconut for promoting

processing units. The projects received for coconut wood processing units could be sanctioned on the above basis.

16. Survey on incidence and severity of Ganoderma wilt of coconut with respect to agronomic practices in dry tracts of southern Karnataka, Agricultural Research Station, Mudalkaval, Tiptur, Tumkur Dt., Karnatak at a total cost of Rs.2.761 lakhs.

The project was submitted by the Agricultural Research Station, Tumkur of UAS Bangalore, Karnataka. The objective of the project is to conduct the survey on the incidence and intensity of Basal stem rot (Ganoderma wilt) disease of coconut in dry tracts of southern Karnataka and to assess influence of different agronomic practices followed by farmers on incidence and severity of fatal disease (Ganoderma wilt) of coconut.

The committee observed that basal stem rot is one of the major constraints in coconut production in the southern Karnataka. The data generated in this study will be useful to prepare a hot spot area map for systematic rouging of diseased palms to prevent further spread of the disease and to take remedial measures to combat this fatal disease. Hence the committee approved the project at a total cost of Rs.2.761 lakhs.

17. Studies on light traps for mass trapping and destruction of coconut slug caterpillar moths as an eco-friendly component of IPM. Andhra Pradesh Horticultural University, Tadepalligudem, West Godavari District, Andhra Pradesh

The project was submitted by the Andhra Pradesh Horticultural University, Tadepalligudem, West Godavari District, Andhra Pradesh. The objective of the project is to standardize the best and easy method for trapping of slug caterpillar moths, to find out the optimum height of placement of light traps, to work out number of light traps required per unit area of infested garden, to find out peak emergence time of moths and effective trapping time and to standardize easy, economical and effective attraction and trapping method of light source.

The committee approved the project in view of the severe infestation of the pest reported from E.Godavari & W.Godavari Dt. of Andhra Pradesh.

18. Monitoring and surveillance of infestation of pest and disease of coconut in Andaman Nicobar Islands- Central Agricultural Research Institute, Port Blair (A & N Islands)

The project was submitted by Central Agricultural Research Institute, Port Blair. The objective of the project is monitoring and surveillance of insect-pest and disease situation of coconut to assess the intensity of infestation in South, Middle and North Andaman and Nicobar Islands. The survey will be conducted in three districts, in each district 5 villages will be selected and 50 coconut trees selected from each village. The total size of the sample is only 750 trees. The committee approved the project subject to the following conditions:

- i. Institutional charges shall be limited to 10%
- ii. Consumables (traps etc) limited to Rs.2.00 lakhs @ Rs.1.00 lakhs per year.
- iii. Travel charges limited to Rs.1.00 lakhs @ Rs.0.5 lakhs per year.

19. Large Scale Procurement Of Seed Nuts From Superior Dwarf By Screening And Identification In Southern Zone Of Kerala- Kerala Agricultural University, Onattukara Regional Agricultural Research Station, Kayamkulam

The project was submitted by Kerala Agricultural University, Onattukara Regional Agricultural Research Station, Kayamkulam. The objective of the project is survey of superior dwarf palms in southern districts of Kerala Viz; Alappuzha, Kollam, Thiruvananthapuram and Kottayam, identify 300 dwarf palms (COD, CGD and MYD) for producing 90,000 dwarf seed nuts and random evaluation of mother palms (Elisa / PCR).

The committee observed that no. of nuts proposed to be collected per palm is on a higher side (100 nuts/palm). In place of RA a field assistant may be engaged and the cost may be reworked accordingly. The seed nuts collection should be continued for two years only and seedling production for 3 years. Possibilities of procurement of MGD seed nuts and increasing the number of mother palms per district also have to be ascertained. The PI may be asked to revise on the above lines and resubmit. The PAC authorized the Chairman PAC to approve the revised project.

20. Mixed cropping of Noni (Morinda citrifolia) in coconut gardens under different agro climatic conditions- Central Plantation Crops research institute (ICAR), Kasargod

The project was submitted by Central Plantation Crops research institute (ICAR), Kasargod. The objective of the project to study the impact of mixed cropping of Noni with coconut on the productivity of coconut palms and soil fertility status. The committee observed that the total cost of the project is on the higher side compared to the total area proposed for the trial in each location. Hence the Board may have a discussion with

CPCRI and the PI to prepare a realistic estimate of the costing and presented in the next PAC.

21. Market Promotional Programme - for promoting the premium grade coconut oil under the brand name "FARMERS COCONUT OIL"

The objective of the project is to carryout market promotional programme for FARMERS COCONUT OIL by M/s. Adat farmers Service Co-operative Bank Ltd., Thrissur District. The committee approved the project and agreed to extend 100% of the expenditure incurred for market promotional activities limited to maximum of Rs.4.00 lakhs on reimbursement basis as per the norms of TMOC as shown below. The proposal was approved by the PAC subject to the condition that the promoter should acquire Agmark certification of the product first. Then only other market promotional activities proposed in the project need be supported. However the assistance shall not exceed 10% of annual sales turn over.

Sl. No.	Component	Proposed expenditure (Rs.in lakhs)	Admissible under Market promotion (Rs. in Lakhs)	Recommended subsidy (Rs. in Lakhs)
I	Agmark Standard for Coconut oil:	1.00	...	1.00
II	Display of the Product in Super market	1.50	3.00	1.50
III	Erection of hoardings	0.10	5.00	0.10
IV	Printing of Leaflets, Pamphlets, Brochures, Posters, etc.	0.40	5.00	0.40
V	Transportation vehicles(brand new goods/cargo vehicles only)	2.00	1.00	1.00
Total		5.00		4.00

22. Market Promotional Programme - for promoting the premium grade coconut oil under the brand name "SILVERDROP"

The objective of the project is to carryout market promotional programme for SILVERDROP by M/s. Silver oil mills, Edappatta P.O., Melattur, Malappuram district. The committee approved the project and agreed to extend 50% of the expenditure incurred for market promotional activities limited to maximum of Rs.10.00 lakhs on reimbursement

basis as per the norms of TMOC as shown below. However the assistance shall not exceed 10% of annual sales turn over.

Sl. No.	Component	Proposed expenditure (Rs. in lakhs)	Admissible under Market promotion	Recommended subsidy (Rs. in Lakhs)
1.	Brand publicity through Electronic Media:	In 2010 - 7.75 In 2011 - <u>2.00</u> 9.75 -----	5.00 lakhs	4.875
2.	Brand publicity through Print Media	In 2010 - 2.50 In 2011 - <u>2.50</u> 5.00 -----	5.00 lakhs	2.500
3.	Printing of Leaflets, Pamphlets, Brochures, Posters, etc.	In 2010 - 3.75 In 2011 <u>2.50</u> 6.25 -----	5.00 lakhs	3.125
Total		21.00	Maximum admissible Rs.10.00 lakhs	10.50 Overall limited to Rs.10.00 lakhs

23. Market Promotional Programme - for promoting the sale of Tender Coconut Water in most hygienic atmosphere through retail out let in International Air Port, Calicut

The objective of the project is to carry out various market promotional programmes by Mr. Muhammed Basheer, Proprietor, Malabar Tender Coconut Stall, Peraravanthodi House, Nediyruppu, Musliyarangadi, Malappuram Dist. for promoting the sale of Tender Coconut in International Air Port, Calicut as Tender coconut Juice. The committee approved the project and agreed to extend 50% of the expenditure incurred for market promotional activities limited to maximum of Rs.1.10 lakhs on reimbursement basis as per the norms of TMOC. The CDB support should be projected in the facia of the retail outlet.

Other Items

- 1. Sanction of additional fund for meeting payment of salary of project staff and extension of project period under the project, "Dietary Coconut Oils (VCO&CO) and their Health Implication"***

The project was scheduled to be completed by 31.012.2009. However the PI has informed that they were unable to complete the project as per the revised schedule due to the local problems and frequent bandhs in Andhra Pradesh. The PAC approved the proposal for extension of the project period for two more months ie up to 28th February 2010 in view of the reasons for delay furnished by the NIN. The PAC also approved the additional amount of Rs.2,80,568/- required for payment of salary to project staff due to the revision of salary as per ICMR norms as on 01.04.2008 and also due to the engagement of project staff for 3 more months to complete the animal experiments. The total project cost was revised to Rs.65,33,994/-.

2. Proposal for Development of tractor mounted and self propelled coconut climber for coconut harvesting- Konkan Krishi Vidyapeeth, Dapoli – Sanction of additional fund as intellectual property right for payment of honorarium to the university staff involved in the project

The Konkan Krishi Vidyapeeth, Dapoli requested for sanction of Rs.2.00 lakhs in addition to the total project cost of Rs.17,23,700/- approved by the PAC as Intellectual property right and for payment of honorarium to the university staff involved in the project. The committee did not agree to the proposal for payment of honorarium.

3. Survey and Identification of root (wilt) disease free palms in coconut and evolution of tolerant genotypes through selection and hybridization - Onattukara Regional Agricultural Research Station (ORARS), KAU, Kayamkulam- Revision of Budget

The PAC approved the additional amount of Rs.2,47,621/- required for payment of salary to project staff due to the revision of salary as per ICAR norms as on 28.02.2008 to 31.05.2010 and total project cost was revised to Rs.38,51,280/-.

GENERAL DECISION

1. A study should be undertaken by the Board to assess the mode of marketing of coconut oil units in Kerala supported by the Board under the TMOC, so as to assess the percentage (Qty) of coconut oil that is sold as branded and packed in bottles and small pouches, whole sale in tins & bulk and retail as loose oil.
2. Savings under earlier project, sanctioned to CCRI viz; 'Design and Development of process for pulverization of coconut husk and conversion into compost', Rs.2,81,391/- should be utilized for fabricating and supplying one set of

machineries (Tender coconut husk slicer, Hand operated chopping machine , Power operated chopping machine, Tender coconut husk shredder) to Technology Development Center, Vazhakulam for demonstration. A workshop to demonstrate these machineries to potential entrepreneurs should also be organized by CCRI utilizing the balance amount.

3. PAC also suggested that project with a subsidy element Rs.2.00 lakhs may be sanctioned by Chairman, PAC subject to ratification by the PAC.

The meeting came to an end by 6.00 PM

Director
For Chairman

32nd Meeting of PAC of TMOC on 8th January 2010 at Kerabhavan, Kochi

List of Participants

Sl. No.	Name and Address
A	Members
1	Smt. Minnie Mathew, IAS, Chairman, Coconut Development Board, Kochi-11
2	Dr.K.V.Kasthuri Bai, Principal Scientist & Head of Division of Plant Physiology & Post harvest technology,CPCRI,Kasargod-671 124 <u>Representative of</u> Assistant Director General (Plantation crops), ICAR
3	Dr. Appanna, General Manager, Technical Services, Investment Credit Department, 3rd Floor, B Wing, NABARD, Plot No. C –24, G Block Badra –KurIa Complex, Post Box No.8121, Bombay – 400 051
4	Shri. Thangaraj, Asst. Agricultural Marketing Adviser, DMI, Kochi, 6th floor, A Block, Agmark, Kendriya Bhavan, Kakkanad, Kochi <u>Representative of</u> Joint Secretary & Agricultural Marketing Adviser to Govt. of India
5	Dr.S.Sulochana, Senior Scientist, Indian Institute of crop processing technology, Pdukottai road, Tanjore <u>Representative of</u> Joint Secretary, Ministry of food Processing industries.
6	Shri. A.C. Philip, Principal Agricultural Officer, Ernakulam <u>Representative of</u> Secretary Agriculture, Govt. of Kerala
7	Dr. A. Jacob Rajasekaran, Chief Mahager, Indian Overseas Bank, P.O, Vettukattil Building, M.G.Road, Kochi – 682 016
8	Shri. M. Thomas Mathew, Chief Coconut Development Officer& Member Secretary, PAC, CDB,Kochi-11
B	EXPERTS
9	Dr. M. Aravindakshan, Chairman, CDB (Retd.), 17 / 794, Green Park, Thiruvambadi P.O, Thrissur

C	Others
10	Dr. K. Muralidharan, Director, Coconut Development Board
11	Shri. Jnanadevan R, Assistant Director, Coconut Development Board
12	Sri Sreekumar Poduval, Jr. Processing Engineer, Coconut Development Board
13	Shri.P.Balachandran Nair, Marketing Officer, Coconut Development Board
14	Shri.R.Madhu, Audit Officer, Coconut Development Board

Proceedings of the 33rd meeting of PAC of Technology Mission on Coconut held at Kochi on 15th March 2010

The 33rd meeting of the Project Approval Committee (PAC) on Technology Mission on Coconut was held at the Board Room of Coconut Development Board, Kochi on 15th March 2010 under the Chairmanship of Smt. Minnie Mathew IAS, Chairman, CDB and Chairman of PAC. Dr. M. Aravindakshan, former Chairman, Dr. Kuriachan.M.A. Prof. and Head, College of Pharmacy, Govt. Medical College, Calicut Dr. A.N.Srivatsa, Retd. Scientist ,DFRL, attended the meeting as expert members. The list of participants in the meeting is annexed.

The following Agenda items were taken up for consideration:

AGENDA No. 1: Confirmation of the Proceedings of 32nd Project Approval Committee Meeting held on 8th January 2010

The Committee confirmed the proceedings of the 32nd PAC Meeting

AGENDA No. 2: Action taken report of the 32nd PAC Meeting

The committee perused the action taken on the decision of the 32nd meeting of the PAC and also ratified the release of first installment of assistance to M/s Balaji Oil Industries.

AGENDA No. 3: Approval of new project proposals:

III. PROCESSING AND PRODUCT DIVERSIFICATION

1. Development and optimisation of a nutraceutical soft drink from indigenous varieties of Cocos nucifera - Amrita school of Pharmacy, AIMS, Ponekkara, Cochin at a total cost of Rs.171.52 lakhs.

The project was submitted by Dr. K.G.Revikumar, Amrita school of Pharmacy, AIMS, Cochin. The objective of the project is to (I) formulate and optimize a soft drink containing tender coconut water and other adaptogenic rejuvenating principles, natural antioxidants from traditional plants such as Trichopus zeylanicus and Emblica officinal is,(ii) to evaluate its antioxidant potential and rejuvenating characters by assessing various biochemical parameters

by invitro and in vivo techniques, (iii) to assess the shelf life period of prepared formulation by various stability studies for the purpose of commercial marketing and compare the prepared formulation with already available marketed products and (iv) to evaluate the developed optimized nutraceutical soft drink with the support of chemical analysis, pre clinical and clinical studies for biocompatibility and toxicological studies.

Dr. Srivasta, Director (Retd) DFRL stated that the technology for preservation and packaging of tender coconut water was standardized by DFRL and the technology is available. Tinkering with the tender coconut water is likely to change the composition especially alpha lactones and also the taste. Hence instead of tender coconut water mature coconut water which is available in large quantity may be tried as a base for the new formulation. Other committee members and experts also concurred with the view.

Hence the committee after detailed discussion opined that the study would be useful and suggested that a small investigative study to assess the possibilities of preparing coconut water based nutraceutical products may be sanctioned to Amrita school of Pharmacy for a duration of one year with essential cost. Large scale studies including clinical studies could be considered for funding based on the outcome of the investigative study. The PI may be asked to revise the project accordingly and submit to Chairman for consideration and approval.

2. Establishment of Desiccated Coconut Powder Unit - M/S. Sri Akshaya Agro Processing, Gedlehalli Village, Byranayakanahalli Post, Tiptur, Tumkur Dt. at a total cost of Rs. 108.00 lakhs.

The project was submitted by M/S. Sri Akshaya Agro Processing. The objective of the project is to set up a of Desiccated coconut Powder manufacturing unit with a capacity to process 30000 nuts per day involving an outlay of Rs.108.00 lakhs.

Sl. No.	Components	Project Cost	Eligible Cost	Eligible Subsidy
		(Rs. in lakhs.)		
1	Land & Land Development	Own	-	-
2	Work Shed/Building	50.00	39.296	9.824
3	Plant and Machinery	32.70	32.70	8.175
4	Electrification	5.33	5.33	1.333
5	Office and furniture	0.50	0.50	0.125
5	Working Capital	9.76	-	-
Total		108.00	77.826	19.457

The committee observed that the cost of the building and machineries was high. Hence the committee decided that the cost of the project be revised as per the costings in the model project approved by the PAC. The committee authorized the Chairman to sanction the eligible subsidy based on the revised costing.

3. Establish an industry for manufacturing of D.C. Powder & other bye products- M/s. Siddeswara Agro Industries, Siddapura Village, Konehalli Post, Tiptur Tk, Tumkur Dist. Karnataka at a total cost of Rs.133.51 lakhs

The project was submitted by M/s. Siddeswara Agro Industries. The objective of the project is to produce the Desiccated coconut Powder & other by products (chips) with the help of latest technology with a capacity to process 25000 nuts per day.

Sl. No.	Components	Project Cost	Eligible Cost	Eligible Subsidy
		(Rs. in lakhs.)		
1	Land	Own	0	0
2	Building & other civil works	46.25	40.64	10.16
3	Plant & Machinery	47.30	47.30	11.825
4	Blanching, Steaming Equipment & Effluent treatment	7.00	7.00	1.750
5	Furniture & Office equipments	0.72	0.72	0.180
6	Preliminary & Pre-op. Expenses	0.33	0.33	0.083
7	Working capital	28.00	0	0.000
8	Margin for contingencies	4.40	0	0.000
Total		134.00	95.99	23.998

The committee after detailed discussion decided that the building area should be reduced to 6500 sq. ft. Further the eligible cost should be revised based on the model project and the eligible subsidy reworked accordingly. The committee authorized the Chairman to sanction the eligible subsidy based on the revised cost.

4. Establishment of Virgin Coconut Oil Unit - The Kulanada Agricultural Marketing & Processing Co-operative Society Ltd., Reg. No. P.T.204, Kulanada, Pathanamthitta Dt. at a total cost of Rs.54.60 lakhs.

The project was submitted by Kulanada Agricultural Marketing & Processing Co-operative Society. The objective of the project is production of Virgin Coconut Oil and Coconut Vinegar. The installed capacity of the unit is to process 5000 coconuts per day for VCO and process 100 litres of coconut water in to Vinegar per day.

Sl. No.	Components	Project Cost	Eligible Cost	Eligible Subsidy
		(Rs. in lakhs.)		
1	Land and Development	3.00	3.00	0.750
2	Building (2093 Sq. ft.) & Other Civil Works	13.50	13.50	3.375
3	Plant & Machinery	35.10	25.00	6.250
4	Technical Know-how	0.50	0.50	0.125
5	Furniture and Office Equipments	0.20	0.20	0.050
6	Preliminary Expenses & Pre-operative Expenses	0.80	0.52	0.130
7	Working Capital Margin	1.50	...	...
Total		54.60	42.72	10.680

The committee after detailed discussion approved the project and decided to extend 25% of eligible cost as back ended capital subsidy to the unit limited to Rs.10.68 lakhs.

5. *Setting up a new 20 MT Coconut Oil Manufacturing Unit- M/s. KLF Nirmal Industries Pvt. Ltd., Perundurai in Tamil Nadu at a total cost of Rs.395.15 lakhs.*

The project was submitted by M/s. KLF Nirmal Industries Pvt. Ltd. The objective of the project is production and marketing of good quality coconut oil with installed capacity for crushing 20 MT copra per day.

The committee observed that cost of land, building, plant and machineries shown in the project cost appears to be on the higher side. It should be revised as per the model project and in comparison to the other units with the same capacity. The committee after detailed discussion approved the project subject to the following conditions:

- The extent of land cost thereof be reduced from 9.24 acres to 1 acre commensurate with the capacity of the unit.
- The cost of the building should be reduced to 10500 sq.ft.
- The unit should aims to export at least 5% of the total production as Govt. of India is extending various benefits of exports of coconut oil.

- d. The unit should obtain Agmark certification for the product.
- e. The bank loan sanction letter should be produced.

6. Setting up of Virgin coconut Oil Unit - M/s. Kottoor Extractions, 10th Mile, Udayamperoor, Ernakulam District, at a total cost of Rs.113.00 lakhs.

The project was submitted by M/s. Kottoor Extractions. The objective of the project is production and marketing of Virgin Coconut Oil in small packs. The installed capacity of the plant is to process 7500 coconuts per day for production of Virgin Coconut Oil and 100 litres of coconut water per day for vinegar.

Sl. No.	Components	Project Cost	Eligible Cost	Eligible Subsidy
		(Rs. in lakhs.)		
1	Land	10.50	10.50	2.625
2	Building(378.07 Sq. m)	45.00	26.46	6.615
3	Plant & Machinery	48.00	30.00	7.500
4	Technical know-how	0.50	0.50	0.125
5	Furniture and Office Equipments	3.00	3.00	0.750
6	Preliminary Expenses & Pre-operative Expenses	2.00	1.09	0.273
7	Working Capital Margin	4.00	0.00	0.000
Total		113.00	71.55	17.888

The committee decided that eligible cost for the building and machineries should be limited as per the model project. Further the cost of construction of compound wall also can be included in the eligible project cost. With these observations the committee approved the project and decided to extend 25% of eligible cost as back ended capital subsidy.

7. Setting up of an Integrated Coconut Processing Unit at Bantra Village, D.K. Dist, Karnataka- M/s. Panickers Coconut Industries, Bantra Village, Mardhala Post, Puttur Taluq, D.K. Dist. Karnataka at a total cost of Rs.99.00 lakhs

The project was submitted by M/s. Panickers Coconut Industries. The objective of the project is production of D.C., V.C.O., Coconut Vinegar and Nata-de-coco with a capacity to process 10,000 nuts per day.

Sl. No.	Components	Project Cost	Eligible Cost	Eligible Subsidy
		(Rs. in lakhs.)		
1	Land	Own	...	...
2	Building	27.00	26.64	6.660
3	Plant & Machinery	65.00	40.00	10.000
4	Technology	0.50	0.50	0.125
5	Furniture & Office equipments	0.50	0.50	0.125
6	Preliminary & Pre-op. Expenses	2.00	0.60	0.150
7	Working capital	4.00	0.00	0.000
Total		99.00	68.24	17.06

The committee after detailed discussion decided that the project cost be re-verified with the model project cost. Shri. Appaanna pointed out that in instances where the unit has availed of Venture Capital Assistance from SFAC, the comments of SFAC should be made available to the PAC. The Committee authorized the Chairman to extend 25% of eligible cost as back ended credit subsidy.

8. Setting up of 50 TPD Oil Expelling Mill at Kinfra Food Processing Park, Kakkancherry, Malappuram - M/s. Parisons Foods Pvt. Ltd, 6/1183, Cherooty Road, Calicut, Kerala at a total cost of Rs. 450.00 lakhs.

The project was submitted by M/s. Parisons Foods Pvt. Ltd. The objective of the project is to set up an oil expelling unit for the production of refined quality coconut oil with a capacity to process 50 tons of copra per day. The unit was inspected by the Processing Engineer to report about its current status. It has been reported that the unit has a 50 tpd coconut oil expeller plant which is housed in a separate building. The unit has commenced production with 60% capacity utilization and is marketing coconut oil with Agmark certification. Bank loan sanction, bills / vouchers for machinery and building etc. have been submitted.

The committee after detailed discussion approved the project and decided to extend 25% of the project cost as back ended subsidy limited to Rs.50.00 lakhs subject to the following conditions:

- a. The subsidy granted for establishment of expeller, filter etc. should be utilized for crushing copra only. Violation may lead to recovery of the subsidy from the Subsidy Reserve Fund Account.

- b. In view of the substantial subsidy being extended by the Board, the unit should benefit the farmers in the region. M/S Parisions should try to procure the bulk of copra for its requirements from the coconut farmers by establishing procurement centres in important coconut growing areas and from the coconut clusters of the Board in Kozhikode and Malappuram.
- c. As a part of its corporate social responsibility, M/s.Parisons should also consider providing financial support to local farmers for setting up primary processing facilities in identified clusters, as is being done by Marico in Malappuram District.

9. Establishment of Coconut Oil Extraction Unit - M/s. Sree Balaji Oil Mills, 8, Rajaji, Kangayam, Tirpur Dist, Tamil Nadu at a total cost of Rs.69.951 lakhs

The project was submitted by M/s. Sree Balaji Oil Mills. The objective of the project is setting up of a Coconut Oil Manufacturing Unit with Installed capacity to process 20 tones of copra per day. The committee observed that the cost of building and machinery proposed is underestimated compared to the total capacity of the unit and the rate approved in the model project. Hence the committee suggested that an officer of the Board may be deputed to inspect the unit and report on the installed capacity, costing and economic viability. The project may be considered in the next PAC based on the report.

10. Project for establishment of Desiccated Coconut Powder & Vinegar Manufacturing Unit -M/s. S.S. Coconut Industries, Kangayam, Thrupur Dist., Tamil Nadu at a total cost of Rs.96.74 lakhs

The project was submitted by M/s. S.S Coconut Industries. The objective of the project is procurement of fully ripened coconut and manufacturing desiccated Coconut Powder & Vinegar and marketing the products in small packs. Capacity of the unit is to process 15000 nuts per shift in two shifts.

Components	Total Project Cost (Rs. in lakhs)	Eligible Project Cost (Rs. in lakhs)	Maximum Eligible Subsidy (Rs. in lakhs)
Land & Land Development	7.00	1.20	0.300
Building & civil works	40.15	33.60	8.400
Plant & Machinery	29.51	29.51	7.377
Electrical Installation	4.59	4.59	1.148
Furniture & Fittings	0.75	0.75	0.187
Pre-op. Expenses	2.00	2.00	0.500
Working capital Margin	12.74	.....	.....
Total	96.74	71.65	17.912

The committee after detailed discussion decided that the cost of building and machineries should be verified with the model project approved by the PAC. The PAC authorized chairman PAC to approve the project with the revised costing.

11. Setting up of Activated Carbon production Unit at Anupatti, Tirupur Dist- M/s. Universal Carbons, 108 E/5, Trichy Road, Palladam, Tirupur Dist., at a total cost of Rs.312.22 lakhs.

The project was submitted by M/s. Universal Carbons. The objective of the project is manufacturing of Activated Carbon with a capacity to produce 3 MT per day.

Components	Amount (Rs. in lakhs)	Eligible cost	Eligible subsidy
Building Cost	93.37	50.00	12.50
Machinery			
Machinery - Indigenous	164.93	164.93	41.2325
Machinery - Imported	3.48	3.48	0.87
Freight & Erection charges	5.98	5.98	1.495
Contingency	9.96		-
Transformer EB Deposit & Dev charges	9.50		-
Working Capital Margin	25.00		-
TOTAL	312.22	224.39 (limited to Rs.200.00 lakhs)	50.00 (Limited to max ceiling)

The committee after detailed discussion approved the project and decided to extend 25% of eligible cost limited to Rs.50.00 lakhs as back ended capital subsidy to the unit.

12. Creation of infrastructure for primary processing of coconut - Kakkoor Coconut Producer's Society, Malappuram Dist. at a total cost of Rs.11.00 lakhs

The project was submitted by Kakkoor Coconut Producer's Society. The objective of the project is primary processing of coconut in clusters within the Kakkoor Village, Malappuram Dist.

Components	Total Project Cost (Rs. in lakhs)	Eligible Project Cost (Rs. in lakhs)	Maximum Eligible Subsidy (Rs. in lakhs)
Land	1.00	1.0	0.25
Building	4.40	4.04	1.01
Plant & Machinery	4.60	4.6	1.15
Preliminary & Pre-op. Expenses	0.10	0.09	0.022
Working capital	0.90	-	-
Total	11.00	9.73	2.432

The Committee observed that the project is to promote primary processing in one of the clusters of the Board by creating common infrastructure for copra production utilizing the marketable surplus available with the farmers of the clusters. The committee after detailed discussion approved the project in principle, subject to the submission of loan sanction letter from the Bank. The committee authorized Chairman PAC to sanction the eligible subsidy as worked out above on receipt of loan sanction letter from the bank.

13. Setting up a unit for preservation and packing of tender coconut water - M/s. Benzfab Foods Pvt Ltd, 1/19, Saheed Nagar, Bhubaneswar, Orissa at a total cost of Rs.200.41 lakhs.

The project was submitted by M/s. Benzfab Foods Pvt Ltd. The objective of the project is to set up processing unit for packaged tender coconut water with a capacity to process 10,000 tender coconuts per day at Bhubaneswar Orissa by adopting the technology developed by the BOARD and DFRL, including automation system. The technology has been transferred by DFRL.

Components	Amount (in lakhs.)	Eligible Cost (in lakhs)	Eligible Subsidy (in lakhs)
Land & Development	19.72	19.72	4.93
Building & Civil Works	62.76	62.76	15.69
Plant & Equipments	81.80	81.80	20.45
Technical know-how	3.15	3.15	0.79
Electrical Installations	23.00	23.00	5.75
Furniture and Fixture	7.50	7.50	1.87
Preliminary & pre-op. expenses	11.35	2.09	0.52
Working Capital Margin	11.13	0	0
Total	220.41	200.02	50.00

The committee after detailed discussion approved the project and decided to extend Rs.50.00 lakhs which is 25% of eligible cost as back ended capital.

14. *Demonstration of batch processing for the formulation & packaging of coconut oil based 2 T oil for small scale industrial units - Cochin University of Science and Technology, Kochi at a total cost of Rs.4.95 lakhs.*

The project was submitted by Dr. Ajith Kumar G., Reader, Mechanical Engineering, School of Engineering, CUSAT. The objective of the project is to demonstrate batch processing for the formulation & packaging of coco nut oil based 2 T oil for small scale industrial units.

The committee observed that an amount of Rs.4.95 lakhs was remaining with CUSAT under a project entitled “Marketing of Coconut Oil as two stroke Automobile Engine oil” sanctioned by the 7th PAC held on 13.9.03. The study includes patenting, certification, pricing, test marketing and market survey. The brand name of the coconut oil based two stroke engine oil was chosen as cocoil 2 T and the had firmed up the packing size and design of the container and ready to launch the product and obtained approval for the logo. The brand name and trademark was designed and formalities were completed to register the oil in name of CDB. The study was completed and the report was submitted on 4.11.2005.

The present project is for setting up a demonstration unit, conducting awareness programme/ work shop among the target group and for test marketing of the packaged product by distributing samples of produce. The committee pointed out that the final report of the study should indicate the statutory approvals if any for marketing and commercializing the product. The PI should check with Automotive Research Institute, Pune on the approvals and certifications, if any, to be obtained before launching the product on a commercial scale. The committee approved the proposals and utilization of balance funds available with CUSAT subject to the acceptance of the aforenative conditions by the PI.

IV. PEST AND DISEASE MANAGEMENT

15. *Mass multiplication of Parasitoids, Predators, Bio-Agents and large scale demonstration of Biological control of major insect pest and diseases of Coconut in Andhra Pradesh- Horticultural Research Station, Ambajipeta, Andhra Pradesh Horticultural University at a total cost of Rs.23.375 lakhs.*

The project was submitted by Dr. A. Sujatha, Principal Scientist (Entomology), Horticulture Research Station, Ambajipeta East Godavari District, AP. The objective of the project is mass production of parasitoids ie. *Bracon hebetor*, *Goniozus nephantidis*, *Brachymeria nosatoi*, Predator *Cardiastethus exiguous* and Bio-agents viz. *Metarhizium*, *T.viride*, *T.harzianum*, *T.hamatum* (fungal bio-agents), *Pseudomonas fluorescens* (Bacterial bio-agents) and *baculovirus* (viral bio-agent) and large scale demonstration of biological control of insect pests and diseases of coconut in farmer's garden.

The project envisages conducting five large scale demonstrations of biological control measures in the farmers field for the control of the pests, leaf eating caterpillar, rhinoceros beetle, and diseases like basal stem rot, stem bleeding and bud rot. Total area proposed for demonstration is 250 acres @ 50 acres per demonstration.

The committee observed that intensity of incidence of above pests and diseases are not indicated in the project report. The committee after detailed discussion suggested that cost of the project is too high which should be reduced to the minimum. The proposal for purchase of fermentor should be excluded since the Board has already sanctioned a fermentor in another project already sanctioned to APHU. Only one post of technical assistant is required. Only one refrigerator and Air-conditioner would be considered. The duration of the project may be reduced from 3 to 2 years. The PI may be asked to revise and re-submit the project accordingly. The PAC authorized the chairman PAC to approve the revised project.

16. Mixed cropping of Noni (Morinda citrifolia) in coconut gardens under different agro climatic conditions - Central Plantation Crops research institute (ICAR), Kasargod at a total cost of Rs.27.754 lakhs.

The project was presented by Dr. H P Maheswarappa, Senior Scientist (Agronomy). The objective of the project is to study the performance of Noni, as mixed crop in single and double hedge systems under coconut garden in different agro climatic conditions and to study the impact of mixed cropping of Noni with coconut on the productivity of coconut palms and soil fertility status. The committee opined that the cost of the project is too high and suggested that such a systematic study with different cropping system is not required. The committee suggested to conduct a small demonstration in the farmers field with single hedge system and a maximum financial assistance of Rs.5.00 lakhs. Economics of the cultivation of Noni in coconut garden and the marketability of the product should be brought out in the study report.

V. MARKET PROMOTION

17. Market Promotional Programme - To setup retail out let “KAVIL” for sale of Tender Coconut and Tender Coconut products

The project was submitted by Shri. Gangadaran P. Puliyanchery House, Muchukunnu, Koyilandi, Kozhikode dist. The objective of the project is to setup retail out let “KAVIL” for sale of Tender Coconut and Tender Coconut products such as: Tender coconut water, Tender coconut juice and Tender coconut Milk juice. The committee approved the project and sanctioned 50% of financial assistance (ie.) Rs.49,297/- on reimbursement basis based on the bills and vouchers submitted by the promoter.

Other Items

a. Ratification expenditure incurred for the survey of sawmills in Trivandrum and Kollam District by GSPU Associates.

The committee observed that data generated in the survey on the sawmills available in the Kollam and Trivandrum district will be useful for preparation of project report for modernization and expansion of these units in future for supporting the coconut wood processing sector which is poised for good growth on account of the massive replanting programme. Hence the committee ratified the expenditure incurred conducting the survey through GSPU Associates, the empanelled consultant.

b. Project for “Multi-locational Technology Demonstration on Coconut Mite Control in Coconut Growing States” –Payment of honorarium

The committee approved the payment of honorarium of Rs.36,000/- @ Rs.12,000/- per month to Dr. Sahoo, PI of the project, (Retd.) who was engaged in the project for three months after his retirement for completion of the project.

c. Project for “Technology of value added coconut based products”, CFTRI, Mysore - Extension of project period

The committee considered the reasons put forth for non-completion of the project in time. The procedural delays in getting clearance from Process Development Research Utilization Committee (PDRUC) were noted. It was decided to take up the procedural delays with the Director, CFTRI. The committee ratified the extension of the project period for 5 more months ie. upto 30th April 2010 without incurring any additional expenditure.

d. Project for “Control of Black Headed Caterpillar outbreak in Erode district of Tamil Nadu” –Extension of project period

The committee noted that a Joint Inspection of the project area was conducted by a team consisting of Officers of CDB and Dept. of Agriculture on 08.07.2009 and reported that very good control of pest was noticed after the 1st round release of parasite in the coconut garden as envisaged in the project. It is also reported that farmers have requested for further supply of parasitoids to control the pest. In view of the justification furnished by the Dept of Agriculture, the PAC approved the extension of the project period up to March 2011 without incurring any additional expenditure over and above the amount already sanctioned and to complete the second round release of parasitoids as envisaged in the project and submission of the final report.

e. Extension of time for implementation of the Market Promotion Programme of Kalpasree Brand coconut products manufactured and promoted by M/s Kallamkunnu Service Co-operative Bank Ltd. No. R 314, Irinjalakuda, Thrissur

The committee after detailed discussion approved the extension of the project period upto June 2010 without incurring any additional amount, as approved in the original project. The proposal for providing assistance for marketing vehicle may be considered at a later stage after assessing the progress of implementation of the already approved items and the sales turn over.

f. Project for “Proposal for Extension of the project “Expansion of the Integrated Processing Unit – M/s. Kallamkunnu Service Co-operative Bank

The committee approved the extension of the project period upto August 2010 for completion of work in connection of the existing Integrated Coconut Complex at Kallamkunnu.

g. Project for “Design and Development of New Machines for Integrated Coconut Processing”, CFTRI, Mysore - Extension of project period

The committee ratified the extension of the project period for 4 more months i.e. upto 22.05.2010 and the release of balance fund required for completing the project in view of the complexity of the works involved in achieving the remaining objectives and to bring the project to its logical conclusion.

h. Project for “Batch/continuous transesterification process for utilization of coconut oil for bio-diesel production”-IIP Dehradun - Extension of project period and utilisation of balance fund for further studies

The committee approved the extension of project period upto March 2010 considering the technical and administrative reasons furnished by the PI for the delay in completion of the project in time. The committee suggested that economics of production of biodiesel should be worked out and included in the final report of the project and sanctioned an amount of Rs.1.00 lakhs for this purpose.

The committee after detailed discussion did not approve the proposal for further studies for reducing the CFPP utilizing the balance amount. The project may be closed with the results reported in the final report and IIP should be requested to refund the unspent balance remaining with them immediately.

i. Pilot project “Establishment of Demonstration cum Training Centre for Coconut Products” under Technology Mission on Coconut” by Department of Horticulture, Govt. of Karnataka extension of project period, ratification of expenditure and deviation the original project report

The committee after detailed discussion ratified the extension of the project period up to 20.08.2009 and revalidating the unspent balance of Rs.30.39 lakhs in view of the assurance given by the Dept. of Horticulture, Govt. of Karnataka in the State Level Monitoring Committee (SLMC) meeting held on 30.06.2009 and the request made by the Secretary (Horticulture). The committee also ratified the additional expenditure incurred for the vinegar unit @ Rs.2.00 lakhs instead of Rs.1.00 lakh as approved in the original project.

The proposal of the Dept. of Horticulture for installation of VCO unit at a cost of Rs.18.00 lakhs with a capacity to process 1000 nuts per day by re-appropriating the amount earmarked for generator and electricity and payment of consultation fee for VCO unit establishment to CFTRI was not approved by the PAC.

The committee also approved further extension of the project upto September 2010 for completing all the works including the transfer of the ball copra drier developed under a study sanctioned to National Institute for Interdisciplinary Science and Technology. Coconut Development Board should take immediate action to transfer the drier at the earliest.

j. Project for “Integrated Coconut Development Scheme”, District Panchayat, Kozhikode Panchayat -Extension of project period

The PAC considered the reason put forth by Secretary District Panchayat for the extension. It was noted that during the initial period of implementation farmers were reluctant to apply chemical fertilizers. There was also delay in sanction of loan from District co-operative bank, Kozhokode to some clusters. The project was implemented with 50% credit from District Co-operative Bank Kozhikode. Besides Agricultural Officers of the Panchayath who were in charge of implementing the scheme were busy with implementation of other schemes of the Agricultural Department and Grama Panchayath. Taking into consideration the points mentioned by the Secretary District Panchayat, the PAC extended the project period up to 31st March 2010 for completing the project and submission of final report.

k. Revised project proposal for implementation of the Market Promotion Programme of Mr. Jude Martin, Karikku Park, Kochi for promoting the sale of Tender Coconut Water in most hygienic atmosphere through retail out let.

The committee did not agree to the deviation from the project approved by the earlier PAC. The committee suggested that the progress of implementation of the components already sanctioned by the PAC in its 31st meeting and the turn over should be reviewed. The proposal for including grant of subsidy for marketing vehicles can be considered at a later stage after ensuring that the project is being implemented satisfactorily.

l. Revised project proposal for implementation of the Market Promotion Programme of ‘Neethi’ Brand coconut products manufactured and promoted by M/s Karalam Service Co-operative Bank Ltd. No.600, Kizhuthani, Thrissur.

The committee after detailed discussion approved the extension of the project period up to March 2011 without incurring any additional amount, as approved in the original project. The proposal for providing assistance for vehicles for marketing may be considered at a later stage after assessing the progress of implementation of the components of the project already sanctioned.

m. Project proposal for Setting up of Coconut Wood processing and machining Unit - M/s. Keram Lumbers, Puthupally PO, Kayamkulam at total cost of Rs.142.00 lakhs

The objective of this project is put up a facilitation center, mini coconut wood processing plant and value added processed lumbar products. The project envisages

setting up a vacuum pressure impregnation plant (50 cft per charge) and seasoning unit (100 cft per charge) and complete wood working machines. Total cost of the project is Rs.142.00 lakhs out of which Rs.15.00 lakhs is the promoter's contribution, Rs.61.00 lakhs grant from CDB and Rs.66.00 lakhs is the bank loan.

In view of the urgency in developing / utilizing coconut timber processing units PAC after detailed discussion approved the project in principle and to extend 25% of the project cost as back ended capital subsidy limited to Rs.50.00 lakhs as per the existing norms of TMOC. The subsidy may be enhanced if National Steering Committee revises the norms and restores the original provision earmarked in the Technology Mission on Coconut for promoting wood processing units.

GENERAL DECISION

It was suggested that CDB and NABARD may conduct a study to review the cost of setting up of different coconut processing units and arrive at maximum ceilings for reducing the eligible project cost for different processing units.

Mr. Appanna General Manager, Technical Services Department, NABARD, Bombay suggested that in the case of small processing units where the cost of plant and machineries are less than 49% the working capital and pre-operative expenses and other fixed assets may also be included in the eligible cost limiting to 5% of the project cost for each of the component.

In conclusion Dr. M. Aravindakshan, Chairman, CDB (Retd.) and Dr. K V. Kasthuri Bai, Principal Scientist & Head of the Division of Plant Physiology & Post harvest Technology, CPCRI, Kasaragod expressed appreciation about the systematic and effective conduct of PAC meetings under the dynamic leadership Smt. Minnie Mathew IAS, Chairman, CDB who is leaving the Board shortly.

Chairman stated that she was greatly benefited by the experience and professionalism of the members of the PAC. She thanked the members and experts, especially Dr.M. Aravindakshan Shri.C.P.Appanna, Dr. Vilaschandran, Dr. A.N.Srivatsa, Shri. Thangaraj etc. for their valuable technical guidance and co-operation, in conducting the PAC meetings and taking proper decisions for the benefit of the coconut industry.

The meeting came to an end by 5.45 PM.

Director
For Chairman

33rd Meeting of PAC of TMOC on 15th March 2010 at Kerabhavan, Kochi

List of Participants

Sl. No.	Name and address
A	MEMBERS
1	Smt. Minnie Mathew, IAS, Chairman, Coconut Development Board, Kochi – 11
2	Dr. K V. Kasthuri Bai, Principal Scientist & Head of the Division of Plant Physiology & Post harvest Technology, CPCRI, Kasaragod -671 124. <u>Representative of</u> Assistant Director General (Plantation crops), ICAR
3	Shri.C.P.Appanna General Manager, Technical Services Department, 3rd Floor, B Wing, NABARD, Plot No. C –24, G Block Badra -KurIa Complex, Post Box No.8121, Bombay - 400 051
4	Shri M Thomas Mathew, Chief Coconut Development Officer & Member Secretary, PAC Coconut Development Board, Kochi – 11
B	EXPERTS
5	Dr. M. Aravindakshan, Chairman, CDB (Retd.), 17 / 794, Green Park Thiruvambadi P.O, Thrissur
6	Dr. A.N.Srivatsa, Retd. Scientist, 411, A & B Block,
7	Dr.Kuriachan.M.A., Prof. and Head, College of Pharmacy, Govt. Medical College, Calicut
C	OTHERS
8	Dr. K. Muralidharan, Director , Coconut Development Board, Kochi – 11
9	Sri. A.K.Nandi, Secretary, Coconut Development Board, Kochi
10	Shri Sreekumar Poduval, Jr. Processing Engineer, Coconut Development Board, Kochi
11	Shri. R. Jnanadevan, Assistant Director (TMOC), Coconut Development Board, Kochi

Proceedings of the 34th meeting of PAC of Technology Mission on Coconut held at Kochi on 11th November 2010

The 34th meeting of the Project Approval Committee (PAC) on Technology Mission on Coconut was held at the Board Room of Coconut Development Board, Kochi on 11th November 2010 at 10.30 am. The list of members attended the meeting is annexed.

The following Agenda items were taken up for consideration:

AGENDA No. 1: Confirmation of the Proceedings 33rd Project Approval Committee Meeting held on 15th March 2010

The Committee confirmed the proceedings of the 33rd PAC Meeting

AGENDA No. 2: Action taken report of the 33rd PAC Meeting

The committee perused the action taken on the decision of the 33rd meeting of the PAC and approved the proposal to cancel the approval granted for setting up retail outlet “KAVIL” and Mr.Jude Martin for sale of tender coconut with prior intimation to the party. PAC also opined that in the case of Karalam Service Co-operative Bank proposal for procuring vehicle which was not included in the original proposal need not be considered at this stage. The society is yet to avail Rs.12.00 lakhs already sanctioned in the original proposal.

AGENDA No. 3: Approval of new project proposals:

1. Project proposal for Establishment of Desiccated Coconut Powder Unit - M/s. Dhanalakshmi Food Tech, Gedlehalli, Halkurke Road, Byranayakanahalli Post, Tiptur at total cost of Rs.61.92 lakhs

The objective of the project is to setup a desiccated coconut powder manufacturing unit with a capacity to produce 3.24 ton desiccated coconut per day.

Components	Amount (in lakhs.)	Eligible Project Cost (Rs. in lakhs.)	Maximum Eligible Subsidy (Rs.in lakhs.)
Land	0.62	.....	.....
Building	29.00	20.00	5.00
Plant and Machinery	21.10	21.10	5.275
Electricity Deposit	1.20	.....	....
Working Capital	10.00	.....	....
TOTAL	61.92	41.10	10.275

The PAC opined that clarification has to be obtained as to whether unsecured loan carry any interest. In any case term loan has to be repaid first with interest before clearing the unsecured advances. PAC approved the project with an eligible subsidy of Rs.10.275 lakhs as 25% of eligible cost to produce 3.24 ton desiccated coconut per day subject to the condition that the unit should install blanching and steaming facilities and incorporate effluent treatment system.

2. Setting up of a Desiccated coconut powder and flakes unit at Alathur, Palakkad - M/s. Maharaja Coconut Products, Panthakkalmedu, Thenkurissi PO, Palakkad at a total cost of Rs.37.10 lakhs.

The objective of the project is to setup a desiccated coconut powder and flakes manufacturing unit with a capacity to produce 270 ton desiccated coconut powder per annum.

Components	Project Cost	Eligible project cost	Eligible subsidy
	(Rs. in lakhs)		
Machinery & installation	21.11	21.11	5.280
Preliminary Expenses	0.19	0.19	0.040
Total Working capital	15.80	-	-
Total	37.10	21.30	5.32

The committee approved the project with an eligible subsidy of Rs.5.32 lakhs to produce 270 ton desiccated coconut powder per annum subject to the condition that the unit should install blanching and steaming facilities and incorporate effluent treatment system.

3. Setting up a unit for Desiccated Coconut - M/s. Umamaheswari Industries, KN Hally, B. H. Road, Tiptur Taluk, Tumkur Dist, at a total cost of Rs.49.90 lakhs

The objective of the project is setting up of a unit for production of desiccated coconut with a capacity to process 16000 nuts per day.

Components	Amount (in lakhs.)	Eligible Cost (in lakhs)	Eligible Subsidy (in lakhs)
Land	Own	-	-
Building	30.00	19.84	4.96
Machinery	18.50	18.50	4.625
ET Plant	1.00	1.00	0.25
Other fixed assets	0.10	-	-
P.O.P.	0.10	0.10	0.02
Margin for contingencies	0.20	-	-
Total	49.90	39.44	9.855

The committee approved the project with an eligible subsidy of Rs.9.855 lakhs to process 16000 nuts per day to produce desiccated coconut powder subject to the conditions that the unit should install blanching and steaming facilities and incorporate effluent treatment system.

4. *Setting up of Activated Carbon unit - M/s. Sundar Carbon, Fisheries College, Backside, Madurai Bypass Road, Tuticorin, at a total cost of Rs.530.00 lakhs*

The objective of the project is manufacturing of activated carbon with a capacity to produce 12 tons of activated carbon per day.

Components	Project Cost (Rs. in lakhs)	Eligible Cost (Rs. in lakhs)	Eligible Subsidy (Rs. in lakhs)
Land	2.00	2.00	Limited to Rs.50.00 lakhs
Building & Civil works	153.00	152.00	
Plant & Equipments	375.00	323.00	
TOTAL	530.00	478.00	

The committee after detailed discussion decided that the land cost may be excluded while working out the eligible cost. The committee approved the project with an eligible subsidy limited to Rs.50.00 lakhs to produce 12 tons of activated carbon per day subject to the condition that the waste heat recovery unit may be introduced and on ascertaining the raw material availability.

5. *Setting up of a Desiccated Coconut Powder manufacturing Unit - M/s. V & V Agro Foods, Plot No. 4, SIDCO Industrial Park, Kulappully, Shornur, Palakkad Dist, at a total cost of Rs.172.95 lakhs*

The objective of the project is manufacturing of desiccated coconut powder with a capacity to process 35000 nuts per day.

The committee after detailed discussion decided that the land cost may be excluded while working out the eligible cost since it is a leased land and the pay back period should be not less than 5 years. The PAC suggested that the promoter/ consultant should present the technical details of the proposed machineries before the next PAC. The project is deferred.

6. *Expansion of Saw Mill & coconut wood seasoning unit at Neendakara - M/s. Steffi Saw Mill, Parimanam, Neendakara PO, Karunagappally Tk, Kollam Dist at a total cost of Rs.13.36 lakhs.*

The objective of the project is chemical treatment of the coconut wood by immersing in a tank for seasoning.

Components	Project Cost (Rs. in lakhs)	Eligible Cost (Rs. in lakhs)	Eligible Subsidy (Rs. in lakhs)
Land	3.00	1.33	0.332
Building & Civil works	2.90	2.90	0.725
Plant & Equipments	6.70	6.70	1.675
Electrical installation	0.35	0.35	0.088
Pre-operative Expenses	0.11	0.11	0.027
Working Capital Margin	0.30	-	-
TOTAL	13.36	11.39	2.847

The PAC authorized Chairman to approve the proposal subject to the condition that the cost of additional machinery, seasoning tanks and additional shed for coconut wood processing may be separated and eligible subsidy reworked.

7. Expansion of Saw Mill & coconut wood seasoning unit at Varkala Block, TVM Dist. - Rich Saw Mill, Kavalayoor, Perumkulam PO, Chirayinkezhu Taluk, Attingal, TVM at a total cost of Rs.17.66 lakhs

The objective of the project is expansion of saw mill & coconut wood seasoning unit through chemical treatment of the coconut wood and by immersing in a tank for seasoning. The capacity of the unit is 25 coconuts trees per week.

Components	Project Cost (Rs. in lakhs)	Eligible Cost (Rs. in lakhs)	Eligible Subsidy (Rs. in lakhs)
Land	4.50	1.734	0.4335
Building & Civil works	5.00	5.00	1.25
Plant & Equipments	7.38	7.38	1.845
Electrical installation	0.35	0.35	0.088
Pre-operative Expenses	0.11	0.11	0.027
Working Capital Margin	0.32	-	-
TOTAL	17.66	14.574	3.6435

The PAC authorized Chairman to approve the proposal subject to the condition that the additional cost for machinery, seasoning tanks and additional shed for coconut wood processing may be separated and costing worked out separately for granting eligible subsidy.

8. Establishment of Coconut Oil Extraction Unit - M/s. Sree Balaji Oil Mills, Rajaji, Kangayam, Tirpur Dist, Tamil Nadu at a total cost of Rs.79.11 lakhs

The objective of the project is setting up of a coconut oil manufacturing unit with a capacity to crush 10 MT of copra per day into oil.

Components	Total Project Cost (Rs. in lakhs)	Eligible Project Cost (Rs. in lakhs)	Maximum Eligible Subsidy (Rs. in lakhs)
Land Development	9.25	7.24	1.81
Building & Civil works	18.80	18.80	4.70
Plant & Equipments	33.38	33.38	8.345
Furniture and Fittings	0.50	0.50	0.125
<i>Electrical Installations</i>	8.57	8.57	2.142
Preoperative expenses	1.90	0.724	0.181
Working Capital Margin	6.71	....	....
TOTAL	79.11	69.214	17.303

The committee approved the project with an eligible subsidy of Rs.17.303 lakhs to crush 10 MT of copra per day into coconut oil.

9. Setting up of a Coconut Shell Powder Unit - M/s. VG Tinder Products (P) Ltd, Nagar Main Road, Reddiyur, Salem, Tamil Nadu at a total cost of Rs.92.43 lakhs

The objective of the project is to setting up of a coconut shell powder unit with a capacity to process 12 MT coconut shell per day to produce coconut shell powder.

Components	Amount (in lakhs)	Eligible Cost (in lakhs)	Eligible Subsidy (in lakhs)
Land & Development	9.75	8.833	2.208
Building & Civil Works	30.88	25.00	6.25
Plant & Machinery	39.37	39.37	9.842
Electrical & Electronic Equipments	2.83	2.83	0.707
Furniture and Fixture	0.50	0.50	0.125
Pre-op. expenses	5.00	0.883	0.220
Working Capital Margin	4.10	-	-
Total	92.43	77.416	19.352

The committee approved the project with an eligible subsidy of Rs.19.352 lakhs to process 12 MT coconut shell per day to produce coconut shell powder as per the revised costing suggested by the Project Approval Committee.

10. Setting up of a Coconut shell powder Manufacturing unit - M/S. Venkateswaran Traders, Shan Nivas IIIrd Cross, Shivaya Nagar, Reddiyur, Salem, Tamil Nadu at a total cost of Rs.74.81 lakhs

The objective of the project is manufacturing of coconut shell powder to process 15 MT shell per day to produce coconut shell powder

Components	Project Cost	Eligible project cost	Eligible subsidy
	(Rs. in lakhs)		
Land	5.00	-	-
Plant & machinery	50.00	50.00	12.50
Building	3.00	-	-
Furniture & fittings	0.50	0.50	0.12
Electrical installation	2.00	2.00	0.50
Pre-op. expenses	2.50	0.61	0.15
Working capital	11.81	-	-
Total	74.81	53.11	13.27

The committee approved the project with an eligible subsidy of Rs.13.27 lakhs to process 15 MT shell per day to produce coconut shell powder by excluding the land cost since the land is on lease.

11. Setting up a unit for Coconut Shell Powder - M/s. Vetham Agro Industries, Sundar Kudil, Perumal Koil Street, Ramanathapuram, Coimbatore at a total cost of Rs.100.00 lakhs

The objective of the project is manufacturing coconut shell powder with a capacity to process 10 MT shell per day.

Components	Amount (in lakhs.)	Eligible Cost (in lakhs)	Eligible Subsidy (in lakhs)
Land & Development	5.50	5.50	1.37
Building & Civil Works	16.00	13.80	3.45
Plant & Machinery	53.34	30.00	7.50
EB Deposit	5.00	-	-
Electrical & Electronic Equipments	5.34	-	--
Furniture and Fixture	0.53	0.53	0.133
Pre-op. expenses	2.47	-	-
Working Capital Margin	11.82	-	-
Total	100.00	49.83	12.45

Electrical items and pre-operative expenses can be subsidized as per norms if details are furnished. The PAC approved the project as per the revised costing suggested by the Project Approval Committee with an eligible subsidy of Rs.12.45 lakhs to process 10 MT shell per day to produce coconut shell powder subject to the above suggestions.

12. Setting up of a unit for Coconut Shell powder - Sri Soubhagya Agro Foods & Minerals Pvt Ltd, TSR Complex, Visakhapatnam at a total cost of Rs.76.83 lakhs

The objective of the project is to establishment of coconut shell powder with a capacity to produce 3000 tons coconut shell powder per annum.

Components	Project Cost (Rs. in lakhs)	Eligible Cost (Rs. in lakhs)	Eligible Subsidy (Rs. in lakhs)
Land	10.18	6.732	1.683
Land Dev & Civil works	22.00	20.00	5.500
Plant & Equipments	29.36	29.36	7.340
Electrical equipment and fittings	15.29	10.00	2.500
Total	76.83	59.36	16.523

The committee approved the project with an eligible subsidy of Rs.16.523 lakhs to produce 3000 tons coconut shell powder per annum as per the revised costing suggested by the Project Approval Committee.

13. Construction of Godown for making ball copra - Shri. Gokavarapu Venkata Ramana Murthy, Mnachavaram Panchayath, Ambajipeta E. Godavari Dist, Andhra Pradesh at a total cost of Rs.12.50 lakhs

The objective of the project is storage and ball copra making with a capacity to process 3000 nuts per batch.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakhs)		
Land & Development	Own	...	...
Building & Civil Works for godown	12.50	8.65	2.160
TOTAL	12.50	8.65	2.160

The committee approved the project with an eligible subsidy of Rs.2.160 lakhs to process 3000 nuts per batch of 3 months.

14. Setting up of a grated coconut factory at Ezhupunna - M/s. Tharakan Foods Private Limited., Ezhupunna, Cherthala at a total cost of Rs.128.00 lakhs

The objective of the project is to establishing a factory for manufacturing grated coconut with a capacity to process 4000 – 5000 nuts per day.

Components	Project Cost	Eligible project cost	Eligible subsidy
	(Rs. in lakhs.)		
Building –Factory	35.00	35.00	8.75
Store	10.00	10.00	2.5
Plant and machinery	54.42	54.42	13.605
Factory Furniture	1.40	1.40	0.35
Electrification	2.50	2.50	0.625
Utensils	1.00	1.00	0.25
Fermentation Jars	0.45	0.45	0.1125
Water tanks	0.60	0.60	0.15
Office furniture	0.35	0.35	0.0875
Computer and UPS	0.45	-	-
Contingencies	1.83	-	-
Working capital	20.00	-	-
TOTAL	128.00	105.72	26.43

The committee approved the project with an eligible subsidy of Rs.26.43 lakhs to process 4000 – 5000 nuts per day for producing grated coconut.

15. Minimal Process of Tender Coconut - M/s. PVR Honey Hills (India) Pvt. Ltd., Madivala, Bengaluru, Karnataka at a total cost of Rs.15.70 lakhs

The objective of the project is to setting up of a unit for Minimal Processing of Tender Coconut with a capacity to process 5000 nuts per day.

Components	Project Cost (Rs. in lakhs)	Eligible Cost (Rs. in lakhs)	Eligible Subsidy (Rs. in lakhs)
Land	...	...	...
Building	1.50	1.50	0.375
Plant & Machinery	3.00	3.00	0.750
Cold Storage	1.90	1.90	0.475
Electrical Fittings	0.50	0.50	0.125

Furniture & Fixtures	0.50	0.50	0.125
Vehicles	3.00	...	...
Crates	0.60	0.60	0.150
Other Assets	0.50	...	...
Advance to Warehouse cum Office	1.50	...	...
Miscellaneous Assets	0.30	0.30	0.075
Companies retail outlets 6 Nos	0.40	...	...
Working Capital Margin	2.00	...	...
Total	15.70	8.30	2.075

The committee approved the project with an eligible subsidy of Rs.2.075 lakhs to process 5000 nuts per day for producing minimally processed Tender Coconut

16. Setting up of a unit for preservation and packing of Tender coconut water” at Nallamannar Kottai, Dindigul, Tamilnadu - VSA Foods & Beverages Pvt. Ltd, Market Yard, Gultekdi, Pune, Maharashtra

The objective of the project is preservation and packing of Tender coconut water with a capacity to process 10000 Tender Coconut per day.

Components	Project Cost	Eligible Cost	Eligible Subsidy
	(Rs. in lakhs)		
Land & Land Dev.	10.80	10.80	2.700
Building	42.70	34.37	8.590
Plant & Equipments	68.10	68.10	17.025
Electrification	10.00	10.00	2.500
ISO Certificates	2.50	2.50	0.625
Technical Know-how	3.86	3.86	0.965
Furniture & office equipments	6.00	6.00	1.500
Preliminary & Pre-op. Expenses	10.00	1.282	0.320
Total	153.96	136.912	34.225

Authorized Chairman to approve the project for processing 10000 nuts per day for producing tender coconut water as per the recommendations of DFRL on the cost of plant & equipments.

17. Expansion of the coconut Oil manufacturing unit - M/s. Kera Mitra, Engandiyur Post, Trichur at a total cost of Rs.84.43 lakhs

The objective of the project is enhancing capacity of the unit to 5000 nuts by installing additional expeller & coding machine in the coconut oil manufacturing unit.

Components	Existing (Amount in lakhs)	Proposed (Amount in lakhs)	Total (Amount in lakhs)	Eligible Cost (Amount in lakhs)	Eligible subsidy (Amount in lakhs)
Land	18.00	...	18.00	-	-
Building	10.48	...	10.48	-	-
Machinery & Equipment	32.45	19.86	52.31	19.86	4.965
Working capital	23.50	...	23.50	-	-
TOTAL	84.43	19.86	104.29	19.86	4.965

The committee approved the project with an eligible subsidy of Rs.4.965 lakhs to process 5000 nuts per day (ie. 2000 nuts additionally to the existing capacity) for producing coconut oil. PAC also opined to release subsidy only after receiving certificate regarding purchase of the machineries through bank payments.

18. Setting up of a Coconut copra processing unit - M/s. Shri Vigneshwara Coconut Industries, Elimale, Sullia at a total cost of Rs.32.00 lakhs

The objective of the project is to setting up of a copra processing unit with a capacity to convert 10000 nuts per day.

Components	Project Cost	Eligible project cost	Eligible subsidy
	(Rs. in lakhs)		
Land	Own	-	-
Building	8.75	6.70	1.675
Plant & Machinery	3.70	3.70	0.925
Generator	3.00	3.00	0.75
Electrification & Misce. assets	0.65	0.65	0.16
Transportation LCV	5.25	-	-
Preliminary expenses-Assets	0.65	0.167	0.21
Working capital	10.00	-	-
Total	32.00	14.217	3.72

The committee approved the project with an eligible subsidy of Rs.3.72 lakhs to convert 10000 nuts per day to copra.

19. Expansion of the existing coconut processing unit - M/s. Modern Oil Mills, Kozhikottiri, Ottappalam Taluk, Palakkad at a total cost of Rs.44.00 lakhs

The objective of the project is producing filtered coconut oil and milling copra with a capacity to process 17000 nuts per day.

Components	Total Project Cost (Rs. in lakhs)	Eligible Project Cost (Rs. in lakhs)	Maximum Eligible Subsidy (Rs. in lakhs)
Land	4.35	-	-
Building	25.30	14.826	3.7065
Plant & Machinery	12.25	12.25	3.0625
Preliminary & Pre-op. Expenses	0.10	0.10	0.025
Working capital	2.00	-	-
Total	44.00	27.176	6.794

The committee approved the project with an eligible subsidy of Rs.6.794 lakhs to process 17000 nuts per day (ie. 2000 nuts additionally to the existing capacity) for producing coconut oil.

20. Setting up of coconut wood processing unit at Attingal - Forest Industries (Travancore) Ltd. (A Kerala Govt. company), Thaikkattukara PO, Aluva

The objective of the project is establishing an integrated coconut wood processing unit with a capacity to process 2.4 lakh cu ft of round logs from 17143 trees per annum.

Components	Project Cost Amount (Rs. in lakhs)
Land Dev.	5.00
Building	45.00
Plant & Machinery	275.00
Furniture	5.00
Pre-op. Expenses	10.00
Working capital	59.00
Total	399.00

The project is proposed to be fully funded by the Government. The PAC suggested that stake holders meeting including Secretary Finance, Industries Govt. of Kerala etc. may be organized to finalize the operationalization of the project as well as flow of funds before considering the case. Initially the project may be considered at 50% level involving an outlay of Rs.200 lakhs for providing assistance as per TMOC norms. May be deferred for the time being.

21. A pilot study on Development of a nutraceutical preparation using nut water - Amrita school of Pharmacy, AIMS, Ponekkara, Kochi at a total cost of Rs.13.50 lakhs.

The project was submitted by Dr. K.G. Revikumar, Amrita school of Pharmacy, AIMS, Ponekkara, Cochin. The objective of the project is 1) to conduct a pilot study at the Amrita School of pharmacy laboratories for formulating a nutraceutical preparation using coconut water, 2) to study the stability issues related to preservation of coconut water and tender coconut water covering the natural sources and commercial products available in the local market, 3) to study the problems associated with the fortification of coconut water with nutraceuticals including antioxidants.

The PAC approved the project with Board's share of Rs.13.5 lakhs subject to the condition to under take the study with 6 and 8 months old tender nuts. The outcome of the study should be published in reputed journals with the permission of the Board and due acknowledgement to be made on Coconut Development Board.

22. Pilot trial on large-scale vermicomposting of tender coconut waste. - Horticultural Research Station, Andhra Pradesh Horticultural University, West Godavari Dt, AP at a total cost of Rs.3.27 lakhs

The project was submitted by Smt. M. Kalpana, Scientist (Hort) Senior scale, Horticultural Research Station, Ambajipeta. The objective of the project is to standardize the large scale vermicomposting of tender coconut waste.

The PAC authorized Chairman to approve the project on receipt of revised proposal incorporating the suggestions of ISC/ Project Appraisal Committee.

23. Enrichment of coconut chips as a functional food - Department of Food Science and Technology, Pondicherry University, Puducherry at a total cost of Rs.46.20 lakhs

The project was submitted by Dr. N. Sangeetha, Lecturer, (Food Product Development and Therapeutic Nutrition) Department of Food Science and Technology,

Pondicherry University, Puducherry. The objective of the project is 1) Standardization and estimation procedure for various phytochemical in related produce which are to be used as functional food. 2) To develop a variety of coconut chips by intercropping related produce. 3) To analyze the nutrient and phytochemical content of the developed coconut chips so as to highlight its various functional food characteristics. 4) To evaluate the sensory attributes of the developed coconut chips. 5) To select the suitable packaging material for increasing the shelf life of developed chips.

The committee was of the opinion that the study need not be funded under TMOC as the objectives are not justifiable for commercial application.

24. Evaluation of Mass Trapping Technology for coconut black headed caterpillar (Opisina arenosella) by using indigenously developed Sex Pheromone Lures and Traps. - Bio-control Research Laboratories, Division of Pest Control (India) Pvt. Ltd., Arakere, Bangalore at a total cost of Rs.15.85 lakhs.

The project was submitted by Dr.(Mrs.) K.R.M.Bhanu, Assistant General Manager, Research (Pheromones), Bio-control Research Laboratories. The objective of the project is to standardize the height of the trap and trap density for maximizing capture of male Opisina arenosella adults, under field conditions, Evaluation of the potential of pheromone based mass trapping as a stand alone tool for management of coconut black headed caterpillar under farmers' field conditions and Demonstration of the utility of pheromone trap as a surveillance and monitoring tool in IPM of Opisina arenosella, in combination with release of larval parasitoids.

The committee approved the project with Board's share of Rs.7.926 lakhs as 50% share subject to the following:

- The demonstration may be taken up in two locations namely Arsikere & Mandya. Substitute the word 'dosage' with 'trap density'.
- All the objectives should be taken up in all the plots simultaneously.
- In the demonstration methodology in each plot treatments may be taken up individually and in combination with pheromones.
- Three years data to be collected and compiled.
- In the final report cost of the lure should be indicated.

25. Large scale procurement of seed nuts from superior dwarf by screening and identification In Southern Zone of Kerala - Kerala Agricultural University, Onattukara Regional Agricultural Research Station, Kayamkulam at a total cost of Rs.13.43 lakhs

The project was submitted by Dr. Sverup John, Project Director, ORARS, Kayamkulam. The objective of the project is large scale procurement of seed nuts for the production of seedlings (30000 dwarf nuts) with comparative tolerance stress conditions.

The committee approved the revised project with Board's share of Rs.13.43 lakhs for large scale procurement of seed nuts for the production of seedlings (30000 dwarf nuts) with comparative tolerance stress conditions. The committee also suggested to obtain the progress report every six months.

26. Market Promotional Programme for production and marketing of coconut Vinegar under the brand name "KERAL" - M/s. Green Indus Group, Mathilakam, Thrissur, District, Kerala

The objective of the project is to undertake market promotional activities of Coconut Vinegar, under the brand name "KERAL" .

The committee approved the project for reimbursement of 50% of expenditure incurred for market promotion activities such as advertisement through electronic media and hoardings of coconut vinegar limited to Rs.2.36 lakhs during 2010-11 being 5% of the sales turn over for the year 2009-10.

27. Market Promotional Programme Coconut processing for the production of good quality filtered coconut oil under the brand name "CHOMS" – M/s. Chettor Oil Mills Peringuzha, Muvattupuzha, Ernakulam

The objective of the project is to undertake market promotion activities for filtered coconut oil under the brand names "CHOMS".

The committee approved the project for reimbursement of 50% of market promotion expenditure limited to maximum Rs.10.00 lakhs as per approved norms.

Sl. no.	Component	Amount (In lakhs)
I	Brand publicity through Print Media:	
	a) Advertisement in TV	3.0
	b) Advertisement in News Paper	1.0
	Advertisement in Weeklies / Magazines	1.0
	Subtotal	5.00
II	Expenditure towards AGMARK Standards	2.00

III	Establishment of retail outlet	3.00
IV	Website Development	2.00
V	Purchase of sales Van	7.00
VII	Participation in Exhibition	3.00
VIII	Printing of Leaflets, Brochures, Posters, etc.	5.00
	Total	27.00

28. Market Promotional Programme for promoting product 'KERASREE' Coconut oil.- M/s Kotachery Co-operative Marketing Society ltd, No. L. 354, Kotachery, Kanhangad P.O., Kasaragod District, Kerala

The objective of the project is to carry out various market promotional programme for promoting the product 'KERASREE'.

The committee approved the project for reimbursement of 100% of market promotion expenditure as per approved norms limited to a maximum of Rs.24.50 lakhs over three years for the following:

Sl. no.	Component	Amount (In lakhs)		
		2009-10	2010-11	2011-12
1	Brand publicity through electronic Media – to make film and telecast in local TV	1.00	2.00	2.00
2	Brand publicity through Print media – to Advertise in local News papers	0.50	2.00	2.00
3	Establishment of retail out let	2.00	--	--
4	Installation of vending machine	0.50	--	--
5	Erection of Hoardings (100 Nos)	1.00	1.50	1.50
6	Printing of Posters, Pamphlets, Leaflets, Dangers, POP sales aid materials etc.	0.50	1.50	1.50
7	Transportation Vehicle.	1.00	---	---
8	Arranging display facilities in Railway Stations	--	0.50	1.00
9	Brand publicity through print Media- Advertisement in News paper / Weeklies.	2.00	3.00	3.00
10	Taking part in Exhibitions / Meals / Festivals	--	0.50	1.00
	TOTAL	6.50	8.00	10.00

29. Market Promotional Programme for promoting the Agmark grade coconut oil under the brand name "CRYSTAL" - Modern oil mills, Kozhikottri P.O., Palakkad District

The objective of the project is to undertake market promotion activities for Agmark grade coconut oil under the brand name “CRYSTAL”.

The committee approved the project for reimbursement of 50% of the expenditure as per norms limited to Rs.10.00 lakhs for the following:

Sl. no	Component	Amount (In lakhs)		
		2010	2011	2012
I	Brand publicity through Print Media	2.00	2.00	-
II	Brand publicity through Print Media			
	Advertisement in news papers	1.00	1.00	0.50
	Advertisement in Weeklies	1.00	0.50	-
III	Agmark Standards	0.50	-	-
IV	Setting up of retail outlets	2.00	-	-
V	Vending machine	1.00	-	-
VI	Goods vehicle	5.50	-	-
VII	Display of coconut products at Railway Stations	0.50	0.50	-
VIII	Participation in Exhibitions	0.50	1.00	-
IX	Erection of hoardings	1.00	0.50	0.50.
X	Printing of Leaflets, Pamphlets, Brochures, Posters, etc.	1.00	0.50	0.50
	TOTAL	16.00	6.00	1.50

30. Market Promotional Programme for promoting Agmark grade coconut oil under the brand name “DOUBLECOCK”- M/s. Ramananda Oil and flour Mills, South Bazar, Cannanore District

The objective of the project is to undertake market promotion for Agmark grade coconut oil under the brand name “DOUBLECOCK”.

The committee approved the project to reimburse 50% of market promotion expenditure as per norms limited to a maximum Rs.10.00 lakhs over three years.

Sl. no.	Component	Amount (In lakhs)
I	Brand publicity through Electronic Media:	9.00
II	Brand publicity through Print Media:	5.00
III	Printing of Leaflets, Brochures, Posters, Dangers, etc.	4.00
IV	Cargo Vehicle	5.58
	Total	23.58

31. Market Promotional Programme for promoting the premium grade Virgin coconut oil under the brand name “OLILIFE”, “OLI KID”, “VISCON” & “VCOCARE” - M/s. Sritara Agrotech, Tip Top Towers, Kurnool Road, ONGOLE Andhra Pradesh

The objective of the project is to undertake market promotion activities for premium grade VCO intended for cosmetic, medical, skin care, and edible use under the brand names “OLILIFE”, “OLI KID”, “VISCON” & “VCOCARE”.

The committee approved the proposal for reimbursement of 50% of market promotion expenditure as per approved norms limited to a maximum of Rs.10 lakhs.

Sl. no	Component	Amount (In lakhs)	
		2010	2011
I	Brand publicity through Electronic Media	0.50	1.50
II	Brand publicity through Print Media	0.90	4.10
III	Parlours, Kiosks, Ware house, etc.	0.30	1.70
IV	ISO,HACCP Organic certification	nil	2.00
V	Participation in Exhibitions/ Fairs/Melas etc and conducting seminars	0.30	2.70
VI	Printing of Leaflets, Pamphlets, Brochures, Posters, etc.	0.75	9.25
VII	Developing and hiring display facilities in food chain markets	0.20	3.00
VIII	Product display	0.10	2.00
IX	Brand registration	0.15	0.85
	TOTAL	3.20	27.10

Other Items

1. Proposal for allocation of fund for the period April 2010-March 2011 for Quality Testing Laboratory at Vazhakulam

The committee approved the project for allocation of Rs.18.00 lakhs for the period of April 2010 to March 2011 and ratification of Rs.5,03,375/- incurred towards recurring expenditure like purchase of chemicals/media, minor maintenance and salary for contract staff during April 2010-Oct 2011.

2. **Project for the establishment of virgin coconut oil manufacture unit & bottling and packaging unit at Kolenchery K & P Associates, Karukappilly, Kolenchery – Extension of project period – ratification for delay**

The committee ratified the delay occurred in completion of the project up to August 2010.

- 3. Pilot project “Establishment of Demonstration cum Training Centre for Coconut Products” under Technology Mission on Coconut” by Department of Horticulture, Govt. of Karnataka extension of project period, ratification of expenditure and deviation the original project report.**

The committee decided to close the project and get the balance unspent amount of Rs.21.89 lakhs refunded from Dept. of Horticulture, Govt. of Karnataka, PAC also suggested to consider the involvement of NGO’s for operationalizing of the demonstration unit for training on a sustainable basis.

- 4. Establishment of a Centralized processing packaging and distribution unit for coconut products - Sevashram, Angamaly**

The committee recommended to initiate action by the Board to get refund of the subsidy released to the unit and kept in the subsidy reserve fund with the bank.

- 5. Development of appropriate technology for community level production of charcoal and activated carbon from coconut stem wood and shell for industrial use**

The committee granted permission to reimburse the amount of Rs.15,704/- being the electricity charges incurred for the demonstration of technology to Subicsha and approved the proposal for carrying out the maintenance work of existing building at a total cost of Rs.1,00,000 /- .

- 6. Project for “Design and Development of New Machines for Integrated Coconut Processing”, CFTRI, Mysore - Extension of project period and re-appropriation of funds to meet the committed expenditure**

The committee approved the project for re-appropriation of funds to meet the committed expenditure and extension of project period (up to 15.12.2010) for effecting the payments and final settlement of accounts.

- 7. “Project for setting up of pilot project for coconut wood utilization for joineries production at forest industries”- Reallocation of funds**

The committee authorized Chairman to ratify the reallocation of funds among components subject to obtaining clarification on the large of variation in expenditure from the approved project from the Managing Director of the institution.

8. Project for “Technology of value added coconut based products”, CFTRI, Mysore - Revalidation of balance amount available with CFTRI

The committee approved the project for the revalidation of unspent balance of Rs.13,791/- for utilization during the current year and release of balance funds of Rs.63,409/- and extend the project period up to 15.12.2010 for settling the pending bills and submission of accounts.

9. “Assessing the techno commercial feasibility of converting softwood waste from coconut trees into value added particle boards” Revised project cost

The committee approved the project of the revised project cost of Rs.30.183 Lakhs and also the release of balance amount of Rs.1.37 Lakhs to EIL since the project has been completed as per the approved programme.

10. Proposal for meeting the expenditure of major Exhibitions/Fairs from TMOC fund

The committee authorized Chairman to reimburse the 50% of the expenditure incurred by the participants on travel and accommodation, on production of original bills and vouchers.

11. Allocation of fund for the year 2010-11 – Modernization of coconut Processing and Value addition by the introduction of Modern Copra Dryers

The committee approved the proposal for allocating Rs.15.00 lakhs for the year 2010 – 11 for implementing the scheme.

12. Proposal for extension of project period for the Project Survey for the occurrence and severity of root (wilt) disease of coconut in south Kanara District of Karnataka

The committee approved the proposal for extending the project up to 31.11.2010 to complete the training and submit final report without incurring any additional expenditure.

13. The Project Establishment of Biological Control Lab attached to the Coconut Development Board, Regional office, Bangalore

The committee approved the total allocation of Rs.3.50 lakhs for 2010-11 and ratified the advance payment of Rs.50,000/- for the first quarter of 2010-11 to Biological Control Lab attached to the Regional office, Bangalore.

14. Proposal for extension of project period for the Project Survey on incidence and severity of Ganoderma wilt of coconut with respect to agronomic practices in dry tracts of southern Karnataka

The committee approved the revision of project period from May 2010 to November 2010 so as to complete the project as per the justifications furnished by the P.I on the delay for the initiation of the project.

15. Revised project proposal for implementation of the Market Promotion Programme of "CITCO". Brand coconut products manufactured and promoted by M/s Cheekanal Industries & trading Company, Omalloor, Pathanamthitta

The committee ratified the action taken in reallocation of expenditure among the components within the sanctioned assistance of Rs.8.00 lakhs already sanctioned in the 28th PAC meeting.

16. Revised project proposal for implementation of the Market Promotion Programme of "KALPASREE" Brand coconut products manufactured and promoted by M/s Kallamkundu Service Co-operative Bank Ltd. No.R 314, Irinjalakuda, Thrissur.

The committee approved the proposal to carry out market promotional activities at a total cost of Rs.9.25 lakhs with assistance from Board limited to Rs.4.60 lakhs and to extend the period for completion of the project till March, 2011.

Other decisions

1. General Manager, NABARD suggested that working capital contributions towards one full cycle of activities can be capitalised for calculating eligible cost/subsidy.
2. Hereafter the cost of land need not be included under eligible cost, however, land development cost can be considered.
3. It was also suggested that for various grades/types of machineries for coconut processing, the cost of production of one ton of finished product may be

tabulated so as to compare the investment by different promoters manufacturing the same finished product.

4. While considering the eligible cost electrical equipments and electronic items, such as weighing balance, etc. may be included.

The meeting came to an end by 4.30 PM. Recommendation of Project Approval Committee approved by Chairman, PAC.

Kochi
18.11.2010

Dr. K. Muralidharan
Director

34th Meeting of PAC of TMOC on 11th November 2010 at Kerabhavan, Kochi

List of Participants

Sl. No.	Name & Address
A	MEMBERS
1	Dr. R.V. Nair, CPCRI, Kasaragod <u>Representative of</u> Assistant Director General (Plantation crops) Indian Council of Agriculture Research (ICAR), Krishi Anusandhan Bhavan –II, Pusa Krishi Bhavan, New Delhi-110 012
2	Dr. Appanna, General Manager, Technical Services, Investment Credit Department, 3 rd Floor, B Wing, NABARD, Plot No. C –24, G Block Badra –KurIa Complex, Post Box No.8121, Bombay – 400 051
3	Mr. Keerachan, Marketing Officer, DMI, Kochi, 6th floor, A Block, Agmark, Kendriya Bhavan, Kakkanad <u>Representative of</u> Joint Secretary & Agricultural Marketing Adviser to Govt. of India, Room No.237, Krishi Bhavan, New Delhi
4	Shri. Dundi, Joint Director of Horticulture, Government of Karnataka, <u>Representative of</u> Secretary , Horticulture Department, Karnataka Government Secretariat, Multistoried building, III rd Stage, IV th Floor, Dr. Ambedker Veedhi, Bangalore-1.
5	Deputy Director of Agriculture, Kakkanad <u>Representative of</u> Secretary Agriculture , Department of Agriculture Government Secretariat, Thiruvananthapuram
6	Dr. A. Jacob Rajasekaran, Chief Manager, Indian Overseas Bank <u>Representative of</u> Chief General Manager, Indian Overseas Bank, Bangalore City Branch, Gandhi Nagar, Bangalore.
7	Shri M Thomas Mathew, Chief Coconut Development Officer & Member Secretary, PAC, Coconut Development Board, Kochi – 11
B	EXPERTS
8	Dr. A.N.Srivatsa, Retd. Scientist (DFRL), 411, A & B Block, Navilu Road, Kuvempu Nagar, Mysore
C	OTHERS
9	Dr. K. Muralidharan, Director, Coconut Development Board, Kochi – 11
10	Sri. A.K.Nandi, Secretary, Coconut Development Board, Kochi
11	Shri. Sebastian K.S, Asst. Marketing Officer, Coconut Development Board, Kochi
12	Shri G.M. Siddharameswara Swamy, Senior Technical Officer, Coconut Development
13	Smt. Jayashree A, Senior Technical Officer, Coconut Development Board, Kochi

Proceedings of the 35th meeting of PAC of Technology Mission on Coconut held at Kochi on 24th February 2011

The 35th meeting of the Project Approval Committee (PAC) on Technology Mission on Coconut (TMOC) was held at the Board Room of Coconut Development Board, Kochi on 24th February 2011 at 10.30 am under the Chairmanship of Shri. A.K. Thakur IAS, Addl. Secretary (Agri), GOI and Chairman, Coconut Development Board. The list of members attended the meeting is annexed.

The following Agenda items were discussed in detail:

AGENDA No. 1: Confirmation of the Proceedings of 34th Project Approval Committee Meeting held on 11th November 2010

The Committee confirmed the proceedings of the 34th Project Approval Committee Meeting

AGENDA No. 2: Action taken report of the 34th PAC Meeting

The committee perused the action taken on the decision of the 34th meeting of the Project Approval Committee.

AGENDA No. 3: Approval of new project proposals:

- 1. Project proposal for Identification of superior high yielding mother palms of west coast tall cultivar / local cultivar for seed nut procurement, production and distribution of seedlings from the farmers fields in the coastal / transistional zone of Karnataka- UHS, GKVK, Bangalore at total cost of Rs.5.94 lakhs***

The project was submitted by Dr. K.M. Indires, Professor (Hort), PG center, UHS Campus, GKVK, Bangalore. The objective of the project is to identify the genetically superior, high yielding mother palms from the farmer's field by extensive surveying of the tract, documentation, characterization and conservation of superior palms for future use and procurement of seed nuts, Production and distribution of quality planting materials.

During the discussion it was suggested that before documentation of the mother palm a concrete study on the phenotypic characters including the yield of the individual palms for a period of three years shall be undertaken to ensure the superiority of the mother palms.

After detailed discussion, Project Approval Committee approved the project subject to revising the duration to three years and scaling up the target to 10,000 seed nuts per year. PI may be asked to include a systematic study on the collection of data on yield, number of leaves, resistance to disease and drought etc. Accordingly the PI may revise the project and resubmit to Chairman, Coconut Development Board for approval.

2. Project for 'Identifying the pheromone synergists of coconut red palm weevil *Rhyncophorus ferrugineus*' - CPCRI, Kasargod at a total cost of Rs.17.33 lakhs.

The project was presented by Dr. K.Subaharan Senior Scientist, (Ento.) CPCRI, Kasargod. The objective of the project is to identify the components present in head space volatiles from coconut palm that stimulates the olfactory receptors in *R. ferrugineus antennae*, to characterize the behavior of *R. ferrugineus* adults to pheromone synergists and to assess the performance of the developed multicomponent blend in release devices at field level.

Project Approval Committee approved the project after detailed discussion and suggested that CPCRI should ensure that the outcome of the project is commercially viable and adaptable in the field. The final product may be patented jointly by CPCRI and Coconut Development Board.

3. Network project for the establishment of coconut processing Demonstration Centers - CPCRI, Kasargod at total cost of Rs.77.58 lakhs

The project was submitted by Dr. S. Arulraj, Project Coordinator (Palms), AICRPP, CPCRI, Kasargod. The objective of the project is large –scale demonstration of coconut processing techniques to produce various value added products for popularizing these products in the respective regions.

The Project Approval Committee observed that the demonstration and training of technology / equipments already developed by CPCRI cannot be considered under TMOC projects. Chairman suggested that the project should be of value to Coconut Development Board. If possible the project may be recast by including DSP farms of the Board for demonstrating / providing training on latest technologies and new equipments only & re-submitted for consideration of Project Approval Committee.

4. Project for expansion, modernization and upgradation of Desiccated Coconut Unit and setting up of a Virgin Coconut Oil unit - M/s. Coco Kernel Products, Madhihalli, Tiptur, Karnataka at total cost of Rs.44.06 lakhs

The objective of the project is modernization and upgradation of Desiccated Coconut unit and setting up of a Virgin Coconut Oil unit with a capacity to produce 3000 kg Desiccated Coconut per shift /900 MT of Desiccated Coconut per year & 250 kg Virgin Coconut Oil per shift /75 MT of Virgin coconut Oil per year. After details discussion the project was approved by the Project Approval Committee. Regarding the Virgin Coconut Oil unit the promoter should give an undertaking that the product will satisfy the Codex standards for Virgin Coconut Oil. Accordingly the eligible cost of Rs.44.06 lakhs and eligible subsidy of Rs.11.01 lakhs has been reworked and has been sanctioned as follows.

Components	Project Cost	Eligible Cost	Eligible Subsidy
	(Rs. in lakhs.)		
Land	.....	
Building & Civil works	.....	
Plant & Equipments	44.06	44.06	11.01
Total	44.06	44.06	11.01

Costing of the projects is within the norms adopted for TMOC projects. The unit should establish Effluent Treatment Plant (coconut water and washed water).

5. Expansion and modernization of Desiccated Coconut powder unit - M/s. Vaishnavi Co-Co Products, Annapura, Tiptur at total cost of Rs.102.86 lakhs

The objective of the project is manufacturing desiccated coconut with a capacity to process 50000 nuts per day /1275 MT of Desiccated coconut per year. After detailed discussion project was approved with eligible cost of Rs.80.004 lakhs and an eligible subsidy of Rs.20.001 lakhs as follows subject to the condition that the unit should install Effluent Treatment Plant (coconut water and washed water).

Components	Project Cost	Eligible Cost	Eligible Subsidy
	(Rs. in lakhs)		
Building & Civil works	36.00	33.144	8.286
Plant & Machinery	46.86	46.860	11.715
Working Capital margin	20.00	-	-
Total	102.86	80.004	20.001

The details /addresses of Effluent Treatment Plant firms will be provided by Dr. KSMS Raghavarao if he is contacted. Costing of the projects is within the norms adopted for TMOC projects.

6. Expansion cum Modernization of existing Desiccated Coconut powder unit at Katbalthur Village, Kundapur Taluk, Udupi Dist - M/s. Swastika Coco Products Pvt. Ltd, Katbalthur Village & Post, Kundapur Taluk, Udupi at total cost of Rs.186.57 lakhs.

The objective of the project is installation of latest machineries to enhance production capacity of Desiccated Coconut Powder to 4000 Kg Desiccated Coconut per day /1200 MT of Desiccated Coconut per year. Costing of the projects is within the norms adopted for TMOC projects. The project was approved with an eligible cost of Rs. 95.64 lakhs and eligible subsidy of Rs.23.905 lakhs as follows.

Components	Project Cost	Eligible Cost	Eligible Subsidy
	(Rs. in lakhs)		
Land & Development	....	....	....
Building & Civil Works	41.79	30.00	7.50
Plant & Machinery	63.97	63.97	15.990
Transportation and erection charges	0.08	0.08	0.020
Electrical Fittings	1.34	1.34	0.335
Furniture and Fixture	0.25	0.25	0.060
Miscellaneous	1.73	....	.....
Working Capital Margin	77.41	.....	.....
Total	186.57	95.64	23.905

The unit should obtain clearance certificate from Pollution Control Board.

7. Establishment of Desiccated Coconut Powder Unit -M/s. Sri Paramashiva Agro Tech, Byranakanahalli , Tiptur at total cost of Rs.56.00 lakhs

The objective of the project is to set up a unit for production of Desiccated Coconut Powder with a capacity to process 3000 nuts per day (76.5 T of Desiccated coconut per

year) Based on the observations made by the officials of CDB and KSFC that the unit is not maintaining Good Management Practices and the initial processing area is not maintained in a hygienic manner, Project Approval Committee did not approve the project for assistance under TMOC.

8. *Setting up of a Desiccated coconut powder unit -Sree Konaseema Coconut Food Products, Ambajipet Mandal, E.G. Dist, AP at total cost of Rs.44.00 lakhs*

The objective of the project is establishment of desiccated coconut powder unit with a capacity to produce 1 MT per day approx 12000 nuts per day /300 MT of Desiccated Coconut per year. The unit was inspected by Deputy Director, Hyderabad and reported that adequate quantity of quality nuts are available in and around Amalapuram area. Costing of the projects is within the norms adopted for TMOC projects. The Project Approval Committee approved the project subject to fulfillment of the following conditions.

1. Bank appraisal to be submitted.
2. Control Board's certificate to be submitted.
3. Blanching / steaming equipments to be included in the machineries list.
4. Effluent Treatment Plant (coconut water and washed water) may be incorporated for treatment of coconut water and washed water etc.

Components	Project Cost	Eligible Cost	Eligible Subsidy
	(Rs. in lakhs)		
Building	20.00	12.80	3.20
Plant & Machinery	12.00	12.00	3.00
Working Capital	12.00	-	-
Total	44.00	24.80	6.20

9. *Establishment of Virgin coconut oil processing Unit- M/s. Pavitra Kera Products, Kundukad, Kizhakkanchery, Alathur, Palakkad at total cost of Rs.76.04 lakhs*

The objective of the project is to set up a unit for manufacture of Virgin Coconut Oil with a capacity to produce 10000 coconuts per day / 135 MT of Virgin Coconut Oil and 166 MT of Defatted Desiccated Coconut per year. Costing of the projects is within the norms adopted for TMOC projects. The Project Approval Committee approved the project with eligible cost of Rs.53.87 lakhs and eligible subsidy of Rs.13.467 lakhs as follows:

Components	Project Cost	Eligible Cost	Eligible Subsidy
	(Rs. in lakhs)		
Land & Land dev.	12.00	-	-
Building & Civil works	14.90	14.90	3.725
Plant & Equipments	29.30	29.30	7.325
Furniture & fittings	0.75	0.75	0.187
Electrical Installations	8.24	8.24	2.060
Pre-op. expenses	3.15	0.68	0.170
Working capital Margin	7.70	-	-
<i>Total</i>	76.04	53.87	13.467

1. The unit should submit an undertaking to maintain the quality of Virgin coconut Oil as prescribed by codex standards
2. Effluent Treatment Plant (coconut water and washed water) to be installed for treatment of coconut water and washed water.
3. Pollution Control Board clearance certificate to be submitted.

10. Setting up of Virgin coconut oil processing Unit -M/s. Farmfact Coconut Products Pvt Ltd, Subbaiahpillai St., Pattukkottai at total cost of Rs.125.75 lakhs

The objective of the project is establishment of a Virgin Coconut Oil Unit with a capacity to process 15000 nuts per day (200 T of Virgin Coconut Oil per year and 455 T of Defatted Desiccated Coconut per year. The PAC observed that for processing 15000 nuts, the DC drier with 5 HP motor is not sufficient. Clarification has also to be obtained regarding the movable disintegrator. The Effluent Treatment Plant (coconut water and washed water) should be incorporated. Certificate of Pollution Control Board to be submitted. Project is deferred.

11. Setting up of a Coconut Oil Extraction Unit -M/s. Ganga Coconut Foods, Muthur Road, Panchapalayam - PO , Pappini Village, Kangayam Tirpur Dist. TN at total cost of Rs.156.66 lakhs

The objective of the project is setting up of a Coconut Oil Extraction Unit with a capacity of 10 MT copra crushing per day /1890 MT of coconut oil per year. Costing of the projects is within the norms adopted for TMOC projects. The PAC approved the project with eligible cost of Rs.100.738 lakhs with eligible subsidy of Rs.25.185 lakhs as follows. Product should be of Agmark standards.

Components	Total Project Cost (Rs. in lakhs)	Eligible Project Cost (Rs. in lakhs)	Maximum Eligible Subsidy (Rs. in lakhs)
Land & land development	29.60	-	-
Building & Civil works	41.83	41.83	10.458
Plant & Equipments	47.20	41.85	10.462
Furniture and Fittings	1.00	1.00	0.250
Electrical Installations	14.66	14.66	3.665
Preoperative expenses	5.50	1.398	0.350
Working Capital margin	16.86	-	-
TOTAL	156.65	100.738	25.185

12. Expansion of existing coconut oil milling unit -M/s. Rehmania Rice, Flour & Oil Mill, Cholakulam, Melattur, Malappuram at total cost of Rs.64.50 lakhs

The objective of the project is installation of dryer for production of copra & two new expellers and accessories with a capacity to produce 5 T of copra crushing per day/ 975 MT of oil per year. Costing of the projects is within the norms adopted for TMOOC projects. The Project Approval Committee approved the project with eligible cost of Rs.52.53 lakhs with eligible subsidy of Rs.13.13 lakhs as follows. Effluent Treatment Plant (coconut water and washed water) should be installed. Product should meet of Agmark standards.

Components	Project Cost	Eligible Cost	Eligible Subsidy
	(Rs. in lakhs.)		
Land	6.50	-	-
Plant & Machinery	28.00	28.00	7.00
Building & Civil works	24.00	23.80	5.95
Furniture & office equipments	0.30	0.30	0.075
Project preparation charges	0.30	0.30	0.075
Pre-op. expenses	0.40	0.40	0.10
Working capital Margin	5.00	-	-
Total	64.50	52.53	13.13

13. Expansion of existing coconut processing unit - M/s. New Kalpaka Oil Mills, K.M. Marikkar Rahamat Manzil, Kayalam Post, Via Mavoor, Kozhikode at total cost of Rs.15.50 lakhs

The objective of the project is expansion of existing coconut processing unit for production of 1.5 tons of coconut oil per day (450 T of oil per year). As per the inspection report of the officer of CDB the unit should incorporate additional space for raw material and finished products, processing area should be maintained hygienically. Floor should be tiled. Once these conditions are satisfied, the unit may be visited by CDB Officer and inspection report submitted and the project may be placed before PAC for approval.

14. Modernization of existing coconut oil manufacturing unit - M/s. Sri Rama Industries, Main Road, Yelmudi, Puttur, Dakshina Kannada, Karnataka at total cost of Rs.31.84 lakhs

The objective of the project is rebranding and installing automatic packing machines in the coconut oil manufacturing unit with a capacity to produce 800 ltr of oil per day /240 MT of oil per year. Costing of the projects is within the norms adopted for TMOC projects. The Project Approval Committee approved the project with eligible cost of Rs.20.71 lakhs with eligible subsidy of Rs.5.177 lakhs as follows.

Components	Amount (in lakhs.)	Eligible Cost (in lakhs)	Eligible Subsidy (in lakhs)
Land & Development	.....	.....	.....
Building & Civil Works	7.71	7.71	1.9275
Plant & Machinery	12.37	12.37	3.0925
Information Tech.	0.35	.....	.....
Furniture and Fixture	0.43	0.43	0.1075
Pre-op. expenses	2.03	0.20	0.05
Working Capital Margin	8.95	.....	.....
Total	31.84	20.71	5.1775

15. Establishment of a Coconut Processing Unit -M/s. Arikatt Coconut Processing Unit, Aloor PO, Thrissur at total cost of Rs.16.80 lakhs

The objective of the project is to install a copra drying system for processing 10,000 nuts per day /428 MT of copra per year. Costing of the projects is within the norms adopted for TMOC projects. The Project Approval Committee approved the project with eligible cost of Rs.8.453 lakhs with eligible subsidy of Rs.2.113 lakhs as follows:

Components	Project Cost	Eligible Cost	Eligible Subsidy
	(Rs. in lakhs.)		
Land	1.80	-	-
Plant & Equipments	3.00	3.00	0.75
Building & Civil works	10.00	5.00	1.25
Furniture & office equipments	0.30	0.30	0.075
Pre-op. expenses	0.20	0.153	0.038
Working capital Margin	1.50	-	-
Total	16.80	8.453	2.113

1. Effluent Treatment Plant (coconut water and washed water) to be included
2. Pollution Control Board clearance Certificate to be obtained and submitted.

16. Establishment of a Coconut Vinegar Unit -Chandrathil Food Products, South Aduvassery, Aduvassery, Ernakulam at total cost of Rs.17.00 lakhs

The objective of the project is to establish of a Coconut Vinegar Unit for processing 1000 litres of coconut water per day /3 lakhs liters per annum. Costing of the projects is within the norms adopted for TMOC projects. The Project Approval Committee approved the project with eligible cost of Rs.15.06 lakhs with eligible subsidy of Rs.3.765 lakhs as follows.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakhs)		
Land	Own	-	-
Building & Civil works	8.00	6.60	1.65
Plant & Equipments	8.05	8.05	2.012
Technical know-how	0.10	0.10	0.025
Wooden racks & shelf for storage of products	0.25	0.25	0.063
Preliminary & Pre op. expenses	0.10	0.06	0.015
Working Capital margin	0.50	-	-
TOTAL	17.00	15.06	3.765

The unit should obtain FPO clearance for marketing of Vinegar.

17. Setting up of a Coconut Chips making unit at Kaprassery, Nedumbassery - M/s. Malayalam Food and Spices Industries, Manayampilly, Nedumbassery PO, Kaprassery at total cost of Rs.12.50 lakhs

The objective of the project is production of coconut chips and coconut rice powder with a capacity to process 1000 nuts per day (30000 KG chips per year). Project Approval Committee observed that 85% of the investment is for production of coconut rice powder, where the snack is prepared by using coconut gratings in small quantity. Hence the project is deffered.

18. Setting up of a coconut shell powdering unit -Srinithi Agro Industries, Nallampalayam, Alathur, Salem, TN at total cost of Rs.92.35 lakhs

The objective of the project is setting up of fully automated coconut shell powdering unit with a capacity to produce 15 MT shell powder per day /4500 T of shell powder per annum. Costing of the projects is within the norms adopted for TMOC projects. The Project Approval Committee approved with eligible cost of Rs.80.60 lakhs with eligible subsidy of Rs.20.15 lakhs as follows.

Components	Project Cost	Eligible Cost	Eligible Subsidy
	(Rs. in lakhs)		
Land & Land development	.....	
Building & Civil works	12.00	12.00	3.00
Plant & Equipment	65.70	65.75	16.425
Furniture & fittings	0.50	0.50	0.125
Electrical installations	1.57	1.57	0.393
Preoperative Expenses	3.50	0.83	0.207
Working capital	9.08	-	-
Total	92.35	80.60	20.15

Precautionary measures should be adopted by the unit against possible fire hazards.

19. Setting up of a Coconut shell charcoal unit - Shri. Vignesh Kumar, Shell craft leader, Dindigul, TN at total cost of Rs.39.97 lakhs

The objective of the project is establishment of a Coconut shell charcoal manufacturing unit with a capacity to process 7 MT coconut shell per day /2100 MT coconut shell year. Costing of the projects is within the norms adopted for TMOC projects. The Project Approval Committee approved with eligible cost of Rs.23.674 lakhs with eligible subsidy of Rs.5.919 lakhs as follows:

Components	Project Cost	Eligible Cost	Eligible Subsidy
	(Rs. in lakhs)		
Land & Development	7.75	-	-
Plant & Equipments	5.00	5.00	1.250
Building & Civil works	19.00	14.804	3.701
Furniture & fittings	0.50	0.50	0.125
Electrical installation & Electrical equipments	3.26	3.00	0.75
Pre-op. expenses	1.50	0.370	0.093
Working capital	2.96	-	-
Total	39.97	23.674	5.919

Market Promotional Programmes

Chairman suggested that a detailed note on the guidelines / revised guidelines on assistance for market promotional activities / brand promotion be circulated to all Project Approval Committee members for their considered views on the assistance for brand promotion to coconut processing industries.

Other Items

- 1. Project for Setting up of a New copra dryer and Coconut Oil Manufacturing Unit- The Inchakundu Service Co-operative Bank Ltd. No.R.197, Inchakundu.P.O., Mupliyam Village, Mukundpuram Taluk, Thrissur – Extension of project period***

The committee ratified the delay occurred in completion of the project and extended the project period upto March 2011.

- 2. Project for setting up processing unit for production of coconut gratings and up gradation of ice cream cups production unit from coconut shell- M/s Lala Industries Pvt. Ltd, Nedumbassery –Extension of project period***

The committee ratified the delay occurred in completion of the project and extended the project period upto March, 2011.

- 3. Project for Setting up of a Coconut Processing unit at Chathamangalam, Kozhikode Dt by The Kozhikode Sahakarana Marketing Society Ltd., Kozhikode Dt - Extension of project period – ratification for delay***

The committee extended the project period upto 30.06.2011.

- 4. Project for Demonstration of batch processing for the formulation & packing of coconut oil based 2T oil for small scale industrial units – Extension of project period beyond March 2011 –CUSAT, Kochi***

The committee extended the project period for 6 months (up to 25th September 2011).

- 5. Project for Development of Processes and Herbal formulations based on Virgin Coconut Oil - AVT Institute for Advanced Research (AVTAR), Coimbatore - Extension of project period up to June 2011***

The committee extended the project period for 6 more months i.e. up to June 2011.

6. *Project for Design and Development of New Machines for Integrated Coconut Processing*”, CFTRI, Mysore - Extension of project period for account settling

The committee extended the project period for 3 more months (up to 31.3.2011) for settlement of accounts.

7. *Project for “Dietary coconut Oils (VCO & CO) and their health implications’ National Institute of Nutrition (NIN) ICMR, Hyderabad -Extension of project period for account settling*

The committee extended the project period up to 31st March 2011 for effecting the payments and settling the accounts.

8. *Project for Monitoring and surveillance of infestation of pest and disease of coconut in Andaman Nicobar Islands -Director, Central Agricultural Research Institute (ICAR), Port Blair, A & N Islands – Enhancement of emoluments of project staff.*

The committee approved the payment of salary of project staff and revised the project cost to Rs.8,15,800/-

9. *Project for Production of root (wilt) resistant/tolerant coconut seedlings for root (wilt) disease prevalent tracts- CPCRI, RS, Kayamkulam– Payment of arrears of SRF.*

The committee permitted CPCRI to pay the arrears from the receipts realized from the sales of seedlings under the completed project and report to Project Approval Committee.

10. *Setting up of a Desiccated Coconut Powder Manufacturing Unit -M/s. V & V Agro Foods, Plot No. 4, SIDCO Industrial Park, Kulappully, Shornur, Palakkad at a total cost of Rs.172.95 lakhs*

The Project Approval Committee observed that the promoter may install a combined dryer (M/s. Tea craft, Coimbatore etc.) with blanching and steaming facility instead of Fluid bed drier. Effluent Treatment Plant (coconut water and washed water) should be installed. Pollution Control Board certificate to be obtained. The product should meet BIS standard. Subject to the above the PAC approved the project. Accordingly the project cost may be revised and resubmitted

for approval of Chairman. It was also suggested by the Chairman that the Board may write to Punjab National Bank requesting release of term loan to the promoter. If necessary grievance of the promoter may be brought to the notice of Finance Secretary, Govt. of Kerala for taking up the matter with the State Level Banking Committee.

11. Project for demonstration of technology for processing and packaging Neera in Karnataka by Deptt. Of Hort, Karnataka

The PAC approved the proposal.

12. Proposal for meeting the expenditure on International Exhibitions from TMOC fund

1. PAC noted the expenditure incurred for the exhibitions.
2. The PAC approved the proposal.

Other decisions

1. As a matter of principle, the Board need not insist on technology transfer for Virgin Coconut Oil from CFTRI. However Board should obtain an undertaking from manufacturers of Virgin Coconut Oil and ensure that Virgin Coconut Oil conforms to prescribe standards (codex).
2. Board should prepare and circulate a list of consultants for setting up of Effluent Treatment Plant (coconut water and washed water) in coconut processing industries in order that all projects have ETP incorporated in them.
3. The Board should insist that project consultants / Chartered Accountants should include sensitivity analysis in the detailed project report submitted for TMOC assistance.
4. A detailed study may be undertaken to evaluate the capacity utilization of coconut oil milling units supported under TMOC.
5. Under the TMOC market promotion programmes the following activities should be taken up:
 - i) Generic promotion of coconut products (advertisement, hoarding etc.)
 - ii) Awareness campaigns, exhibitions, fairs, festivals etc.
 - iii) Participation in International exhibitions, assistance to manufacturers for participation in major domestic/ international exhibitions as per norms.
6. TMOC cell should update the status of the projects sanctioned under TMOC periodically (every six months) and should post to the website of the Board.

7. For projects sanctioned to scientific institutions like ICAR, CSIR, etc. The revision of wages of JRF, SRF etc. as per the GOI rules may be allowed without waiting for Project Approval Committee approval.

Reports on the Project Approval Committee / National Steering Committee meetings including list of projects sanctioned may be published in the CDB journals. Chairman and members appreciated the Director and officers of the TMOC cell for the meticulous way in which the projects were presented and the Project Approval Committee meeting conducted.

The meeting came to an end by 6.10 PM by the vote of thanks by Chief Coconut Development Officer.

This issues with the approval of Chairman.

Dr. K. Muralidharan
Director

35th Meeting of PAC of TMOC on 24th February 2011 at Kerabhavan, Kochi

List of Participants

Sl.No.	Name and address
A	MEMBERS
1	Shri. Anup Kumar Thakur, IAS Chairman, Coconut Development Board
2	Dr. Jose Samuel, Hort. Division, Govt. of India <u>Representative of</u> The Horticulture Commissioner, Department of Agriculture & Cooperation Krishi Bhavan, New Delhi
3	Sri. K.B Dundi, Joint Director of Hort, Plantation Crops & Plant Protection, State Horticulture Dept., Karnataka <u>Representative of</u> Secretary (Horticulture) Government of Karnataka, Karnataka Government Secretariat, Multistoried building, IIIrd Stage, IVth Floor, Dr. Ambedker Veedhi, Bangalore.
4	Dr. RV Nair, Head Division of Crop Improvement, CPCRI, Kasargod <u>Representative of</u> Assistant Director General (PC), Indian Council of Agricultural Research, Krishi Bhavan, New Delhi
5	Shri. C.P. Appanna, 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 <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	Dr. C.V. Kavitha Abirami, Sr. Scientist, Indian Institute of Crop Processing Technology Ministry of Food Processing Industries, Government of India Pudukkottai Road, Thanjavur, Tamil Nadu <u>Representative of</u> Joint Secretary, Min. of Food Processing Industries Panchsheel Bhavan, August Kranti Marg Khel Gaon, New Delhi
7	Shri. M.M. Jose, Directorate of Marketing & Inspection, 6th floor, A Block, Agmark, Kendriya Bhavan, Kakkand, Kochi <u>Representative of</u> Joint Secretary & Agricultural Marketing Adviser to Govt. of India, Room No.237, Krishi Bhavan, New Delhi

8	Dr. KSMS Raghavarao, Head, Department of Food Engineering, Central Food Technological Research Institute (CFTRI), Mysore <u>Representative of</u> Director, Central Food Technological Research Institute, Mysore
9	Shri M Thomas Mathew, Chief Coconut Development Officer & Member Secretary, PAC Coconut Development Board, Kochi – 11
B	EXPERTS
10	Dr.M.Aravindakshan, (Retd.Chairman CDB) Co-ordinator, Amritha School of Environmental Studies, Coimbatore
11	Sri.C.R Vijayakumar, Consultant, DC Industries Bangalore

C	OTHERS
12	Dr. K. Muralidharan, Director Coconut Development Board, Kochi – 11
13	Sri. A.K.Nandi, Secretary, Coconut Development Board, Kochi
14	Shri Sreekumar Poduval, Jr. Pro. Engineer Coconut Development Board, Kochi
15	Shri G.M. Siddharameswara Swamy Senior Technical Officer, CDB, Kochi
16	Smt. Jayashree A , Senior Technical Officer Coconut Development Board, Kochi
17	Smt. D.S. Resmi, Technical Officer Coconut Development Board, Kochi

Proceedings of the 36th meeting of PAC of Technology Mission on Coconut held at Kochi on 12th August 2011

The 36th meeting of the Project Approval Committee (PAC) on Technology Mission on Coconut (TMOC) was held at the Board Room of Coconut Development Board, Kochi on 12th August 2011 at 11.00 AM under the Chairmanship of Shri. T.K. Jose IAS, Chairman, Coconut Development Board. The list of members attended the meeting is annexed. At the outset Chairman welcomed all the members and informed that there is some delay in holding the PAC meeting since February 2011. He assured the members that henceforth the PAC meeting will be held once in every 3 months. He also presented the details of the projects sanctioned so far under TMOC and said that the status of the projects is being updated and uploaded in the Website of Coconut Development Board. He reiterated the objective of TMOC and informed that we should look for non-traditional and innovative projects and products rather than traditional oil making.

Thereafter the following Agenda items were discussed in detail:

AGENDA No. 1: Confirmation of the Proceedings of 35th Project Approval Committee Meeting held on 24th February 2011

The Committee confirmed the proceedings of the 35th Project Approval Committee Meeting

AGENDA No. 2: Action taken report of the 35th PAC Meeting

The committee perused the action taken on the decision of the 35th meeting of the Project Approval Committee on the issue of continuation of Brand Promotion market promotional programme of TMOC, NABARD & Government of Karnataka have responded to the circular and have suggested as follows:

Comments of NABARD

- As long as the products are catering to a very localized market, multiple brands may not have much problem as each of them would have carved out a section of the market. However, CDB may explore possibilities of developing common brand for a generic product atleast from a state. Alternatively, marketing/ publicity may be done by a single agency where to start with atleast 50% of the material produced by the individual units are to be given to them which can be subsequently raised depending on the success.

- Products coming under health care and cosmetic segments needs to be popularized where multiple branding can be promoted. Possibility of uniformity in content and packing may be explored.
- Organised way of publicity involving media, companies and Coconut Development Board on a professional platform.
- Publicity should also give mileage to the efforts of Coconut Development Board.
- Possibilities of expanding markets in railways and airlines. For eg: Packed tender coconut water served in trains and flights.
- The cap for assistance for private entrepreneurs to be proportionate to that of Government Sector to keep them on an equal footing.

Comments of Director of Horticulture, Govt. of Karnataka

The present guidelines provide assistance to Government agencies, co-operatives and private entrepreneurs for brand publicity, marketing and storage infrastructure, publicity material, display, etc. But more emphasis needs to be given for increasing the processing activity for making the coconut products. More assistance needs to be provided for producing the coconut product rather than its brand development.

Processing activity requires more investment from the entrepreneur or from the beneficiary as it involves various items of expenditure like land, building, machinery, men and raw material. Hence, the percentage and quantum of subsidy for raising the production is to be increased from the present level of 25% to 40% for this purpose.

The different coconut products that are now being made are quite popular and hence more subsidy is required for developing new products of consumer acceptance. Such ventures may be assisted by Coconut Development Board.

Market development and brand development for the same coconut product will be a proprietary commercial activity. For this purpose the manufacturing agency needs to make more investment as it will have a direct bearing on profit earning of the agency. Hence, it is suggested that such activities may be taken up by the entrepreneur himself.

However, market development and brand development can be included as one of the components of integrated projects involving processing and increasing the production of processed products. The overall subsidy for this component may be limited to 5% of project cost subject to a maximum of Rs.5.00 lakhs. The subsidy for

market development and brand development can be back ended so as to ensure proper utilization of this component. Activities like buyer-seller meet, exchange of delegation, participation of exhibitions/ fairs/ melas, etc., are to be encouraged free of cost in order to give boost to the market promotion for the processed coconut products.

After discussion it was decided that Market Promotional assistance for brand promotion may be provided to the manufacturers of value added products other than copra & coconut oil. However, promotional assistance may be extended for quality improvement, packaging improvement, certification fees for ISO, HACCP, Agmark etc. The assistance may be extended to the units according to the need of the industry and without any cap on a particular item. However the maximum eligible assistance shall be limited to Rs.10 lakhs or 50% of the expenditure which ever is less on reimbursement basis.

The activities such as, brand publicity through electronic and print Media, Parlours, Kiosks, Ware house, etc., Undertaking activities like buyer-seller meet, exchange of delegations, Participation of Exhibitions/Fairs/ Melas etc., Developing/ hiring of display facilities in major food chain market, Development of Website, Display of coconut products at Air Ports/Railway Stations, Expenditure for obtaining Agmark, ISO, HACCP etc., certification, improvement in packaging, quality logo etc. can be assisted under the subcomponent.

AGENDA No. 3: Approval of new project proposals:

- n. Project proposal for Performance evaluation of elite seedlings in farmer's fields of Alappuzha and Kollam Districts - ORARS, Kerala Agricultural University, Kayamkulam, Alappuzha at total cost of Rs.12.10 lakhs***

The project was submitted by Dr. M.R.Bindu, Associate professor, ORARS, Kayamkulam. The objective of the project is to evaluate the performance of the mother palms selected during 2004-05 for the presence of root wilt disease by ELISA test, a comparative study of the mother palms of Kuttiyadi origin distributed by the Department of Agriculture in the region (6 PANCHAYATS), compare the morphological characters, incidence of pests and diseases in selected palms, conducting ELISA test in selected palms and identification of root (wilt) free palms. PAC approved the project. The outcome of the project shall be testing of a total of 200 palms for presence of Phytoplasma by ELISA, so as to mark them as mother palms for seed procurement.

o. Evaluating the performance of released coconut hybrids in Farmer fields - Coconut Research station, Veppankulam, Thanjavur at total cost of Rs.15.10 lakhs

The project was submitted by Dr.Natarajan.C., Professor and Head, Coconut Research station, Veppankulam, Thanjavur District. The objective of the project is to conduct survey to collect the passport data regarding the distribution of hybrid seedling to farmers, to identify the farmers those who have planted released hybrids in large area in different locations and to assess the yield potential of the released hybrids of major coconut growing districts in Tamil Nadu.

The PAC approved the project at a total cost of Rs.15.10 lakhs. It was suggested that apart from the parameters already suggested quality of tender coconut water may be quantified & tolerance to pest and disease may also be included in the morphological/ field parameters.

p. Mixed cropping of Noni (Morinda citrifolia) in coconut gardens under coastal agro-ecosystems - Central Plantation Crops research institute (ICAR), Kasargod at total cost of Rs.6.52 lakhs

The project was submitted by Dr. H P Maheswarappa, Senior Scientist (Agronomy), Central Plantation Crops Research Institute (ICAR), Kasargod. The objective of the project is to study the performance of Noni (Morinda citrifolia), as mixed crop in single hedge systems under coconut garden and to study the impact of mixed cropping of Noni with coconut on the productivity of coconut palms and soil fertility status.

Project Approval Committee approved the revised project for conducting research cum field demonstration at a total cost of Rs.6.52 lakhs over a period of 3 years.

q. Development of effective and safe chemical module against post harvest diseases of coconut and demonstration of developed module in farmer's conditions. - Horticultural Research Station, Andhra Pradesh Horticultural University, Venkatramannagudem, West Godavari, AP at total cost of Rs.20.68 lakhs.

The project was submitted by Dr. A. Snehalatha Rani, Scientist (Plant Pathology), Horticulture Research Station, APHU, Ambajipeta, Andhra Pradesh. The objective of the project is to identify effective chemicals against post harvest diseases under varied storage structures, to develop cost effective module to manage post harvest diseases in coconut, to study the bio safety measures by using mammals (Rabbits / Rats), to calculate cost benefit ratio and economic analysis and to demonstrate the developed chemical management package against post harvest disease in farmers gardens.

Project Approval Committee approved the project at a total cost of Rs.20.68 lakhs with a duration of 3 years.

r. Development of Technology for Production of Health Foods from Tender & Mature Coconut - CFTRI, Mysore at total cost of Rs.20.90 lakhs.

The project was submitted by Dr. A. G. Gopala Krishna, Scientist-G, Department of Lipid Science & Traditional Foods, Central Food Technological Research Institute, Mysore, Karnataka. The objective of the project is to provide a ready to reconstitute Nutraceutical retained dehydrated product from tender and mature coconut water, to provide a ready to use Nutraceutical retained food supplement (instant powder) from tender and mature coconut meat and to utilize above products in preparation of two ready to eat/drink health foods.

Project Approval Committee approved the project at a total cost of Rs.20.90 lakhs.

s. Investigations and development of technology for desiccated coconut industry effluent water treatment -Dept. of Chemical Engineering, IISc, Bangalore at total cost of Rs.11.572 lakhs.

The project was presented by the PI Dr. J R. Mudakavi, Department of Chemical Engineering, IISc, Bangalore. The objective of the project is to develop reliable treatment and monitoring methods for coconut processing industry effluent water, to characterize the effluent water of the desiccated coconut industry, to develop an environment friendly effluent treatment process for desiccated coconut industry, to explore alternate byproducts from coconut water and to evolve good sanitary practices for the industry.

Project Approval Committee approved the project at a total cost of Rs.11.572 lakhs. The PI has also requested the Board to organize a workshop to discuss the various issues related to effluents in desiccated coconut industry.

The Project Approval Committee decided to defer the projects listed under (Item no.7 to 13).

14. Establishment of Desiccated Coconut manufacturing unit at Ayyappanaickenpalayam, Tirupur Dist, TN - M/s. Kovai Agro Foods, Meenakshipuram, Pollachi at total cost of Rs.240.00 lakhs

The objective of the project is establishment of desiccated coconut manufacturing unit with a capacity to processing of 56,000 coconuts per day. The project was approved with an eligible cost of Rs.179.68 lakhs and eligible subsidy of Rs.44.92 lakhs as follows.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(in lakhs)		
Land	Own	-	-
Building & Civil works	73.33	70.00	17.50
Plant & Equipments	104.27	104.27	26.068
Furniture & office equipments	3.51	3.51	0.8775
Preliminary & Pre op. expenses	5.00	1.90	0.475
Working Capital margin	50.00	-	-
TOTAL	236.11	179.68	44.920

The Project Approval Committee approved the project subject to the fulfillment of the conditions viz, the Effluent Treatment Plant (coconut water and washed water) should be incorporated and blanching / steaming equipments to be included in the machineries list.

15. Establishment of Desiccated Coconut Powder manufacturing unit -M/s. KKP Industries, Nallipalayam, Padiyur Post, Kangayam Taluk, Tirupur at total cost of Rs.162.188 lakhs

The objective of the project is to setting up of a Desiccated coconut powder manufacturing unit with installed capacity to process 4 MT (40,000 coconut) per day. The project was approved with an eligible cost of Rs.107.969 lakhs and eligible subsidy of Rs.26.992 lakhs as follows.

Components	Project Cost	Eligible Cost	Eligible Subsidy
	(Rs. in lakhs.)		
Land & land development	27.225	-	-
Building & Civil works	38.140	36.247	9.062
Plant & Equipments	57.809	57.809	14.452
Furniture and Fittings	1.250	1.250	0.313
Electrical Installations	11.240	11.240	2.81
Preoperative expenses	6.650	1.423	0.355
Working Capital margin	19.874	-	-
TOTAL	162.188	107.969	26.992

The Project Approval Committee approved the project subject to the fulfillment of the conditions viz, the Effluent Treatment Plant (coconut water and washed water) should be incorporated and blanching / steaming equipments to be included in the machineries list.

16. Establishment of Virgin coconut oil manufacturing unit -M/s. Sathyam Grama Sangham, Azheekal, Alapuzha at total cost of Rs.40.85 lakhs

The objective of the project is establishment of virgin coconut oil manufacturing unit with an installed capacity to produce 5,000 nuts per day. The project was approved with an eligible cost of Rs.31.73 lakhs and eligible subsidy of Rs.7.933 lakhs as follows.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(in lakhs)		
Land	5.75	-	-
Building & Civil works	10.40	10.40	2.60
Plant & Equipments	19.70	19.70	4.925
Furniture & fittings	0.50	0.50	0.125
Electrical Installations	0.75	0.75	0.188
Pre op. expenses	0.90	0.38	0.095
Working Capital margin	2.85	-	-
TOTAL	40.85	31.73	7.933

The committee approved the proposal in principle. However the cash flow analysis has to be reworked taking a realistic estimate of the costs and capacity utilization. The capacity of the machinery especially the tubular bowl centrifuge has to be ascertained.

1. For the production of virgin coconut oil micro filter is not required. This may be clarified from the machinery supplier.
2. It would be better if the promoter attends a demonstration of the process by visiting any of the units established by the machinery supplier.
3. Virgin Coconut Oil should confirm to the APCC specifications.

The costing may be reworked accordingly and resubmitted.

17. Coconut Shell charcoal manufacturing unit -RB carbon, Tirupur, Tamilnadu at total cost of Rs.172.23 lakhs

The objective of the project is establishment of shell charcoal manufacturing unit with a capacity to process 90 MT coconut shell/day (30 MT shell charcoal per day). The project was approved with an eligible cost of Rs.118.33 lakhs and eligible subsidy of Rs.29.581 lakhs as follows.

Items	Total Project Cost (` in lakhs)	Eligible Project Cost (` in lakhs)	Maximum Eligible Subsidy (` in lakhs)
Land & Land Development	11.00	-	-
Building & Civil Works (Brick Klin 9 Nos, Chimney & Labour Shed Etc.)	81.23	60.23	15.057
Plant & Equipments	51.55	51.55	12.887
Furniture and Fittings	1.00	1.00	0.250
Electrical Installations	4.05	4.05	1.012
Electronic Equipments	0.52	-	-
Preoperative Expenses	1.75	1.50	0.375
Working Capital Margin	21.13	-	-
Total	172.23	118.33	29.581

18. Activated carbon manufacturing unit - EBE Liza Enterprises, Tamilnadu at total cost of Rs.103.10 lakhs

The objective of the project is setting up of new activated carbon manufacturing with an installed capacity to process 1.50 MT activated carbon per day. The project was approved with an eligible cost of Rs.82.322 lakhs and eligible subsidy of Rs.20.58 lakhs as follows.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(` in lakhs)		
Land & Dev	10.38	-	-
Plant & Equipments	40.25	40.25	10.062
Building & civil works	35.50	35.50	8.875
Furniture and Fittings	1.00	1.00	0.250
Electrical installation	4.73	4.73	1.183
Electronic Equipments	0.75	-	-
Preoperative Expenses	2.00	0.842	0.210
Working Capital Margin	8.49	-	-
Total	103.10	82.322	20.580

19. Establishment of Coconut Shell Charcoal production unit at Pollachi - M/s. Sharni Carbon, Kariyanchettipalayam, Pollachi at total cost of Rs.49.88 lakhs

The objective of the project is production of coconut shell charcoal with an installed capacity to process 162 tons/ annum and 13 tones in the 1st year rising upto 146 tons from 6th year onwards. The project was approved with an eligible cost of Rs.42.65 lakhs and eligible subsidy of Rs.10.224 lakhs as follows.

	Total cost (` in lakhs)	Eligible Project Cost (` in lakhs)	Maximum Eligible Subsidy (` in lakhs)
Land & Dev.	Own	-	-
Plant & Equipments	35.15	29.65	7.412
Building & Work shed	9.25	9.25	2.312
Electrical installation	2.00	2.00	0.500
Pre-op. Expenses	1.75	1.75	-
Working capital	1.73	-	-
Total	49.88	42.65	10.224

20. Establishment of Coconut shell powder unit at Namakkal -M/s. Asian Industries, Bye-Pass Road Padamudipalayam, Valur PO, Namakkal at total cost of Rs.100.00 lakhs

The objective of the project is establishment of coconut shell powder unit with installed capacity to process 10 tons of coconut shell/day. The project was approved with an eligible cost of Rs.93.435 lakhs and eligible subsidy of Rs.23.359 lakhs as follows.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(` in lakhs)		
Land (1.015 acres)	4.50	-	-
Building & Civil works	15.00	15.00	3.75
Plant & Equipments	60.00	60.00	15.00
Erection and installation charges & laying foundation for machineries, freight, transport	17.50	17.50	4.375
Preliminary & Pre op. expenses	1.00	0.935	0.234
Working Capital margin	2.00	-	-
TOTAL	100.00	93.435	23.359

21. Expansion and modernization of the existing coconut shell ice cream cup unit - Nexus Frozen Fruits Containers & Foods Pvt. Ltd, Manickamangalam PO, Kalady, EKM at total cost of Rs.54.02 lakhs

The objective of the project is expansion and modernization of the existing coconut shell ice cream cup unit with installed capacity to process 20,000 coconut shell ice-cream cups and 1000 Ltrs coconut based frozen dessert per day. Based on the observations of ISC and suggestions of the officers who have visited the unit, the project for expansion and modernization of the existing fruits containers and food unit (coconut shell ice cream cups) was separated and presented by the promoter in the PAC. The PAC appreciated the novelty of the product which have high export value. The project was approved with an eligible cost of Rs.52.55 lakhs and eligible subsidy of Rs.13.13 lakhs as follows.

Components	Amount (in lakhs.)	Eligible Cost (in lakhs)	Eligible Subsidy (in lakhs)
Land	Own land	-	-
Building	17.40	17.40	4.35
Plant & Equipments	33.40	33.40	8.35
Furniture and office equipments	1.22	1.22	0.30
Preliminary & pre-op. expenses	1.00	0.53	0.13
Working Capital Margin	1.00	-	-
<i>Total</i>	54.02	52.55	13.13

The capacity of the unit is proposed to be enhanced from 10000 to 20000 cups per day.

Based on the value and turnover of coconut ice cream (coconut dessert) the proposal for financial assistance for the ice cream unit will be considered separately in due course. PAC also suggested that the unit may explore the possibility of manufacture & packing of coconut cream & milk.

22. Setting up of Spray Dried Coconut Milk Powder manufacturing Plant at Peringandoor, Athani, Thrissur - M/s. Surya Shobha, Shobha Engineering Co. Complex, Peringandoor, Athani, Thrissur at total cost of Rs.207.00 lakhs

The objective of the project is manufacturing of Coconut Milk Powder and sale in local and foreign market with Installed capacity of 20,000 nuts/ day. The project was approved with an eligible cost of Rs.193.9 lakhs and eligible subsidy of Rs.48.475 lakhs as follows.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakhs)		
Land	0.40	-	-
Building & Civil works	45.00	45.00	11.25
Plant & Machinery	141.00	141.00	35.25
Technical know-how	5.60	5.15	1.288
Furniture & office equipments	2.00	0.75	0.187
Preliminary & Pre op. expenses	6.00	2.00	0.50
Working Capital margin	7.00	-	-
TOTAL	207.00	193.9	48.475

23. Setting up of a integrated coconut processing unit for the production of DC & VCO at Hutbay, Little Andaman, A & N Islands -M/s. Riflex Industries Pvt. Ltd, Port Blair, A&N Islands at total cost of Rs.107.32 lakhs

The objective of the project is setting up of a integrated coconut processing unit for the production of Virgin Coconut oil & Desiccated coconut with installed capacity of 10,000 nuts/day. The project was approved with an eligible cost of Rs.99.32 lakhs and eligible subsidy of Rs.24.83 lakhs as follows.

Items	Total Project Cost (` in lakhs)	Eligible Project Cost (` in lakhs)	Maximum Eligible Subsidy (` in lakhs)
Land & Land Dev.	Leased	-	-
Plant & Equipments Including electrical install.	63.32	63.32	15.83
Building & civil works	25.00	25.00	6.25
Furniture & office equpts.	3.15	3.15	0.787
Tech. transfer fee	0.55	0.55	0.138
Other expenses	3.30	3.30	0.825
Working capital Margin	8.00	-	-
Freight charges to Hutbay	4.00	4.00	1.00
Total	107.32	99.32	24.83

24. Setting up of integrated coconut processing unit for the production of DC& VCO at Great Nicobar, A & N Islands- M/s. Riflex Industries Pvt. Ltd, Port Blair, A&N Islands at total cost of Rs.104.53 lakhs

The objective of the project is setting up of integrated coconut processing for the production of Virgin Coconut oil & Desiccated coconut with installed capacity of 10,000 nuts/day. The project was approved with an eligible cost of Rs.94.19 lakhs and eligible subsidy of Rs.23.535 lakhs as follows.

Items	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(₹ in lakhs)		
Land & Land Dev.	Leased		
Plant & Equipments (including electrical install.)	63.78	63.78	15.94
Building & civil works	22.00	22.00	5.50
Furniture & office equpts.	2.70	2.70	0.67
Pre-op. expenses	3.30	0.96	0.24
Working capital Margin	8.00	-	-
Freight charges to Campbellbay	4.75	4.75	1.18
Total	104.53	94.19	23.535

25. Setting up of a integrated coconut processing unit for the production of DC& VCO at Bakultalla (Rangat), A & N Islands M/s. Riflex Industries Pvt. Ltd, Port Blair, A&N Islands at total cost of Rs.103.43 lakhs

The objective of the project is setting up of a integrated coconut processing for the production of Virgin Coconut oil & Desiccated coconut with installed capacity of 10,000 nuts/day. The project was approved with an eligible cost of Rs.93.08 lakhs and eligible subsidy of Rs.23.26 lakhs as follows.

Items	Total Project Cost (₹ in lakhs)	Eligible Project Cost (₹ in lakhs)	Maximum Eligible Subsidy (₹ in lakhs)
Land & Land Dev.	Leased		
Plant & Equipments (including electrical install.)	63.43	63.43	15.85
Building & civil works	22.00	22.00	5.50
Furniture & office equpts.	2.70	2.70	0.67
Pre-op. expenses	3.30	0.95	0.23
Working capital Margin	8.00	-	-
Freight charges to Campbellbay	4.00	4.00	1.00
Total	103.43	93.08	23.26

The PAC approved the projects in principle and advised the promoters to decide on setting up of units in any of the two locations. The eligible subsidy in any case be limited to a maximum of Rs.48.365 lakhs as shown above.

26. Establishment of unit for packed tender coconut water at Otthakkalmandapam, Coimbatore - Pure Tropic, Mangalam Road, Karuvampalayam, Tirupur, Tamil Nadu at total cost of Rs.102.00 lakhs

The objective of the project is establishment of unit and export of packed coconut water with installed capacity of 3000 packs per day (5,95,000 packs/ year-200 ml). The project was approved with an eligible cost of Rs.92.00 lakhs and eligible subsidy of Rs.23.00 lakhs as follows.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(` in lakhs)		
Land	Own	-	-
Plant & Machinery	92.00	92.00	23.00
Margin for Working capital	10.00	-	-
TOTAL	102.00	92.00	23.00

The committee also suggested that the unit should stabilize and enhance the capacity with their own permanent infrastructure facilities including machineries for tetra packing at the earliest.

27. Setting up of a Virgin Coconut Oil Unit - M/s. Farmfact Coconut Products Pvt Ltd, KPM Colony, Subbaiahpillai St., Pattukkottai at total cost of Rs.125.75 lakhs

The objective of the project is establishment of Virgin Coconut Oil unit with installed capacity to process 7500 nuts per shift (2 shifts). The project was approved with an eligible cost of Rs.106.927 lakhs and eligible subsidy of Rs.26.732 lakhs as follows.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(Rs. in lakhs)		
Land & Land development	13.00	4.00	1.00
Building	32.00	32.00	8.00
Plant & Equipments	67.50	67.50	16.875
Technical know-how	0.50	0.50	0.125
Furniture & office equipments	1.75	1.75	0.438
Preliminary & Pre op. expenses	3.00	1.177	0.294
Working Capital margin	8.00	-	-
TOTAL	125.75	106.927	26.732

28. Construction of Godown for the production of Ball Copra at Mokeri - Shri. Suneshan V. K.,Sreevalsom, Thalassery, Kannur at total cost of Rs.6.267 lakhs

The objective of the project is production of high quality Ball copra with installed Capacity of 15000 nos per batch. The project was approved with an eligible cost of Rs.3.10 lakhs and eligible subsidy of Rs.0.775 lakhs as follows.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(` in lakhs)		
Land	0.800	-	-
Building	3.100	3.100	0.775
Plant & machinery	0.010	-	-
Working capital	2.357	-	-
Total	6.267	3.100	0.775

29. Setting up of a coconut processing unit at Vettilappara, Urungattiri Panchayat, Malappuram - Mr. T.V. Thomas, Thekkekkuttu House, Vettilappara PO, Malappuram at total cost of Rs.3.90 lakhs

The objective of the project is production of milling and edible copra with installed capacity of 3000 coconuts/day. The project was approved with an eligible cost of Rs.2.48 lakhs and eligible subsidy of Rs.0.62 lakhs subject to the condition that the land document, building permit, building plan and estimate etc. are submitted.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(` in lakhs)		
Land	0.50	-	-
Building	2.00	1.44	0.36
Plant & Equipments	1.00	1.00	0.25
Preliminary & Pre op. expenses	0.10	0.04	0.01
Working Capital margin	0.30	-	-
TOTAL	3.90	2.48	0.62

30. Establishment of ball copra making unit - Mr. P.J Thomas, Padinjarethottiyil, Kooranchundu, Kozhikode at total cost of Rs.5.00 lakhs

The objective of the project is production of high quality ball copra with installed capacity of 40000 nos. coconuts per year. The project was approved with an eligible cost of Rs.2.40 lakhs and eligible subsidy of Rs.0.725 lakhs as follows.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(in lakhs)		
Land	0.50	-	-
Building 39.99 sq.m.	3.00	2.40	0.60
Tools & Equipments	0.50	0.50	0.125
Working capital margin	1.00	-	-
TOTAL	5.00	2.90	0.725

31. Construction of Godown for Ball Copra Making and Storage of Copra - Shri Appana Naga Venkateswara Rao, S/o. Seetha Raman, AVR & CO. – Copra Merchant, Ambajipetta, East Godavari A.P. at total cost of Rs.23.00 lakhs

The objective of the project is production of ball copra and storage with installed capacity of 65,000 nuts / year. The project was approved with an eligible cost of Rs.13.00 lakhs and eligible subsidy of Rs.3.25 lakhs as follows.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
Civil works for storage shed 2166.5 sq ft	(in lakhs)		
Basement	6.90	13.00	3.25
Superstructure	5.75		
Roof Slab	5.75		
Finishing	4.60		
Total	23.00	13.00	3.25

32. Ball Copra making unit at Koorachundu - Shri. Hameed VS, Vellikulath House, Koorachundu, Kozhikode at total cost of Rs.3.75 lakhs

The objective of the project is production of high quality ball copra with installed capacity of 15000 nos. coconuts per year. The project was approved with an eligible cost of Rs.1.05 lakhs and eligible subsidy of Rs.0.262 lakhs as follows.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(in lakhs)		
Land	1.75	-	-
Building & Civil works	1.25	0.90	0.225
Cost of coconuts	0.60	-	-
Tools	0.15	0.15	0.0375
TOTAL	3.75	1.05	0.2625

33. *Generation of xylooligosaccharides from green coconut husk for augmenting gut health and function- National Institute of Animal Nutrition, Bangalore at total cost of Rs.40.06 lakhs.*

The project was submitted by Dr. Ashis Kumar Samanta, Senior Scientist, National Institute of Animal Nutrition, Bangalore. The objective of the project is to generate xylooligosaccharides from green coconut husks, to purify and characterize the xylooligosaccharides and to elucidate the prebiotic potentiality / therapeutic value of xylooligosaccharides.

Project Approval Committee approved the project at a total cost of Rs.40.06 lakhs with a duration of 3 years.

Other Items

13. *Proposal for fund requirement for the period April 2011- March 2012 for Quality Testing Laboratory at Vazhakulam, Aluva and ratification of expenditure incurred during April 2011 – July 2011.*

The PAC approved the financial allocation of Rs.20.00 lakhs towards recurring expenditure for purchase of chemicals/media, maintenance and salary for contract staff etc. of the Quality Testing Laboratory. The PAC also ratified expenditure of Rs.1.55983 lakhs during April 2011 - July 2011 towards routine recurring expenditure.

14. *Production of Disease free Elite planting material for Improving the productivity of coconut in Bay islands - Central Agricultural Research Institute (ICAR)– Revision of project cost*

The PAC ratified the additional amount of Rs.57,400/- sanctioned and released to CARI towards the revision of wages for Research Fellows and approved the project cost to be enhanced to Rs.20.01 lakhs

15. *Scaling up the production of planting material from coconut root (wilt) disease resistant palms through plumule culture. – Dr.Anitha Karun, Principal Scientist (Horticulture Biotechnology) – Revision of project cost*

The PAC ratified the release of Rs.1,58,400/- towards the wages for the period from 1.4.10 to 31.3.11 for the 2 SRF'S and 1 JRF and approved the enhancement of total project cost to Rs.47.262 lakhs

16. *Quick detection of root wilt diseases of coconut using molecular kit -Dr. R. Manimekalai, Scientist (Sr. Scale) Biotechnology, CPCRI, Kasaragod - Revision of project cost*

The PAC approved the payment of enhanced salary to 2 SRF's and the resultant enhancement of project cost to Rs.52,99,200/-.

17. Integrated management of bud rot disease of coconut in endemic areas - Central plantation Crops Research Institute, Kasargod - Revision of emoluments of SRF in the project and revision of project cost

The PAC ratified the release of Rs.66,142/- towards arrear of wages to Research Fellows and approved the enhancement of total project cost to Rs.20.609 lakhs.

18. Proposal for the Management of Black Headed Caterpillar (BHC) Menace on Coconut in Karnataka – Extension of project period.

As per the request of the Joint Director of Horticulture who attended the PAC meeting the project period was extended up to March 2012 by the PAC for the completion of the inputs application including last round of release of parasites and submission of final report including the list of beneficiaries.

19. Establishment of Biological Control Lab at Regional Office, Bangalore for the biological suppression of coconut leaf eating caterpillar in Karnataka - Coconut Development Board, Regional Office, Bangalore- Extension of project period

The PAC ratified release of 1st and 2nd quarter funds of Rs.1,30,885/- towards the recurring expenses of Bio control Lab and approved the budget of Rs.7 lakhs for 2011-12 & 2012-13.

20. Development of tractor mounted and self propelled coconut climber for coconut harvesting - B.S. Konkan Krishi Vidyapeeth, Dapoli– Revision of project cost.

The PAC approved the payment of enhanced salary of the Research Associate for 11 months and revised project cost Rs.17,67,700/- Lakhs.

21. Development of technology for preparation of particle boards & diversified products from tender coconut waste -Director, Central Coir Research Institute (CCRI), Kalavoor– Extension of project period.

The PAC ratified extension of the project period for one year i.e. up to 31st March 2012 to take up further studies and scaling up technologies developed and to ascertain the technical and commercial feasibility without any additional financial commitments.

22. *Synthesis and characterization of value added products from coconut oil - Indian Institute of Science, Bangalore –Additional Grant.*

The PAC reviewed the progress of the project and noted that the synthesis of Ca, Na, Li soaps for grease and optimization of emulsifiers for metal cutting operations have been completed. However performance evaluations, field test and setting up of pilot plants for demonstration of technology have to be initiated. The PAC opined that provisions for procurement of new automated viscometer cannot be considered under TMOC projects. Facilities available at the institute have to be utilized. The PI was requested to specify the time frame for establishment of the pilot testing plant for the production of coconut oil based emulsifier for cutting oils and demonstrating the synthesis of grease. PAC deferred a decision on allocation of additional grant for the second phase of the project till the report of the PI is reviewed.

23. *Project proposal for implementation of the Market Promotion Programme of “KERASHREE”. Brand coconut products manufactured and promoted by M/s Kotachery Co-operative Marketing Society ltd, No. L. 354, Kotachery, Kanhangad P.O., Kasaragod District, Kerala*

The PAC ratified the reimbursement of Rs.8.00 lakh and reallocation of the funds till 2012-13 to undertake market promotional activities as proposed.

24. *Inclusion of cost of land and land development under eligible Components for assistance.*

The PAC decided that the land procured within an approved industrial estate area of State Govt. / SEZ etc. for the establishment of processing units only need to be considered for providing eligible assistance under TMOC, even if the land is allocated on a long lease basis (not less than 12 years).

Other Decisions

- Chairman suggested that from the next PAC meeting onwards the proforma has to be revised incorporating the sales & marketing aspects also.
- Chairman desired that studies on value added innovative novel products should be taken up like Tender Coconut Soufle preparations, its packaging, increasing shelf life etc. by institutions like CFTRI.

- It was also suggested that development or import of technology for large scale processing of matured coconut water into Coconut Juice should also be taken up.
- In the MoU the following conditions should be specified:
 1. The unit shall display a visible permanent board in the premises of the unit stating that the project was established with the financial assistance from the Coconut Development Board under the scheme 'Technology Mission on Coconut'.
 2. Monthly reporting of physical and financial progress till the loan is closed will be insisted.
 3. The unit should mention in their advertisement and packaging of their products regarding the financial assistance from the Coconut Development Board under the scheme 'Technology Mission on Coconut'.

Dr. K. Muralidharan
Director

36th Meeting of PAC of TMOC held on 12th August 2011 at Kerabhavan, Kochi

List of Participants

Sl. No.	Name and address
A	MEMBERS
1	Shri. T.K. Jose IAS Chairman, Coconut Development Board
2	Dr. Devendra Kumar Dhodawat IAS Secretary Agriculture , Department of Agriculture, Government Secretariat, Thiruvananthapuram
3	Sri. K.B Dundi, Joint Director of Hort, (Plantation Crops & Plant Protection), State Horticulture Dept., Karnataka <u>Representative of</u> Secretary (Horticulture) Government of Karnataka, Karnataka Government Secretariat, Multistoried building, IIIrd Stage, IVth Floor, Dr. Ambedker Veedhi, Bangalore.
4	Dr. R. Chandramohanan, Head Crop Protection Division, CPCRI, Kasargod <u>Representative of</u> Dr. George. V. Thomas, Director, CPCRI, Kasaragod
5	Shri. Joseph S Pynadath, General Manager, Technical Services, Investment Credit Department, 3 rd Floor, B Wing, NABARD, Plot No. C -24, G Block Badra – KurIa Complex, Post Box No.8121, Bombay <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 –KurIa Complex, Post Box No.8121, Bombay
6	Shri. M.M. Jose, Senior Marketing Development Officer of Directorate of Marketing & Inspection, Kochi <u>Representative of</u> Joint Secretary & Agricultural Marketing Adviser to Govt. of India, Room No.237, Krishi Bhavan, New Delhi
7	Dr. KSMS Raghavarao, Head, Department of Food Engineering, Central Food Technological Research Institute (CFTRI), Mysore <u>Representative of</u> Director, Central Food Technological Research Institute, Mysore

8	Mr. Karupuswami, AGM, IOB, Ernakulam Shri. K. Mohan Kumar, Indian Overseas Bank, Kaloor, Kochi
9	<u>Representative of</u> Chief General Manager, Indian Overseas Bank, Bangalore City Branch, Gandhi Nagar, Bangalore- 560 009
B	EXPERT
10	Shri. D.N. Nirranjan Kani, Managing Director, Holista Transworld Ltd, 4th Floor, 6/18 Casa Major Road, Egmore, Chennai

C	OTHERS
13	Dr. K. Muralidharan, Director Coconut Development Board, Kochi
14	Dr. A.K.Nandi, Secretary, Coconut Development Board, Kochi
15	Sri. Sreekumar Poduval Junior Processing Engineer, CDB, Kochi
16	Smt.Cicily George, Finance Officer Coconut Development Board, Kochi
17	Smt. Deepthi Nair, Marketing Officer Coconut Development Board, Kochi
18	Smt. Jayashree A , Senior Technical Officer Coconut Development Board, Kochi
19	Smt. D.S. Resmi, Technical Officer Coconut Development Board, Kochi

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



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

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

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

The Committee confirmed the proceedings of the 35th Project Approval Committee Meeting

AGENDA No. 2: Action taken report of the 36th PAC Meeting

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

AGENDA No. 3: Approval of new project proposals:

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

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

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

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

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

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

The committee opined that:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Other Items

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

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

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

The Committee approved the extension of the project period up to December 31st 2011.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

12. Revision of cost for model project

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

The meeting concluded by 8.45 P.M

Dr. K. Muralidharan
Director
for Chairman

Annexure I

37th Meeting of PAC of TMOC held on 12th December 2011 at
Kerabhavan, Kochi

List of Participants

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

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

Proceedings of the 39th meeting of Project Approval Committee (PAC) of Technology Mission on Coconut held at Kochi on 17th August 2012

The 39th meeting of the Project Approval Committee (PAC) on Technology Mission on Coconut (TMOC) was held at the Board Room of Coconut Development Board, Kochi on 17th August 2012. Shri. T.K. Jose IAS, Chairman, Coconut Development Board and Chairman PAC chaired the meeting. The list of members attended the meeting is given in annexure I.

At the outset Chairman, welcomed the members of PAC and experts to the meeting. In his introductory remarks Chairman mentioned that this is the 10th year of implementation of TMOC programme. He reiterated the need for reorientation of the policies and perspectives for TMOC programme in the emerging market scenario. New initiatives have been initiated by the Board in this regard. Coconut Development Board has signed an MOU with CARE-Keralam, a joint venture of Ayurvedic Entrepreneurs and KINFRA supported by AYUSH (Government of India), to take up research on product development based on traditional ayurveda using coconut products as a main ingredients. CARE-Keralam has also been entrusted with the responsibility of identifying prospective entrepreneurs and hand holding for establishing coconut based value added products manufacturing units with assistance from Coconut Development Board under TMOC. Chairman said that the present PAC would consider research project from CARE-Keralam, Amrita Viswa Vidya Peetham, PSG College of Arts and Science, KAU, etc. Under Processing and Product diversification, 12 Projects with the investment of Rs.22 crores have been received and considered for extending financial assistance. In the present scenario of price crash in coconut sector, there is an urgent need to promote product development, product diversification and establishment of processing units for value added product other an copra and coconut oil.

AGENDA No. 1: Confirmation of the Proceedings of 38th Project Approval Committee Meeting held on 18th May 2012

The Committee confirmed the proceedings of the 38th Project Approval Committee Meeting.

AGENDA No. 2: Action taken report of the 38th PAC Meeting

The committee perused the action taken on the decision of the 38th meeting of the Project Approval Committee.

AGENDA No. 3: Approval of new project proposals:

1. Development of a litholytic formulation, incorporating the medicinal properties of coconut water and core of pseudo stem of plantain tree – CARE-Keralam Ltd., Kinfra Park, Koratty, Thrissur at a total cost of Rs.75.48 lakhs

The project was presented by Shri. D. Suresh Kumar, Head R&D, CARE-Keralam Ltd., Thrissur. The objective of the project to develop an effective litholytic formulation utilizing the diuretic property of tender coconut water.

The PAC after detailed discussion approved the project in principle and authorised Chairman, Coconut Development Board to approve the revised proposal incorporating the following aspects, as and when received.

- i) Honorarium to physicians may be kept at the minimum.
- ii) The share of the Institution and the Board has to be shown separately (50:50 basis).
- iii) The product developed should clearly bring out the medicinal properties of tender coconut water, which should form the main base/ingredient.

The Principal Investigator was requested to revise the proposal and costing accordingly and resubmit to the Chairman, Coconut Development Board for approval.

2. Immunostimulation with Virgin Coconut Oil to treat recurrent infections of the upper respiratory tract of Children - CARE-Keralam Ltd., Kinfra Park, Koratty, Thrissur at a total cost of Rs.60.66 lakhs

The project was presented by Shri. D. Suresh Kumar, Head R&D, CARE-Keralam Ltd., Thrissur. The objective of the project is to assess the immunostimulatory property of VCO in normal children and children suffering from recurrent infections of upper respiratory tract.

The PAC after detailed discussion approved the proposal in principle and authorized Chairman to sanction the eligible grant-in-aid on receipt of revised proposal subject to the following:

- i) Cost on major equipments should be shown as the share of the Institution.
- ii) The period taken for clinical trial for 300 subjects to be reviewed and rationalized.
- iii) Share of the Institution and the Board have to be shown separately.
- iv) All the ethical, social and moral responsibilities as per norms should be taken into account by the Institution conducting the study.

The PI was requested to revise the project accordingly and submit to Coconut Development Board for approval of Chairman.

3. Development of an Anti Diarrhoeal formulation, incorporating the medicinal principles of coconut water and heart wood of *Caesalpinia sappan* - CRe-Keralam Ltd., Kinfra Park, Koratty, Thrissur at a total cost of Rs.63.92 lakhs

The project was presented by Shri. D. Suresh Kumar, Head R&D, CRe-Keralam Ltd., Thrissur. The objective of the project is to develop an effective antidiarrhoeal formulation utilizing the diuretic property of tender coconut water and the antibacterial property of *Caesalpinia sappan*.

The PAC after detailed discussion approved the proposal in principle and authorized Chairman to sanction the eligible grant-in-aid on receipt of revised proposal subject to the following:

- i) Salary component and honorarium have to be revised and should be kept at the minimum.
- ii) The share of the Institution and Board has to be shown separately.
- iii) Infrastructure and equipment should be Institutional share. Equipment like Buchi Rotary Evaporator is shown in each project, should form part of the infrastructure of the Institution and should be shown in any one of the project only.

The PI was requested to revise the project accordingly and submit to Chairman, Coconut Development Board for approval.

4. Improving coconut production in Kerala using soil data through remote sensing and GIS techniques - Amritha Viswa Vidya Peetham University, Amritanagar, Coimbatore at a total cost of Rs.18.856 lakhs

The project was presented by Dr.P. Geetha, Asst. Professor, Amritha University, Coimbatore. The objective of the project is 1) to identify and map, using remote sensing and GIS techniques, the coconut growing areas of Kerala, 2) to create soil data base using GIS for coconut regions identified and 3) to recommend production improvement measures based on soil data base.

After detailed discussion, the PAC opined that the project could be initially implemented in 5 districts of Kerala namely, Kozhikode, Malappuram, Palakad, Thrissur and Ernakulam. Based on the reliability and authenticity of the results, the project can be extended to other

regions in the second phase. The costing and duration have to be revised accordingly. The share of the Institution and the Board have to be shown separately.

The PI was requested to submit revised project to Chairman, Coconut Development Board for sanction of eligible grant-in-aid. The PAC authorised Chairman to approve the revised proposal as and when submitted.

5. Formulation of health mixes with Coconut Milk powder and coconut flour, their shelf life and effect on growth and Immune status - Department of Nutrition and Dietitics, PSG College of arts and science, Coimbatore at a total cost of Rs.24.78 lakhs

The project was submitted by Department of Nutrition and Dietitics, PSG College of Arts and Science, Coimbatore. The objective of the project is to formulate health mixes using coconut flour and coconut milk powder, to determine the shelf life of health mixes, to find out the effect of health mixes on the growth and immune capacity and to compare the nutrient content and cost of formulated mixes with commercial health mixes available in the market.

PAC deferred the project for the time being and advised that the PI may present the proposal before the next PAC with details on the duration of the project, number of subjects, detailed costing of the project, institutional share, outcome anticipated, products proposed to be formulated, etc.. etc.

6. Establishment of coconut hybrid seedlings production unit under farmers participatory programme - Instructional Farm, College of Agriculture, Vellayani, Trivandrum at a total cost of Rs.183.69 lakhs

The project was submitted by Instructional Farm, College of Agriculture, Vellayani, Trivandrum. The objective of the project is large scale procurement of seednuts of dwarf varieties of coconut like CGD, COD, MYD and raising nursery and production of quality coconut seedlings for public distribution, production of TX D hybrids through breeding programme. [The following crosses are proposed: WCT X COD (Kera Sankara), WCT X MYD (Kera Sree)], production of DXT hybrids through breeding programme. (Following crosses are proposed: CODX WCT, MYD X WCT, CGD X WCT), and large scale production and distribution of good quality WCT and Komadan coconut seedlings.

PAC after detailed discussion authorised Chairman, Coconut Development Board to arrange a detailed discussion with the PI and finalise the proposal and place before PAC in the next meeting. The following aspects have to be discussed;

- i) Area of operation being root wilt affected, hybrid combinations should be RWD tolerant or resistant
- ii) Details about the costing, research materials, mobile diagnostic unit, revolving fund, etc. may be clarified.
- iii) Need for production of TxD hybrid to be reviewed.

The PI was advised to revise the project accordingly.

7. Modernization and technical up gradation of Desiccated Coconut powder unit - M/s.Sarvashakthi Agro Products, Udupi, Karnataka at a total cost of Rs.230 lakhs

The objective of the project is modernization and upgradation of the already established desiccated coconut powder unit to enhance the capacity from 60,000 to 1,00,000 coconuts per day for producing 1 MT desiccated coconut powder per day. The project was approved with an eligible cost of Rs.135.705 lakhs and eligible subsidy of Rs.20.66 lakhs as follows.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(₹ in lakhs)		
Land	Own	-	-
Building & Civil works (17660 sq ft)	80.00	30.00	7.50
Plant & Equipments	113.00	105.705	26.426
Goods carrier	20.38	-	-
Working Capital margin	16.62	-	-
TOTAL	230.00	135.705	Limited to 20.66 lakhs

Since the promoter has already availed a subsidy of Rs.29.34 lakhs under TMOC the maximum eligible subsidy was restricted to Rs.20.66 lakhs.

8. Setting up of desiccated coconut powder manufacturing unit -M/s. Sri Amritha Hitech Coco Food Products Export, Perundurai, Erode at a total cost of Rs.258.13 lakhs

The objective of the project is setting up of desiccated coconut powder manufacturing unit with a capacity to process 70,000 coconuts per day for producing 700 kg desiccated coconut powder per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(₹ in lakhs)		
Land	Own	-	-
Building & Civil works	77.37	60.00	15.00
Plant & Equipments	149.00	145.62	36.41
Furniture & Office equipments	1.76	1.76	0.44
Preliminary & Pre op. expenses	15.00	2.43	0.60
Working Capital margin	15.00	-	-
TOTAL	258.13	209.81	Limited to 50 lakhs

Chairman suggested that the unit should adhere to ISO standards and other social security measures for the laboures etc. could be enforced, so as to make the unit with international quality standards. The PAC approved the project with maximum eligible subsidy of Rs.50.00 lakhs, with the above condition.

9. Setting up of Desiccated Coconut powder unit -M/s. SS Coconut Industries, Geejihally, Arsikera, Hassan Dist., Karnataka at a total cost of Rs.125.24 lakhs

The objective of the project is setting up of desiccated coconut powder manufacturing unit with a capacity to process 30,000 coconuts per day for producing 3 MT desiccated coconut powder per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(₹ in lakhs)		
Land	Own	-	-
Building & Civil works (5000sq m)	59.00	52.50	13.125
Plant & Equipments	60.49	50.24	12.561
Furniture Fixtures	0.25	0.25	0.062
Misce. deposits	0.50	-	-
Working Capital margin	5.00	-	-
TOTAL	125.24	102.99	25.748

The project was approved in principle subject to the condition that Blanching & Effluent Treatment Plants (ETP) to be incorporated in the project. Since the unit has already commenced production, PAC authorized Chairman to sanction the eligible subsidy based on the actual expenditure as and when all the required documents are submitted which may be got ratified in the next PAC.

10. Setting up of Desiccated Coconut Processing Industry - M/s. Sree Mukkanneshwari Coconut Industries, Tiptur Tq., Tumkur Dist, Karnataka at a total cost of Rs.63.40lakhs

The objective of the project is setting up of unit for production of desiccated coconut powder with a capacity to process 25000 nuts/ day for producing 2 MT desiccated coconut powder per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(₹ in lakhs)		
Land	Own	-	-
Building & Civil works (8961 sq ft)	28.37	28.37	7.093
Plant & Equipments	23.83	21.21	5.302
Electrification	1.55	1.55	0.387
Electricity deposit	2.25	-	-
Interest during project implementation/ building construction	2.50	-	-
Miscellaneous Expenses & contingencies	2.40	-	-
Working Capital margin	2.50	-	-
TOTAL	63.40	51.13	12.782

The project was approved in principle subject to the conditions that 1) Blanching & Effluent Treatment Plants (ETP) to be incorporated in the project. 2) The financial parameters like IRR, BEP, NPR, DSCR etc to be worked out and revised project to be submitted. 3) If the unit has commenced production the actual expenditure and relevant document as per norms to be submitted. PAC authorized Chairman to sanction the eligible subsidy based on the actual expenditure as and when the documents are submitted which can be got ratified by the next PAC.

11. Setting up of desiccated coconut powder manufacturing unit - M/s.Tenguraja Coco products, Karkala, Uduppi, Karnataka at a total cost of Rs.169 lakhs

The objective of the project is to set up a unit for production of desiccated coconut powder with a capacity to process 24000 nuts per day for producing 2.4 MT desiccated coconut powder per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(₹ in lakhs)		
Land	Own	-	-
Building & Civil works	45.00	45.00	11.25
Plant & Equipments	114.00	62.50	15.625
Preliminary & Pre op. expenses	4.00	1.63	0.408
Working Capital margin	6.00	-	-
TOTAL	169.00	109.13	27.282

It was clarified by the promoter that the whole system is fully automatic and all contact points are made of SS 304 materials. Hence the cost of machinery is high. The project was approved in principle. PAC authorized Chairman to sanction the eligible subsidy limiting the cost as per standard norms adopted under TMOC and got ratified in the next PAC meeting.

12. Expansion, upgradation and modernisation of Desiccated Coconut Powder and Setting up of new Virgin Coconut Oil manufacturing unit - M/s. Asha Coconut industries, Tirupur, Tumkur Dist, Karnataka at a total cost of Rs.207.52 lakhs

The objective of the project is expansion, up gradation and modernisation of desiccated coconut powder and establishment of new virgin coconut oil manufacturing unit with a capacity to process 70,000 nuts /day for desiccated coconut powder and 5,000 nuts per day for virgin coconut oil.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(₹ in lakhs)		
Land	Own	-	-
Building & Civil works (19697 sq ft)	30.25	30.25	7.563
Plant & Machinery	123.47	117.91	29.477
Technical know-how	0.50	0.50	0.125
Contingencies	9.50	-	-
Working Capital margin	43.80	-	-
TOTAL	207.52	148.66	37.165

The project was approved with a maximum eligible subsidy of Rs.37.165 lakhs subject to the condition that Effluent Treatment Plants (ETP) to be incorporated in the project.

13. Setting up of Virgin Coconut Oil and Desiccated coconut powder unit - M/s. Jaimatha Agro Oils, Vaishnavi Complex, Tiptur, Tumkur Dist, Karnataka at a total cost of Rs.246.20 lakhs

The objective of the project is setting up of virgin coconut oil and desiccated coconut powder unit with a capacity to process 69,000 coconut per day for producing 1320 Tons of desiccated coconut per year & 5000 L of virgin coconut oil per year.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(₹ in lakhs)		
Land	-	-	-
Building & Civil works (26000 sq ft)	98.00	90.00	22.50
Plant & Equipments	118.20	107.83	26.95
Working Capital margin	30.00	-	-
TOTAL	246.20	197.83	49.45

The project was approved in principle subject to the condition that a) Transfer of Technology certificate to be furnished. b) Since the unit has commenced production the eligible subsidy may be worked out based on the actual expenditure. c) Promoter should submit the documents as per norms. d) Comments of Regional Office Bangalore on desiccated coconut unit to be obtained. e) Blanching & Effluent Treatment Plants (ETP) to be incorporated in the project. PAC authorized Chairman to sanction the eligible subsidy subject to the above.

14. Setting up of Organic Virgin Coconut Oil unit - M/s. Honeybee Agro Corporation, Udumalpet, Tirupur Dist, Tamil Nadu at a total cost of Rs.530.00 lakhs

The objective of the project is setting up of Organic Virgin Coconut Oil unit with a capacity to process 1,00,000 coconuts per day for producing 6.5 T Virgin Coconut Oil per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(₹ in lakhs)		
Land	10.00	-	
Building & Civil works	185.00	-	
Plant & Equipments	202.30	200.30	
Technical know-how	0.55	0.55	
Electrification	30.00	-	
Furniture & office equipment	9.35	-	
Preliminary & Pre op. expenses	10.00	-	
Working Capital margin	70.00	-	
TOTAL	530.00	Limit to 200.00	Limited to 50 lakhs

The project was approved in principle. PAC authorized Chairman to sanction the eligible subsidy as and when the bank appraisal and term loan sanction letters are furnished.

15. Setting up of a Tender coconut water preservation and packaging unit - M/s. Yogic Foods Pvt. Ltd, Anupam Apartment, East Arjun Nagar, Delhi at a total cost of Rs.151.48 lakhs

The objective of the project is establishment of a tender coconut water preservation and packaging unit with a capacity to process 15000 tender coconuts per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(₹ in lakhs)		
Land	Leased	-	-
Building & Civil works (2200 sq.ft.)	7.50	7.50	1.875
Clean Room	5.0	5.00	1.25
Plant & Machinery	105.74	89.93	22.483
Technical know-how	3.50	3.50	0.875
Electrical installation	5.03	5.03	1.257
Office Equipments	2.70	2.70	0.675
Contingencies	4.00	-	-
Preliminary & Pre op. expenses	5.00	-	-
Working Capital margin	13.01	-	-
TOTAL	151.48	113.66	28.415

The project was approved with a maximum eligible subsidy of Rs.28.415 lakhs. The unit should furnish a NOC from DFRL, Mysore for the machineries. Product should meet the APCC standards.

16. Setting up of Packed Tender coconut water unit - M/s. Global Associates, Manjeshwar, Badaje, Kasargod at a total cost of Rs.110.40 lakhs

The objective of the project is setting up of packed tender coconut water unit with a capacity to process 10,000 packed tender coconut water per day

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(₹ in lakhs)		
Land (75 cents)	25.20	-	-
Plant & Equipments	36.23	35.73	8.93
Building & Civil works (521.8m ²)	34.72	34.72	8.68
Pre op. expenses	12.30	1.08	0.27
Working Capital margin	1.95	-	-
TOTAL	110.40	71.53	17.88

The project was approved in principle subject to the condition that the construction of unit to be of ISO/ HACCP standards. It was also suggested to undertake a feasibility study of similar units and raw material source, varietal study by the promoter before venturing into it. PAC authorized Chairman to sanction the eligible subsidy and to be ratified by the next PAC.

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

The objective of the project is manufacturing carbonized shells lumps and granules with a capacity to process 1700 Tons Carbonized shells & Granules per annum (3.7 T per day)

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(₹ in lakhs)		
Land	5.00	-	-
Building	14.50	14.50	3.625
Machinery	15.07	6.71	1.677
TOTAL	34.57	21.21	5.302

The project was approved with a maximum eligible subsidy of Rs.5.302 lakhs.

18. Setting up of a boda making unit - Sri. Sreejith, Kappummal House, Maruthonkara, Kavilumpara, Kozhikode at a total cost of Rs.5.50 lakhs

The objective of the project is setting up of a ball copra making unit with a capacity to process 50000 coconuts per year for producing 100 Q ball copra per year.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(₹ in lakhs)		
Land	Own	-	-
Building & Civil works	4.60	4.60	1.15
Fixed assets- vessels, furniture, weighing machine etc	0.15	0.15	0.037
Preliminary & Pre op. expenses	0.05	0.048	0.012
Working Capital margin	0.70	-	-
TOTAL	5.50	4.79	1.199

The project was approved with a maximum eligible subsidy of Rs.1.199 lakhs.

19. Management of Disease affected Palm in Nagercoil District - Department of Agriculture, Tamilnadu at a total cost of Rs.57.318 lakhs

The project was submitted by Department of Agriculture, Tamilnadu. After detailed discussion, the PAC opined that the Board shall extend an assistance of Rs.500/ palm for cutting and removal of root wilt disease affected palms after obtaining report from Regional Office Chennai. The programme should be completed before March 2013; PAC asked the department to rework it and submit again.

20. Market Promotional Programme - Participation in 5th Indexpo Muscat-2012 at Oman International Exhibition Centre, Muscat

The objective of this prestigious project is to display, demonstrate and sell Indian products, goods and services to the fast developing market of Sultanate of Oman while further encouraging developing trade links between the two countries.

In addition to the dissemination of information, the exhibition provide the opportunity for creating consumer awareness on value added coconut products and widening the market for coconut products in traditional as well in non-traditional areas. With the association of manufacturers, the Board desires to conduct sales-cum-display of various coconut by-products during the exhibitions. PAC approved the proposal with a total sum of Rs.17,50,000/- subject to the approval of Govt. of India for participation of officials. PAC strongly suggested that manufactures should be exposed to international markets for export opportunities for Indian coconut products and also to learn about the export market needs.

Estimate of expenditure for the deputation of Board/Ministry officials in Indexpo Muscat-2012

Table-I

Sl. No	Particulars	In US \$	In Indian`
1	Rent for 27 sq.mtr Shell scheme stall@ 300 USD	8100	
2	Travel fare (100% for 2 officials)		300000
3	Per diem charges(2 officials) US\$ 75 per day as per diem and maximum limit to US\$ 150 per person for 5 days for hotel accommodation	2400	
4	Miscellaneous expenses for the procurement of exhibits		100000
5	Miscellaneous Expenses (for Business Meet/ publicity/ transportation etc	2000	
	Total	*12500	688812
			1088375
	Sub Total (a)		Or say 11,00,000

Estimate of expenditure for participation of entrepreneurs in Indexpo Muscat-2012

Table -II

Sl.No	Particulars	In US \$	In Indian
1	Travel Expenses (reimbursement of 50% of Air Fare) for 4 entrepreneurs		400000
2	Hotel Accommodation (50% of hotel rate) for 4 persons		100000
3	Reimbursement of freight charge (transportation of exhibits (100% on production of bill)		150000
	Sub Total (b)		650000
	Total a + b		1750000

Other Items

1. ***Project for 'Development of technology for preparation of particle boards & diversified products from tender coconut waste'- Central Coir Research Institute (CCRI), Kalavoor, Alleppey –Extension of project period***

PAC ratified the release of final installment of Rs.2.416 lakhs and approved the proposal to extend the project period upto 31.07.2013.

Other issues

- Mr. Appanna, General Manager, NABARD suggested that the Coconut Producers Federations can avail Producers Organizations Development Fund (PODF) through the Business Initiation Department (BID) of NABARD. Further he added that NABARD has a scheme to provide 50% grant-in-aid under Farmers Technology Transfer Fund (FTTF).
- Dr. M. Aravindakshan, former Chairman, CDB suggested that the outcome of the research studies sponsored under TMOC may be documented and published.
- It was also decided that the coconut processing units (Food products) should be insisted to obtain certification – FSSAI Authority of the concerned states.

The meeting concluded by 5.30 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. George. V. Thomas, Director, CPCRI, Kasaragod <u>Representative of</u> Assistant Director General (Plantation crops) Indian Council of Agriculture Research (ICAR), Krishi Anusandhan Bhavan –II, Pusa, New Delhi
3	Dr. M.Tamil Selvan, Additional Commissioner (Horticulture) Ministry of Agriculture, Govt. of India <u>Representative of</u> Horticulture Commissioner, Department of Agriculture & Cooperation Krishi Bhavan, New Delhi -110 001
4	Shri. C.P. Appanna, General Manager, Technical Services, 3 rd Floor, B Wing, NABARD, Plot No. C –24, G Block Badra –Kurla Complex, Post Box No.8121, Bombay <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
5	Shri. M.M. Jose, Senior Marketing Development Officer, Directorate of Marketing & Inspection, Kochi, 6th floor, A Block, Agmark, Kendriya Bhavan, Kakkand <u>Representative of</u> Joint Secretary & Agricultural Marketing Adviser to Govt. of India, Room No.237, Krishi Bhavan, New Delhi
6	Shri.Sugata Ghose, Chief Coconut Development Officer i/c., Coconut Development Board, Kochi
B	EXPERTS
7	Dr.M.Aravindakshan Co-ordinator, Amritha School of Environmental Studies, Ettimedai, Coimbatore

8	Prof. D.M. Vasudevan, MD, FRC Path, Co-investigator, Amrita School of Medicine, Amritha Institute of Medical Sciences, Kochi
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C	OTHERS
9	Dr. K. Muralidharan, Director Coconut Development Board, Kochi
10	Dr. A.K.Nandi, Secretary, Coconut Development Board, Kochi
11	Shri. Sreekumar Poduval Junior Processing Engineer, CDB, Kochi
12	Shri. P.Sabareenathan, Finance Officer Coconut Development Board, Kochi
13	Smt. Jayashree A , Senior Technical Officer Coconut Development Board, Kochi

Proceedings of the 39th meeting of Project Approval Committee (PAC) of Technology Mission on Coconut held at Kochi on 17th August 2012

The 39th meeting of the Project Approval Committee (PAC) on Technology Mission on Coconut (TMOC) was held at the Board Room of Coconut Development Board, Kochi on 17th August 2012. Shri. T.K. Jose IAS, Chairman, Coconut Development Board and Chairman PAC chaired the meeting. The list of members attended the meeting is given in annexure I.

At the outset Chairman, welcomed the members of PAC and experts to the meeting. In his introductory remarks Chairman mentioned that this is the 10th year of implementation of TMOC programme. He reiterated the need for reorientation of the policies and perspectives for TMOC programme in the emerging market scenario. New initiatives have been initiated by the Board in this regard. Coconut Development Board has signed an MOU with CARE-Keralam, a joint venture of Ayurvedic Entrepreneurs and KINFRA supported by AYUSH (Government of India), to take up research on product development based on traditional ayurveda using coconut products as a main ingredients. CARE-Keralam has also been entrusted with the responsibility of identifying prospective entrepreneurs and hand holding for establishing coconut based value added products manufacturing units with assistance from Coconut Development Board under TMOC. Chairman said that the present PAC would consider research project from CARE-Keralam, Amrita Viswa Vidya Peetham, PSG College of Arts and Science, KAU, etc. Under Processing and Product diversification, 12 Projects with the investment of Rs.22 crores have been received and considered for extending financial assistance. In the present scenario of price crash in coconut sector, there is an urgent need to promote product development, product diversification and establishment of processing units for value added product other than copra and coconut oil.

AGENDA No. 1: Confirmation of the Proceedings of 38th Project Approval Committee Meeting held on 18th May 2012

The Committee confirmed the proceedings of the 38th Project Approval Committee Meeting.

AGENDA No. 2: Action taken report of the 38th PAC Meeting

The committee perused the action taken on the decision of the 38th meeting of the Project Approval Committee.

AGENDA No. 3: Approval of new project proposals:

1. Development of a litholytic formulation, incorporating the medicinal properties of coconut water and core of pseudo stem of plantain tree – CARE-Keralam Ltd., Kinfra Park, Koratty, Thrissur at a total cost of Rs.75.48 lakhs

The project was presented by Shri. D. Suresh Kumar, Head R&D, CARE-Keralam Ltd., Thrissur. The objective of the project to develop an effective litholytic formulation utilizing the diuretic property of tender coconut water.

The PAC after detailed discussion approved the project in principle and authorised Chairman, Coconut Development Board to approve the revised proposal incorporating the following aspects, as and when received.

- i) Honorarium to physicians may be kept at the minimum.
- ii) The share of the Institution and the Board has to be shown separately (50:50 basis).
- iii) The product developed should clearly bring out the medicinal properties of tender coconut water, which should form the main base/ingredient.

The Principal Investigator was requested to revise the proposal and costing accordingly and resubmit to the Chairman, Coconut Development Board for approval.

2. Immunostimulation with Virgin Coconut Oil to treat recurrent infections of the upper respiratory tract of Children - CARE-Keralam Ltd., Kinfra Park, Koratty, Thrissur at a total cost of Rs.60.66 lakhs

The project was presented by Shri. D. Suresh Kumar, Head R&D, CARE-Keralam Ltd., Thrissur. The objective of the project is to assess the immunostimulatory property of VCO in normal children and children suffering from recurrent infections of upper respiratory tract.

The PAC after detailed discussion approved the proposal in principle and authorized Chairman to sanction the eligible grant-in-aid on receipt of revised proposal subject to the following:

- i) Cost on major equipments should be shown as the share of the Institution.
- ii) The period taken for clinical trial for 300 subjects to be reviewed and rationalized.
- iii) Share of the Institution and the Board have to be shown separately.
- iv) All the ethical, social and moral responsibilities as per norms should be taken into account by the Institution conducting the study.

The PI was requested to revise the project accordingly and submit to Coconut Development Board for approval of Chairman.

3. Development of an Anti Diarrhoeal formulation, incorporating the medicinal principles of coconut water and heart wood of *Caesalpinia sappan* - CRe-Keralam Ltd., Kinfra Park, Koratty, Thrissur at a total cost of Rs.63.92 lakhs

The project was presented by Shri. D. Suresh Kumar, Head R&D, CRe-Keralam Ltd., Thrissur. The objective of the project is to develop an effective antidiarrhoeal formulation utilizing the diuretic property of tender coconut water and the antibacterial property of *Caesalpinia sappan*.

The PAC after detailed discussion approved the proposal in principle and authorized Chairman to sanction the eligible grant-in-aid on receipt of revised proposal subject to the following:

- i) Salary component and honorarium have to be revised and should be kept at the minimum.
- ii) The share of the Institution and Board has to be shown separately.
- iii) Infrastructure and equipment should be Institutional share. Equipment like Buchi Rotary Evaporator is shown in each project, should form part of the infrastructure of the Institution and should be shown in any one of the project only.

The PI was requested to revise the project accordingly and submit to Chairman, Coconut Development Board for approval.

4. Improving coconut production in Kerala using soil data through remote sensing and GIS techniques - Amritha Viswa Vidya Peetham University, Amritanagar, Coimbatore at a total cost of Rs.18.856 lakhs

The project was presented by Dr.P. Geetha, Asst. Professor, Amritha University, Coimbatore. The objective of the project is 1) to identify and map, using remote sensing and GIS techniques, the coconut growing areas of Kerala, 2) to create soil data base using GIS for coconut regions identified and 3) to recommend production improvement measures based on soil data base.

After detailed discussion, the PAC opined that the project could be initially implemented in 5 districts of Kerala namely, Kozhikode, Malappuram, Palakad, Thrissur and Ernakulam. Based on the reliability and authenticity of the results, the project can be extended to other

regions in the second phase. The costing and duration have to be revised accordingly. The share of the Institution and the Board have to be shown separately.

The PI was requested to submit revised project to Chairman, Coconut Development Board for sanction of eligible grant-in-aid. The PAC authorised Chairman to approve the revised proposal as and when submitted.

5. Formulation of health mixes with Coconut Milk powder and coconut flour, their shelf life and effect on growth and Immune status - Department of Nutrition and Dietitics, PSG College of arts and science, Coimbatore at a total cost of Rs.24.78 lakhs

The project was submitted by Department of Nutrition and Dietitics, PSG College of Arts and Science, Coimbatore. The objective of the project is to formulate health mixes using coconut flour and coconut milk powder, to determine the shelf life of health mixes, to find out the effect of health mixes on the growth and immune capacity and to compare the nutrient content and cost of formulated mixes with commercial health mixes available in the market.

PAC deferred the project for the time being and advised that the PI may present the proposal before the next PAC with details on the duration of the project, number of subjects, detailed costing of the project, institutional share, outcome anticipated, products proposed to be formulated, etc.. etc.

6. Establishment of coconut hybrid seedlings production unit under farmers participatory programme - Instructional Farm, College of Agriculture, Vellayani, Trivandrum at a total cost of Rs.183.69 lakhs

The project was submitted by Instructional Farm, College of Agriculture, Vellayani, Trivandrum. The objective of the project is large scale procurement of seednuts of dwarf varieties of coconut like CGD, COD, MYD and raising nursery and production of quality coconut seedlings for public distribution, production of TX D hybrids through breeding programme. [The following crosses are proposed: WCT X COD (Kera Sankara), WCT X MYD (Kera Sree)], production of DXT hybrids through breeding programme. (Following crosses are proposed: CODX WCT, MYD X WCT, CGD X WCT), and large scale production and distribution of good quality WCT and Komadan coconut seedlings.

PAC after detailed discussion authorised Chairman, Coconut Development Board to arrange a detailed discussion with the PI and finalise the proposal and place before PAC in the next meeting. The following aspects have to be discussed;

- i) Area of operation being root wilt affected, hybrid combinations should be RWD tolerant or resistant
- ii) Details about the costing, research materials, mobile diagnostic unit, revolving fund, etc. may be clarified.
- iii) Need for production of TxD hybrid to be reviewed.

The PI was advised to revise the project accordingly.

7. Modernization and technical up gradation of Desiccated Coconut powder unit - M/s.Sarvashakthi Agro Products, Udupi, Karnataka at a total cost of Rs.230 lakhs

The objective of the project is modernization and upgradation of the already established desiccated coconut powder unit to enhance the capacity from 60,000 to 1,00,000 coconuts per day for producing 1 MT desiccated coconut powder per day. The project was approved with an eligible cost of Rs.135.705 lakhs and eligible subsidy of Rs.20.66 lakhs as follows.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(₹ in lakhs)		
Land	Own	-	-
Building & Civil works (17660 sq ft)	80.00	30.00	7.50
Plant & Equipments	113.00	105.705	26.426
Goods carrier	20.38	-	-
Working Capital margin	16.62	-	-
TOTAL	230.00	135.705	Limited to 20.66 lakhs

Since the promoter has already availed a subsidy of Rs.29.34 lakhs under TMOC the maximum eligible subsidy was restricted to Rs.20.66 lakhs.

8. Setting up of desiccated coconut powder manufacturing unit -M/s. Sri Amritha Hitech Coco Food Products Export, Perundurai, Erode at a total cost of Rs.258.13 lakhs

The objective of the project is setting up of desiccated coconut powder manufacturing unit with a capacity to process 70,000 coconuts per day for producing 700 kg desiccated coconut powder per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(₹ in lakhs)		
Land	Own	-	-
Building & Civil works	77.37	60.00	15.00
Plant & Equipments	149.00	145.62	36.41
Furniture & Office equipments	1.76	1.76	0.44
Preliminary & Pre op. expenses	15.00	2.43	0.60
Working Capital margin	15.00	-	-
TOTAL	258.13	209.81	Limited to 50 lakhs

Chairman suggested that the unit should adhere to ISO standards and other social security measures for the laboures etc. could be enforced, so as to make the unit with international quality standards. The PAC approved the project with maximum eligible subsidy of Rs.50.00 lakhs, with the above condition.

9. Setting up of Desiccated Coconut powder unit -M/s. SS Coconut Industries, Geejihally, Arsikera, Hassan Dist., Karnataka at a total cost of Rs.125.24 lakhs

The objective of the project is setting up of desiccated coconut powder manufacturing unit with a capacity to process 30,000 coconuts per day for producing 3 MT desiccated coconut powder per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(₹ in lakhs)		
Land	Own	-	-
Building & Civil works (5000sq m)	59.00	52.50	13.125
Plant & Equipments	60.49	50.24	12.561
Furniture Fixtures	0.25	0.25	0.062
Misce. deposits	0.50	-	-
Working Capital margin	5.00	-	-
TOTAL	125.24	102.99	25.748

The project was approved in principle subject to the condition that Blanching & Effluent Treatment Plants (ETP) to be incorporated in the project. Since the unit has already commenced production, PAC authorized Chairman to sanction the eligible subsidy based on the actual expenditure as and when all the required documents are submitted which may be got ratified in the next PAC.

10. Setting up of Desiccated Coconut Processing Industry - M/s. Sree Mukkanneshwari Coconut Industries, Tiptur Tq., Tumkur Dist, Karnataka at a total cost of Rs.63.40lakhs

The objective of the project is setting up of unit for production of desiccated coconut powder with a capacity to process 25000 nuts/ day for producing 2 MT desiccated coconut powder per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(₹ in lakhs)		
Land	Own	-	-
Building & Civil works (8961 sq ft)	28.37	28.37	7.093
Plant & Equipments	23.83	21.21	5.302
Electrification	1.55	1.55	0.387
Electricity deposit	2.25	-	-
Interest during project implementation/ building construction	2.50	-	-
Miscellaneous Expenses & contingencies	2.40	-	-
Working Capital margin	2.50	-	-
TOTAL	63.40	51.13	12.782

The project was approved in principle subject to the conditions that 1) Blanching & Effluent Treatment Plants (ETP) to be incorporated in the project. 2) The financial parameters like IRR, BEP, NPR, DSCR etc to be worked out and revised project to be submitted. 3) If the unit has commenced production the actual expenditure and relevant document as per norms to be submitted. PAC authorized Chairman to sanction the eligible subsidy based on the actual expenditure as and when the documents are submitted which can be got ratified by the next PAC.

11. Setting up of desiccated coconut powder manufacturing unit - M/s.Tenguraja Coco products, Karkala, Uduppi, Karnataka at a total cost of Rs.169 lakhs

The objective of the project is to set up a unit for production of desiccated coconut powder with a capacity to process 24000 nuts per day for producing 2.4 MT desiccated coconut powder per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(₹ in lakhs)		
Land	Own	-	-
Building & Civil works	45.00	45.00	11.25
Plant & Equipments	114.00	62.50	15.625
Preliminary & Pre op. expenses	4.00	1.63	0.408
Working Capital margin	6.00	-	-
TOTAL	169.00	109.13	27.282

It was clarified by the promoter that the whole system is fully automatic and all contact points are made of SS 304 materials. Hence the cost of machinery is high. The project was approved in principle. PAC authorized Chairman to sanction the eligible subsidy limiting the cost as per standard norms adopted under TMOC and got ratified in the next PAC meeting.

12. Expansion, upgradation and modernisation of Desiccated Coconut Powder and Setting up of new Virgin Coconut Oil manufacturing unit - M/s. Asha Coconut industries, Tirupur, Tumkur Dist, Karnataka at a total cost of Rs.207.52 lakhs

The objective of the project is expansion, up gradation and modernisation of desiccated coconut powder and establishment of new virgin coconut oil manufacturing unit with a capacity to process 70,000 nuts /day for desiccated coconut powder and 5,000 nuts per day for virgin coconut oil.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(₹ in lakhs)		
Land	Own	-	-
Building & Civil works (19697 sq ft)	30.25	30.25	7.563
Plant & Machinery	123.47	117.91	29.477
Technical know-how	0.50	0.50	0.125
Contingencies	9.50	-	-
Working Capital margin	43.80	-	-
TOTAL	207.52	148.66	37.165

The project was approved with a maximum eligible subsidy of Rs.37.165 lakhs subject to the condition that Effluent Treatment Plants (ETP) to be incorporated in the project.

13. Setting up of Virgin Coconut Oil and Desiccated coconut powder unit - M/s. Jaimatha Agro Oils, Vaishnavi Complex, Tiptur, Tumkur Dist, Karnataka at a total cost of Rs.246.20 lakhs

The objective of the project is setting up of virgin coconut oil and desiccated coconut powder unit with a capacity to process 69,000 coconut per day for producing 1320 Tons of desiccated coconut per year & 5000 L of virgin coconut oil per year.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(₹ in lakhs)		
Land	-	-	-
Building & Civil works (26000 sq ft)	98.00	90.00	22.50
Plant & Equipments	118.20	107.83	26.95
Working Capital margin	30.00	-	-
TOTAL	246.20	197.83	49.45

The project was approved in principle subject to the condition that a) Transfer of Technology certificate to be furnished. b) Since the unit has commenced production the eligible subsidy may be worked out based on the actual expenditure. c) Promoter should submit the documents as per norms. d) Comments of Regional Office Bangalore on desiccated coconut unit to be obtained. e) Blanching & Effluent Treatment Plants (ETP) to be incorporated in the project. PAC authorized Chairman to sanction the eligible subsidy subject to the above.

14. Setting up of Organic Virgin Coconut Oil unit - M/s. Honeybee Agro Corporation, Udumalpet, Tirupur Dist, Tamil Nadu at a total cost of Rs.530.00 lakhs

The objective of the project is setting up of Organic Virgin Coconut Oil unit with a capacity to process 1,00,000 coconuts per day for producing 6.5 T Virgin Coconut Oil per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(₹ in lakhs)		
Land	10.00	-	
Building & Civil works	185.00	-	
Plant & Equipments	202.30	200.30	
Technical know-how	0.55	0.55	
Electrification	30.00	-	
Furniture & office equipment	9.35	-	
Preliminary & Pre op. expenses	10.00	-	
Working Capital margin	70.00	-	
TOTAL	530.00	Limit to 200.00	Limited to 50 lakhs

The project was approved in principle. PAC authorized Chairman to sanction the eligible subsidy as and when the bank appraisal and term loan sanction letters are furnished.

15. Setting up of a Tender coconut water preservation and packaging unit - M/s. Yogic Foods Pvt. Ltd, Anupam Apartment, East Arjun Nagar, Delhi at a total cost of Rs.151.48 lakhs

The objective of the project is establishment of a tender coconut water preservation and packaging unit with a capacity to process 15000 tender coconuts per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(₹ in lakhs)		
Land	Leased	-	-
Building & Civil works (2200 sq.ft.)	7.50	7.50	1.875
Clean Room	5.0	5.00	1.25
Plant & Machinery	105.74	89.93	22.483
Technical know-how	3.50	3.50	0.875
Electrical installation	5.03	5.03	1.257
Office Equipments	2.70	2.70	0.675
Contingencies	4.00	-	-
Preliminary & Pre op. expenses	5.00	-	-
Working Capital margin	13.01	-	-
TOTAL	151.48	113.66	28.415

The project was approved with a maximum eligible subsidy of Rs.28.415 lakhs. The unit should furnish a NOC from DFRL, Mysore for the machineries. Product should meet the APCC standards.

16. Setting up of Packed Tender coconut water unit - M/s. Global Associates, Manjeshwar, Badaje, Kasargod at a total cost of Rs.110.40 lakhs

The objective of the project is setting up of packed tender coconut water unit with a capacity to process 10,000 packed tender coconut water per day

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(₹ in lakhs)		
Land (75 cents)	25.20	-	-
Plant & Equipments	36.23	35.73	8.93
Building & Civil works (521.8m ²)	34.72	34.72	8.68
Pre op. expenses	12.30	1.08	0.27
Working Capital margin	1.95	-	-
TOTAL	110.40	71.53	17.88

The project was approved in principle subject to the condition that the construction of unit to be of ISO/ HACCP standards. It was also suggested to undertake a feasibility study of similar units and raw material source, varietal study by the promoter before venturing into it. PAC authorized Chairman to sanction the eligible subsidy and to be ratified by the next PAC.

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

The objective of the project is manufacturing carbonized shells lumps and granules with a capacity to process 1700 Tons Carbonized shells & Granules per annum (3.7 T per day)

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(₹ in lakhs)		
Land	5.00	-	-
Building	14.50	14.50	3.625
Machinery	15.07	6.71	1.677
TOTAL	34.57	21.21	5.302

The project was approved with a maximum eligible subsidy of Rs.5.302 lakhs.

18. Setting up of a boda making unit - Sri. Sreejith, Kappummal House, Maruthonkara, Kavilumpara, Kozhikode at a total cost of Rs.5.50 lakhs

The objective of the project is setting up of a ball copra making unit with a capacity to process 50000 coconuts per year for producing 100 Q ball copra per year.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(₹ in lakhs)		
Land	Own	-	-
Building & Civil works	4.60	4.60	1.15
Fixed assets- vessels, furniture, weighing machine etc	0.15	0.15	0.037
Preliminary & Pre op. expenses	0.05	0.048	0.012
Working Capital margin	0.70	-	-
TOTAL	5.50	4.79	1.199

The project was approved with a maximum eligible subsidy of Rs.1.199 lakhs.

19. Management of Disease affected Palm in Nagercoil District - Department of Agriculture, Tamilnadu at a total cost of Rs.57.318 lakhs

The project was submitted by Department of Agriculture, Tamilnadu. After detailed discussion, the PAC opined that the Board shall extend an assistance of Rs.500/ palm for cutting and removal of root wilt disease affected palms after obtaining report from Regional Office Chennai. The programme should be completed before March 2013; PAC asked the department to rework it and submit again.

20. Market Promotional Programme - Participation in 5th Indexpo Muscat-2012 at Oman International Exhibition Centre, Muscat

The objective of this prestigious project is to display, demonstrate and sell Indian products, goods and services to the fast developing market of Sultanate of Oman while further encouraging developing trade links between the two countries.

In addition to the dissemination of information, the exhibition provide the opportunity for creating consumer awareness on value added coconut products and widening the market for coconut products in traditional as well in non-traditional areas. With the association of manufacturers, the Board desires to conduct sales-cum-display of various coconut by-products during the exhibitions. PAC approved the proposal with a total sum of Rs.17,50,000/- subject to the approval of Govt. of India for participation of officials. PAC strongly suggested that manufactures should be exposed to international markets for export opportunities for Indian coconut products and also to learn about the export market needs.

Estimate of expenditure for the deputation of Board/Ministry officials in Indexpo Muscat-2012

Table-I

Sl. No	Particulars	In US \$	In Indian`
1	Rent for 27 sq.mtr Shell scheme stall@ 300 USD	8100	
2	Travel fare (100% for 2 officials)		300000
3	Per diem charges(2 officials) US\$ 75 per day as per diem and maximum limit to US\$ 150 per person for 5 days for hotel accommodation	2400	
4	Miscellaneous expenses for the procurement of exhibits		100000
5	Miscellaneous Expenses (for Business Meet/ publicity/ transportation etc	2000	
	Total	*12500	688812
			1088375
	Sub Total (a)		Or say 11,00,000

Estimate of expenditure for participation of entrepreneurs in Indexpo Muscat-2012

Table -II

Sl.No	Particulars	In US \$	In Indian
1	Travel Expenses (reimbursement of 50% of Air Fare) for 4 entrepreneurs		400000
2	Hotel Accommodation (50% of hotel rate) for 4 persons		100000
3	Reimbursement of freight charge (transportation of exhibits (100% on production of bill)		150000
	Sub Total (b)		650000
	Total a + b		1750000

Other Items

- 1. Project for 'Development of technology for preparation of particle boards & diversified products from tender coconut waste'- Central Coir Research Institute (CCRI), Kalavoor, Alleppey –Extension of project period***

PAC ratified the release of final installment of Rs.2.416 lakhs and approved the proposal to extend the project period upto 31.07.2013.

Other issues

- Mr. Appanna, General Manager, NABARD suggested that the Coconut Producers Federations can avail Producers Organizations Development Fund (PODF) through the Business Initiation Department (BID) of NABARD. Further he added that NABARD has a scheme to provide 50% grant-in-aid under Farmers Technology Transfer Fund (FTTF).
- Dr. M. Aravindakshan, former Chairman, CDB suggested that the outcome of the research studies sponsored under TMOC may be documented and published.
- It was also decided that the coconut processing units (Food products) should be insisted to obtain certification – FSSAI Authority of the concerned states.

The meeting concluded by 5.30 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. George. V. Thomas, Director, CPCRI, Kasaragod <u>Representative of</u> Assistant Director General (Plantation crops) Indian Council of Agriculture Research (ICAR), Krishi Anusandhan Bhavan –II, Pusa, New Delhi
3	Dr. M.Tamil Selvan, Additional Commissioner (Horticulture) Ministry of Agriculture, Govt. of India <u>Representative of</u> Horticulture Commissioner, Department of Agriculture & Cooperation Krishi Bhavan, New Delhi -110 001
4	Shri. C.P. Appanna, General Manager, Technical Services, 3 rd Floor, B Wing, NABARD, Plot No. C –24, G Block Badra –Kurla Complex, Post Box No.8121, Bombay <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
5	Shri. M.M. Jose, Senior Marketing Development Officer, Directorate of Marketing & Inspection, Kochi, 6th floor, A Block, Agmark, Kendriya Bhavan, Kakkand <u>Representative of</u> Joint Secretary & Agricultural Marketing Adviser to Govt. of India, Room No.237, Krishi Bhavan, New Delhi
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13	Smt. Jayashree A , Senior Technical Officer Coconut Development Board, Kochi

Proceedings of the 40th meeting of Project Approval Committee (PAC) of Technology Mission on Coconut held at Kochi on 25th & 26th June 2013

The 40th meeting of the Project Approval Committee (PAC) on Technology Mission on Coconut (TMOC) was held at HQ of Coconut Development Board, Kochi on 25th & 26th June 2013. Shri. T.K. Jose IAS, Chairman, Coconut Development Board and Chairman PAC presided over the meeting. The list of members attended the meeting is given in annexure I.

At the outset Chairman, welcomed the members of PAC and experts to the meeting. In his introductory remarks Chairman mentioned that the Board has almost completed a decade of implementation of TMOC programme. In the present scenario of price crash in coconut, there is an urgent need to promote product diversification and value addition. The support of various research institutes like CFTRI and DFRL plays a crucial role in development of technologies in coconut sector. Further support of state Govts of the major coconut growing states is also essential to handhold the industry in coconut sector. Major coconut growing states have already been addressed in this regard. As a result Karnataka and Tamilnadu had initiated action for making provisions in the state budget for the current year. Kerala Govt. has already announced additional incentives of 25% for establishment of coconut processing units and Rs. 15 crores has been earmarked for Coconut Bio parks. Further as an impact of the investors meets held in Kerala and Andhra Pradesh and on creation of awareness more proposals were received seeking assistance under TMOC for establishing coconut based processing units. He reiterated the need for reorientation of the policies and perspectives for TMOC programme in the emerging market scenario. It was suggested that the coconut processing units on conversion to Private Limited Companies can bring in more efficiency and system in operation apart from raising equity for the unit and tax exemption.

Chairman said that the present PAC would consider 43 projects with an outlay of Rs.94.72 crores of which nine are research projects from various institutions including the projects for process standardisation of Neera. Under Processing and Product diversification, 34 Projects with the investment of Rs.91.823 crores have been received and considered for extending financial assistance which includes setting up of 11 Desiccated Coconut Powder manufacturing units, one Virgin Coconut Oil unit, four Tender Coconut Water units, two Coconut Milk Powder units, one Coconut Water based Vinegar unit, two Coconut Shell Charcoal units, five Coconut Shell based Activated Carbon, seven Ball Copra and one Milling Copra unit. After the introductory remarks agenda items were taken up.

AGENDA No. 1: Confirmation of the Proceedings of 39th Project Approval Committee Meeting held on 17th August 2012

The Committee confirmed the proceedings of the 39th Project Approval Committee Meeting.

AGENDA No. 2: Action taken report of the 39th PAC Meeting

The committee perused the action taken on the decision of the 39th meeting of the Project Approval Committee.

AGENDA No. 3: Approval of new project proposals:

1. Value added formulation of ayurvedic drug Ksheerabala by using virgin coconut oil and its therapeutic effects on arthritis- St. Thomas College, Pala at a total cost of Rs 39.08 Lakhs.

The project was presented by Dr. Ratheesh M., Assistant Professor, Department of Biochemistry, St. Thomas College, Pala. The P.I. highlighted the need to develop an effective anti-inflammatory drugs with fewer side effects for treatment of rheumatoid arthritis .

The objective of the project is to formulate a value added formulation of ayurvedic drug Ksheerabala by using virgin coconut oil and evaluate its therapeutic effects on experimental arthritis with focus on Antioxidant potential, Anti-inflammatory effect, Inhibition on paw pathology,(Histopathology and synovial pathology) and Molecular mechanism of Action.

The PAC after detailed discussion approved the project in principle at a total cost of Rs 39.08 Lakhs, Boards share being Rs 20.957 lakhs for a period of two years and authorized Chairman, Coconut Development Board to approve the revised proposal incorporating the following aspects, as and when received.

- 1) Role of each participating research institute namely; Govt Ayurveda College, Thiruvananthapuram, Indian Institute of Science, Bangalore, and M.G. University, Kottayam should be specified in the present investigation
- 2) Ethical clearance for conducting the project in consultation with approved agencies (eg. CPCRI, Kasargod) should be obtained.

2. Nutritional Evaluation of the Embryonic Tissue-Haustorium of the Germinating Coconut as a Food Supplement and its Therapeutic Analysis- SCMS Institute of Bioscience and Biotechnology Research & Development (SIBBR&D, Kalamassery, Kochi at a total cost of Rs 50.08 Lakhs

The project was presented by Prof. (Dr). C. Mohankumar, Director, SCMS Institute of Bioscience and Biotechnology Research and Development, SIBB R&D), Cochin. The objectives of the project are :1)To standardize the germination of mature coconut for the development of Haustorium 2) Analysis of macro and micro constituents viz. protein, sugars, amino acids, vitamins, hormones, minerals 3)Optimization of the nature of the tissue and standardization of processing Haustorium 4) Cell migration assay to evaluate the growth promoting property 5)Therapeutic analysis in animal models during normal and pregnancy conditions and 6) Microbial and Toxicity analysis of the preparation.

The committee after detailed discussions approved the proposal in principle at a total cost of Rs 50.08 lakhs and Boards share being Rs. 25.08 lakhs for a period of two years. Expert of the committee opined that the commercial value of the study, outcome and benefit to the farmer may be clearly spelt out.

3. Designing a Hygienic Harvesting Process and an Appropriate Harvesting Technology for Sustaining the Quality of Coconut Neera as a Nutritive Drink -SCMS Institute of Bioscience and Biotechnology Research & Development (SIBBR&D, Kalamassery, Kochi at a total cost of Rs 60.84 Lakhs

The project was presented by Prof. (Dr). C. Mohankumar, Director, SCMS Institute of Bioscience and Biotechnology Research and Development, SIBB R&D), Cochin. The objectives of the project are : 1)To promote a appropriate harvesting process of coconut Neera under aseptic conditions for preventing its auto fermentation 2) Analysis of the inherent and innate microbial load associated with the coconut Neera during harvesting 3) To develop an appropriate and cost effective processing technology for the production and preservation of Neera as a health drink without fermentation and 4) Feasibility studies on coconut Neera for enhancing its shelf life as well as the production of other value added products from it.

The committee after detailed discussions opined that such studies are the need of the hour and approved the proposal at a total cost of Rs 60.84 lakhs and Boards share being Rs. 30.84 lakhs for with a project period limited to one and half years. Chairman advised that the PI should submit fortnightly progress of the project to the Board regularly.

4. Standardization of neera and developing process for making value added products from coconut neera- Technology Development Centre, Coconut Development Board, South vazhakulam Aluva at a total cost of Rs. 25 lakhs

Sree Kumar Poduval, Processing Engineer, CDB presented the project. The objectives of the project are :1) Assessing the variation of degree of fermentation of freshly collected neera with and without addition of lime at various temperatures in earthenware pots (control) and other food grade plastic vessels 2) Developing cost effective techniques for standardization of process for making jaggery, concentrated syrup and coconut palm sugar from neera

3) Packaging and shelf life studies of processed neera, jaggery, concentrated syrup and coconut sugar in different packaging systems at various temperature conditions and 4) Conducting nutritional and microbial analysis of coconut neera and other value added products from neera

Sri A.N Srivatsa Scientist (Retd.) DFRL, opined that standardization of Neera in retortable pouches may be excluded and other options viz. sterilizable pet bottles or low cost aluminium cans may be tried. The committee after detailed discussions approved the proposal at a total cost of Rs. 25 lakhs for duration of 6 months. Chairman advised the PI to submit weekly progress report of the implementation of the project by e mail to TMOCC division with copy to CCDO and Chairman.

5. Diversified product development – functional dietary and food ingredient from coconut milk powder, Olive Lifesciences Pvt. Ltd., Research and development center, KIADB Industrial Area, Antharasanahalli, Tumkur, Karnataka at a total cost of Rs 88.70lakhs.

The project was presented by Dr Shivaprasad, Research Head, Olive Lifesciences Pvt. Ltd, Karnataka. The objectives of the project are:1) Selection of right variety of coconut, based on the average copra or milk content 2) Standardization and optimization of processing coconut milk powder 3) Screening of coconut milk powder for various in-vitro and in-vivo bioassays which are linked to develop product for fatigue (Chronic fatigue syndrome; CFS) and impaired memory 4) To develop a standardized coconut milk powder suitable for memory enhancing activity and/ or energy supplement activity 5) To scientifically establish the utility of this product, as dietary/food supplement and 6) To achieve higher value addition by brand building in the international market.

The committee after detailed discussions approved the proposal at a total cost of Rs.88.70 Lakhs limiting the share of Board at Rs 35.00 Lakhs for a duration of 36 months. Committee suggested that the first objective of selection of right variety may be excluded from the project instead of which data available with CPCRI may be taken for reference.

6. Formulation of health mixes with Coconut Milk powder and coconut flour, their shelf life and effect on growth and Immune status- Department of Nutrition and Dietetics, PSG College of arts and science, Coimbatore at a total cost of Rs 29.52Lakhs.

Dr. Lalitha Ramaswamy, Associate Professor & HOD, Dept of Nutrition & Dietetics, PSG College of arts and science, Coimbatore presented the project. The objectives of the project are: 1) To formulate health mixes using coconut flour and coconut milk powder 2) To determine the shelf life of the health mixes 3) To find out the effect of health mixes on the growth and immune capacity and 4) To compare the nutrient content and cost of the formulated mixes with commercial health mixes.

The committee after detailed discussions approved the proposal at a total cost of Rs 29.52 lakhs and Boards share being Rs.14.762 lakhs for a period of two years.

Chairman suggested that being a reputed institution and Coimbatore being a major coconut growing belt, various Departments of the collage viz Social sciences and Management Studies may initiate actions for formation of coconut farmer collectives which will help in evaluation as well as setting up of units on completion of the lab scale study.

7. Isolation, characterization and evaluation of in vitro anti-cancer and antioxidant activities of polyphenols from kernel and oil from coconut -School of Biosciences , M G University, Kottayam at a total cost of Rs 30.8 Lakhs

Dr K Muralidharan explained the background of the project and informed PAC that the project was already approved by the 38th PAC. However, the proposal is being placed before PAC due to change of project implementing agency

Chairman stated that since the project is being implemented by a State Government Institution, 100 % assistance shall be given for the study. The committee approved the proposal at a total cost of Rs 30.8 Lakhs for a period of 3 years

8. Setting up of a desiccated coconut powder manufacturing unit - Malabar Coconut Products, Pravasi Industrial Estate, Trithallur PO, Thrissur, Kerala at a total cost of Rs. 228.89lakhs

The objective of the project is setting up of a desiccated coconut powder manufacturing unit the capacity from 20,000 coconuts per day for producing 2 MT desiccated coconut powder per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(₹ in lakhs)		
Land & Land Dev.	30.00	-	-
Building & Civil works	75.00	58.00	14.50
Plant & Equipments	80.00	80.00	20.00
Furniture & fittings	1.50	-	-
Electrical installations	8.65	-	-
Pre op. expenses	5.00	1.55	0.388
Working Capital margin	28.74	-	-
TOTAL	228.89	139.55	34.888

Committee suggested that the unit may be converted to a Private Limited Company for raising equity, taxation benefits and to bring in efficiency and better systems in operation of the unit.

The unit have a vinegar and bio gas unit for waste water utilization. The project was approved with a maximum eligible subsidy of Rs.34.888 lakhs.

9. Setting up of a desiccated coconut powder manufacturing unit & its by-products -M/s. Sri Matha Agro Tech, Manjumatha Nagar, Tiptur, Karnataka at a total cost of Rs.60.00 lakhs

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 producing 3 MT desiccated coconut powder per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(₹ in lakhs)		
Land	Own	-	-
Building & Civil works	18.00	18.00	4.50
Plant & Equipments	21.00	21.00	5.25
Electrical installation	0.50	0.50	0.125
Preliminary & Pre op. expenses	0.50	0.40	0.10
Working Capital margin	20.00	-	-
TOTAL	60.00	39.90	9.975

Approved the project with a maximum eligible subsidy of Rs.9.975 lakhs subject to the condition that Effluent Treatment Plants (ETP) to be incorporated in the project.

10. Setting up of a desiccated coconut powder manufacturing unit by M/s. Sri Guru Coconut Industry, Manjumatha Nagar, Tiptur, Karnataka at a total cost of Rs. 99.00 lakhs

The objective of the project is setting up of desiccated coconut powder manufacturing unit with a capacity to process 50,000 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	-	-
Building & Civil works	50.75	50.75	12.688
Plant & Equipments	31.80	31.80	7.95
Electrical installation	2.00	2.00	0.50
Preliminary & Pre op. expenses	1.65	0.862	0.216
Working Capital margin	12.80	-	
TOTAL	99.00	85.412	21.353

Approved the project with a maximum eligible subsidy of Rs.21.353 lakhs subject to the condition that Effluent Treatment Plants (ETP) to be incorporated in the project.

11. Setting up of a desiccated coconut powder manufacturing unit - M/s.Nandi Agro Food Coconut Industries, Tumkur, Karnataka at a total cost of Rs. 119.15 lakhs

The objective of the project is setting up of desiccated coconut powder manufacturing unit with a capacity to process 40,000 coconuts per day for producing 4 MT desiccated coconut powder per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(₹ in lakhs)		
Land	Own	-	-
Building & Civil works	50.00	50.00	12.50
Plant & Equipments	59.65	53.19	13.298
Other fixed assets	0.25	-	-
Deposits	0.50	-	-
Contingencies	0.50	-	-
Preliminary & Pre op. expenses	0.25	0.25	0.0625
Working Capital margin	8.00	-	-
TOTAL	119.15	103.44	25.86

Approved the project in principle with a maximum eligible subsidy of Rs.25.86 lakhs subject to the condition that Effluent Treatment Plants (ETP) to be incorporated in the project. Since the unit has already commenced production, PAC authorized Chairman to sanction the eligible subsidy based on the actual expenditure as and when all the required documents are submitted.

12. Setting up of a desiccated coconut powder manufacturing unit - M/s. Meghana Coconut Industry, Halepalya, Tiptur, Tumkur, Karnataka at a total cost of Rs.114.50lakhs

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

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(₹ in lakhs)		
Land	Own	-	-
Building & Civil works	60.80	41.00	10.25
Plant & Equipments	30.70	30.70	7.675
Diesel Generator set	5.00	5.00	1.25
BESCOM deposit & Electrification work	3.50	-	-
Pre op. expenses	2.50	1.025	0.256
Working Capital margin	12.00	-	-
TOTAL	114.50	77.725	19.431

Approved the project with a maximum eligible subsidy of Rs.19.431 lakhs subject to the condition that Effluent Treatment Plants (ETP) to be incorporated in the project. The product has been launched in the name 'Nature Fresh' and 'Flying Dove'.

13.Setting up of desiccated coconut manufacturing unit - M/s. Guru Raghavendra Coconut Industries, Sy. No. 109/6, Y.T.Road, Tiptur, Karnataka at a total cost of Rs. 124.85lakhs

The objective of the project is setting up of desiccated coconut powder manufacturing unit with a capacity to process 40,000 coconuts per day for producing 4 MT desiccated coconut powder per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(₹ in lakhs)		
Land	-	-	-
Building & Civil works	53.50	50.00	12.500
Plant & Equipments	60.85	54.45	13.613
Other Fixed Assets	3.00	-	-
Preliminary Expenses	1.50	1.15	0.288
Deposits	0.50	-	-
Contingencies	0.50	-	-
Working Capital margin	5.00	-	-
TOTAL	124.85	105.60	26.40

Approved the project in principle with a maximum eligible subsidy of Rs.26.40 lakhs subject to the condition that Blanching & Effluent Treatment Plants (ETP) to be incorporated in the project. Since the unit has already commenced production, PAC authorized Chairman to sanction the eligible subsidy based on the actual expenditure as and when all the required documents are submitted.

14. Expansion &Modernization of DC unit - M/s. Sri Lakshmidevi Coconut Industries, Hassan Dist, Karnataka at a total cost of Rs. 86.15lakhs

The objective of the project is setting up of desiccated coconut powder manufacturing unit with a capacity to process 40,000 nuts /day for producing 4 MT desiccated coconut powder per day. The project was approved with an eligible cost of Rs.72.72 lakhs and eligible subsidy of 18.18 lakhs

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(₹ in lakhs)		
Land	Own	-	-
Building & Civil works	29.20	29.20	7.300
Plant & Equipments	54.65	43.42	10.855
Other fixed assets	0.15	-	
Deposits	0.30	-	
Pre op. expenses	0.10	0.10	0.025
Working Capital margin	1.75	-	
TOTAL	86.15	72.72	18.18

Committee suggested that the unit may be converted to a Private Limited Company for raising equity, tax benefits and to bring in efficiency and systems in operation of the unit.

Approved the project in principle subject to the condition that Blanching & Effluent Treatment Plants (ETP) to be incorporated in the project. Since the unit has already commenced production, PAC authorized Chairman to sanction the eligible subsidy based on the actual expenditure as and when all the required documents are submitted.

15. Setting up of desiccated coconut manufacturing unit - M/s. Jenukul Coconut Products, Mysore Road, Arsikere, Hassan Dt, Karnataka at a total cost of Rs.75.00lakhs

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

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(₹ in lakhs)		
Land	-	-	-
Plant & Equipments	32.88	32.88	8.220
Building & Civil works	32.35	29.105	7.276
Electrification	1.50	1.50	0.375
Diesel Generator	4.72	4.72	1.180
Electricity Deposit	0.35	-	-
Borewell & Pump set	1.70	-	-
Office equipments	1.50	-	-
TOTAL	75.00	68.205	17.051

Approved the project in principle with a maximum eligible subsidy of Rs.17.051 lakhs subject to the condition that Effluent Treatment Plants (ETP) to be incorporated in the project. Since the unit has already commenced production, PAC authorized Chairman to sanction the eligible subsidy based on the actual expenditure as and when all the required documents are submitted.

16. Setting up of desiccated coconut manufacturing unit - M/s. Sha Enterprises, Avitanellur, Poonath PO, Koilandy Tk, Kozhikode, Kerala at a total cost of Rs.19.25lakhs

The objective of the project is setting up of desiccated coconut powder manufacturing unit with a capacity to process 5,000 nuts /day for producing 0.5 MT desiccated coconut powder per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(₹ in lakhs)		
Land	Lease	-	-
Plant & Equipments	14.35	14.35	3.587
Building & Civil works	3.65	3.65	0.913
Working Capital margin	1.25	-	
TOTAL	19.25	18.00	4.500

Approved the project with a maximum eligible subsidy of Rs.4.50 lakhs subject to the condition that Effluent Treatment Plants (ETP) to be incorporated in the project.

17. Setting up of desiccated coconut manufacturing unit - M/s.Pooja Agro Products, Turuvekere Road Cross, Tiptur Tq., Tumkur Dist, Karnataka at a total cost of Rs.125.24lakhs

The objective of the project is setting up of desiccated coconut powder manufacturing unit with a capacity to process 40,000 nuts /day for producing 4 MT desiccated coconut powder per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(₹ in lakhs)		
Land	Own	-	-
Plant & Equipments	60.49	38.417	9.604
Building & Civil works	59.00	59.00	14.750
Other fixed assets	0.15	-	-
Deposits	0.50	-	-
Pre op. expenses	0.10	0.10	0.025
Working Capital margin	5.00	-	-
TOTAL	125.24	97.517	24.379

Approved the project with a maximum eligible subsidy of Rs.24.379 lakhs.

18. Setting up of desiccated coconut manufacturing unit - M/s Akshya matha Agro Processing, Tiptur, Karnataka at a total cost of Rs. 143.64 lakhs

The objective of the project is setting up of desiccated coconut powder manufacturing unit with a capacity to process 10000 nuts /day for producing 1 MT desiccated coconut powder per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(₹ in lakhs)		
Land	Own	-	-
Plant & Equipments	34.51	34.51	8.627
Building & Civil works	55.00	43.00	10.75
Electrical installation	3.55	3.55	0.888
Working Capital margin	50.57	-	-
TOTAL	143.64	81.06	20.265

Approved the project in principle with a maximum eligible subsidy of Rs.20.265 lakhs subject to the condition that Effluent Treatment Plants (ETP) to be incorporated in the project.

19. Setting up of integrated coconut processing unit (VCO & DC)- M/s. Unicare coconut Products, Nadal, Edakkad, Kannur, Kerala at a total cost of Rs. 156 lakhs

The objective of the project is setting up of integrated coconut processing unit (VCO & DC) with a capacity to process 15,000 nuts per day for producing 1.5 MT DC per day and to process 5000 nuts per day for producing 300 litres of VCO per day.

Components	Total Project Cost	Eligible Project Cost	Maxi. Eligible Subsidy
	(₹ in lakhs)		
Land	Own	-	-
Land Development	5.00	5.00	1.250
Building & Other Civil works	43.00	43.00	10.750
Plant & Machinery	90.10	79.788	19.947
Technical know-how	0.55	0.55	0.138
Furniture & Office equipments	3.00	-	-
Preliminary & Pre op. exp	2.35	1.41	0.352
Working Capital margin	12.00	-	-
TOTAL	156.00	129.748	32.437

Approved the project with a maximum eligible subsidy of Rs.32.437 lakhs subject to the condition that Effluent Treatment Plants (ETP) to be incorporated in the project. Good management practices to be followed in the unit. Since the unit has already commenced production, PAC authorized Chairman to sanction the eligible subsidy based on the actual expenditure as and when all the required documents are submitted.

20. Setting up of processing and packing of tender coconut water unit - M/s. Nature's, First India Pvt. Ltd., Battavarapalli Village, Belathur, Bagalur, Hosur, Tamilnadu at a total cost of Rs.215.00lakhs

The objective of the project is setting up of processing and packing of tender coconut water unit with a capacity to process 60,000 tender coconuts per day for packing 15,000 liters of tender coconut water per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(₹ in lakhs)		
Land	-	-	-
Building & Civil works	2.99	2.990	0.747
Plant & Equipments	187.47	187.470	46.867
Electrical Installation	19.25	19.250	4.812
Pre op. expenses	5.29	2.097	0.524
TOTAL	215.00	211.807	Limited to 50.0 lakhs

Approved the project in principle subject to the condition that the relevant documents viz Bank appraisal details, Plan & estimate for modification of the building and details of technology with process flow chart is furnished. PAC authorized Chairman to sanction the eligible subsidy based on the actual expenditure as and when all the required documents are submitted.

21. Setting up of processing and packing of tender coconut water unit - M/s. Ceves Agro Food Products Pvt Ltd, Gujarat unit at Theni, TN at a total cost of Rs. 503.00lakhs

The objective of this project is setting up of processing and packing of tender coconut water unit with a capacity to process 50,000 tender coconuts per day for processing of 14,000 litres of tender coconut water per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(₹ in lakhs)		
Land & Building	90.00	-	-
Plant & Machinery	408.00	200.00	50.00
Office Equipments & Furniture	5.00	-	-
TOTAL	503.00	200.00	50.00

Approved the project with a maximum eligible subsidy of Rs.50 lakhs.

22.Setting up of processing and packing of tender coconut water unit - M/s. Life Tree Agro Foods, Palakkad, Kerala at a total cost of Rs.145.13 lakhs

The objective of this project is setting up of processing and packing of tender coconut water unit with a capacity to process 10,000 tender coconuts per day for processing 2,500 liters of tender coconut water per day.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(₹ in lakhs)		
Land	9.30	-	-
Plant & Equipments	56.50	49.50	12.375
Tech. Transfer Fee	3.50	3.50	0.875
Building & Civil works	45.80	40.00	10.00
Furniture & fittings	1.25	-	-
Electrical installations	8.93	8.93	2.230
Pre-op. expenses	9.42	1.25	0.312
Working Capital margin	10.43	-	-
TOTAL	145.13	103.18	25.792

Approved the project with a maximum eligible subsidy of Rs.25.792 lakhs.

23.Modernization of packaged Tender Coconut water unit- M/s. Jain Agro Food Products Pvt. Ltd., Mandya, Karnataka at a total cost of Rs. 81.00 lakhs

The objective of this project is Modernization of packaged Tender Coconut water unit to expand the capacity from 20000 tender coconuts per day to 48000 tender coconuts per day (8800 litres of tender coconut water per day) in bottles, tetra pack and aseptic bulk packing.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(₹ in lakhs)		
Plant & Machinery			
Machineries	71.85	71.85	17.96
Filters	2.35	2.35	0.587
Generator	6.80	5.00	1.25
TOTAL	81.00	79.20	19.797

Promoter has already availed a subsidy of Rs.30.065 lakhs as subsidy for establishing the unit. Approved the project with a maximum eligible subsidy of Rs.19.797 lakhs.

24. Setting up of Coconut milk manufacturing unit - M/s. Global Exports and Imports, Nadackal, Kottayam, Kerala at a total cost of Rs. 189.00 lakhs

The objective of this project is setting up of Coconut milk manufacturing unit with a capacity to process 30,000 coconuts per day for producing milk powder.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(₹ in lakhs)		
Land	Own	-	-
Building & Civil works	39.00	39.00	9.750
Plant & Equipments	131.35	131.30	32.825
Furniture & office equipments	1.65	-	-
Pre op. expenses	3.00	1.70	0.425
Working Capital margin	14.00	-	-
TOTAL	189.00	172.00	43.000

Approved the project in principle subject to the condition that building cost to be reworked since it is a reconstruction of the existing building and subsidy worked out accordingly. PAC authorized Chairman to approve the revised cost as and when submitted.

25. Setting up of coconut milk powder and desiccated coconut manufacturing unit - M/s. Holista Tranzworld Ltd, Egmore, Chennai, Tamil Nadu at a total cost of Rs.645.00lakhs

The objective of this project is setting up of Coconut milk powder and desiccated coconut manufacturing unit with a capacity to process 35,000 coconuts per day for producing 800 MT of Coconut Milk and 300 MT of Coconut milk powder.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(₹ in lakhs)		
Land & Building	10.00	-	-
Plant & Equipments	235.0	200.00	50.00
Working Capital margin	350.0	-	-
TOTAL	595.00	200.00	50.00

Approved the project with a maximum eligible subsidy of Rs.50 lakhs. Since the unit has already commenced production, PAC authorized Chairman to sanction the eligible subsidy based on the actual expenditure as and when all the required documents and separate loan details for the unit are submitted.

26.Setting up of coconut water based vinegar manufacturing unit - M/s. Keralite Foods,Karthika,Koonthloor, Chirayankeezhu, Trivandrum, Kerala at a total cost of Rs. 22 lakhs

The objective of this project is setting up of Coconut water based vinegar manufacturing unit with a capacity to process 300 liters of coconut water per day for producing vinegar.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(₹ in lakhs)		
Land & Land Dev	1.00	1.000	0.250
Building & Civil works	8.50	8.500	2.125
Plant & Machinery	6.05	5.960	1.490
Electrical installations	3.28	3.079	0.769
Furniture	0.50	-	-
Pre op. expenses	0.80	0.196	0.049
Working Capital margin	1.87	-	-
TOTAL	22.00	18.735	4.684

Approved the project with a maximum eligible subsidy of Rs.4.684 lakhs. It was also suggested that the promoter may enhance the product line and expand the capacity of the unit. Committee suggested that the unit may be converted to a Private Limited Company for raising equity, tax exemption and to bring in efficiency and systems in operation.

27. Setting up of Shell charcoal manufacturing unit - M/s. ARSTA Eco, Doddapette, Tiptur, Karnataka at a total cost of Rs. 105.77 lakhs

The objective of this project was setting up of Shell charcoal manufacturing unit with a capacity to process **5.3 MT** of coconuts shell per day for producing **1.60 MT** Shell Charcoal.

Components	Project Cost (Charcoal unit)	Eligible Project Cost	Maximum Eligible Subsidy
	(₹ in lakhs)		
Land	13.58	-	-
Plant & Equipments	70.94	70.94	17.735
Building & Civil works	12.50	12.50	3.125
Electrical installation	2.75	2.75	0.687
Office equipments	1.50	-	-
Generator	3.50	3.50	0.875
Lab Equipments	1.00	1.00	0.250
TOTAL	105.77	90.69	22.672

Approved the project with a maximum eligible subsidy of Rs.22.672 lakhs. Committee suggested that the unit may be converted to a Private Limited Company for raising equity, tax benefits and to bring in efficiency and system in operation.

28. Setting up of Granulated coconut shell charoocal unit - M/s.Guru Raghavendra Char Products, Tiptur, Karnataka at a total cost of Rs. 67.21 lakhs

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

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(₹ in lakhs)		
Land	Lease	-	-
Building & Civil works	35.00	24.00	6.000
Plant & Equipments	24.76	24.76	6.190
Electrification	2.45	2.45	0.612
Working Capital margin	5.00	-	-
TOTAL	67.21	51.21	12.802

Approved the project with a maximum eligible subsidy of Rs. 12.802 lakhs. Committee suggested that the two units proposed by the same promoter can be converted to Private Limited Companies for raising equity, tax benefits and to bring in efficiency and systems in operation.

29. Setting up of coconut shell based steam activated carbon - M/s. Kalpachar Products Pvt. Ltd., Pennasamudra Village, BH Road, Arsikere, Karnataka at a total cost of Rs.550.00 lakhs

The objective of this project was setting up of coconut shell based steam activated carbon with a capacity to process 72 MT of coconut shell per day to produce 8 MT Coconut shell based steam Activated carbon with a total cost of Rs. 550 lakhs as follows:

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
(₹ in lakhs)			
Land		-	Limited to 50 lakhs
Plant & Equipments		200	
Building & Civil works		125	
Electrical installation		20	
Working capital margin		-	
TOTAL	550.00	345	

Approved the project with a maximum eligible subsidy of Rs. 50 lakhs.

30. Modernisation and capacity enhancement of existing coconut shell based activated carbon unit - M/s.Raj Carbon, Harbour bye pass road, Tuticorin, Tamilnadu at a total cost of Rs. 120.456 lakhs

The objective of this project was Modernisation and capacity enhancement of existing coconut shell based activated carbon unit with a capacity to process 45 MT to 108 MT of coconut shell per day for producing 12 MT Coconut shell activated carbon.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
(₹ in lakhs)			
Land	Own	-	-
Building & Civil works	-	-	-
Plant & Equipments	113.930	113.930	21.48
Electrical installation	6.526	6.526	
TOTAL	120.456	120.456	21.48

The promoter has already availed a subsidy of Rs.28.52 lakhs for setting up of the unit in the year 2006. Approved the project with a maximum eligible subsidy limited to Rs.21.48 lakhs since it is an expansion of the same unit.

31. Setting up of Activated Carbon manufacturing unit - M/s. United Carbon Solutions Pvt. Ltd, Kangayam, Tirupur TN at a total cost of Rs. 996.01 lakhs

The objective of this project was setting up of Activated Carbon manufacturing unit with a capacity to process **100 MT of coconut** shell per day for producing **11 MT Coconut shell activated carbon.**

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(₹ in lakhs)		
Land & Land Dev.	51.20	-	-
Plant & Equipments	714.66	200.00	50.00
Building & Civil works	193.67	-	-
Electrical installation	5.73	-	-
Others	1.69	-	-
Pre op. expenses	2.97	-	-
Working Capital margin	26.09	-	-
TOTAL	996.01	200.00	50.00

Approved the project with a maximum eligible subsidy of Rs. 50 lakhs. Since the unit has already commenced production, PAC authorized Chairman to sanction the eligible subsidy based on the actual expenditure as and when all the required documents are submitted.

32. Setting up of a Activated Carbon manufacturing unit - M/s.Rachamalla Carbons Pvt Ltd., Hyderabad, Andhra Pradesh at a total cost of Rs. 484.3 lakhs

The objective of this project is setting up of Activated Carbon manufacturing unit with a capacity to process process 72 MT of coconut shell per day for producing 8 MT Coconut shell activated carbon.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(₹ in lakhs)		
Land	Own	-	-
Plant & Equipments	351.30	200.00	50.00
Building & Civil works	115.00	-	-
Office furniture	3.00	-	-
Vehicles	15.00	-	-
TOTAL	484.30	200.00	50.00

Approved the project with a maximum eligible subsidy of Rs. 50 lakhs.

33. Setting up of Coconut shell based Activated Carbon manufacturing Unit - M/s Vcan Active Carbon Pvt Ltd., Adyar, Chennai. Tamilnadu at a total cost of Rs. 407.9 lakhs

The objective of this project is setting up of Coconut shell based Activated Carbon manufacturing Unit with a capacity to process 50 MT of coconut shell per day for producing **4.5 MT Coconut** shell activated carbon.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(₹ in lakhs)		
Land (2.17 Acres- lease)	34.51	-	Limited to 50.0 lakhs
Plant & Machinery	161.55	161.45	
Building & Civil works	140.90	135.00	
Transportation & erection	3.00	-	
Other Assets	2.00	-	
Electrification	10.00	10.00	
Contingencies	12.44	-	
Preliminary & Pre op. expenses	11.50	3.41	
Working Capital margin	32.00	-	
TOTAL	407.90	309.86	

Approved the project with a maximum eligible subsidy of Rs. 50 lakhs.

34. Setting up of ball copra manufacturing unit - Mr. Santhosh V.K., Vadakkedath, Kavalumpara, Kozhikode, Kerala at a total cost of Rs. 10.00 lakhs

The objective of this project is setting up of ball copra manufacturing unit with a capacity to process **96,000** coconuts for producing **12 MT Ball copra** per year.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy	
	(₹ in lakhs)			
Land	1.00	-	-	
Building & Civil works	8.00	7.00	1.75	
Preliminary & Pre op. expenses	0.05	0.05	0.0125	
Fixed Assets	0.15	-	-	
Working Capital margin	0.80	-	-	
TOTAL	10.00	7.05	1.7625	

Approved the project in principle with a maximum eligible subsidy of Rs.1.7625 lakhs. Since the unit has already commenced production, PAC authorized Chairman to sanction the eligible subsidy based on the actual expenditure as and when all the required documents are submitted.

35. Setting up of a ball copra processing unit - Smt. Naga Satya SSHG, EG Dist, Andhra Pradesh at a total cost of Rs. 19.50 lakhs

The objective of this project is setting up of ball copra processing unit with a capacity to process **4 lakhs coconuts** for producing **50 MT ball copra per year**.

(a)	(b)		
Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(₹ in lakhs)		
Land	5.00	-	-
Building & Civil works	14.50	14.50	3.625
Working Capital margin	...	..	...
TOTAL	19.50	14.50	3.625

Approved the project in principle with a maximum eligible subsidy of Rs. 3.625 lakhs. Since the unit has already commenced production, PAC authorized Chairman to sanction the eligible subsidy based on the actual expenditure as and when all the required documents are submitted.

36. Setting up of a ball copra processing unit - M/s. Sri Venkata Lakshmi Traders,WG, Andhra Pradesh at a total cost of Rs. 28.87 lakhs

The objective of this project is setting up of ball copra processing unit with a capacity to process 10 lakh coconuts per year for producing 125 MT Ball copra per year.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(₹ in lakhs)		
Land	Own	-	-
Building & Civil works (489 sq.m)	28.10	28.10	7.025
Preliminary & Pre op. expenses	0.77	-	-
TOTAL	28.87	28.10	7.025

Approved the project in principle with a maximum eligible subsidy of Rs. 7.025 lakhs. Since the unit has already commenced production, PAC authorized Chairman to sanction the eligible subsidy based on the actual expenditure as and when all the required documents are submitted.

37. Setting up of ball copra manufacturing unit - Shri.Pedamallu Brahmanandham, Pasarlapudi Lanka, , EG. Dist, AP at a total cost of Rs. 36.00 lakhs

The objective of this project is setting up of ball copra manufacturing unit with a capacity to process **6.10 lakhs**_coconuts/ six months for producing 76 MT Ball copra per year.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(₹ in lakhs)		
Land	-	-	-
Plant & Equipments	-	-	-
Building & Civil works	32.70	32.70	8.175
Preliminary & Pre op. expenses	3.30	-	-
TOTAL	36.00	32.70	8.175

Approved the project in principle with a maximum eligible subsidy of Rs. 8.175 lakhs. Since the unit has already commenced production, PAC authorized Chairman to sanction the eligible subsidy based on the actual expenditure as and when all the required documents are submitted.

38. Setting up of ball copra manufacturing unit - Shri. Susil Goyal, Mukteswaram, Andhra Pradesh at a total cost of Rs. 15.00 lakhs

The objective of this project is setting up of ball copra manufacturing unit with a capacity to process 10 lakhs nuts/year for producing 125 MT Ball copra per year.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(₹ in lakhs)		
Land	Own	-	-
Building & Civil works	15.0	12.50	3.125
TOTAL	15.00	12.50	3.125

Approved the project in principle with a maximum eligible subsidy of Rs.3.125 lakhs. Since the unit has already commenced production, PAC authorized Chairman to sanction the eligible subsidy based on the actual expenditure as and when all the required documents are submitted.

39. Setting up of ball copra manufacturing unit - Shri. Kankipati Adinarayana, E.G. Dist, Andhra Pradesh at a total cost of Rs. 20.0 lakhs

The objective of this project is Setting up of ball copra manufacturing unit with a capacity to process 7 lakh nuts per year for producing 87.5 MT Ball copra per year. The project was approved with an eligible cost of Rs. 20 lakhs and eligible subsidy of Rs. 5 lakhs as follows:

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(₹ in lakhs)		
Land	Own	-	-
Building & Civil works	20.00	20.00	5.00
Working Capital margin	..		
TOTAL	20.00	20.00	5.00

Approved the project in principle with a maximum eligible subsidy of Rs. 5 lakhs. However the unit has already commenced production, PAC authorized Chairman to sanction the eligible subsidy based on the actual expenditure as and when all the required documents are submitted.

40. Setting up of ball copra manufacturing unit - Smt. Kasa Renuka Durga Devi, W G Dist, Andhra Pradesh at a total cost of Rs. 25.74 lakhs

The objective of this project was setting up of ball copra manufacturing unit with a capacity to process 4 lakhs coconuts per year for producing 50 MT Ball copra per year. Approved the project with an eligible cost of Rs. 25.74 lakhs and eligible subsidy Rs..6.435 lakhs as follows

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(₹ in lakhs)		
Land	Own	-	-
Plant & Equipments	-	-	-
Building & Civil works	25.74	25.74	6.435
TOTAL	25.74	25.74	6.435

However, since the unit has already commenced production, PAC authorized Chairman to sanction the eligible subsidy based on the actual expenditure as and when all the required documents are submitted.

41. Setting up of copra processing unit for production of high quality copra - Muthalamada Federation of CPS, Palakkad, Kerala at a total cost of Rs. 53.50 lakhs

Shri.P.Vinod Kumar, representing the Federation of Coconut Producers Societies, Muthalamada Gramapanchayat, Palakkad presented the proposal. The objective of this project is setting up of copra processing unit for production of FAQ grade copra with a capacity to process 30,000 coconuts per day for producing approximately 4.30 MT milling copra.

Components	Total Project Cost	Eligible Project Cost	Maximum Eligible Subsidy
	(₹ in lakhs)		
Land (10 Cents)	Lease	-	-
Plant & Equipments	20.50	19.00	4.75
Building (1570sq.ft.) Lease	1.00	-	
Civil work	16.50	16.50	4.125
Preliminary & Pre op. expenses	0.50	0.50	0.125
Working Capital margin	15.00	-	-
TOTAL	53.50	36.00	9.00

Approved the project with an eligible cost of Rs. 36 lakhs and eligible subsidy of Rs. 9 lakhs.

42. Control of Black Headed Caterpillar of coconut in Erode district -Commissioner of Agriculture, Department of Agriculture, Chepauk, Chennai at a total cost of Rs 8.64 lakhs.

Dr K Muralidharan, Director presented the proposal to implement the scheme in 4 selected Blocks (Anthiyur, Bhavanisagar, Sathyamangalam, Thalavadi) of Erode District covering 7200 trees by release of braconid parasite which is to be produced in Gobi Parasite breeding station and Bhavani Control lab . The committee approved the proposal at a total cost of Rs 8.64 Lakhs with a duration of 6 months. Committee wanted to have monthly progress report to be monitored by TMOC Cell.

43. Design and Development of hydraulic coconut breaker - M/s.Apex Design Center, Coimbatore

Dr K Muralidharan presented the proposal and after discussions the committee approved the project in principle subject to the condition that the cost of manpower should be limited to 3 lakhs. Project cost approved is as follows:

Development Cost in Lakhs	
Development Purchases	2.8
Machinery and Tools	2.0
Manpower	3.0
Patent Filling	1.0
Total	8.80

The committee approved the proposal at a total cost of Rs 8.80 Lakhs and eligible subsidy of Rs. 4.40 lakhs and a duration of 6 months. Monthly monitoring of the progress of implementation to be carried out by TMOC Cell.

Other Items

1. Proposal for revolving fund for the project “Establishment of Biological Control Laboratory” at Regional Office, CDB, Bangalore -reg

Considering the requirement for large scale production of parasitoids on self sustainable basis, the proposal for maintaining the parasite breeding lab with a production target of 25 lakh parasites per annum was approved involving an amount of Rs 2,00,000/-as revolving fund. The increase in wages of lab attendants and cleaning workers was also approved by the Committee. Committee also opined that the details of amount realized as receipts through release of parasites yearwise from the

commencement of the project has to be ascertained. Release of 1st installment funds of Rs.1,25,000/-effected for continuing the production of parasites was ratified. The revolving fund may be settled by March 31st every year and be renewed every year.

2. Proposal for fund requirement for the period April 2013-March 2014 for Quality Testing Laboratory at Vazhakulam - reg

Proposal has been deferred for the time being. Chairman expressed his utter dissatisfaction and desperation on the pathetic condition of the maintenance of Quality Testing Laboratory and TDC at Vazhakulam which he found during his recent visit to the campus. The Junior Processing Engineer should take immediate steps to make the premises and building presentable and submit proposals later. Chairman also suggested that the following activities to be taken up urgently by TDC/ QTL staff to make the functioning of the unit vibrant and result oriented.

1. Cleaning and maintenance of the premises.
2. Maintenance of the building including front gate.
3. Planting of sufficient Nos. of dwarf seedlings in the campus.
4. Display of products manufactured during training especially biscuits, cookies etc. made of coconut.
5. Each of the scientific staff having PG degree should take up a project – each, proposal to be submitted immediately.
6. JPE/ QTL team may initiate formation of CPS/ CPF in the neighbouring Grama Panchayats and Block Panchayats and introduce small scale coconut based processing units by providing training and motivation, and technical support.

3. Establishment of an Integrated Coconut Processing unit - Indus Bio Products, Parpunja, Puttur, S. Kannara Dist., Karanataka - approval for revised Plant & Machinery.

The revised project proposal for establishment of an Integrated Coconut Processing unit with an enhanced capacity of 15,000 coconuts/day for DC at a total cost of Rs.71.52 lakhs and eligible subsidy of Rs. 27.327 lakhs was approved by the PAC.

4. Ratification of expenditure incurred for the survey for estimation of Coconut Production 2013-14 - CDB, HQ.

An expenditure of Rs. 41, 12,348 incurred for conducting the survey and met from the TMO head was approved by the PAC.

5. Ratification of proposals sanctioned in principle by 39th PAC - M/s. SS Coconut Industries, Geejihally, Arsikera, Hassan Dist., Karnataka.

PAC ratified the sanction of revised project with eligible subsidy of Rs. 25.145 lakhs.

6. Ratification of proposals sanctioned in principle by 39th PAC -M/s. Sree Mukkanneshwari Coconut Industries, Tiptur Tq., Tumkur Dist, Karnataka

PAC ratified the sanction of revised project with eligible subsidy of Rs. 13.606 lakhs.

7. Ratification of proposals sanctioned in principle by 39th PAC - M/s.Tenguraja Coco Products, Karkala, Uduppi, Karnataka

PAC ratified the sanction of revised project with eligible subsidy of Rs. 27.775 lakhs.

8. Project proposal “Market research study on tender coconut supply chain” - Local Economic Development Society, Kochi

Project was presented by Shri. Anoop Nair, CEO, LEDS and PI of the project. Committee approved the project at a total project cost of Rs. 4.50 lakhs. The objective of the project is to carry out a research study for assessing the potential involved in establishing a Tender coconut supply chain. The stake holders would consist of coconut farmers 50, Coconut Producers Society 5, FOCT 60, Tender Coconut Parlour Vendors and intermediaries 50, consumers of tender Coconut users and non users 100 nos each.

9. Establishment of one tender coconut parlour and to sell tender nuts collected from the members of the federations and other coconut-based products – ratification of the expenditure incurred - Kaipamangalam Federation of Coconut Producers society, Thrissur

PAC ratified the expenditure of Rs. 1,49,400/- incurred for setting up a tender coconut parlour by the Kaipamangalam Federation of Coconut Producers society, Thrissur sanctioned on 13.5.2013.

10. Establishment of two tender coconut parlours and for sale of tender nuts collected from the members of the Kanjiramkulam CPS, Kazhuvloor (PO), Trivandrum – Sanction for reimbursement and ratification of location change :-

The change of location of a tender coconut parlour from Neyyattinkara and Kovalam to Chowara was ratified and sanction was accorded for reimbursing an amount of Rs. 62,850/-towards the expenditure incurred for setting up a parlour.

11. Extension of time for implementation of the Market Promotion activities of VCO-manufactured by M/s Keratech coconut oil Manufacturing Co, Engandiyoor, Thrissur

PAC opined that the reason furnished for delay in submission of documents are not justifiable and hence the proposal is deferred. Further, the party may submit the details of production, growth in sale, increase in turnover and profit during the period within a month positively.

12. Extension of time for implementation of the Market Promotion activities of coconut cream- manufactured and promoted by M/s Dinesh Food, Dinesh Bhavan, Payyambalam Road, Kannur

PAC opined that the reason furnished for delay in submission of documents is not justifiable hence the proposal is deferred. Further, the party may submit the details of production, growth in sale, turnover and profit during the period within a month positively.

13. Evaluation of Mass Trapping Technology for coconut black headed caterpillar (*Opisina arenosella*) by using indigenously developed Sex Pheromone Lures and Traps submitted by Pest Control of India, Bangalore – Extension of project period – Ratification.

The project has been completed and final report also submitted in April 2013. PAC ratified the extension of the project period for 3 months upto April 2013.

14. “Quick Detection of root wilt diseases of Coconut using molecular kit”- by Dr. R Manimekalai, CPCRI, Kasaragod – Extension of project period –Ratification

PAC ratified the extension of the project period granted up to September 2013.

15. Scaling up the production of planting material from coconut root (wilt) disease resistant palms through plumule culture –By Dr. Anitha Karun, CPCRI, Kasargod, Extension of project period – Ratification

PAC ratified the extension of the project period granted up to September 2013.

16. Network Project for Establishment of Nucleus Seed Gardens for Production of Quality Planting Materials of Recently Released Coconut Cultivars by CPCRI, Kasaragod-AICRP (Palms), CPCRI, Kasargod, Extension of project period – Ratification

PAC ratified the extension of the project period granted up to September 2013.

17. Field demonstration of integrated disease management technology for management of coconut leaf rot disease including bio control agents” by CPCRI, Kayamkulam - Enhancement of Project cost - Ratification

PAC ratified the enhancement of project cost to Rs.14,79,872/- due to increase of remuneration of research fellows working under the project on par with the rate prevailing under ICAR funded schemes with effect from 1.4. 2010 and payment of arrears of Rs.1,11,113/- to the Institute.

18. Mass multiplication of Parasitoids, Predators, Bio-Agents and large scale demonstration of Biological control of major insect pest and diseases of Coconut in Andhra Pradesh by Dr. Y.S. R Horticultural University, A.P. –Additional budget proposal

PAC sanctioned an additional amount of Rs.4.42 lakhs for conducting the demonstration in 50 acres.

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	Sri. M.K. Shankaralingagowda, IAS Principal Secretary (Horticulture), Secretariat, Multistoried building, IIIrd Stage , IVth Floor, Dr.Ambedkar Veedhi, Bangaore
3	Dr.George V. Thomas, Director, CPCRI, Kasargod. <u>Representative of</u> Assistant Director General (Plantation crops) Indian Council of Agriculture Rresearch(ICAR), Krishi Anusandhan Bhavan –II Pusa. New Delhi-110 012.

4	Sri. B.J Jayakkumar, Additional Director, Department of Agriculture, Government Secretariat, Thiruvananthapuram, <u>Representative of</u> Secretary (Agri), Govt. of Kerala, Thiruvananthapuram.
5	Dr. Anilkumar R. , Assistant Agricultural Marketing Adviser, D.M.I., R.O., Kochi. <u>Representative of</u> Joint Secretary & Agricultural Marketing Adviser to Govt. of India, Room No.237, Krishi Bhavan, New Delhi
6	Sri.P.M. Jayapher, A.G.M The Chief Regional Manager, Indian Overseas Bank, Regional Office, M.G Road, Ernakulam- 682 016
7	Shri.Sugata Ghose, Chief Coconut Development Officer, Coconut Development Board, Kochi
B	EXPERTS
8	Dr. A.N. Srivatsa, Retd.Scientist(DFRL), 411, A & B Block, Navilu Road, Kuvempu Nagar, Mysore – 570 023.
9	Dr.Chandrika Mohan, Senior Scientist, CPCRI, Kayamkulam.

C	In Attendance
10	Dr. K. Muralidharan, Director Coconut Development Board, Kochi
12	Dr. A.K.Nandi, Secretary, Coconut Development Board, Kochi
13	Shri. Sreekumar Poduval Junior Processing Engineer, CDB, Kochi
14	Sri. K.S Sebastian, Assistant Marketing Officer, Coconut Development Board, Kochi
15	Smt. Jayashree A , Senior Technical Officer Coconut Development Board, Kochi
16	Smt. Resmi. D.S., Technical Officer Coconut Development Board, Kochi