### Proceedings of 21<sup>st</sup> meeting of PAC of Technology Mission on Coconut held at Kochi on 30.11.2006

The 21<sup>st</sup> meeting of the Project Approval Committee (PAC) on Technology Mission on Coconut was held at the Board Room of Coconut Development Board, Kochi on 30.11.2006 at 9.30 am, under the Chairmanship of Smt. Minnie Mathew IAS, Chairman, CDB & Chairman PAC. Dr. K V. Kasthoori Bai, Principal Scientist, Head of the Division of Plant Physiology & Post harvest Technology, CPCRI Kasaragod attended the meeting representing the Assistant Director General (Plantations) ICAR, New Delhi. Mr.Dasgupta, Consultant (Energy) attended as an expert. The list of members who attended the meeting is annexed.

There after the following Agendas were taken up for discussion:

## AGENDA No. 1: Confirmation of the Proceedings of 20<sup>th</sup> Project Approval Committee Meeting held on 8.09.06

The Committee approved the proceedings of the 20th PAC Meeting.

### AGENDA No. 2: Action taken report of the 20<sup>th</sup> PAC Meeting & follow up actions of ongoing programme

The action taken report of the 20th PAC was presented by the Chief Coconut Development Officer and various points on the ATR were discussed

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

#### A. PROCESSING & PRODUCT DIVERSIFICATION

1. Establishment of training cum production centers for coconut clusters in Tamil Nadu, attached to Farmers' Training Centers under the Director of Agriculture, Department of Agriculture, Chepauk, Chennai, at a total cost of Rs. 878.00 lakhs

The project was presented by Shri. Santhanam, IAS, Commissioner of Agriculture, Tamil Nadu. The Committee noted that the project proposal was limited to group formation, capacity building and awareness creation. It was strongly felt that the capacity building should lead to processing and marketing activities by the groups. For this credit linked projects should be prepared and the Board would be able to provide subsidy as per TMOC norms. The Committee did not approve the proposal to form 1155 clusters. After detailed deliberations, the PAC approved the project limiting to set up 7 training cum demonstration centers in the major coconut growing zones of the state for imparting training on production, protection and primary level coconut processing to 107 clusters already formed by the Department of Agriculture. The

project period was also curtailed to 2 years with a total financial assistance of Rs 41.35 lakhs from the Board. The component wise financial allocations approved by the PAC are as follows:

- 1. Capacity building of 107 clusters @ Rs. 5000 per cluster Rs.5.35 lakh.
- 2. Development of infrastructure facilities for 7 FTCs @ Rs.5 lakh per FTC Rs.35 lakhs.
- 3. Trainers training programme (50 officials and leaders of potential groups) Rs.1lakh.

Total cost of the project – 41.35 lakhs

The project was approved subject to the condition that at least 30 clusters will encouraged to set up coconut based industries after acquiring training under this project. In the current year 5 units will be motivated to take up processing. Revised project along with detailed time schedule and the milestones fixed for different activities proposed in the first & second year of the project shall be furnished to the Board by the Department of Agriculture. The Committee authorized the Chairman to sanction the eligible financial assistance.

2. Dietary coconut Oils (VCO & CO) and their health implications - submitted by Dr. A. Vajreswari, Deputy Director, Head – Lipid Chemistry Division National Institute of Nutrition (ICMR) Jamai-Osmania, Hyderabad, Andhra Pradesh & the Principal Investigator, at a total cost of Rs. 60.4316 lakhs

The Principal Investigator presented the project for carrying out an evaluation study on the impact of chronic consumption of diets prepared with coconut oil/VCO on lipid metabolism, insulin resistance and inflammatory parameters of young adult human volunteers. The Committee suggested adding one more objective in the project to study the impact of unheated VCO on obesity. The Committee pointed out that the sample size was too small and may not be statistically significant. Dr. Vajreshwari stated that metabolic studies involved strict control over diets. Therefore, the suggested sample size is acceptable as per international norms. The promoter of the project has also reduced the project cost from Rs.60.4316 lakhs to Rs.51.00 lakhs. But she pointed out that institutional charges would have to be paid to NIN by the Board.

After detailed discussion, the Committee pointed out that VCO should not be heated while used for cooking and diet preparation. The promoter should provide evidence of acceptance of the sample size. The Committee approved the project at a cost of Rs.51.00 lakhs + 10% institutional charges.

3. Project on Agriculture waste management and power generation from coconut – Shri Sunil Kumar K Menon, M/s. Sree cattle feeds Pvt. Ltd., Souparnika, Near Cheriya Palam, Karuvannur P.O,Thrissur, Kerala – , at a total cost of Rs. 501.78 lakhs

The Project was presented by Shri Sunil Kumar K Menon, the promoter of the project. The Committee after detailed discussion approved the project for production of value added products including power generation from coconut bio-mass, subject to the following conditions:

- a) The project title should appropriately be changed to setting up of coconut shell based power generation unit at Palladam, Coimbatore and hence the only relevant items need to be included in the cost estimations of the power generation unit. Accordingly the project should be revised and resubmitted.
- b) The committee decided that the letter received from the Chief Programme Executive, Department of Aerospace Engineering, Indian Institute of Science, Bangalore, was adequate proof that M/s Ariya Hi Tech Energy, Coimbatore could promote the Gasification technology.
- c) The promoter should produce a letter from the equipment manufacturer Cummins that they will give a warranty to the coconut shell power plant similar to the one given by them for the CNG plant.
- d) The price of the 250 Kg gasifier shall be verified for considering the cost of gasifier proposed in the project for extending financial assistance.

The PAC authorized the Chairman to approve the revised project and sanction the eligible financial assistance as back ended capital subsidy to the financial institution. The financial institution should also be a party to be signed in the MoU.

**4.** Development of technology for value addition to the by products in coconut

#### processing.- CFTRI, Mysore, at a total cost of Rs. 45.68 lakhs.

The Committee approved the project, prioritizing the development of technologies for formulation of recipes for the following value added products and limiting the institutional charge to 10%:

- a) Coconut honey from mature coconut.
- b) Coconut lassi
- c) Coconut whey proteins
- d) Coconut wet chutney
- e) Coconut souffle

The CFTRI Mysore may be requested to submit the revised project on the above lines and the PAC authorized the Chairman to approve the same.

# 5. Establishment of an Integrated Coconut Processing Complex in Lakshadweep - The Director of Agriculture, Directorate of Agriculture, Kavaratti – 682 555, at a total cost of Rs.117.00 lakhs

The project was presented by Shri Mullakkoya, Director of Agriculture, UT of Lakshadweep. The Committee after detailed discussion opined that it would be more useful to have a Technology Demonstration —cum-Production Centre with minimum facilities for pilot scale production of coconut products viz. FAQ grade quality copra using modern copra dryers, mini-expeller for demonstrating the production of coconut oil, production of shell charcoal, vinegar, coconut based convenience food, VCO and Neera.

The Committee also decided as follows:

- a) The title of the project is to be changed to "Setting up of a Technology demonstration cum production centre for coconut based value added products in Lakshadweep".
- b) The Lakshadweep Coconut Producers Committee (LCPC) as proposed in the project shall be formulated during the first year itself and provision for capacity building should also be incorporated in the revised project.
- c) After the project period and after capacity building the Centre will be transferred to the LCPC for running the unit as training cum production centre on self sustainable basis under the control of Department of Agriculture.

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

6. Project for Development of an Integrated Processing Complex for Manufacturing and Marketing of coconut based products at Kavaratti., The Chairman, Village (Dweep) Panchayath, Office of the Village (Dweep) Panchayath U.T. of Lakshadweep Kavaratti-682 555, at a total cost of Rs. 19.65 lakhs.

The PAC approved the project in principle as a demonstration cum training centre with 100% assistance from the Board, subject to revision of the project in the following lines:

- a) The Promoter has to produce proof of documents of having adequate land and other infrastructure facilities for housing the training centre.
- b) The technologies for production of quality copra using copra dryer developed by CPCRI, VCO and shell charcoal should be demonstrated in the production centre.
- c) The Unit should be self sustained with in the project period of three years and thereafter run as a training cum production centre by the Village Panchayath.

The project shall be revised accordingly and resubmitted. The PAC authorized Chairman to approve the revised project.

7. Developing of coconut climbing bike (Dr.V. John)- The Director, Regional Research laboratory, CSIR, Pappanamcode, Trivandrum, at a total cost of Rs. 12.79 lakhs.

The project was presented by Dr.V.John, PI of the project. The Committee after careful examination observed that the cost of the machine proposed to be developed under the project was high. Similarly the weight of the machine was very heavy. However, considering the urgent need for developing suitable devices for palm climbing and harvesting the coconuts, the PAC approved the project with a total financial assistance of Rs.12.79 lakhs. The possibility of reducing the cost and weight of the machine to the minimum extend shall be considered by the Institute. The Committee also suggested to ensure in-built safety mechanism in the climbing bike in case of exigency.

8. Bioconversion of tender coconut waste into high quality organic manure using promising bio agents - ARS, Ambajipetta at a total cost of Rs. 8.00 lakhs.

The PAC approved the project at a total cost of Rs.8.00 lakhs under the subcomponent – Development of technologies for post harvest processing and value addition, limiting the total project period to 2 years.

9. 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, at a total cost of Rs.50.837 lakhs

The project was presented by the promoter. Considering the domestic and export market potential of the products, the PAC after careful examination approved the project with a total financial assistance of Rs.6.53 lakhs (25% of the cost involved for expansion/up gradation of the unit). However, the PAC authorized the Chairman to release the assistance only after obtaining the bank appraisal report, details of business turn over, etc.

10. Production of Cheaper and Healthier Blends of Coconut oil with other Vegetable oils - CFTRI, Mysore, at a total cost of Rs.20.28 lakhs.

The Committee after referring to the copy of the leaflet on knowledge series on food regulation in trade, prevention of food adulteration act & rules (as on 6.1.2006) published by CII, New Delhi, approved the project limiting the institutional charges to 10% under the subcomponent – Development of technologies for post harvest processing and value addition.

## 11. Financial assistance for coconut chips unit - Mrs. Mary Shibi, C/o Antony Jaison Jose, Cheethaparambil (H) Vaduthala., at a total cost of Rs. 4.00 lakhs

The PAC after careful examination of the project observed that the promoter had undergone training at CDB, TDC, Vazhakkulam. Considering the need for supporting the promoter to set up a small scale enterprise, PAC approved the project with 25% cost of eligible components as back ended capital subsidy. The cost of machinery will be critically appraised before sanction.

### 12. Manufacture of Coconut Shell Charcoal- M/s. Genuine Shell Carb Private Limited, 154E, Ram Nagar, Kovai Road, Kangayam, Erode- 638 401, at a total cost of Rs. 745.00 lakhs.

The Project was presented by the promoter. The Committee after careful examination approved the project proposal for expansion of the Activated Carbon Unit acquired by the Promoter from M/s Hamsaveni Carbons Pvt. Ltd. for providing back ended capital subsidy @ 25% of the cost involved for expansion/up gradation of the unit with a maximum financial assistance of Rs.50.00 lakhs. The promoter shall furnish the details of export data of the product to the Board on monthly basis for which necessary clause need to be incorporated in the MOU

**13**. **Integrated Coconut Processing Complex** - The Kandalloor Coconut Processing and Marketing Co-operative Society Ltd. No. A 755, Puthiya Vila, P.O. Kayamkulam, Alappuzha Dt., at a total cost of Rs. 16.70 lakhs

The PAC approved the revised project for copra manufacturing and vinegar production storage and marketing at the rate of 25% of the eligible financial assistance as back ended capital subsidy. The District Co-operative Bank, Alleppey, the financing Bank, will also be a party to be signed in the MOU.

### **14.** Augmenting adoption of farm level processing/value addition of coconut through micro entrepreneurship- **Dr. P.Anithakumari, CPCRI, Kayamkulam, at a total cost of Rs. 10.322**

The Project was presented by Dr. Anithakumari, PI of the project. PAC after having detailed discussions and the future need for promoting primary processing and the marketing value added products at the farm level, approved the project in principle under the subcomponent "Acquisition of technology, demonstration cum training" with 100% assistance for technological /extension interventions proposed under the project, subject to revision of the project on the following lines:

- a) A Provision for setting up of a common facility centre in the cluster for grading, packing, storing & marketing of the product shall be included in the project.
- b) A minimum of 10% of the total production of coconut shall be converted into value added products at farm level by developing micro entrepreneurship in the project area at the end of the project period.

- c) Possibility of funding from the Grama Panchayath for creating common infrastructure facilities for coconut processing, storage and marketing should also be ascertained and included in the revised project.
- d) The infrastructure facilities created in the cluster shall be handed over to the Panchayath and the cluster after the completion of the project period.

#### The model evolved should be replicable.

15. Scheme for setting up of Pananchery Farmers information Center- Pananchery Farmers Club, Thrissur

The promoter presented the project. The Project required revision. The Technical Officer, CDB, incharge of the Panancherry cluster would give necessary advice on developing a market information system with connectivity to CDB Headquaters for getting real time information on prices.

16. Pananchery Farmers' Cluster Copra Processing Centre, Pananchery Farmers' Cluster Chanoth, P.O. Pattikkad, Thrissur, at a total cost of Rs.5.00 lakhs.

The project was presented by the promoter. PAC suggested that the cluster should be first registered as a company so as to have an identity for taking loan. Technical Officer, CDB in charge of the cluster will help the cluster to submit a revised project report in conformity with TMOC norm.

17. Proposal to study the role of virgin coconut oil on HIV morbidility – **Dr. R. Hemalatha Asst. Director, National Institute of Nutrition, Hyderabad, at a total cost of Rs.27.95 lakhs.** 

The PAC did not approve the project since the proposal has been referred to APCC.

18. Proposal for setting up Edible/Ball/Cup copra production and marketing unit- Shri. V. Aboobackar, Sullia Dhashina Karnataka at a total cost of Rs.40.25 lakhs.

The PAC after careful examination of the project observed that the promoter is only purchasing ball copra from farmers and marketing into Edible/Cup copra. Hence machineries proposed in the project for setting up processing unit need not be required. Hence the PAC did not approve the project.

19. Proposal for setting up of Shell Powder manufacturing unit -by M/s Alampara Coconut Allied Corporation, Kancheepuram at a total cost of Rs.37.95 lakhs.

The PAC did not approve the project since the project is not forwarded through the Bank along with Bank appraisal report. The promoter may be asked to furnish the same immediately for considering the same in the next PAC.

20. Setting up of unit for manufacture of virgin coconut oil at Muringhoor, Chalakkudy by M/s Golden Vintage farmers industry, Koratty, Thrissur, at a total cost of Rs.175 lakhs

The 20<sup>th</sup> PAC decided to consider the project after obtaining the documents proving the ownership of technology and quality of the product, copy of the deed of the land and infrastructure acquired and detailed appraisal report. Accordingly the promoter has furnished the detail. The project has been considered and an amount of Rs.30.33 lakhs was sanctioned as eligible subsidy. Draft MOU for signing has also been forwarded to the promoter for release of the first installment. The promoter is yet to furnish the singed MOU for release of first installment of eligible financial assistance. The PAC approved the project and suggested to fix up a time limit to execute the MOU and release of funds.

21. Project for development of new coconut based products in Tetra Pak packages for commercial production- Nadukkara Agro Processing Company Ltd, Avoly P.O, Muvattupuzha, at a total cost of Rs.15.0455 lakhs

The PAC approved the project for developing technology for packing following coconut products in tetra pack. However, the PAC directed the Secretariat to examine the latest balance sheet of the company to study the financial soundness of the promoter before release of the funds.

Coconut milk pineapple juice health drink in tetra pack
 Coconut water drink in tetra pack
 Total
 Rs. 3,90,575/ Rs. 3,23,575/ Rs. 7,14,150/-

22. Setting up of a semi mechanized copra drying unit with a capacity to process 25,000 coconut per day – by Tellicheri Cooperative Marketing and Processing Society, Mattanoor, Kannur at a total cost of Rs. 60 lakhs

The PAC observed that the project is not forwarded through the bank along with the bank appraisal report and was not supported with necessary plan and estimate of the building. It was also noted the requirement of the term loan need to enhanced to a minimum of 40% of the total project cost. The project shall be revised and resubmitted through the bank along with the appraisal report. The PAC authorized the Chairman to approve the revised project.

#### B. Market Promotion & Market Research

### 1. Project for Market Promotion- Coconut Development Board, at a total cost of Rs.200.00 lakhs.

As per the revised guidelines approved by the National Steering Committee, the generic market promotion activities are to be under taken directly by the Board. In view of the ensuing seasonal advantage for promotion of tender coconut and for the promotion of coconut oil a proposal for displaying hoardings in various points in the important cities at an estimated cost of Rs.200 lakhs. Necessary proposals will be obtained from the empanelled agency and the hoarding plan finalized after following the codal formalities. The PAC approved the project with a total cost of Rs.200.00 lakhs.

### 2. Market promotion of coconut products - Managing Director, Karshaka Bandu Agri-Tech, Kasaragod.

PAC approved the proposal and sanctioned reimbursement of eligible subsidy as per the norms of TMOC limited to a maximum of Rs.10.00 lakhs. Documentary evidence for sales turn over for the last 3 years also shall be obtained prior to the release of the assistance

## 3. Project proposal on coconut push cart- Fruit hut beverages Pvt. Ltd, Vijayanagar, Hyderabad, at a total cost of Rs.13.4 lakhs.

The Committee noted that the project was to improve the sale of tender nut water by showcasing tender nut as a hygienic and aesthetic product to specially designed push carts which can vend instant chilled coconut water. The proposal will not only enhance the aesthetic appeal but will elevate the tender nuts sold in a crude manner to the same level of other soft drinks. This project has the potential of being a good market promotion venture for generating demand and increasing sales of tender nut water. Therefore, components eligible for subsidy were identified for sanction on reimbursement basis.

The PAC approved the project with 50% of the eligible components as financial assistance to the unit on reimbursement basis as detailed below:

	Total	Eligible
	Cost	subsidy
	(Rs. in	lakhs)
Cost of cart (20 Nos. @ Rs.25,000/-)	5.00	2.50
Preparation of mould	1.50	0.75
Auto trolley	<u>1.30</u>	<u>0.65</u>
Total	7.80	3.90
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**4. Project for supply and value chain analysis of edible copra in India** by National Institute for Agricultural Management (NIAM), Jaipur at a total cost of Rs. 14.70 lakhs.

The PAC approved the project limiting the institutional charges to 10%. Clarification is to be obtained whether both service tax and institutional charges proposed in the project cost are required.

5. Proposal for providing assistance for setting up of minimal processing of tender coconut unitdirectly by the Board, at a total cost of Rs. 30 lakhs under Market Promotion Activities.

The marketing of minimally processed tender coconut is gaining momentum and the Board is getting a number of projects for financing such units Hence a lump sum amount for regularly supporting such units during the current financial year is proposed. However, the viability of the units already approved will be studied for some more time before sanctioning new units. The PAC approved the proposal and authorized the Chairman to sanction eligible assistance to viable marketing units on reimbursement basis after assessing the viability of the proposals.

#### C. Management of Pest & Disease

1. A Geo-spatial approach for Mapping, Yield Estimation & Health of Coconut - Birla Technical Services 3rd Floor, Guru Angad Bhawan, 71, Nehru Place, New Delhi-110 019, at a total cost of Rs. 12.68 lakhs

Birla Technical Services made a presentation on how Remote Sensing can help to monitor the spread of disease, identify and analyze stress, carry out an acrage estimation and monitor crop health. The information can be used for supply chain management, hedging and price. The work done by BTS for Basmati rice was presented.

The Expert from CPCRI opined that since coconut is different from the seasonal crops where forecasting of yield and crop prospects are standardized, the technology needed to be refined. It was decided that the PI of the project should have a discussion with Scientists at CPCRI, Kasaragod.

The PAC appreciated the work done by the BTS and opined that such type of yield forecasting and palm health estimation studies through remote sensing should be considered. However, since there is no provision to provide financial assistance under any of subcomponents of TMOC the PAC suggested to consider the project under the On-going Scheme – Market Promotion & Statistics (Surveys & Evaluation Studies) of the Board. However, since coconut is not cultivated as a mono crop in Kerala, field verification should be at least 10% of the area before finalizing the estimation based on the satellite images.

# 2. Control of Red Palm weevil in Tamil Nadu during the year 2006-07 - Director of Agriculture, Department of Agriculture, Chepauk, Chennai, at a total cost of Rs. 5.00 lakhs.

The PAC approved the project with a total financial assistance of Rs.5.00 lakhs as a demonstration of use of pheromone traps for the control of Red Palm Weevil with 100% funding from the Board for setting up 5000 pheromone traps on a compact area basis in the endemic areas of the pest in 16 districts of Tamil Nadu as proposed by the Department of Agriculture. The pheromones are to be procured from the CPCRI Kayamkulam.

### 3. Project for control of Eriophyid Mite on coconut on pilot basis during 2006-07- by The Commission of Agriculture Tamil Nadu, at a total cost of Rs. 22.74 crores.

The Commissioner of Agriculture presented the project in the PAC. The technical programme involves root feeding of 94.892 lakh coconut trees with Azadiractin 1% in three rounds. The Committee after detailed discussion suggested that since adequate rains were received in various parts of Tamil Nadu during the past couple of years the mite infestation has significantly come down. Hence treatment of palms in the hot spot endemic areas only would be necessary during the coming summer period. The PAC suggested to identify the hot spot areas and revise the project with 25% financial assistance from the Board.

4. Multi-locational trials for Technology Demonstration on Coconut Mite Control in Coconut Growing States, by using biocides developed at Regional Research Laboratory. - The Director Regional Research Laboratory (Council of Scientific and Industrial Research), Bhubaneswar 751 013, India, at a total cost of Rs.69.18 lakhs.

The PAC approved the project subject to the following conditions:

- a) The cost of equipments viz. GCMS, Nitrogen analyzer & Auto analyzer shall be excluded from the project cost.
- b) Institutional charges should be limited to 10% of the recurring expenditure.
- c) The bio-efficacy, bio-safety and toxicological studies should be included in the multi-location trial to fulfill the conditions insisted by the Central Insecticidal Act for registering the bio-pesticide for commercial production.
- d) The budget proposed under TA should be limited to the minimum requirement.

The project shall be revised accordingly and resubmitted. The PAC authorized the Chairman to sanction the assistance.

5. Project for management of Black headed Cater Pillar on coconut in Kasaragod District - **Department of Agriculture, Kerala, at a total cost of Rs. 26.175 lakhs.** 

The PAC approved the project as a large scale demonstration of the management practices of pest in the endemic areas recommended by CPCRI including use of bio pesticides and bio control agents with a total financial assistance of Rs.20.40 lakhs as Board's share. The share of the Board is for meeting the cost of bio-pesticides, parasitoids and fertilizers. The fund shall be released to the District Collector, Kasaragod after executing MOU.

6. Development of a new formulation of Azadirachtin and Field Demonstrations for Large scale adoption for the management of Black Headed Caterpillar, Red Palm Weevil, Rhinoceros beetle and Eriophyid mites infesting Coconut- by Research and Development Centre- by EID Parry(India) Ltd.145, Devanahalli Road, Off. Old Madras Road, Karnataka at a total cost of Rs. Rs.29.736 lakhs

The Principal Investigator presented the project. The committee after careful examination of the project observed that similar studies on the granular formulation of Azadirachtin has already been started at CPCRI under an APCC funded project. Hence PAC did not approve the project.

7. Project proposal for control of pest and diseases of coconut by using Bio- pesticides under Coconut Development Board Schemes - by Director of Horticulture, Government of Karnataka(Dept. of Horticulture) Directorate of Horticulture, Lalbagh, Bangalore-04, at a total cost of Rs.100.00 lakhs.

The PAC observed that the details of the bio pesticide viz. the chemical content, type of formulations, mode of application, dosage etc. are not indicated in the project report. A detailed project showing the location, the number of palms, the number of beneficiaries, the detailed time frame showing the schedule of application of bio pesticides should be indicated in the project. The area and number of palms selected for adoption should be in a compact area covering the endemic areas of the infestation of the pest. The project can be considered under the subcomponent, adoption of technologies for the management of pest and diseases with 25% financial assistance.

It was decided to request the State Govt. to revise the project and submitted a detailed project report on the above lines.

8. Project proposal for control of Rhinoceros Beetle and Red Palm Weevil of coconut by using Pheromone Traps under Coconut Development Board Schemes - **Director of Horticulture**, **Government of Karnataka(Dept. of Horticulture) Directorate of Horticulture**, **Lalbagh**, **Bangalore-04**, at a total cost of Rs.100.00 lakhs.

The PAC discussed the project. It was pointed out that Pheromone Traps are recommended for control of red palm weevil in endemic areas as a part of IPM in a compact area. Hence the proposal should be implemented in compact areas with farmer participation. The detailed technical programme showing the time frame for setting up of the traps, regulation of food trap, traps servicing etc. have to be furnished in the project proposal. It was also noted that the projected cost of Pheromone Traps is very high. The cost of Pheromone supply from CPCRI for the control of red palm weevil is @Rs.30/- only and by private agencies @Rs.250/-. Further the Pheromones recommended for control of Rhinoceros Beetle has not been found to be effective in controlling the pest in farmers' field. Hence the PAC did not approve the project. It was decided to advise the state Govt. to revise the project on the above lines and pose the project for funding

assistance (25% as per TMOC norms) for setting up Pheromone Traps for control of red palm weevil on a compact area basis, where the pest is endemic.

9. Studies on biocontrol of stem bleeding and bud rot disease of coconut in Andhra Pradesh – by ARS, Ambajipetta, at a total cost of Rs.8.24 lakhs.

The Committee after careful examination of the project observed that similar studies for identification of bio control agent against bud rot pathogen also is being carried out at CPCRI. Hence the PAC did not approve the project.

10. Identification and Documentation of Elite coconut palms of variety dwarf in Tamilnadu- by Dr. M.V. Louis, Hi-tech Coconut Corporation, Nagarcoil, Tamil Nadu, at a total cost of Rs.10.79 lakhs.

The Committee did not approve the project since the proposal does not come under the purview of TMOC.

11. Development and further studies for perfecting the eco-friendly Herbal acaricide against Eriophyid mite and other sucking insects on Coconut - by Dr. Hendry Louis, Hi-tech coconut corporation, Nagarcoil, Tamil Nadu, at a total cost of Rs.9.395 lakhs

The committee agreed with the comments of Internal Screening Committee and decided to refer the project to Dr. B. Malik Net Work Co-ordinator, AINP Acarology, UAS Bangalore for expert opinion.

#### Other Items

1. Revised Project on Control of Eriophyid Mite on Coconut in Maharashtra as a large scale demonstration of IPM/INM package recommended by NSC.

The PAC approved the revised project by changing the pattern of assistance as approved in the original project i.e. @ Rs.8/- per palm for treating 288088 Mite affected palms to 100% funding for meeting the cost of inputs under the subcomponent demonstration technologies for management of pest and diseases as detailed below:

### CDB Share (for I Ha @ 150 palms/Ha)

1. Root feeding with 5% Azadirachtin @ 7.5 ml +
7.5 ml water for 3 rounds @ Rs.1960/litre - Rs.6615/-

2. Raising green manure crops @ 60g / palm

@ Rs.30/kg - Rs.270/-

3. Neemcake @ 5kg/palm @ Rs.10/- per kg - Rs.7500/-

4. Fertilizer application (NPK) @Rs.19/- per palm - Rs.2850/

Rs. 17,235/-

The unspent balance of Rs.23,04,704/- available with the Department, shall be utilized for covering an area of 133.72 Ha @ Rs.17,235/- per Ha. The cost of FYM, labour charges etc. should be reflected in the total project cost as contribution of farmers/State Govt.

The state level administration approval for implementing the project on the above lines also shall be obtained from the Dept. of Horticulture, Maharashtra.

2. **Establishment of Integrated Coconut Processing Complex -** M/s. Kallamkunnu Service Co-operative Bank Ltd., Thrissur..

The project was approved in the 5<sup>th</sup> Meeting of the Project Approval Committee held on 8.02.2003 at Chennai with a total financial assistance of Rs.27.46 lakhs. The Secretary, Kallakunnu SCB, presented the status of the project. The project has been completed except VCO Unit. The Secretary requested the Board to sanction additional subsidy for the excess amount incurred over the estimated cost of machinery and its installation charges. The PAC did not agree to the request. It was decided to close the project with the products already commissioned. The financial institution may be requested to furnish the completion report of the unit with the products already commissioned along with the asset accrued Certificate for considering the release of balance fund.

### **List of Participants**

### Twenty-first Meeting of PAC of TMOC on 30<sup>th</sup> November 2006 at Kera Bhavan, Kochi

Sl.No.	Name and address
1	Smt. Minnie Mathew IAS, Chairman, Coconut Development Board & Chairman, PAC
2	Shri.D. Venketeshwara Rao I A S Principal Agriculture Secretary, Government of Karnataka, Horticulture Department, Karnataka Government Secretariat, Multistoried building, IIIrd Stage, IVth Floor, Ambedker Veedhi, Bangalore.
3	Shri. James Antony, Marketing Officer, Directorate of Marketing and Inspection(DMI),Kochi-37 (as representative of Assistant Agricultural Marketing Adviser, DMI, Faridabad)
4	Shri. John Kurian Chief General Manager, Technical Services department, 3 <sup>rd</sup> Floor, C Wing, NABARD, Plot No. C –24, G Block Badra -KurIa Complex Bandra (E), Bombay - 400 051
5	Dr. K V. Kasthoori Bai, Principal Scientist & Head of the Division of Plant Physiology & Post harvest Technology, CPCRI, Kasaragod -671 124.
6	Dr. A.Vajreswari, Deputy Director, Head –Lipid Chemistry Division National Institute of Nutrition (ICMR) Jamai-Osmania, Hyderabad – 500 007, Andhra Pradesh
7	Shri. Dasgupta Consultant (Energy) Randass Technologies (P) Ltd., 350-A-2, Subramaniyampalayam Road, G.N.Mills (Post), Coimbatre-641 029

	Shri.M.Thomas Mathew,
8	Chief Coconut Development Officer & Member Secretary, PAC
	Coconut Development Board, Kochi
	Shri.Rajeev P.George
9	Deputy Director(Dev), Coconut Development Board, Kochi
1.0	Shri.P.T.Thomas
10	Deputy Director(Marketing), Coconut Development Board, Kochi
11	Shri. R. Jnanadevan,
	Assistant Director (TMOC), Coconut Development Board, Kochi
12	Shri. T.B. Nandakumar,
	Assistant Director (IR), Coconut Development Board, Kochi
13	Shri. Sreekumar Poduval,
	Jr. Processing Engineer, Coconut Development Board, TDC, Vazhakkulam
14	Shri.P.Balachandran Nair,
	Marketing Officer, Coconut Development Board, Kochi
15	Shri. V.G. Chandrasekharan,
	Statistical Officer, Coconut Development Board, Kochi
16	Shri K.S. Sebastian,
	Statistical Investigator, Coconut Development Board, Kochi

### Proceedings of the 22<sup>nd</sup> meeting of PAC of Technology Mission on Coconut held at Kochi on 01.02.07

The 22<sup>nd</sup> meeting of the Project Approval Committee (PAC) on Technology Mission on Coconut was held at the Board Room of Coconut Development Board, Kochi on 01.02.2007 at 11.30 am, under the Chairmanship of Smt. Minnie Mathew IAS, Chairman, CDB & Chairman PAC. Dr. K V. Kasthoori Bai, Principal Scientist, Head of the Division of Plant Physiology & Post harvest Technology, CPCRI Kasaragod attended the meeting representing the Assistant Director General (Plantation crops) ICAR, New Delhi. The list of members who attended the meeting is annexed.

The following Agendas were taken up for discussion:

## AGENDA No. 1: Confirmation of the Proceedings of 21st Project Approval Committee Meeting held on 30.11.06

The Committee approved the proceedings of the 21st PAC Meeting.

### AGENDA No. 2: Action taken report of the 21st PAC Meeting

The action taken report of the  $21^{\rm st}$  PAC was presented by the Chief Coconut Development

Officer and various points on the ATR were discussed.

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

#### A. PROCESSING & PRODUCT DIVERSIFICATION

1. Project for setting up of a unit for manufacturing coconut shell charcoal (Raw-material for production of activated carbon) - Indo German Carbons Pvt. Ltd. at Kangayam in Erode District of Tamil Nadu.(Phase II) at a total cost of Rs.140 lakhs.

The PAC after careful examination approved the project in principle. The project aims at setting up shell charcoal manufacturing unit at Kangayam, with production capacity of 6000 M.T per year by adopting a new method, developed indigenously known as flare stack method. This is an improved version of pit method in which fumes are channelised and properly burnt in flare stack before emitting to atmosphere. The project was approved to

extend back-ended capital subsidy as per norms of TMOC subject to the following conditions:

- a) The ownership of the company shall be verified. The unit will be sanctioned subsidy only after verifying that this company has not received subsidy under any other TMOC project.
- b) Cost of fencing/compound wall will not be considered for granting subsidy.
- c) The land cost should be limited to 10% of the eligible project cost. Documentary evidence for value of the land should be submitted.
- d) Invoice of plant & machinery shall be furnished by the promoter.
- e) Subsidy to technology transfer fee will be granted subject to verification as per the govt. of India approved norms.

The committee authorized the Chairman PAC to sanction eligible assistance after satisfying the above requirements.

2. Batch/continuous transterification process for utilization of coconut oil for bio diesel production- The Indian Institute of Petroleum P.O.IIP, Mohkampur Dehra Dun – 248 005, at a total cost of Rs.44.64 lakhs.

The objective of the project is to develop batch/continuous chemical (catalytic process for the conversion of coconut oil into bio-diesel) and to evaluate bio-diesel from coconut oil against the proposed BIS specification to ascertain its applicability as bio-diesel.

The PAC while examining the project noted that clarification was needed on the following points.

- I. whether the process is already developed or to be developed.
- II. the proportion of coconut oil to be used for blending purpose for production of bio diesel
- III. the need for purchase of equipments, especially colorimeter.

These matters were discussed with the Principle Investigator of the project over phone and it was clarified that they proposed to standardize the blending ratio by carrying out experiments with different ratios viz. 5%, 10% and 15% of coconut oil with other fuel oil for continuous/batch transferification process for bio diesel production. It was also clarified that the technology has not yet perfected and a new technology is proposed to be developed under the project by batch as well as continuous transferification process.

After obtaining the clarification from IIP on the above points, PAC approved the project at a total cost of Rs.37.165 lakhs after limiting the TA to Rs.50,000/-and overhead and institutional charges to Rs.3.866 lakhs. It was also decided that ownership of patent will be equally shared by Coconut Development Board and the Indian Institute of Petroleum.

3. Study on coconut supplementation to enhance nutritional status of undernourished children in urban slums of Hyderabad - The Akkshaya Foundation Society, Hyderabad, at a total cost of Rs.15.64 lakhs.

The committee after careful examination of the project opined that predominantly coconut based foods are to be included in the diet menu in consultation with National Institute for Nutrition. The committee also observed that the project period is too short. A minimum period for conducting the study should be 9 months, which will be six months study, two months washout period and one month evaluation. A control group also needs to be included in the research project for comparison. The Board will meet the full expenditure for diet supplements. The operational expenses should be limited to one lakh.

The Committee decided to call for a revised project on the above lines.

4. Adoption of Technology – Grama Lakshmi Coconut Shell Daily Utility Product by Women at Home - Grama Lakshmi Coconut Shell Production and Training Centre, Thumponathumalayil, Amanakara.P.O., Ramapuram, Kottayam - at a total cost of Rs.26.10 lakhs.

The objective of the project is to expand the production capacity of the coconut shell based products manufacturing unit to 3 times by creating additional infrastructure and making the present unit as a production cum training center giving employment to 20 women per day. The products proposed under the project are ladle (different sizes), spatula (different sizes), ice cream cups, tea cups, handicraft items, door panels, dining tables, chairs etc.

The Committee approved the project and sanctioned an amount of Rs.4.15 lakhs which is 25% of eligible project cost as back ended capital subsidy.

5. Demonstration and Adoption of Technologies for value addition in Coconut through Entrepreneurship and Skill Training - Krishi Vigyan Kendra, Thrissur, at a total cost of Rs.8.37 lakhs.

The Committee agreed with the comments of the internal Screening Committee and did not approve the project as the Board has already created sufficient infrastructure for imparting training on coconut based convenience foods at Technology Development Centre, Vazhakulam.

#### B. MARKET PROMOTION

2. Setting up of kiosks - M/s. Global Tourism Hospitality & Entertainment Experts' Cooperative Society Ltd. No.A4444, Leela Shelters, Flat No. A, Punnen Road, Statue, Thiruvananthapuram, at a total cost of Rs.27,25,000/- lakhs.

The committee did not approve the project as the project was not well conceived. The arrangements for sourcing the tender coconut have not been worked out. The details of the activities undertaken by the society have not been furnished. Further the audited balance sheet was also not available for ascertaining the financial status of the society.

3. Market Promotional Programme for KSB Kalpasree coconut products - The President, Kallamkunnu Co-operative Bank Ltd., No.R.314, Kallamkunnu P.O. Nadavaramba, Irinjalakuda, Thrissur, at a total cost of Rs.30.00 lakhs.

The committee approved the project and sanctioned financial assistance of Rs.25.00 lakhs for carrying out market promotional activities for 1 year. The payment of subsidy shall be made on reimbursement basis. The subsidy shall not exceed 10% of the sales turn over.

4. Market Promotional Programme - M/s.Fly Do Exim India, Room No.XIII/TMC/242/V10 & VII, Star Complex, Court Road, Taliparamba, Kannur, Kerala-670 141, at a total cost of Rs.22.00 lakhs.

The committee approved the project in principle and sanctioned financial assistance of Rs.7.125 lakhs towards 50% of the cost for carrying out market promotional activities for 1 year. The promotion and display should however be continued by the manufacture for at least

three years. The payment of subsidy shall be made on reimbursement basis. The subsidy shall not exceed 10% of the sales turn over.

	(Rs. in lakhs)
Advertisement through TV, Weeklies, Dailies	- 5.000
Setting up of Kiosks	- 0.500
Developing Web Site	- 0.500
Printing of leaflets, palm lets, brochures, Posters etc.	- 0.875
Hiring of display facilities in major	
food chain market for 3 years.	- 0.250
Total	7.125
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Before release of subsidy the unit will be visited by a team of officers for an on the spot study of the production process. The unit should also furnish a test report on the quality of the product from a reputed laboratory.

#### C. TECHNICAL SUPPORT & EXTERNAL EVALUATION

**1.** Modern Soil Testing and Plant Analysis Laboratory for Coconut - Coconut Development Board, Kochi with technical consultancy from Dr. Hameed Khan, Project Co-ordinator (Palms),ICAR(Retd.), at a total cost of Rs.51.15 lakhs.

The committee after detailed discussion decided that the details of analysis that can be carried out in the main lab and also the mobile lab should be clearly indicated in the project.

The committee suggested that soil health card indicating recommendations for adoption of the nutrient management practices should be distributed to the farmers along with the soil test results.

The PAC decided to get a revised project report for the Mobile Lab.

#### Other Items

#### A. PROCESSING & PRODUCT DIVERSIFICATION

1. Setting up of Handicraft Training unit at Nedumbassery Panchayath - The Secretary, Parakkadavu Block Panchayath, Kurumassery Post, Ernakulam, at a total cost of Rs.7,25,000/-

The project envisages to set up Handicraft training unit to impart training to the selected entrepreneurs in production and marketing of the handicraft products from coconut shell/wood.

The Committee approved the project subject to the condition that the following items of recurring expenditure for conducting the training shall be met by the Block Panchayath:

1. Wages for electrical assistant	- Rs. 36,000/-
2. Raw material for training	- Rs. 20,000/-
3. Pre operative expenses	- Rs. 6,500/-
4. Trainees Stipend	- Rs.1,57,500/-
5. Other expenses	- Rs. 60,000/-
Total	Rs.2,80,000/-

The Board will meet the balance fund for the following expenditure for setting up the training cum production centre, under the head "Acquisition, training and demonstration of technologies".

1. Machinery and equipments	- Rs.1,25,000/-
2. Other assets	- Rs. 50,000/-
3. Honorarium for 12 months	- Rs.1,20,000/-
4. Office show room	- Rs.1,50,000/-
Total	Rs.4,45,000/-

2. Project for setting up of a demonstration cum training centre for production of coconut chips and vinegar- Kerala Agro industries corporation Ltd., Ernakulam, at a total cost of Rs.19.504 lakhs.

The project envisages setting up a demonstration cum training centre for coconut based value added products viz. coconut chips, vinegar, chutney powder, biscuit etc. The committee approved the project subject to the condition that the Board will meet part of the expenditure only for setting up the training centre under the head "Acquisition training and demonstration of technologies" as follows:

1. Machinery and electrification	- Rs.3,00,000/-
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The balance amount required for the project shall be met by the Kerala Agro industries Corporation Ltd. Further 5 to 10 clusters for value addition per year shall be formed by Agro Industries Corporation.

3. Project for development of technologies for processing brown husk into industrial fuel – M/s Randass Technologies Pvt. Ltd., at a total cost of Rs.118 lakhs.

The project proposed to convert various waste/by products from coconut into various value added products like industrial fuel. This will improve the returns to the farmers.

The committee approved the project in principle under the head Development of technologies. The maximum financial assistance that can be extended is Rs.35.00 lakhs as per the norms of TMOC.

The patency and ownership of the technology shall be shared equally by the Board and the Randass Technologies Pvt. Ltd. The committee authorized Chairman to release eligible subsidy as per the progress of work.

4. Project for establishment of a tender coconut water processing unit and a Desiccated Coconut Production unit at Thadepallygudem, W.Godavari District, Andhra Pradesh – KO & IN India, Hyderabad.

The committee observed that the project was not forwarded through the Bank. However since the Board has already approved the transfer of technology for preserving and packing tender coconut water, the committee approved the project in principle, subject to submission of the project through Bank along with bank appraisal report.

The committee also authorized the Chairman PAC to approve similar projects for setting up of tender coconut water preserving and packing unit anticipated from entrepreneurs during the current financial year, who had availed the technology from the Board and place the matter before the next PAC.

5. Development of technology package for virgin coconut oil and value added downstream products from fresh coconut - RRL, Thiruvananthapuram, at a total cost of Rs.39.50 lakhs.

The committee did not approve the project since CFTRI, Mysore has already standardized the technology for production of virgin coconut oil and de-fatted coconut powder. Objectives 1 to 7 were already covered in the study given to CFTRI. The committee was of the view that objective 8, ie. development of formulation of cosmaceutical products such as sunscreen, body lotion and other personal products using virgin coconut oil should be taken up by RRL. The committee also suggested that the Board can invite a proposal from the Central Drug Research Institute Lucknow on development of nutraceutical products from coconut/coconut oil/virgin coconut oil.

6. Change of location and name of the Project proposal for setting up of Coconut Shell **Based Activated Carbon Unit** - M-far Carbons

The committee noted the change of the name of the company from M/s M-far Carbon to M/s Active Char Products and the location from Vazhakulam, Alwaye to Industrial Development Area Edayar, Binanipuram. The committee ratified the changes and also the action taken to release eligible subsidy to the unit.

7. **Proposal for expansion of the Integrated Processing Unit** – M/s Kallamkunnu Service Co-operative Bank.

The committee considered the request of M/s Kallamkunnu Service Co-operative Bank for sanction of additional financial assistance as the society had incurred an expenditure of Rs.190.89 lakhs as against the original project cost of Rs.160 lakhs approved by the PAC earlier. The Society was seeking approval for the expansion of the expeller unit for 1.5 tonnes of copra per day to 10 tonnes per day considering the availability of copra and sanction of additional expenditure incurred in connection with the expansion.

The other major variation was in the cost of the building as Coconut Development Board had deducted the cost of the building as assistance had been sanctioned to the unit under copra drier scheme.

After detailed discussion the committee decided that a team of officers from Coconut Development Board may carry out a physical inspection to verify.

- 1. Whether the building was eligible for subsidy as per TMOC guidelines and whether the deduction made earlier was erroneous.
- 2. Whether the additional expenditure incurred by the society was really on account of enhancement of the processing capacities.

The committee also authorized the Chairman to sanction additional subsidy if the additional expenditure incurred was found to be on account of increased processing capacities and erroneous deductions.

Market Promotion

1. Extending assistance to units manufacturing Agmark Certified Micro filtered branded coconut oil in consumer packs.

The committee reviewed in detail the decision taken in the 17<sup>th</sup> PAC meeting not to extend assistance to coconut oil processing units considering the glut in domestic oil market and price fall of coconut.

The committee noted that adulteration of coconut oil was one of the main reasons for its declining off take and declining prices. To check adulteration, oil units have to be motivated to take up packing and branding for improvement of their sales. Taking into consideration the decline in prices the committee decided to review the earlier decision and agreed to extend financial assistance to processing units for the production of multi-filtered branded, packed coconut oil with Agmark certification. The PAC also agreed to re-consider the oil production units which were not considered for grant of subsidy earlier, if they produce the relevant documents showing the expenditure incurred for setting up the oil production unit with Agmark standards. All such case should be brought to PAC for consideration.

2. Market promotional Programme for Velco Brand coconut products - M/s Vellur Service cooperative Bank Ltd. No.3971, Vellur P.O Via Payyannur, Kannur, Kerala, at a total cost of Rs. 30.00 lakhs.

The committee approved the project and sanctioned financial assistance of Rs.25.00 lakes for carrying out market promotional activities for 1 year. The payment of subsidy shall be made on reimbursement basis. The subsidy shall not exceed 10% of the sales turn over.

3. Scheme for providing tender coconut merchandising to SHGs, NGOs etc at subsidized rate

The committee considered the proposal for promoting the sale of Tender Nuts in a more hygienic and aesthetically appealing manner through a chain of neat branded kiosks. The proposal envisaged the grant of 50% of the cost of a merchandising unit to existing and potential vendors and voluntary organizations to promote the sale of tender coconut in hygienic condition. The cost of the unit designed by M/s. MAA Bozell is worked out at Rs.8500/-.

The Committee after detailed discussion approved the project proposal for providing "profitable kiosk" - coconut merchandising units- to SHGs, NGOs etc. As most of vendors were economically backward and may not be in a position to raise resources, it was decided to consider this as a market promotional effort of the Board with beneficiary contribution of Rs.1000/- towards the cost of the unit.

4.Market promotion – Approval for deviation in the implementation of the project sanctioned to M/s Benzy Food & Beverages (P) Ltd., Ponnani.

The Committee approved the change in location of supermarket after one year for arranging display of the coconut products instead of continuing it in the same supermarket for three years considering the supermarket's reluctance to provide space for a long period. The committee permitted to release the balance subsidy payable to the promoter Rs.1,00,000/- as Board share sanctioned for hiring display facilities in major food chain markets for a minimum period of three years.

Pest & Disease Management

1. Production of root (wilt) resistant / tolerant coconut seedlings for root (wilt) disease prevalent tracts - CPCRI, RS, Kayamkulam, at a total cost of Rs.44.40 lakhs.

The committee approved the proposal for enhancement of the TA from Rs.25,000/- to Rs.40,000/-. However the excess expenditure over and above the sanctioned limit under TA shall be met from the receipts realized by the sale of seedlings from the second year onwards.

- 2. a) Project proposal for control of pest and diseases of coconut by using Bio-pesticides
  - Director of Horticulture, Government of Karnataka (Dept. of Horticulture) Directorate of Horticulture, Lalbagh, Bangalore at total cost of Rs.75 lakhs.
  - b) Project proposal for control of Red Palm Weevil of coconut by using Pheromone Traps under Coconut Development Board Schemes Director of Horticulture, Government of Karnataka (Dept. of Horticulture) Directorate of Horticulture, Lalbagh, Bangalore at a total cost of Rs.50.00 lakhs.

The committee approved the projects 'a' and 'b' under the subcomponent 'Adoption of technologies for the management of pest and diseases and sanctioned 25% of the project cost only as share of the Board as per the norms of TMOC. The balance amount shall be met by the State Govt./farmers. The state Govt. should submit the state level administrative sanction for implementing the schemes indicating the contribution from the state Govt./farmers/etc. for release of eligible assistance.

### List of Participants

### 22<sup>nd</sup> Meeting of PAC of TMOC held on 01.02.07 at Kera Bhavan, Kochi

S.No.	Name and address
1	Smt. Minnie Mathew IAS, Chairman, Coconut Development Board & Chairman, PAC
2	Shri P. S Moni, Joint Director of Agriculture (Farms), Directorate of Agriculture, Representative of: Agricultural Production Commissioner, Government of Kerala Secretariat, Thiruvanathapuram
3	Shri. D. Venketeshwara Rao I A S Principal Agriculture Secretary, Government of Karnataka, Horticulture Department, Karnataka Government Secretariat, Multistoried building, III <sup>rd</sup> Stage, IV <sup>th</sup> Floor, Ambedker Veedhi, Bangalore.
4	Dr. K V. Kasthuri Bai, Principal Scientist & Head of the Division of Plant Physiology & Post harvest Technology, CPCRI, Kasaragod -671 124. Representative of: Assistant Director General (Plantation crops) Indian Council of Agriculture Research (ICAR), Krishi Anusandhan Bhavan –II, Pusa Krishi Bhavan, New Delhi-110 012
5	Smt. Susan Nair, DMI, Kendriya Bhavan, Kakkanad-37 Representative of: Asstt. Agricultural Marketing Adviser Directorate of Marketing and Inspection Govt. of India, NH.4, CGO Complex Faridabad-121 001
6	Dr. Raghava Rao, Representative of: Director, Central Food Technological Research Institute, Mysore-20
7	Shri. John Kurian, Chief General Manager, Technical Services department, 3 <sup>rd</sup> Floor, C Wing, NABARD, Plot No. C –24, G Block Badra -KurIa Complex Bandra (E), Bombay - 400 051

	Shri. M. Thomas Mathew,
8	Chief Coconut Development Officer & Member Secretary, PAC
	Coconut Development Board, Kochi
9	Shri. V.K Sankaran,
	Secretary, Coconut Development Board, Kochi
10	Shri. Rajeev P.George,
	Deputy Director (Dev), Coconut Development Board, Kochi
11	Shri. P.T. Thomas
	Deputy Director (Marketing), Coconut Development Board, Kochi
12	Smt. Remany Gopalakrishnan,
	Deputy Director (IT), Coconut Development Board, Kochi
13	A.N. Muraleedharan Achari,
	Finance Officer, Coconut Development Board, Kochi
14	Shri. R. Jnanadevan,
	Assistant Director (TMOC), Coconut Development Board, Kochi
15	Shri. T.B. Nandakumar,
	Assistant Director (IR), Coconut Development Board, Kochi
16	Shri. Sreekumar Poduval,
	Jr. Processing Engineer, Coconut Development Board, TDC, Vazhakulam
17	Shri.P. Balachandran Nair,
17	Marketing Officer, Coconut Development Board, Kochi
18	Shri. V.G. Chandrasekharan,
10	Statistical Officer, Coconut Development Board, Kochi
19	Shri K.S. Sebastian,
1)	Statistical Investigator, Coconut Development Board, Kochi
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### Proceedings of the 23<sup>rd</sup> meeting of PAC of Technology Mission on Coconut held at Kochi on 20.03.07

The 23<sup>rd</sup> meeting of the Project Approval Committee (PAC) on Technology Mission on Coconut was held at the Board Room of Coconut Development Board, Kochi on 20.03.2007 at 3.00 pm, under the Chairmanship of Smt. Minnie Mathew IAS, Chairman, CDB and Chairman PAC. Dr. K V. Kasthuri Bai, Principal Scientist, Head of the Division of Plant Physiology & Post harvest Technology, CPCRI, Kasaragod attended the meeting representing the Assistant Director General (Plantation crops) ICAR, New Delhi. Dr. A.N. Srivatsa, Scientist (Retd.), DFRL and Shri. B.R. Nair, Regional Director, National Co-operative Development Project (NCDC), Trivandrum attended as expert members. The list of members who attended the meeting is annexed.

The following Agendas were taken up for discussion:

## AGENDA No. 1: Confirmation of the Proceedings of 22<sup>nd</sup> Project Approval Committee Meeting held on 01.02.07

The Committee approved the proceedings of the 22<sup>nd</sup> PAC Meeting.

AGENDA No. 2: Action taken report of the 22nd PAC Meeting

The Committee perused the action taken report of the 22nd PAC.

AGENDA No. 3: Approval of new project proposals:

#### A. PROCESSING & PRODUCT DIVERSIFICATION

6. Project for setting up of a training cum production center for coconut products-Kanjikkuzhy Block Panchayath, Kanjikkuzhy, Alappuzha districts at a total cost of Rs.245.34 lakhs.

The project was presented by Shri. K. Janardhanan, Asst. Project Officer, Poverty Alleviation Unit, District Panchayath, Alappuzha before the PAC. The project aims at setting up of a common training cum processing center for value added products such as virgin coconut oil, coconut shell charcoal, coconut chutney powder and coconut chips etc. with a

capacity to process 5000 coconuts per day. It also aims at formation of women groups for processing of value added convenient foods utilizing the facilities of the common processing / training center. The location of the common production center is in Kanjikkuzhy Panchayath, in the Panchayath land and construction of the building is by utilizing the fund received by the Block Panchayath under the SGSY scheme, is in progress.

The committee after detailed discussion observed that central assistance under SGSY has already been availed for the 'Production Center' and hence no further subsidy can be sanctioned for this component. It was decided that the components 'Training Center' and 'Quality Control Laboratory' may be considered for grant of assistance. However a detailed proposal should be submitted for the Training Center indicating item wise details of the total cost of Rs.5.00 lakhs along with details of training programmes proposed. A detailed proposal may also be prepared for the Quality Control Lab incorporating the required management input in consultation with a committee consisting of members from CDB, CFTRI etc. and submitted to PAC for consideration.

7. Process Optimisation For Production Of Ready To Serve Value Added Products Based On Tender Coconut & Coconut Milk - Department of processing technology, College of Horticulture, KAU, Vellanikkarea at a total cost of Rs.20.095 lakhs.

Dr. P.B. Pushpalatha Associate Professor, Dept. of Processing Technology, College of Horticulture, Vallanikkara, Principal investigator presented the project before the PAC. The objective of the project is to develop an ideal tender coconut de-husking device, which can remove 2/3rd of the husk, making the coconut in the shape of a ball, refinements of process for production of novel coconut milk based products such as toffee, honey, bread spread etc., standardization of recipes and process for production of ready to serve tender coconut and coconut milk based products (packed mixtures and powders, shake ice creams etc.) and assessment of shelf of the novel products under various packaging systems.

The Committee after detailed discussion approved the proposal for development of a device for de-husking of tender coconut with duration of 6 months. Regarding the proposal for refinement of recipe/development of condensed and dehydrated milk products, the committee observed that development of such products at the laboratory level was not

sufficient. Technology should be standardized so as to be demonstratable at a pilot plant level. Therefore the proposal can be considered if the focus of the proposal is on productionisation and the product developed and standardized at the pilot plant level. It was decided to inform the promoter accordingly.

**8.** Proposal for establishment of integrated virgin coconut oil production enterprises in Perambra - Subicsha Coconut Producers Company Ltd., Calicut at a total cost of Rs.232.50 lakhs.

The project was presented by Shri. M. Kunhammad Master, Chairman, Subicsha Coconuts Producer Company Ltd., Calicut. The proposal aims at establishing a cluster of an Integrated Virgin Coconut Oil Production Enterprises by women entrepreneur groups supported by Subicsha.

The Committee after detailed discussion decided that the proposal cannot be considered since central assistance has already been availed by SUBICSHA under the SGSY scheme for the construction of building for setting up the processing units. However if projects through Banks are received from viable SHGs for promoting production, the same can be considered on merit on a case to case basis.

### 9. Development of special coconut shaping lathe - Vayalar Invention Center at a total cost of Rs.0.438 lakhs.

The proposal was presented by the promoter. It is proposed to design a simple machine/manually operated cutting and shaping device for tender coconut. The construction of the machines requires an angular frame used as stand or platform. It has a moving bed fitted on to a sliding rail with a stopper end. On the other end, it has a head stock with a rotating shaft mounted on bearing which is driven by a slow speed motor. The shaft is fitted with the knife, fitted on the shaft at one edge and a small sharp edge at centre. The coconut is placed on the moving bed and clipped with a bracket for safety and the bed with the coconut is moved towards rotating blade slowly. The coconut is faced and side shaped in a very few minutes.

The committee after careful examination of the proposal agreed to extend financial assistance @ 50% of the total project cost, with a condition to obtain patent for the equipment after development.

### 10. Establishment of a centralized bottling and a franchising unit for virgin coconut oil-K & P associates, Kolencherry, Ernakulam at a total cost of Rs.110.00 lakhs.

The project was presented by Shri.K.V. Poulose, Managing Partner of the Firm. The chief promoters of the projects are K&P Associates, a partnership firm commenced on 27th July 2005. The main objective of the project is to setup a centralized bottling unit of virgin coconut oil with a capacity of 20000 litres of VCO per day produced by units adopting Rubco technology including the produce of K&P Associates on a buy back arrangement with Rubco. The proposal is based on the agreement between M/s RUBCO and K&P associates. The project deals with transportation and bottling of VCO produced by different franchising units setup by adopting DME technology promoted by RUBCO.

After detailed discussion the committee observed that bottling and packaging is part of processing. Production of VCO is one of the thrust areas identified for promoting value addition in coconut. It was therefore decided to sanction eligible financial assistance. However the committee observed that the Company's MoU with Rubco shall be looked into to examine the condition in the agreement before sanctioning eligible subsidy.

# 11. Design and Development of New Machines for Integrated Coconut Processing - Dr. KSMS Raghavarao, Head, Food Engineering, CFTRI, Mysore -570 020, at a total cost of Rs.29.46 lakhs.

The project was presented by the promoter. The main objectives of the project is design and development of a trimming machine for tender coconuts, development of machine for continuous shelling of coconut, development of continuous paring machine for coconut, development of flakes/grating machine and Technology for reducing the process time for production of ball copra.

The Committee after detailed discussion approved the proposal with 10% contribution from CFTRI. The project period is for 2 years. However CFTRI should ensure that every 6

months, the design and development of one machinery should be completed. The committee also observed that a similar study has already been sanctioned to RRL Trivandrum for reducing the process time for production of ball copra and hence this component (Objective No.5) is excluded from the programme.

# 12. Project proposal for setting up of coconut complex at Urangattri, Malappuram District-The Urangattri Service Co-operative Bank Ltd., No.8895, P.O. Urangattri, Arecode (Via) Malappuram 673 639, at a total cost of Rs.100.00 lakhs.

The project aims at setting up an integrated processing unit with an installed capacity to process 25000 coconuts per day into products such as good quality copra, multi-filtered branded coconut oil with Agmark standard, coconut vinegar and bio gas as bi-products. The original proposal submitted by the society was at a total cost of Rs.56.24 lakhs. The project was approved in principle by the 10th PAC meeting held on 19.05.04. The PAC also suggested that the eligible amount of subsidy should be worked out. If the society has already availed subsidy from other institutions, the subsidy may be sanctioned after deducting the amount so that the total subsidy does not exceed 25% of the project cost. The project was revised and resubmitted based on the decision taken in the 22nd PAC meeting, "to re-consider the oil production units which were not considered for grant of subsidy earlier, if they produce the relevant documents showing the expenditure incurred for setting up the oil production unit with Agmark standards" to prevent adulteration.

The committee after detailed discussion approved the revised proposal in principle provided the society obtain Agmark certification for the coconut oil. The committee also authorized Chairman to sanction eligible financial assistance. The committee suggested that documents showing the source of the equity share of promoter and utility of the bio-gas shall be verified before release of financial assistance.

## 13. Project proposal for an Integrated Coconut Processing Unit - Kuttikad Farmers Service Co-operative Bank Ltd. No.572, Kuttikad, P.O. Mukundapuram Thrissur Dt., at a total cost of Rs.180.00 lakhs.

The original project at a total cost of Rs.154.00 lakhs, was placed in the 10th PAC meeting held on 19.05.2004 and it was decided to take up the project after review of similar project for its profitability and viability. The similar projects sanctioned and implemented by SCB, Kallamkunnu and Karalam have been successfully commissioned and are working

satisfactorily. The units are helpful in ensuring remunerative price to member farmers and quality coconut oil to consumers. Hence the project is re-submitted with the revised costing as per the decision taken in the 22nd PAC meeting to re-consider the proposal received from oil production units which are going in for packing, branding and Agmark certification.

The committee after detailed discussion approved the proposal in principle and authorized Chairman to sanction eligible financial assistance. The committee suggested that cost of building, capacity utilization of expeller unit and utility of the bio-gas shall be verified before sanction and release of financial assistance. The committee observed that the reason for variation in the original and revised project cost should be obtained from the promoter before grant of subsidy.

14. Proposal for establishing coconut processing unit for production of Micro filtered coconut oil, coconut vinegar - Kerala Malanad Karshka Produce Co-operative Marketing Society, ThiruvampadyPost Calicut, at a total cost of Rs. 59.28 lakhs.

The objective of the project is to setup a coconut processing unit for the production of multi-filtered coconut oil as main product and coconut vinegar as bi-product. The installed capacity is to process 10 tones of copra per day into coconut oil and 500 liters of coconut water per day into vinegar. The original project was placed in the 17th PAC meeting held on 28.09.2005. The Committee observed that production of coconut oil need not be supported considering the prevailing glut in domestic oil market. The project is resubmitted based on the decision taken in the 22nd PAC meeting to re-consider the coconut oil production units with the Agmark standards so as to encourage the production of quality oil and check adulteration. The committee noted that the project had gone into production and had not been sanctioned eligible subsidy only because of the decision taken in the 17th PAC meeting which was subsequently revised in the 22nd PAC meeting.

The committee after detailed discussion approved the proposal under the subcomponent adoption of technologies and sanctioned 25% of the eligible project cost not exceeding Rs.11.44 lakhs as back ended capital subsidy.

15. Project to establish a coconut processing unit for production of microfiltered coconut oil, coconut vinegar, coconut water- Thirumeni Agrl. Marketing Society, Kannur at a total cost of Rs. 28.5 lakhs

The objective of the project is to set up a coconut processing unit for the production of multi-filtered coconut oil and bi-products viz. coconut water based lemonade, coconut vinegar and Thenginpookkularasayanam. The project was placed in the 17th PAC meeting held on 28.09.05. The Committee then observed that "considering the glut in the domestic oil market, production of coconut oil need not be assisted. Coconut water lemonade proposed in the project is yet to be standardized. Thenginpookkularasayanam is a medicinal product, which requires drug license for commercial production." But in the wake of rampant adulteration and reduced off take of coconut oil on account of adulteration. The 22nd PAC decided to reconsider and support coconut oil production units having packaging, branding and Agmark standards. The project has been resubmitted based on the decision taken in the 22nd PAC.

The committee after detailed discussion approved the proposal. However the eligible financial assistance shall be reworked deleting the products Coconut water lemonade and Thenginpookkularasayanam. The promoter should produce documents showing the Agmark standard for the coconut oil production unit.

#### 16. Project for setting up of an Integrated Coconut Complex - M/s. Vellur Service Cooperative Bank Ltd. No. 3971, P.O. Vellur, Via, Payyannur, Kannur Dt. at a total cost of Rs. 164.16 lakhs

The objective of the project is to set up an integrated processing unit for the production of filtered coconut oil, virgin coconut oil made from coconut milk, high quality edible grade copra, coconut chips, and coconut vinegar and coconut chutney powder. Installed capacity of the unit is to process 25,000 coconuts per day.

The project was placed in the 17th PAC held on 28.9.2005 and it was decided that the component involving production of coconut oil need not be assisted. The promoter was asked to furnish a revised project proposal excluding cost of establishment of oil production unit. Accordingly, an amount of Rs.18.00 lakhs was sanctioned based on the 20th PAC decision.

In the light of the decision of the 22nd PAC the coconut oil production unit which was excluded from the original project was reconsidered and additional subsidy of Rs.15.835 lakhs was sanctioned for the oil expeller unit.

#### B. MARKET PROMOTION

1. Market Promotional Programme for KSB "Neethi" Brand Coconut Oil - Karalam Service Co-operative Bank ltd. No.R.600, Kizhuthani P.O., Thanissery, Thrissur-680 701, at a total cost of Rs. 33.00 lakhs

The objective of the project is to carry out various market promotional programme for KSB "Neethi" Brand Coconut Oil, Coconut Chips and Coconut Water based Vinegar. The committee approved the proposal subject to Agmark certification. However the committee observed that the society should examine the legality of using the brand name 'Neethi' so as to avoid any litigation.

2. Setting up of a Tender Coconut Parlour at Regional Coconut Research Station, Bhatye, Ratnagiri Dt.- Regional Coconut Research Station Dr.Balasaheb Sawant Konkan Krishi Vidyapeeth, Dapoli Dist., Ratnagiri, Maharashtra., at a total cost of Rs. 6.00 lakhs

The committee after detailed discussion decided that the proposal shall be revised deleting the 'Deep Freezer' since usually only a cooling chamber is required for the tender coconut. The revised project is to be submitted to PAC for approval.

3. Market Promotional Programme for 'SARAS GOLD' Brand Coconut Oil- M/s. St. Mary's Oil Industries, Kadathy, Muvattupuzha-682 316. Kerala, at a total cost of Rs. 28.5 lakhs

The committee after detailed discussion observed that the cost of 'Lab' is very high. The promoter may consult Directorate of Marketing and Inspection (DMI), Kochi to prepare a realistic estimate for the Agmark laboratory and submit a revised project to PAC for consideration.

4. Setting up a unit for the production and Marketing of Snow Ball Tender Coconut at Munoorppally, Angamaly.- KDV Agencies, Kalluprambil, Ezhattumukhom, Munoorpally, Angamaly, at a total cost of Rs. 5.43 lakhs

The committee decided that the project shall be referred to CPCRI for a critical review and then resubmitted to PAC.

#### Other Items

1. Market Promotional Campaigns through All India Radio for the year 2006-07- CDB at a total cost of Rs.28.153 lakhs

The Board sanctioned a broadcast plan with Rs.28.153 lakhs (25,08,360 + 12.24% service tax.) for the market promotional activities of coconut products through All India Radio. The broadcast was carried out through Vividh Bharathi from Thiruvavnanthapuram, Kochi, Kozhikode, Thrissur, Idukki, Pune, Bangalore, Hyderabad, Chennai, Nagpur, New Delhi and a Private Channel Radio Merchi, in Mumbai from December - February 2007.

The PAC ratified the action taken by the Board to meet the expenditure under the sub component "Market Promotion" of Technology Mission.

2. Setting up of modern copra drier unit as demonstration unit by Al-jazeerath Industries and training company Androth Island in Lakshadweep Islands at a total cost of Rs.10,84,285/-

The committee ratified the action taken by the Board to sanction subsidy @ 50% of the total cost of setting up of the unit limited to Rs.5.00 lakh Al-jazeerath Industries and training company Androth Island in Lakshadweep Islands as per the norms of HVA under TMOC subcomponent, 'Acquisition of Technology Demonstration cum Training'.

 Proposal for organizing 'Coconut Festival' by the Coconut Development Board during May 2007 at a total cost of Rs.21.00 lakhs at Trivandrum, Kerala

The committee approved the proposal for organizing a four day coconut festival at Kanakakkunnu, Thiruvananthapuram from 3rd May 2007 to 6th May 2007. The committee also sanctioned an amount of Rs.21.00 lakhs under the component, 'Market Promotion' of TMOC for the festival.

The meeting concluded at 8.00 p.m.

### $List\ of\ Participants\\ 23^{rd}\ Meeting\ of\ PAC\ of\ TMOC\ held\ on\ 20.03.07\ at\ Kera\ Bhavan,\ Kochi$

Sl. No.	Name and address
1	Smt Minnie Mathew, IAS, Chairman, Coconut Development Board, Kochi – 11
2	Shri.D. Venketeshwara Rao I A S, Principal Agriculture Secretary, Government of Karnataka, Horticulture Department, Karnataka Government Secretariat, Multistoried building, IIIrd Stage, IVth Floor, Ambedker Veedhi, Bangalore.
3	Dr. K V. Kasthuri Bai, Principal Scientist & Head of the Division of Plant Physiology & Post harvest Technology, CPCRI, Kasaragod -671 124. Representative of: Dr. K V Ramana Assistant Director General (Plantation crops),ICAR, Krishi Anusandhan Bhavan –II, Pusa Krishi Bhavan, New Delhi-110 012
4	James Antony, DMI, Kendriya Bhavan, Kakkanad-37 Representative of: Asstt. Agricultural Marketing Adviser Directorate of Marketing and Inspection Govt. of India, NH.4, CGO Complex Faridabad-121 001
5	Dr. K.S.M.S Raghava Rao, Head, Dept. of Food Engineering Representative of Director, Central Food Technological Research Institute Mysore—20
6	Shri Joseph S. Pynadath, General Manager, NABARD, Kerala Regional Office, Statue, Thiruvananthapuram – 695039 Representative of: Chief General Manager, NABARD
7	Dr. A.N. Srivatsa, Scientist (Retd.),DFRL 411, A & B Block, Navilu Road, Kuvempu Nagar, Mysore – 570 023.
8	Shri. B.R. Nair, Regional Director, National Co-operative Development Project (NCDC) Co-Bank Towers, PMG Junction, Thiruvananthapuram

9	Shri M Thomas Mathew, Chief Coconut Development Officer, Coconut Development Board, Kochi - 11
10	Shri. V.K Sankaran, Secretary, Coconut Development Board, Kochi
11	Shri. Rajeev P. George Deputy Director (Dev), Coconut Development Board, Kochi
12	Shri. P.T. Thomas Deputy Director (Marketing), Coconut Development Board, Kochi
13	Smt. Remany Gopalakrishnan, Deputy Director (IT), Coconut Development Board, Kochi
14	Shri. A.N. Muraleedharan Achari, Finance Officer, Coconut Development Board, Kochi
15	Shri. R. Jnanadevan, Assistant Director (TMOC), Coconut Development Board, Kochi
16	Shri. P. Balachandran Nair, Marketing Officer, Coconut Development Board, Kochi

### Proceedings of the 24<sup>th</sup> meeting of PAC of Technology Mission on Coconut held at Kochi on 31.07.2007

The 24th meeting of the Project Approval Committee (PAC) on Technology Mission on Coconut was held at the Board Room of Coconut Development Board, Kochi on 31.07.2007 at 10.00 am, under the Chairmanship of Smt. Minnie Mathew IAS, Chairman, CDB and Chairman of PAC. Padmabhushan Dr. M. S. Valiathan, Dr. K. Gopakumar, DDG Fisheries (Retd.) and Dr. Thomas Mathew, Professor & Department Head, & Dr Sairu Philip Assoc Proff, Department of Community Medicine, Medical College Alappuzha attended the meeting as Special Invitees for critically evaluating the projects on (a) Impact of Virgin Coconut Oil as a cooking medium on cardiovascular risk factors and clinical outcomes in patients with coronary artery disease receiving standard medical care and (b) "Epidemiology study of the patients for the last one year, to analyze the past history of their dietary profile through the structured questioner" while presenting the project by the Principal Investigators and then to advice the PAC for taking an appropriate decision. Dr. A.N. Srivatsa, Scientist (Retd.), DFRL attended the PAC as Expert Member. Dr. K V. Kasthuri Bai, Principal Scientist, Head of the Division of Plant Physiology & Post Harvest Technology, CPCRI, Kasaragod attended the PAC representing ADG (Plantaion). The list of members and others who attended the meeting is annexed.

The following Agendas were taken up for discussion:

### AGENDA No. 1: Confirmation of the Proceedings of 23rd Project Approval Committee Meeting held on 31.07.07

The Committee approved the proceedings of the 23rd PAC Meeting.

#### AGENDA No. 2: Action taken report of the 23rd PAC Meeting

The Chief Coconut Development Officer briefly presented the action taken report on the proceedings of the 23<sup>rd</sup> meeting of the PAC.

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

#### A. PROCESSING & PRODUCT DIVERSIFICATION

# 1. Design and fabrication of an equipment and technique for composting of tender coconut husk - Central Coir Research Institute, Coir Board, Kochi at a total cost of Rs.16.99 lakhs

The objective of the project is to fabricate machinery for chopping and grinding of tender coconut husk into half inch thick board intended for wall paneling and developing technology to compost the same into organic manure.

The project was presented by Dr. Sharma, Director, CCRI and his team

After detailed discussion, the project was approved in principle with the following changes:

- 1. Supervisory and consultancy charges shall be deleted
- 2. Contingency charges shall be limited to Rs.1.50 lakh
- 3. Salary and Material/Equipment charges shall be limited to the actual figures.
- 4. 'Performance test, launching and documentation' shall be renamed as 'Evaluation Studies'

Further the Committee observed that Coir Board shall transfer the technology to the Board, apply for joint patent and collaborate with CDB for up gradation/ modifications of technologies for commercialization. The Committee authorize the Chairman, CDB to approve the revised project and sanction eligible assistance.

# 2. Proposal to set up a Coconut Processing unit submitted by The Malabar Coconut Products, Onchiyam, Chombala, Badagara, Kozhikode District at a total cost of Rs.25.00 lakhs

The proposal is for setting up copra dryer for processing coconut into quality copra as well as to start a coconut processing unit for the manufacture of high quality coconut oil.

The project was presented by the promoter. The Committee approved the proposal subject to the following conditions:

1. Suitable MOU shall be signed to ensure procurement of coconut from the beneficiaries of cluster areas sponsored by the Board.

2. Only branded, packed and Agmark certified coconut oil shall be considered for financing by the CDB.

Dr.Vilasachandran, General Manager, NABARD informed that while apprising Agro processing project for computation of the value of land in project cost, NABARD considers the eligible land cost restricted to a maximum of 10% of the project cost.

Hence the eligible subsidy for land cost in this project is worked out as Rs.0.565 lakhs and the project was approved with a total subsidy of Rs.5.665 lakhs subject to the fulfillment of the conditions mentioned above.

3. Proposal to establish micro enterprise for manufacturing coconut chips - M/s. COPS, P.O., Palakkad Dist. promoted by Kanhirapuzha Grama Panchayath Farm Club, Irumbakachola P.O., Kanhirapuzha, Palakkad Dt. At a total cost of Rs.7.12 lakhs

The proposal is to establish micro enterprise for manufacturing coconut chips by involving women SHGs.

The project was presented by the promoter. The Committee approved the proposal subject to the following conditions:

- 1. Quality of the produce shall be periodically checked at the Quality Control Lab Vazhakulam.
- 2. Machinery for Nitrogen filling shall be deleted. Instead material cost for three layer laminated Aluminum foil should be included in the project. Quotations/invoice for the packing material required for a period of one year shall be furnished along with the project.
- 3. Stainless steel (SS) sheet should be covered over the wooden cutting table and the cost for this may be included in the project.

Revised project shall be submitted within one month. Chairman was authorized to sanction eligible subsidy for the project.

4. Design, Development and Fabrication of a multipurpose equipment for punching & Cutting Tender Coconut and Dehusking & Grading Ripe Coconut - Shri V.P.David,

### Vadassery House, Pariyaram P.O., Chalakudy (Via), PIN-680 721 at a total cost of Rs.15.00 lakhs

The proposal is to Design, Development and Fabrication of multipurpose equipment for punching & Cutting Tender Coconut and Dehusking & Grading Ripe Coconut.

The project was presented by the promoter. The Committee approved the proposal subject to the condition that material cost for the consumables shall be included in the project. The Committee observed that provision for building can be provided @ 50% of the cost limited to a maximum of Rs.0.675 lakhs. The committee also suggested that the selling price of equipment shall be affordable to the farming community on commercialization. The entrepreneur shall apply for a joint patent with the Board. The Committee authorized Chairman to approve the revised project and sanction the eligible subsidy.

# 5. Training cum Demonstration Centre for post harvest processing of coconut - Dr. D.V. Raghava Rao, Principal Scientist (Hort) & Head, Agricultural Research Station, ANGRAU, Ambajipeta- 533 214 (A.P) at a total cost of Rs.0.98 lakhs

The proposal is to provide training cum demonstration on post harvest processing of coconut to the coconut growers of Andhra Pradesh by establishing a Training-cum Demonstration Centre at ARS, Ambajipeta (AP) and for popularization of copra making methods and product diversification.

The Committee approved the recommendations of the ISC to provide Rs.48,000/- as subsidy towards the cost of conventional CPCRI model dryer and for conducting training. It should be ensured that the training centre is sustainable and the recurring expenditure for continuing the training programme beyond the project period be met by the University.

6. Study on coconut oil consumption and acute myocardial infarction in south Kannada district of Karnataka state - Dr. K.R.Thankappan, Professor and Head, Achutha Menon Centre for Health Science Studies, Sree Chitra Tirunal Institute for Medical Sciences and Technology, Trivandrum 695 011 at a total cost of Rs.108.384 lakhs.

7. 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, Amrita Institute of Medical Sciences and Research Centre, Kochi at a total cost of Rs.59.40 lakhs.

The Principal Investigators presented the projects before the Committee and experts.

Salient features of the project by: Sree Chitra Tirunal Institute for Medical Sciences and Technology, Trivandrum

Dr.K.R.Thankappan, Principal Investigator presented the project in detail. The study is on epidemiology study of the patients for the last one year, to analyze the past history of their dietary profile through the structured questioner. The sample size selected for the study is 1000 AMI samples & 1000 controls.

The outcome of the project is to see whether there is an association between coconut oil consumption & acute myocardial infraction. Padmabhushan Dr. M. S. Valiathan, informed that the study is similar to the study under taken to assess the adverse impact on the consumption of Tobaco on human health and hence the present study is relevant and need to be sponsored.

The committees enquired the possibility of reducing the cost of study. The PI agreed to delete the cost of HPLC costing Rs.20.00 Lakhs and to limit institutional charges to 10%. Committee opined that the project should be discussed further for possible reduction in costing from the present level of 32% cost for personal charges and 38% for Lab cost. The project has to be funded 100% by the Board since it is a Govt institution.

Dr.Kasthuribai informed that CPCRI has already done some studies on varietal characteristics of coconut with respect to fatty acid content and the results of these studies could be made available, if required.

Salient features of the project by: Amrita Institute of Medical Sciences and Research Centre, KochiDr. K. K. Haridas - Department of Cardiology, Amrita Institute of Medical Sciences and Research Centre, Kochi presented the project. The objective of the project is to compare the effects of coconut oil as a dietary cooking medium for the serum lipid & other cardiovascular risk factors. In the study patients with CAD undergoing standard medical therapy shall be compared with patients consuming with Sunflower based cooking media. The sample size will be 200 samples. (Patients will be randomized to two groups) The project is to be funded by Board & Amrita Institute on 50: 50 basis.

The outcome of the project is to generate preliminary data on clinical Para meters in comparison with sunflower oil & coconut oil on cardiovascular risk factors.

#### **GENERAL RECOMMENDATIONS:**

The consensus opinion of the Committee was that Board shall finance the studies so as to have an authentic data on the effect of consumption of coconut oil on heart diseases.

- Suitable Monitoring Committee consisting of experts from relevant fields shall be constituted to evaluate the project & mid term corrections if any.
- Institute shall ensure at least NABL accreditation for the laboratory.
- Necessary protocols/ ethical clearance, informed consent, approvals from ICMR etc shall be obtained.
- The MOU should contain necessary protective clause advantageous to the sponsor and be properly vetted by a legal advisor.
- The result of the study should be published only with the written consent from the Sponsor.

Dr.Valiathan informed that he would send some further comments on both the projects immediately. The comments since received are accepted and incorporated as part of the minutes.

- The projects should be submitted in the ICMR format.
- The projects should be shown to one or two referees who are experts in the field.

• In the project submitted by AIMS, the patients should not be billed if the investigation charges are met by the Board.

#### B. MARKET PROMOTION

### 8. Market Promotion of Nutri-Ko VCO - Kerala State Rubber Co-operative Ltd., (Rubco), Kannur at a total cost of Rs.100.00 lakhs

The proposal is to carry out various market promotional programmes for Nutri-ko brand Virgin Coconut oil.

The project was presented by the promoter. After detailed discussions, it was decided to call for the details of production base so as to verify as to how they are going to achieve the marketing target of 10 lakh tones of VCO. Besides this the audited statement of accounts of the company, details of market segmentation and export marketing strategy should be called for.

As the market promotion strategy is not based on a realistic production estimate, it was decided to call for the above information from RUBCO.

# 9. Setting up of coconut parlour at RCRS, Bhatye, Rathnagiri - Regional Coconut Research Station, Dr.Balasaheb Sawant Konkan Krishi Vidyapeeth, Bhatye, Ratnagiri, Maharashtra at a total cost of Rs.6.00 lakhs

The proposal is to set up a Tender Coconut Parlour at Regional Coconut Research Station, Bhatye, Ratnagiri Dt . The project was presented by the promoter

The Committee observed that the proposal is not within the man date of the Research Station and hence it was not approved.

### 10. Market Promotional Programme for branded coconut products - the President, Sevashram, Mangattukara, Puliyanam P.O., Angamaly at a total cost of Rs.10.00 lakhs

The proposal is to carry out various market promotional programmes for branded coconut oil, medicated coconut oil, herbal oil and coconut oil based toilet soap.

The Committee approved the proposal for market promotion at 50% of the expenditure on reimbursement basis limited to a maximum of Rs.10.00 lakhs.

### 11. Project for participation in foreign exhibitions - Coconut Development Board at a total cost of Rs.36.8225 lakhs

After detailed discussion, the proposals for participation of the Board along with selected manufacturers in the following exhibitions were approved by the Committee at a total cost of Rs.36.8225 lakhs:

- 1. Anuga Food Fair, Cologne, Germany October 13-17, 2007 at Rs. 13,68,250/-
- 2. AF-L Artigiano in Fiera-12th International Crafts Selling Exhibition, Itlay December 1-9, 2007

at Rs..10,50,500/-

- 3. Foodex 2007, Tokyo, Japan March 13-16 at Rs.12,63,800/-.
- C. MANAGEMENT OF PEST & DISEASE
- 12. Production and distribution of seedlings from Ganoderma disease tolerant and mite resistant elite coconut palms of Arsikere Tall Cultivars tolerant to drought from the farmers fields in the Maidan Tracts of Karnataka- UAS, GKVK, Bangalore at a total cost of Rs.13.596 lakhs

The project was presented by the Principal Investigator.

The Committee observed that the objectives proposed in the project cannot be completed within three years. Further lot of research has already been conducted regarding drought, mite and Ganoderma disease tolerant varieties. .Hence it was decided that the project shall be recast for identification and documentation of superior mother palms and production and distribution of quality seedlings with in a period of three years.

Revised project shall be submitted to Chairman, CDB for approval.

13. Development of management technologies for post harvest diseases in coconut - Agricultural Research Station, Acharya N G Ranga University Ambajipeta. At a total cost of Rs.8.00 lakhs

The project was presented by the Principal Investigator. The Committee approved the project in principle subject to the following conditions:

- 1. SRF shall be changed to JRF
- 2. The item wise details of cost for Recurring contingencies shall be furnished Revised project shall be submitted to Chairman, CDB for approval.
- 14. Demonstration of recommended IPM/INM technologies for the management of Eriophyid mite in the affected areas of Gujarat- Director of Research, Junagadh Agricultural University, Junagadh, Gujarat -at a total cost of Rs.31.326 lakhs.

The objective of the proposal is to demonstrate the efficacy and feasibility of recommended IPM/INM technologies for the management of Eriophyid mite. The project was presented by the Principal Investigator.

The Committee approved the project in principle subject to the following conditions:

- 1. SRF shall be changed to JRF
- 2. TA shall be limited to Rs.1.30 lakh ie. 0.50 lakh during 1<sup>st</sup> year and Rs.0.40 lakh each during 2<sup>nd</sup> and 3<sup>rd</sup> year.
- 3. Training charges shall be limited @Rs.500/- and No. of skilled labours to be limited to one
- 4. Farmers' share contribution shall be ensured and certified by the Institution after physical inspection for release of subsequent installments

Revised project shall be submitted to Chairman, CDB for approval.

#### **Projects recommended for rejection**

1. Establishment of Oil and Flour mill (Food Products) - M/s. Aiswarya Oil & Flour Mill, Paluvai, Chakkamkandom, Thrissur-680 522 at a total cost of Rs.20.5 lakhs

&

2. Manufacturing AGMARK certified Roasted coconut oil in consumer packs - M/s. Kairaly Coconut Products, Anandapuram Thrissur at a total cost of Rs.35.41 lakhs

The Committee agreed with the observation of ISC and rejected the above three project proposals

#### AGENDA No. 4: Review - sanctioned projects

a) Presentation of Final Report of the project, "Coconut Oil as Base oil for Industrial Lubricants" -Cochin University of Science And Technology, Kochi-22, Kerala

Final Report of the project was presented by the Principal Investigator of the project, Dr. Ajith Kumar

The Committee discussed in detail about the assets created under the project by the University and the possibility of getting back the machineries and equipments purchased under the project and their proper utilization. Even though, the MOU contains a clause on the assets to be taken over by the Board, the committee expressed apprehension on the proper utilization of such complicated equipment and machineries by the Board for want of technical manpower. Hence it was decided to allow the CUSAT to be the custodian. However, the Board is vested with full access and right on the equipments and machineries.

b) Presentation of the project, "Refining of coconut oil by utilizing membrane filters as the major unit operation and development of a process to improve nutritional quality of refined coconut oil for frying and other edible uses" sanctioned to CFTRI, Mysore-Extension of the project requested

The Principal Investigator presented the report and requested for extension of the project period up to December 2007 and also to release the balance amount for completion of the project.

The Committee approved for extension of the project period up to December 2007. It was suggested to release 10% of the total financial assistance only after submission of the final report. Also agreed for release of 10% of the withheld amount as a special case to meet the expenditure on project staff.

c) Revised proposal for Establishment of demonstration cum training Centre for coconut products- Dept. of Horticulture, Karnataka

Shri Nagaraj, Jt. Director presented the revised project.

The committee observed that the Technical committee constituted by the Department of Horticulture, is not authorized to over look the PAC approved programme. Hence, the committee decided that project shall be implemented as per original plan with following modifications:

- 1. Desiccated coconut unit (1000 nuts per day)
- 2. coconut chips (500 nuts per day)
- 3. Modern copra dryer with baby expeller unit

The project shall be completed by 30<sup>th</sup> September 2007, failing which money shall be refunded.

d) Project resubmitted to PAC with the comments of CPCRI-Setting up a unit for the production and Marketing of Snow Ball Tender Coconut at Munoorppally, Angamaly by KDV Agencies, Kalluprambil, Ezhattumukhom, Munoorpally, Angamaly at a total cost of Rs.5.43 lakhs

The committee discussed the project in detail and suggested that transportation unit is required for day to day activities of the centre. However, quotations/intends from reputed agencies only shall be considered. Hence a detailed list with actual cost shall be submitted to the Chairman for final approval.

e) Permission of PAC for changing the Bank for the project for setting up a coconut shell powder manufacturing unit at Avinashi-M/s. Vijayalakshmi Agro Industries

The Committee ratified the shifting of the subsidy A/c from Syndicate Bank SME Branch, Tatabad, Coimbatore to Canara Bank, Trichy Road, Coimbatore subject to the condition that subsidy shall be kept in the subsidy reserve fund during the lock in period i.e. up to 5 years for which the proposed bank should provide an undertaking.

#### Other items

1) Bio diverse sustainable organic coconut farm in Veliyanad Village, Kuttanad, Alappuzha – Smt Acamma Kurian, Paruvapparapil, Velyanad, Alappuza 689 590 at a total cost of Rs.27,18,517/-

The project was presented by the Promoter. The Committee after detailed discussion suggested that since the major component of expenditure is for bund making, the project shall be referred to a competent engineer in the concerned department of the State Department in the locality to ensure the correctness of expenditure. Also observed that, since it is a labour oriented project, the Board can fund only up to 25% of the cost. The Committee authorized the Chairman to approve the project after obtaining the clarification on the costing.

### 2) Bio- hedging village programme – Mararikulam Grama Pancaat –President, The Mararikulam Grama Panchayat at a total cost of Rs.9.818 lakhs

The project was presented by the Promoter. The Committee after detailed discussion approved the project subject to the following conditions:

- 1. Sappota, Mango, Jack, etc. shall be deleted
- 2. Small units for organic manure production shall be included
- 3) Marketing of Tender Coconut Water using Push Cart in Vasai, Dist. Thane Chairman, Agriculture Produce Market Committee (APMC) Co-operative Building, 2<sup>nd</sup> floor, Bhabola Naka, Sandor, District Thane, Maharastra 401207 at a total cost of Rs.2.25 lakhs

The Committee approved the installation of 9 Push Carts with 50% assistance on reimbursement basis.

4) Propagation of improved modern copra dryers under TMOC for primary processing of coconut – Coconut Development Board.

The committee approved the proposal for earmarking a lump sum amount of Rs.15.00 lakhs for implementing the scheme of improved modern copra driers as per norms.

The meeting concluded at 8.00 p.m.

#### Twenty fourth Meeting of PAC of TMOC on 31st July 2007 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	Smt. Susan Nair, Directorate of Marketing & Inspection(DMI), Kochi Representative of Asstt. Agricultural Marketing Adviser Directorate of Marketing and Inspection Govt. of India, NH.4, CGO Complex Faridabad-121 001
3	Dr. K.S.M.S Raghava Rao, Head, Dept. of Food Engineering Representative of Director, Central Food Technological Research Institute, Mysore—20
4	Dr. T. Vilasachandran General Manager (Tech), Investment Credit Department, 3rd Floor, B Wing, NABARD, Plot No. C –24, G Block Badra -KurIa Complex ,Post Box No.8121, Bombay - 400 051
5	Dr. K V. Kasthuri Bai, Principal Scientist & Head of the Division of Plant Physiology & Post harvest Technology, CPCRI, Kasaragod -671 124.
6	Shri M Thomas Mathew, Chief Coconut Development Officer, Coconut Development Board, Kochi – 11 (Member Secretary)
	B. Experts
1	Dr. M.S.Valiathan, Advisor, Manipal Academy of Higher Education, Manipal – 576 119
2	Dr. A.N.Srivatsa, Scientist (Retd.),DFRL411, A & B Block, Navilu Road, Kuvempu Nagar,Mysore – 570 023

	C. Special Invitees
1	Dr. K. Gopakumar, DDG Fisheries(Retd.)28/947, Cheruparambath Road Kadavanthara Kochi- 682 020
2	Dr. Thomas Mathew Professor & Department Head Department of community Medicine Medical College Alappuzha
3	Dr. Sairu Philip, Assoc. Professor in Community Medicine, Medical College, Alappuzha
	D. Others
1	Shri. A.N.Muraleedharan Achari Secretary, Coconut Development Board, Kochi
2	Shri.Rajeev P.George Deputy Director (Dev), Coconut Development Board, Kochi
3	Dr. P.T. Thomas Deputy Director (Marketing), Coconut Development Board, Kochi
4	Dr. Remany Gopalakrishnan, Deputy Director (IT), Coconut Development Board, Kochi
5	Shri. P. Balachandran Nair, Marketing Officer, Coconut Development Board, Kochi
6	Shri Sreekumar Poduval, Jr. Processing Engineer, Coconut Development Board
7	Shri. R. Jnanadevan, Assistant Director (TMOC), Coconut Development Board, Kochi
8	Smt. Jayasree .A Technical Officer, Coocnut Developmetn Board, Kochi
9	Smt. Leeena Mol.M.A Technical Officer, Coconut Development Board, Kochi
10	Shri. Sasikumar . C Technical Officer, Coconut Development Board, Kochi

### Proceedings of the $25^{th}$ meeting of PAC of Technology Mission on Coconut held at Kochi on $23^{rd}$ October 2007

The 25<sup>th</sup> meeting of the Project Approval Committee (PAC) on Technology Mission on Coconut was held at the Board Room of Coconut Development Board, Kochi on 23.10.2007 at 10.00 am, under the Chairmanship of Smt. Minnie Mathew IAS, Chairman, CDB and Chairman of PAC. Dr. M. Aravindakshan, Director of Research (Retd) KAU and former Chairman, CDB, Dr. A.N. Srivatsa, Scientist (Retd.), DFRL attended the PAC as Expert Members. Dr. T. Vilasachandran General Manager (Tech), NABARD, and Dr. K.V. Kasthuri Bai, Principal Scientist, Head of the Division of Plant Physiology & Post Harvest Technology, CPCRI, Kasaragod representing ADG Plantation crops ICAR attended the PAC. The list of members and others who attended the meeting is annexed.

The following Agendas were taken up for discussion:

### AGENDA No. 1: Confirmation of the Proceedings of 24<sup>th</sup> Project Approval Committee Meeting held on 31.07.07

The Committee approved the proceedings of the 24<sup>th</sup> PAC Meeting.

#### AGENDA No. 2: Action taken report of the 24th PAC Meeting

The Deputy Director briefly presented the action taken report on the proceedings of the 24<sup>th</sup> meeting of the PAC.

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

#### A. PROCESSING & PRODUCT DIVERSIFICATION

### 1. Setting up a Copra Manufacturing unit – Shri. M.V.George, Mayamparambil, T.V.Puram.P.O., Vaikom at a total cost of Rs. 1.437 lakhs

The objective of the project is to setup a copra manufacturing unit at a capacity to process 2500 coconut per day. After detailed discussion on the project, the committee approved the project subject to the following conditions:

- a. The technical specification of the copra drier shall be furnished by the promoter.
- b. Break even analysis in terms of capacity utilization and profitability should be furnished.
- c. The promoter should be asked to clarify how to ensure uninterrupted power supply for operating the drier continuously for the drying process. On satisfactory submission of the above details, Chairman shall approve eligible subsidy.

### 2. Project for Expansion and Modernization of Oil Mill - M/s. Sneha Oil Mill, Chandiroor, Alappuzha at a total cost of Rs. 14.200 lakhs.

The objective of the project is to expand and modernize the existing unit with modern equipments to increase the production capacity from 1tone to 2 tone of coconut oil per day. The unit is owned by Santhigiri Ashram. The committee after detailed discussion opined that Santhigiri Ashram is one of the reputed organizations doing several activities in the service and ayurvedic sector and having a good marketing tie up. The committee approved the project to extend 25% of cost of expansion of the unit subject to a maximum of Rs.3.5495 lakhs as back-ended capital subsidy.

The committee observed that the costing proposed for machineries is low and hence suggested that Junior Processing Engineer of the Board inspect the machinery supplier unit at Thripunithura for necessary verification. The title of the project shall be revised as Expansion of the existing unit for production of branded packed coconut oil with agmark standard.

# 3. Establishment of a coconut processing unit at Kannimari Vandithavalam, Palakkad District - The Palakkad District Agricultural Produces Processing and Marketing Industrial Co-operative Society, Vandithavalam, Palakkad District, at a total cost of Rs. 118.36 lakhs

The proposal is to establish an integrated coconut processing unit at Kampalathara, Kannimari of Vandithavalam Palakkad district with an installed capacity to process 40000 coconuts per day. The main end products of the unit are edible copra, coconut oil, desiccated coconut and coconut vinegar. The promoter of the project is the Palakkad District Agricultural Produces Processing and Marketing Industrial Co-operative Society promoted by a group of enterprising Agriculturists of Palakkad District.

The committee after detailed discussion opined that some intervention is needed for ensuring better price to the farmers of Palakkad District. Considering the need for starting an integrated coconut processing unit in this area to produce value added products, the committee approved the project subject to the following conditions:

- a. The society shall be asked to establish backward linkages and consider entering into an MoU for procurement of coconut from the coconut farmers in the cluster.
- b. Since the unit has already availed Rs.2,43,355/- from the Board for setting up of the copra drying unit under the on going programme, "Aid to Co-operative societies for setting up of primary processing unit during the year 2000-2001 before sanction of the TMOC project, the cost of copra drying unit may be excluded while granting the eligible subsidy.
- c. The unit should be advised to start with 25000 nuts and scale up.

#### B. Pest and Disease Management

#### 1. Project for control of Eriophyid Mite on coconut on pilot basis during 2007-08-Department of Agriculture, Tamil Nadu, at a total cost of Rs. 22.774 Crores.

The main objective of the project is to control of Eriophyid Mite infestation on coconut in hot spot areas of 11 coconut growing districts of Tamil Nadu covering 94.892 lakh palms by adopting root feeding of botanicals like Azardiractin 1% for three time treatments at 45 days interval.

The committee after detailed discussion approved the project in principle subject to the following conditions:

- a. Release of the share of the Board (25% of the cost of adoption of Plant protection measures) will be in a phased manner and commensurate with release of state share. The state level administrative sanction indicating contribution of State Govt. shall be furnished before release of fund. Three rounds of root feeding and balanced application of nutrients also shall be ensured by the State Govt.
- b. Quality of Azadiractin proposed to be supplied for root feeding shall be ensured by the Department of Agriculture and the method of procurement should be transparent.
- c. The Govt. of Tamil Nadu shall institute a proper monitory mechanism with representatives of Regional Office, Chennai and TNAU.

- d. The control programme will be implemented on a cluster basis.
- e. The details of the clusters and schedule of root feeding with mile stones should be furnished.

#### 2. Control of Black Headed Caterpillar outbreak in Erode district of Tamil Nadu-Department of Agriculture, Tamil Nadu- at a total cost of Rs. 40.42 lakhs

The objective of the project is to control heavy infestation of Black Headed caterpillar to the tune of about 38310 infected trees in Erode district through root feeding of Monocrotophos 10 ml / 10 ml water, Parasite release — Braconids 20Nos./tree/5 times, Bethylids 10 nos./tree for 5 times and Fertilizer application for rejuvenation of coconut trees.

The committee after detailed discussion approved the project to extend 100% financial assistance to meet the cost of Parasitoids only. In order to ensure quality, the parasitoids shall be procured either from Bio Control Lab, Bhavani, TNAU Lab at Aliyar Nagar or Coconut Development Board Lab at Bangalore. The cost of adoption of fertilizers and other inputs should be met by the farmers.

3. Demonstration of technologies for management of Red Palm Weevil of Coconut by sanitation & pheromone based mass trapping in Alappuzha District, Kerala on a pulse polio immunization mode with the participation of Farmers / Panchayat- Bio-Control Research Laboratories, Division of Pest Control (India) Pvt. Ltd., P.O. Box. 6426, Yelahanka P.O, Bangalore – 560 064, Karnataka at a total cost of Rs. 31.630 lakhs.

The objective of the programme is to demonstrate technologies for management of Red Palm Weevil of Coconut by sanitation & pheromone based mass trapping in Alappuzha District, Kerala in a campaign mode with the participation of Farmers / Panchayath. The committee after detailed discussion opined that participation of farmers and Grama Panchayath are very essential for successful implementation of this programme on such a large scale. Hence in order to ensure participation of farmers the committee approved only the 1<sup>st</sup> phase of programme conducting awareness programme under the subcomponent, "Technical support, external evaluation and emergent requirements". Expenditure was approved for conducting 6 Taluk wise seminars – 0.72 lakhs, 1 district seminar – 0.25 lakhs and publicity and promotional material – 2 lakh.

After assessing the impact of the awareness seminars, the possibility of implementing the large scale setting up of trap in the endemic areas of the district would be considered. The Local bodies of the District/Block/Grama Panchayath also should be involved in the implementation of the project and the possibility of getting financial assistance from them shall be ascertained for implementing the project in a campaign mode. The comments of the CPCRI, Kayamkulam on the technical programme also should be sought while considering the 2<sup>nd</sup> phase of the project.

#### ADDITIONAL AGENDA

#### Processing and Product Diversification

1. Project for modernization of full-fledged processing Centre at Vattoly Bazar, Kinaloor Balussery- M/s. Kinaloor Agro Products Vattolly Bazar, Balussery at a total cost of Rs. 40.00 lakhs.

The objective of the programme is to modernize the coconut processing units utilizing additional modern machineries to process 20,000 nuts per day for the value addition to VCO, Elaneer soda etc.

The committee observed that the project is incomplete and details of the infra structure already created are not furnished in the proposal. The source of the technology for value addition also not furnished. Hence the committee deferred the project.

### 2. Coconut Oil and Coconut Cake - M/s. Anand Oil Mills, Thrikkalathoor, Muvattupuzha at a total cost of Rs. 3.187 lakhs

The objective of the project is expansion of the existing unit with modern equipments. The committee observed that the item wise details of the new machineries proposed to be purchased for the expansion of the unit, the existing infra structure already created, capacity utilization and production details has not been indicated in the project. The proforma invoice for the machineries to be purchased also to be obtained. Hence the project was deferred.

3. Establishment of Coconut Oil Unit at Thottilpalam, Kozhikode Dt. M/s. Thripthi Oil & Flour Mills, Thottilpalam, Kavilumpara, Calicut – 673 513 at a total cost of Rs. 1,32,000 lakhs

The objective of the project is to be setup a coconut oil production unit, under the Margin Money Scheme of the Khadi and Village Industries.

The committee observed that the title of the project should be changed to be setting up of processing unit for the production of multi-filtered branded coconut oil with Agmark standard. Proforma invoice for the machineries proposed to be purchased for the unit should be obtained from the promoter. Revised project to be submitted to PAC for consideration.

4. Establishment of a Centralized Processing Packaging and Distribution Unit or Coconut Products at Pullani, Angamali, Ernakulam - Dt. M/s. Sevashram, Mangattukara, Puliyanam.P.O., Angamaly -683 572 at a total cost of Rs. 235.00 lakhs

The proposal is to set up a processing, packaging and distribution unit of coconut products such as premium grade double filtered coconut oil, coconut chips, coconut vinegar, Herbal oil, Shreekesh (hair oil), soaps, coconut shell charcoal etc. at Pullani, Ernakulam.

The committee after examination approved the project in principle subject to the following conditions:

- 1. Capacity of the chips unit shall be reduced to 500 nuts per day.
- 2. Marketing strategy of the products, particularly coconut chips, to be obtained from the promoter.
- 3. No objection certificate from the Pollution Control Board to be obtained for shell charcoal.
- 4. Manufacturing of soap and medicated oil require drug license from concerned authorities. Hence release of fund shall be subject to submission of necessary clearance certificates.
- 5. The proposal for purchase of vehicle need not be considered.
- 6. The subsidy of Rs.7.35 lakhs already released to 23 copra processing units shall be taken into account while calculating the total eligible subsidy to the unit.

The promoter may be asked to revise the project accordingly. The committee authorized the Chairman PAC to approve the revised project.

### 5. Establishment of Integrated Coconut Plant- M/s. Sritara Agrotech, Ist lane, Ramanagar, Ongole- 523 001, at a total cost of Rs. 36.20 lakhs

The project envisages establishment of an integrated coconut processing unit for the production of diversified value added coconut products VCO, vinegar & charcoal. The committee observed that the technology for production of VCO through centrifugal method has not been transferred to the promoter. Hence the committee decided to consider the project after transfer of the technology. The committee authorized the Chairman PAC to approve the project after transferring the technology.

#### Market Research & Promotion

### 6. Proposal for Generic Promotion of Coconut Products -in Delhi Metro Railway Station - Directly by the Coconut Development Board, at a total cost of Rs. 5,66,295 lakhs

The objective of the project is to carry out generic promotional programme for Coconut products in Delhi Metro Railway Stations.

The committee approved the proposal and suggested to explore the possibility of installing slightly bigger sized hoardings which would be more eye catching.

### 7. Market Promotional Programme for Cocogem Brand Coconut Oil – Malabar Extractions Pvt. Ltd., Karaparamba, Calicut-673 010.at a total cost of Rs. 20.00 lakhs

The proposal is to carryout various market promotional programmes for "Cocogem" brand coconut oil. After detailed discussion, the committee approved the project to extend 50% financial assistance on reimbursement basis. The committee also suggested that promotion of multi-filtered coconut with Agmark standard only need to be supported.

# 8. Market Promotional Programme for 'Heartonica' Brand coconut products- The Kerala Malanad Karshaka Produce Co-operative Marketing Society Ltd., Thiruvampady, Kozhikode., at a total cost of Rs. 25.00 lakhs

The proposal is for carrying out market promotional activities for promoting 'Heartonica' Brand coconut oil and coconut based vinegar produced by Kerala Malanad Society. The

committee after careful examination sanctioned a total amount of Rs.18,36,275/- on reimbursement basis after deducting the subsidy already paid to the unit, Rs.6,63,725/- for market promotional activities. The society should furnish implementation schedule with milestone showing various market promotional activities.

# 9. Proposal for financial assistance for the promotion of the packed tender coconut water-M/s.Fortune Bevrages Pvt. Ltd., Gayatri Bhavan, Rajkot, Gujarat, at a total cost of Rs. 2,34,750/-

The proposal is to popularize packed tender coconut water through the outlets of Pantaloon Retail India Ltd. through supply of free Samples (20,000 pouches), POP Material (Danglers), POP Material (Posters). The committee after discussion approved the project to extend 50% financial assistance on reimbursement basis for carrying out the above activities. However, details of distribution should be worked out in consultation with the Board.

# 10. Market Promotional Programme for 'SARAS GOLD' Brand Coconut Oil - M/s. St. Mary's Oil Industries, Kadathy, Muvattupuzha-682 316. Kerala at a total cost of Rs. 13.00 lakhs

The proposal is to carry out various market promotional programme for 'SARAS GOLD' Brand Coconut Oil and to obtain Agmark Quality Certification. The committee approved the market promotion proposal for the year 2007-08 at a total project cost of Rs.16.75 lakhs and to extend 50% financial assistance on reimbursement basis as per norms of TMOC.

#### 11. Procurement of Coconut under Minimum Support Price Operations-Pilot Testing Study-Project Proposal.

The committee after detailed discussion suggested that since the price of raw coconut would be based on weight of dehusked nuts, the study shall be restricted to Kerala alone.

#### 12. Ratification for additional expenditure incurred in connection with Coco Fest 2007

The Committee considered the reasons for additional expenditure incurred on Coco fest 2007. It was noted that as against 65 exhibitions in Coco fest 2005, there were 139 exhibitions in 2007. This number exceeded the originally anticipated number of 70 units. On account of this it became necessary to construct additional domes for the exhibition. Construction of additional space contributed in a big way to the increase in expenditure.

Taking in to consideration all relevant factors brought out in the note, the Committee ratified the excess expenditure of Rs.4,89,310/-.

#### **OTHER ITEMS**

1. Delegation to Thailand & Philippines at a total cost of \$7000.00.

The Committee approved the proposal for sending a delegation to Thailand and the Philippines under the subcomponent 'Market Research & Promotion' of TMOC at an approximate cost of \$ 7000. The committee also suggested that the delegation should facilitate the adoption/transfer of new technologies available in these countries. The team consist of 2 officials and 4 industrialists.

 Request for waiving the penal interest for delayed submission of Final Report of the project sanctioned to the Bio-Control Research Laboratories of Pest Control (India) Pvt. Ltd. Bangalore.

The committee after detailed discussion approved the request for waiving the penal interest for delayed submission of Final Report of the project sanctioned to the Bio-Control Research Laboratories of Pest Control (India) Pvt. Ltd. Bangalore. The committee also suggested that the final report of the study should be presented in a small work shop to be organized by the Board. The Joint Director of Agriculture of various districts, Director CPCRI, Director of Research KAU and TNAU may be invited for the work shop.

3. Revised proposal for Establishment of demonstration cum training centre for coconut products- Dept. of Horticulture Karnataka at a total cost of Rs.135 lakhs.

The committee after considering the facts reported by the Director of Horticulture, Govt. of Karnataka for not completing the project with in the extended period on 30.09.2007 approved the extension of the project period up to 31.03.2008 subject to the following conditions:

- a. The unit shall be retained as a demonstration cum training center.
- b. The capacity of the VCO unit should be enhanced to 1000 nuts per day with centrifugal method developed by CFTRI. The fund earmarked to generator may be diverted for meeting excess expenditure due to the enhancement of capacity of VCO.

- c. The proposal for setting up of coconut vinegar unit should not be deleted from the project. It should be done on pilot scale as envisaged in the original project.
- d. The capacity of chips unit need not be enhanced to 5000 nuts per day. It should be retained as 500 nuts per day as approved in the original project.
- e. The proposal for desiccated coconut and shell charcoal unit should be deleted from the project. .
- f. The proposal for setting up of handicraft unit should be retained as approved in the original project.
- g. A PERT chart showing the time schedule for different activities should also be furnished.
- **4.** Establishment of Integrated coconut processing unit at Ponnani, Malappuram by M/s Benzy Food and Beverages Pvt Ltd, Ponnani, Malappuram at a total cost of Rs.2.35 crores.

The proposal is to sanction subsidy for shell charcoal unit which was included in the integrated coconut processing unit at Ponnani, Malappuram by M/s Benzy Food and Beverages, but could not be commissioned as envisaged the project due to non receipt of pollution control certificate since the unit is located in the Municipal area. The promoter also requested to reduce the lock- in period of five years since they have cleared all the dues.

The committee after discussion did not approve the proposal for grant of subsidy for shell charcoal unit which was not completed. The Committee also decided to refer the issue of reducing the lock- in period to National Steering Committee.

5. Project for "Automation of Tender Coconut Water Processing System for Large Scale Production" by DFRL for Rs.25.00 lakhs – Revision of Project cost due to cost escalation on fabrication of machineries.

The proposal is to revise the cost of the project from 20.986 lakhs to 32.986 lakhs due to cost escalation on fabrication of machineries. The committee decided to call for the details of original estimate and revised cost for the fabrication of machineries. The committee authorized the Chairman PAC to approve the revised proposal after receiving the detailed justification.

**6.** Proposal for ratification of excess expenditure and additional fund requirement for the period

Oct 2007-March 2008 for Quality Testing Laboratory, CDB at Vazhakulam

The committee noted that the reasons for escalations were mainly on account of customs

duty for the imported machinery. This was not anticipated as the machinery was imported for a

Govt. Testing laboratory. Besides for a NABL accreditation, it became necessary to procure

reference books.

The committee suggested that the lab should be capable for conducting analysis for not

only coconut products but other fields also in a phased manner so that the facilities created are

utilized to the maximum extent. The proposal for additional fund requirement may be reviewed

by a technical committee. However expenses for following essential components for operating

the lab for one more year was approved by the Committee:

a. Muffle Furnace

- 0.5 lakhs

b. Contract staff

Chemical

- 3.176 lakhs (for 12 months from Nov.07 to Oct.08)

Microbiologic

- 2.823 lakh (-do-)

c. NABL auditing and other statutory fee - 1.50 lakh

d. Non recurring expenditure

- 10.94 lakh

The meeting concluded at 2.00 P.M

Chief Coconut Development Officer Member secretary PAC

#### 25<sup>th</sup> Meeting of PAC of TMOC on 23<sup>rd</sup> October 2007 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. Ramakrishnappa, Director of Horticulture Govt. of Karnataka
	Representative of : Secretary, Government of Karnataka, Horticulture Department, Karnataka Government
3	Dr. K V. Kasthoori Bai, Principal Scientist & Head of the Division of Plant Physiology & Post harvest Technology, CPCRI, Kasaragod -671 124.
	Representative of : Assistant Director General (Plantation crops),ICAR, Krishi Anusandhan Bhavan –II, Pusa Krishi Bhavan, New Delhi-110 012
4	Dr. T. Vilasachandran General Manager (Tech), Investment Credit Department, 3rd Floor, B Wing, NABARD, Plot No. C –24, G Block Badra -KurIa Complex ,Post Box No.8121, Bombay - 400 051
В.	Experts
5	Dr. M. Aravindakshan, Chairman, CDB (Retd.)
6	Dr. A.N.Srivatsa, Retd. Scientist, 411, A & B Block, Navilu Road, Kuvempu Nagar, Mysore – 570 023
C.	Others
7	Shri M Thomas Mathew, Chief Coconut Development Officer, Coconut Development Board, Kochi - 11
8	Shri. A.N.Muraleedharan Achari Secretary, Coconut Development Board, Kochi

9	Shri.Rajeev P.George
	Deputy Director (Dev), Coconut Development Board, Kochi
10	Dr. P.T. Thomas Deputy Director (Marketing), Coconut Development Board, Kochi
11	Dr. Remany Gopalakrishnan, Deputy Director (IT), Coconut Development Board, Kochi
12	Shri. P. Balachandran Nair, Marketing Officer, Coconut Development Board, Kochi
13	Shri. Chandrasekharan, Statistical Officer, Coconut Development Board, Kochi
14	Smt. Cicily George, Finance Officer, Coconut Development Board, Kochi
15	Shri Sreekumar Poduval, Jr. Processing Engineer, Coconut Development Board
16	Shri. R. Jnanadevan, Assistant Director (TMOC), Coconut Development Board, Kochi
17	Shri. T.B. Nandakumar Assistant Director, (IR)
18	Shri. K.S. Sebastian, Asst. Marketing Officer in charge, Coconut Development Board, Kochi
19	Smt. Jayasree .A Technical Officer, Coconut Development Board, Kochi
20	Smt. Leeena Mol.M.A Technical Officer, Coconut Development Board, Kochi

### Proceedings of the $26^{th}$ meeting of PAC of Technology Mission on Coconut held at Kochi on $11^{th}$ February 2008

The 26th meeting of the Project Approval Committee (PAC) on Technology Mission on Coconut was held at the Board Room of Coconut Development Board, Kochi on 11.02.2008 at 2.00 pm, under the Chairmanship of Ms. Minnie Mathew IAS, Chairman, CDB and Chairman of PAC. Dr. M. Aravindakshan, Director of Research (Retd.) KAU and former Chairman, CDB, Dr. A.N. Srivasta, Scientist (Retd.), DFRL attended the PAC as Expert Members. Dr. S. Jayaraj, Former Vice Chancellor, TNAU attended the meeting as a special invitee. Dr. T. Vilas Chandran General Manager (Tech), NABARD, Dr. George V Thomas, Director, CPCRI, Kasaragod representing ADG Plantation crops ICAR, Representatives of Chief General Manager Indian Overseas Bank, Representatives of Asst. Agricultural Marketing Adviser, Directorate of Marketing & Inspection (DMI) were also present. The list of members and others who attended the meeting is annexed.

The following Agenda items were taken up for discussion:

### AGENDA No. 1: Confirmation of the Proceedings of 25th Project Approval Committee Meeting held on 23.10.2007

The Committee approved the proceedings of the 25<sup>th</sup> PAC Meeting.

#### AGENDA No. 2: Action taken report of the 25th PAC Meeting

The committee perused the action taken report of the 25<sup>th</sup> meeting of the PAC.

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

#### A. PROCESSING & PRODUCT DIVERSIFICATION

1. Establishment of Coconut Shell Powder unit at IGC Samba, Jammu & Kashmir - M/s. S.S Agro Mills, R/O Ward No.133, Opp. PWD Rest House, Samba District, Jammu (Tk), PIN-184 121 at a total cost of Rs.136.07 lakhs.

Mr. Senthil, the promoter presented the details of the project proposal. It is proposed to set up a coconut shell powder manufacturing unit in the industrial growth centre at Samba, Jammu, with a capacity to manufacture 6.4 tones of coconut shell powder per day. He stated that

the Shell Powder unit is proposed at Samba in Jammu & Kashmir since their regular consumers of the product are concentrated in Jammu only and the cost for transporting the raw material from Erode/ Kangayam to Jammu by rail is affordable. Further the cost of production is low in Jammu due to the provision for 50% capital subsidy from the State Govt., Exemption under Income tax for 5 years and Sales tax for 10 years as well as availability of power at 50% lower cost compared to Tamil Nadu. Further the demand for shell powder in the state is increasing and hence the price of finished product is also more at Jammu.

The Committee after detailed discussion approved the project and decided to extend 25% of the eligible project cost as back- ended capital subsidy to the unit subject to a maximum of Rs.15.92 lakhs. The Committee also suggested that the promoter should submit a long term action plan for the procurement of raw materials immediately, its source, quality and marketing plan for the finished product from the unit to be set up at Samba.

### 2. Setting up of an industrial unit for Processing & value addition of Coconut. - M/s. Monsons Extractions, Industrial Estate, Palayad, Thalassery, at a total cost of Rs.50.00 lakhs

The project was presented by Shri. Fiaz, Promoter of the project. The promoter proposes to setup an industrial unit for the production of value added coconut products, viz. Baby massage oil, Cooking oil, Coconut Vinegar, Partially fat removed coconut powder, Nata-decoco, Coconut parings, Coconut shell charcoal etc. in the 25 cents of land allotted at the Industrial Estate, Thalassery. The installed capacity of the unit is to process 5000 coconut per day. The Committee observed that the land allotted in the industrial estate (25 cents) is not sufficient to set up the unit. The setting up of a shell charcoal unit along with food products is not advisable and clearance from Pollution control Board is also required.

The Committee after detailed discussion suggested that the proposal may be deferred until a team of officers of the Board visits the proposed site and give a report on the feasibility of the project.

3. Setting up of Desiccated Coconut Unit at Sidhapura, Tiptur. - Shri. Siddheswara Coconut Industries, Siddhapura, Konchully P.O, Tiptur, Tumkur, Karnataka, at a total cost of Rs.48.78 lakhs

The proposal is for establishment of unit for production of Desiccated Coconut Powder at Siddapura Village, Tiptur Taluk with a capacity to process 16000 coconuts per day. The Committee after detailed discussion approved the project for the production of desiccated coconut powder with Agmark/BIS certification to extend assistance to 25% of eligible project cost as back- ended capital subsidy to the unit subject to a maximum of Rs.10.995 lakhs.

# 4. Setting up a manufacturing unit for Desiccated Coconut powder - M/s. Bharathi Coconut Products, No.K-76, Hootagalli Industrial Area of KAIDB, DIC Layout, Mysore, at a total cost of Rs.16.00 lakhs

The proposal is to set up a desiccated manufacturing unit at Hotagalli industrial area, Mysore with a capacity to process 6000-7000 coconuts per day. The committee after detailed discussion approved the project subject to the following condition:

- 1. The details of subsidy proposed to be availed by the promoter for plant & machinery and civil works from Ministry of Food Processing, New Delhi should be obtained before grant of subsidy. If the promoter is availing the subsidy from MFPI, Board's subsidy need not be granted.
- 2. The items included in the eligible project cost for grant of subsidy i.e. Water arrangements, electricity deposits should be deleted and eligible subsidy worked out accordingly.
- 3. The product should be Agmark/BIS certified.

### 5. Establishment of Coconut shell powder unit at Arsikere. -M/s.R.P. Agro Industries, Arsikere, at a total cost of Rs.22.70 lakhs

Shri. Gautham, Promoter of the unit presented the project before the PAC. The objective of the project is to set up a coconut shell powder unit with a capacity to produce 3.2 MT per shift and 690 metric tones of Shell powder per annum. The committee after detailed discussion approved the project and decided to extend financial assistance @ 25% of the eligible project cost limited to a maximum of Rs.3.875 lakhs.

### 6. Removal of sedimentation in Coconut oil. - Indian Institute of Chemical Technology, Hyderabad, at a total cost of Rs.2.2472 lakhs

The objective of the project is to identify the sediments and also to develop methodology to restrict the same. The committee after detailed discussion approved the project. However it should be clarified from the IICT whether the institutional charges of Rs.1.00 lakhs proposed in the project is as per the norms of IICT / CSIR. The Committee was of the opinion that it may not be necessary to restrict the institutional fee having regard to the reputation of the National Laboratory. The Committee also suggested that since the objectives of the three projects are different and may be considered separately.

### 7. Reduction of pour point of coconut oil. Indian Institute of Chemical Technology, Hyderabad, at a total cost of Rs.2.2472 lakhs.

The objective of the project is to identify the root cause and also propose interesterification with other vegetable oils by chemical or enzymatic routes to reduce the pour point of coconut oil. The committee after detailed discussion approved the project.

### 8. Composition of virgin coconut oil and traditional coconut oil. - Indian Institute of Chemical Technology, Hyderabad, at a total cost of Rs.1.12 lakhs.

The main objective is to determine the fatty acids composition of both the oils and Isolation and identification of the minor constituents present in unsaponifiable matter in these two varieties of coconut oils. The committee after detailed discussion approved the project.

### 9. Setting up coconut industry at Annapura, Tiptur - Vaishnavi Co-Co Products, Tumkur, Karnataka for production of Desiccated Coconut powder at a total cost of Rs.25.00 lakhs.

The objective of the project is to set up a coconut processing unit for manufacture of Desiccated Coconut Powder at Annapura, Tiptur with a capacity to process 10000 coconuts per day. The committee after detailed discussion approved the project to extend 25% of the eligible project cost as back-ended capital subsidy limited to a maximum of Rs.4.771 lakhs subject to the following conditions:

- 1. The clarification on the subsidy to be availed from KVIC as subsidy. Subsidy cannot be availed from two Central Govt. sources.
- 2. Since the building construction has already been completed, Officers of the Board should visit the unit before grant of 1<sup>st</sup> installment of subsidy, if approved.
- 3. The unit should acquire BIS/Agmark standards for the product.

## 10. Unit for producing coconut oil, coconut cake, Vinegar, Nata-de-coco. Green Kera Enterprises, Taliparamba, Kannur, at a total cost of Rs.22.16 lakhs.

The objective of the project is to manufacture Coconut oil, Coconut oil cake, Natural vinegar and Nata De Coco with a capacity to process 6000 coconut per day into multi-filtered coconut oil, vinegar and Nata De Coco. The Committee after detailed discussion approved the project in principle subject to the submission of the following documents:

- 1. Bank appraisal report and loan sanction letter from the financing bank.
- 2. Agmark certification should be obtained for coconut oil.

# 11. Expansion and Modernization of the existing integrated coconut processing unit at Thiruvampady, Kozhikode. - Kerala Malanad karshaka produce co-op marketing Society Thiruvambady, Calicut, at a total cost of Rs.125.00 lakhs.

The objective of the project is to utilize the additional copra produced as well as procured for value addition by converting it to high quality coconut oil. As the existing crushing capacity of 10 tons of copra per day is not sufficient to utilize the increased availability of copra the unit intends to increase the crushing capacity to 20 tons per day by installing modern high speed expellers and accessories. The unit also intends to utilize a portion of the coconut oil produced for the manufacture of Herbal oil.

The Committee observed that the amount estimated for building is on a higher side, and additional building of size 10000 Sq. ft. is not required for the proposed expansion. The Committee agreed to limit the building cost to 40% of the eligible project cost and grant subsidy to the extent of 25% of eligible project cost with a ceiling of Rs.8.75 lakhs.

## 12. Coconut shell based steam activated carbon - Kalpaka Chemicals Pvt.Ltd, Tuticurion, TN, at a total cost of Rs.162.76 lakhs.

Shri. Ganesan, Plant Engineer, Kalpaka Chemicals presented the project before the PAC. The promoter proposed to expand the activated carbon unit for the production of coconut shell based steam activated carbon from 10 tones per day to 14 tones per day by installing additional kiln with a capacity to process 4 tones per day in view of the huge demand of the product. The promoter has already established an activated carbon plant with 4 kiln unit having the capacity to

produce 10 MT of activated carbon per day. The technology used is an in house technology i.e. Steam activation and waste heat recovery. He presented the details of the export of the activated carbons from the unit for the last 4 years. The production increased from 1632 tones in 2004 to 3000 tones in 2008 and export increased from 73% to 83% of the total production. The export is mainly to France, Italy, Belgium and USA.

The Committee after detailed discussion approved the project and agreed to extend financial assistance @ 25% of eligible project cost of building and machinery required for the expansion limited to a maximum of Rs.33.057 lakhs.

# 13. Establishment of Coconut Processing Unit for the production of good quality branded coconut oil -M/s. Sreya Oil Extractors, Chellanam, Ernakulam Dt., at a total cost of Rs.11.50 lakhs.

The promoter proposes to set up a coconut oil mill for production of coconut oil with a capacity to process 3000 nuts per day. The Committee observed that the unit envisages production of coconut oil in small quantities only and may not be viable. Hence the proposal is deferred. A Committee from the Board may visit the project site and give their recommendations to the chairman, CDB for further action.

## 14. Expansion of the existing unit for Coconut Oil and Coconut Cake - M/s. Anand Oil Mills, Thrikkalathoor, Muvattupuzha, at a total cost of Rs.56.77 lakhs.

The promoter proposes to expand and modernize the existing unit to enhance the processing capacity and to acquire Agmark quality certification. The capacity of the existing unit is to process 4000 nuts per day. The promoter proposes to expand and modernize the unit with a production capacity of 24000 nuts per day with modern machineries for oil crushing, packing etc. Since the capacity of the expansion of proposed unit is commercially viable, the committee approved the project and agreed to extend 25% of eligible cost of expansion of the unit subject to a maximum amount of Rs.3.187 lakhs as back-ended capital subsidy.

15. Establishment of Coconut Processing unit for extraction of Oil - Thiruvananthapuram District Agricultural Science Graduates & Agricultural Technicians Co-operative Society Ltd. T. 1312 Azhikkal, Poovachal.P.O, at a total cost of Rs.39.328 lakhs.

Shri. R.C. Sundharan Nair, President of the Society presented the project. The society proposes to set up a coconut processing unit for production of Filtered and branded coconut oil at Azhikkal, Poovachal.P.O, Thiruvananthapuram, with a capacity to process 3500 nuts per day. The committee after detailed discussion approved the project subject to the following conditions:

- 1. The promoter should produce multi-filtered packed branded coconut oil with Agmark standard.
- 2. The Director for Marketing and Inspection should visit the unit and give a feasibility report.

#### PEST & DISEASE MANAGEMENT

## 16. Integrated management of coconut diseases (bud rot) in endemic areas. - C P C R I, Kasaragod, at a total cost of Rs.49.28 lakhs.

Dr. Sasikala, Senior Scientist, CPCRI presented the project. The main objective of the project is to demonstrate effective management practices for the control of bud rot disease in disease endemic locations, including INM with the involvement of farmers. The CPCRI identified newer chemical molecules viz. Calixin, Akomin and bio-control agent viz. *Bacillus amyloliquefaciens* and *Pseudomonas fluorescens* for control of bud rot disease. It is proposed to conduct field trials with 5 - 10 palms in the endemic areas to test the effectiveness of new chemicals and bio-control agents in the project.

Dr. Jayaraj pointed out that several agro climatic factors such as terrain, soil change, humidity, temperature etc. are related to bud rot disease. The choice of bio-control agent for multiplication in the field conditions should be carefully made before going in for large scale multiplication. He also suggested that the antagonistic fungi Tricoderma should be included. Director CPCRI stated that the bio-control agents proposed in this study are identified from the coconut palms affected by bud-rot disease in the endemic areas and tested at lab scale. Dr. Jayaraj also stated that chemical name only should be used and commercial names avoided.

The Committee after detailed discussion opined that considering the seriousness of the problem, use of new chemical fungicide can be supported. Development of a total system of disease management along with KAU and Dept. of Agriculture should be chalked out for management of the disease in the endemic areas.

For perceptible and replicable results, the sample size for the trial should be increased to a minimum of 25 acres (10 ha.) Ten hectare compact area shall be identified in a village in the endemic areas and the trial shall be conducted by CPCRI on cluster basis in the area with the involvement of Dept. of Agriculture, KAU and CDB. The treatment showing best results shall be replicated in larger areas after demonstration trials. The Committee also agreed to sanction one more JRF for the demonstration trials. The project should be revised accordingly and resubmitted. The Committee authorized chairman PAC to approve the revised project.

## 17. Organic Group Farming project in Vechoor - Manarcadu Social Service Society, Manarcadu, Kottayam, at a total cost of Rs.21.10 lakhs.

Shri. Bijumon, president, Manarcadu Social Service Society (MARS) presented the project before the PAC. MARS is an NGO registered under the charitable society registration act and a service provider appointed by the Govt. of India for operating ICS for aiding in organic certification. The main objective of the project is to develop 50 ha of Coconut Gardens into organic farming system by following Indian standards for organic production.

The Committee after detailed discussion approved the 1<sup>st</sup> phase of the project i.e. development of organic coconut farm in a 50 ha. cluster in Vechoor Panchayath with organic certification in principle. The NGO should plan the requirement of nutrients and organics for management of the coconut gardens for a period of three years. A monitoring committee has to be constituted involving scientist from CPCRI, KAU and officers of the Board for monitoring the implementation of the project. The financial assistance from the Board will be to the extent of 100% for soil testing, 25% of cost of adoption of organic inputs, intercrops and 50% of cost of certification expenses. Internal Control Systems should be introduced right from the commencement of the project. The cost of inputs will be sanctioned under the subcomponent adoption of technology for management of pest and diseases and the certification charges shall be met from the subcomponent market promotion of TMOC. The promoter is advised to re-work the project, costing and submit to the Board.

18. Survey and development of bio intensive IPM package for coconut Slug Caterpillar with special emphasis to bio agents - Dr. A. Sujatha, Senior Scientist (Entomology), Agricultural Research Station, Ambajipeta, Andhra Pradesh, at a total cost of Rs.5.808 lakhs.

The objective of the project is to assess the intensity and damage of coconut and oil palm crop due to infestation of the pest slug caterpillar and also identify the natural enemies of the pests form the hotspot areas and to develop mass rearing techniques of natural enemies which are amiable to laboratory multiplication.

The Committee was of the view that the project is in the nature of basic research and cannot be considered under TMOC.

#### **OTHER ITEMS**

#### 1. Proposal for participation in Foreign Exhibitions - India Show, 2008 Muscat

The Committee approved the proposal for participation in Indian Show 2008, Muscat and sanctioned a total amount of Rs.10,44,390/- for meeting various expenses for participation in the exhibition Indian Show, 2008 at Muscat.

#### 2. Grant of subsidy for completed unit

The procedure for sanction of back-ended capital subsidy to processing units under TMOC scheme followed at present is that the construction and machinery installation works should be taken up only after submission of the project proposal to the Board and after obtaining approval from the Board. As per the guidelines approved by the Govt. of India for implementation of TMOC schemes, 50% of the subsidy amount will be released to the Financial Institution (FI) in advance after receiving the loan sanction letter and release of 50% of loan for keeping it in the Subsidy Reserve Fund Account. Upon completion of the project, the concerned FI would inform Coconut Development Board that the project has been completed with in the over all guidelines of CDB, and remaining 50% subsidy would be disbursed after inspecting the unit.

In some cases entrepreneurs have partially or fully set up the units and have thereafter approached the Board for sanction of subsidy. In view of the fact that they have not taken prior approval of the Board such cases have not been considered. However, Coconut based industries are very few in numbers and value addition has to be encouraged. The Committee considered the matter and decided that all such cases should be decided on a case to case basis taking into consideration relevant factors such as details of bank appraisal, date of sanction of

loan, duration of loan, whether repayment is continuing, proper bills for purchase of machineries etc. are available so as to assess whether the unit is recently established. If the unit has been set up without prior approval of the Board, it will be considered provided the unit is recently established/in the process of being established and if the unit satisfies all other conditions for availing of assistance under TMOC. Whether the unit has been recently established or not will be decided by the Committee depending upon the date of sanction of the loan, the date of installation of machinery, period of repayment, etc. .

a) Setting up of Integrated Coconut Complex - M/s. Sree Agro Products Pvt. Ltd.,R.S.No.52/1,NH-5, Near Toll Gate, Peravali Village, Madal, Tanuku, W.G.Dist, Andhara Pradesh, at a total cost of Rs.328.93 lakhs

The objective of the project is establishment of unit for production of Desiccated Coconut Powder, Coir fiber extraction, Curled rope manufacturing, two ply yarn making, Coco peat compacting etc. The Committee noted that the date of sanction of loan was 1.12.2006 and that the project had been submitted on 5.12.2007. The loan was for a period of 6 years commencing from November 2007 and the date of purchase of machinery was 4.9.2007. The Committee approved the project for extending financial assistance for the land building and machinery etc for the desiccated coconut manufacturing unit only. The unit should be inspected by the Officers of the Board and the infrastructure created should be ascertained before release of eligible subsidy.

b) Establishment of Copra Crushing Unit/Expeller Unit - The Badagara Taluk Primary Cooperative Marketing Society Ltd No.F. 173, Kakkattil.P.O., Kozhikode, at a total cost of Rs.16.25 lakhs.

The proposal o the Badagara Taluk Primary Cooperative society was examined. The project proposal envisages the establishment of an expeller unit at Kakkattil, Badagara Taluk, Kozhikode District for the production of high quality filtered coconut oil. The cost of construction of the infrastructure created for copra drier unit which was established during 2001-02 will not be considered for assistance. The subsidy will be limited for the extension of the unit for production of multi-filtered branded coconut oil. The Committee also decided that the details of infrastructure already created, date of sanction of loan, repayment period etc may be called for from the promoter before releasing financial assistance to the unit.

c) Project proposal for an Integrated Coconut Processing Unit - The Kuttikad Farmers Service Co-operative Bank Ltd. No.572, Kuttikad, Mukundapuram Taluk, Thrissur, at a total cost of Rs.180.00 lakhs

The promoter proposes to set up a coconut processing unit with a capacity to process 26000 coconuts per day at Kuttikad, Mukundapuram Taluk of Thrissur for the production of following products, filtered coconut oil (4 tones of copra per day), coconut chips (1000 nuts per day), Coconut Vinegar (100 Lts of coconut water per day) & Bio-gas (300 cubic meter per year). The project was approved by the 23<sup>rd</sup> PAC meeting held on 20.03.2007 and authorized Chairman PAC to sanction eligible financial assistance. The PAC also suggested that the cost of building, capacity utilization of expeller unit and utility of bio-gas shall be verified before sanction and release of financial assistance. Accordingly the proposed site was inspected by Officers of the Board and it was reported that the copra processing unit was established during 2001-02 and an amount of Rs.2.5 lakhs was also availed by the society under another ongoing scheme of the Board. The installed capacity of the proposed expeller unit is also verified as 4 tones of copra per day.

The committee after detailed discussion decided that the total expenditure incurred by the society for in 2001-02 for the copra drier unit, Rs.64,42,303/- should be excluded from the total project cost. The committee approved to extend financial assistance @ 25% of cost of land, building, machineries etc. required for the expansion of the integrated processing unit except copra drier unit and bio-gas unit.

d) Project for modernization of full-fledged processing Centre at Vattoly Bazar, Kinaloor Balussery - M/s. Kinaloor Agro Products Vattolly Bazar, Balussery, at a total cost of Rs.40.00 lakhs

The objective of the project is to modernize the coconut processing units with additional modern machineries to process 20,000 nuts per day. The Committee suggested to call for the details of the infra structure already created, date of sanction of loan, repayment, date of purchase machineries etc.

e) Establishment of a coconut processing unit at Kannimari Vandithavalam, Palakkad District
- The Palakkad District Agricultural Produces Processing and Marketing Industrial Cooperative Society Ltd., Reg. No. S IND P-140, Vandithavalam, Palakkad District.

The promoter propose to set up a coconut processing unit at Kannimari Vandithavalam, Palakkad District for the production of Edible copra, Coconut Oil, Desiccated Coconut, Coconut Vinegar, and Coconut Paring. As decided in the 25<sup>th</sup> PAC meeting, the details of assistance received from the Board were ascertained. The promoter has availed an amount of Rs.2,43,355/- as subsidy for copra drier unit under another ongoing scheme of the Board during 2001-02. The expenditure incurred for the copra dryer should be ascertained and excluded from the eligible project cost for calculation of subsidy. Subject to this observation the committee approved the project.

## f) Manufacturing AGMARK certified Roasted coconut oil in consumer packs - M/s. Kairaly Coconut Products, Anandapuram Thrissur

The proposal is to setup a processing unit for manufacturing AGMARK certified coconut oil in consumer packs. The proposal was placed in the 24<sup>th</sup> PAC meeting and the committee observed that the promoter has availed loan for the project during January, 2005 and building has already been constructed. The promoter may be asked to furnish the details of infrastructure already created, details of Bank appraisal, date of sanction of loan, purchase of machineries, repayment period of loan etc. Board officials may visit the unit and ascertain the infrastructure created before granting eligible subsidy.

## 3. Study on monthly variation in the quality and quality of coconut copra under different topographic regions of Kerala - Coconut Development Board, Kochi.

The project was presented by Shri. M. Thomas Mathew Chef Coconut Development Officer, The objectives of the project are to study the harvest to harvest variations in the quantity and quality of mature coconut produced in different regions of Kerala in a period of 12 months, to study the phenotypic characteristics to test the maturity of coconut to assess the quantity and quality of copra processed from different harvests and different regions of Kerala, to estimate the average water content in coconut in different varieties from harvest to harvest and region to region, to estimate the share of the shell content of a fully mature coconut and to study

the quality of coconut oil and its variations from harvest to harvest and region to region. This study would serve as a reference point for prospective entrepreneurs in sourcing raw material and setting up coconut based industries.

Dr. S. Jayaraj, former V.C pointed out that this should be a multi disciplinary study involving plant physiologists / agronomists/ breeders and statisticians. It should be a 3 year study which should systematically document diurnal and nocturnal variations in temperature, humidity etc. In the laboratory, there should be analysis of the composition of fat, the quality of copra and coconut oil in different regions. He also mentioned that the study should cover other traditional coconut growing states, Tamil Nadu, Karnataka and Andhra Pradesh.

It was decided that a Committee under the Chairmanship of Dr.Jayaraj would be constituted to prepare a report on the composition of the team, the methodologies to be adopted, the selection of districts, the sample size and the personnel to be engaged for the project.

Dr. Jayaraj, was requested to prepare the project and develop the methodologies for taking up a detailed study by the Universities.

#### 4. Project for providing market promotion assistance for export of coconut.

M/s Horizon Importers and Exporters submitted a project to provide assistance for promoting export of coconut to the UAE through packaging, branding etc. The market promotion activities are envisaged at a total cost of Rs.24.00 lakh. The committee noted that M/s Horizon Importers and exporters was making a determined effort to enter the Gulf market for raw coconut which is almost entirely dominated by Sri Lanka. In order to meet the competition the exporter would need to carry out an aggressive promotion campaign highlighting the special characteristics and goodness of the commodity from India. In view of the quantum jump in production of nuts and the fast approaching peak production season, such ventures are urgently required to prevent decline in prices. The committee after detailed discussion approved the project to extend the financial assistance at the rate of 50% of cost of the above promotional activities limited to a maximum Rs.10.00 lakhs on reimbursement basis, subject to the condition that the promoter should export a minimum of 15 containers (@ 18000 nuts per container) over a period of one year.

#### General Decisions

- 1. The Internal Screening Committee (ISC) should carry out critical evaluations of each project before placing the proposal before the PAC. The ISC should work out unit cost for processing units of varied products and specify the norm for assistance for each item proposed in the budget. It was decided that wherever specific norms for Plant & machinery are not available, the norm should be finalized in consultation with experts from the concerned field.
- 2. Economic analysis of each project should be clearly indicated in the note
- 3. The proforma for each project should clearly mention the following items:
  - a) Details of Plant & Machinery.
  - b) Installed capacity of the proposed / existing units.
  - c) Marketing strategy.
  - d) Details of subsidy already availed.
- 4. CDB may conduct a study for assessing the quantum of oil that is being used by the Ayurveda sector.

The meeting concluded at 7.00 P.M

Chief Coconut Development Officer Member secretary PAC

### 26<sup>th</sup> Meeting of PAC of TMOC on 11<sup>th</sup> February 2008 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	Shri. P Ganeshan I A S Secretary, Government of Karnataka, Horticulture Department, Karnataka Government Secretariat, Multistoried building, IIIrd Stage, IVth Floor,Dr. Ambedker Veedhi, Bangalore-1.
	Dr. George V Thomas Director, CPCRI, Kasaragod -671 124.
3	Representative of : Dr. S.N. Pandey, ADG (Plantation crops), ICAR, Krishi Anusandhan Bhavan — II, Pusa Krishi Bhavan, New Delhi-110 012
4	Dr. T. Vilas Chandran General Manager (Tech), Investment Credit Department, 3rd Floor, B Wing, NABARD, Plot No. C –24, G Block Badra -KurIa Complex, Post Box No.8121, Bombay - 400 051
5	Shri K. K. Gangadharan Director of Agriculture, Kerala Rep. of Agricultural Production Commissioner, Department of Agriculture Government Secretariat, Thiruvananthapuram
	Shri. Thangaraj, Asst. Agricultural Marketing Adviser, DMI, Kochi, 6 <sup>th</sup> floor, A Block, Agmark, Kendriya Bhavan, Kakkand
6	Representative of Agricultural Marketing Adviser to Gol, DMI, GoI, Faridabad-121 001
	Dr. A Jacob Rajasekaran, Chief Manager, IOB, Regional Office, Ernakulam. <u>Representative of</u>
7	Chief Regional Manager, Indian Overseas Bank, Bangalore City Branch, Gandhi Nagar, Bangalore-560 009
В	EXPERTS
8	Dr. M. Aravindakshan, Chairman, CDB (Retd.), 17 / 794, Green Park Peringanam, Thrissur-680 018

	Dr. A.N.Srivatsa,
9	Scientist (Retd.),DFRL, 411, A & B Block,
	Navilu Road, Kuvempu Nagar, Mysore – 570 023.
C	SPECIAL INVITEE
	Dr. S. Jayaraj
	(Former Vice Chancellor, TNAU)
10	Chairman, Sustainable Farm & Rural Development Centre, S. Jayaraj Research Foundation, 39, I Main Road, AGS Colony,
	Velachery, Chennai-600 042
С	OTHERS
11	Shri M Thomas Mathew, Chief Coconut Development Officer, Coconut Development Board, Kochi - 11
12	Shri. K. Kirachand, Marketing Officer
	DMI, Kochi, 6th floor, A Block, Agmark, Kendriya Bhavan, Kakkand
13	Shri. M.K Unni Senior Manager, IOB, Regional Office, Ernakulam
14	Dr. K. Muraleedharan, Director, Coconut Development Board, Kochi – 11
15	Shri. A.N. Muraleedharan Achari, Secretary i/c, Coconut Development Board,
16	Shri. Rajeev P.George, Deputy Director (Dev), Coconut Development Board, Kochi
17	Dr. P.T. Thomas, Deputy Director (Marketing), Coconut Development Board, Kochi
18	Dr. Remany Gopalakrishnan, Deputy Director (IT), Coconut Development Board, Kochi
19	Shri. P. Balachandran Nair, Marketing Officer, Coconut Development Board, Kochi
20	Shri. Chandrasekharan, Statistical Officer, Coconut Development Board, Kochi
21	Smt. Cicily George, Finance Officer, Coconut Development Board, Kochi
22	Shri Sreekumar Poduval, Jr. Processing Engineer, Coconut Development Board
23	Shri. R. Jnanadevan, Assistant Director (TMOC), Coconut Development Board, Kochi
24	Shri. K.S. Sebastian, Asst. Marketing Officer in charge, Coconut Development Board, Kochi
25	Smt. Jayasree .A, Technical Officer, Coconut Development Board, Kochi
26	Smt. Leeena Mol, M.A, Technical Officer, Coconut Development Board, Kochi
27	Shri. C. Sasikumar Technical Officer, Coconut Development Board, Kochi

## Proceedings of the 27<sup>th</sup> meeting of PAC of Technology Mission on Coconut held at Kochi on 12<sup>th</sup> June 2008

The 27<sup>th</sup> meeting of the Project Approval Committee (PAC) on Technology Mission on Coconut was held at the Board Room of Coconut Development Board, Kochi on 12.06.2008 at 10.00 am, under the Chairmanship of Ms. Minnie Mathew IAS, Chairman, CDB and Chairman of PAC. Dr. M. Aravindakshan, Director of Research (Retd.) KAU and former Chairman, CDB, Dr. A.N. Srivasta, Scientist (Retd.), DFRL attended the PAC as Expert Members. Dr. T. Vilas Chandran General Manager (Tech), NABARD, Dr. George V Thomas, Director, CPCRI, Kasaragod representing ADG Plantation crops ICAR, Representative of Asst. Agricultural Marketing Adviser, Directorate of Marketing & Inspection (DMI) and representative of Govt. of Karnataka were also present. The list of members and others who attended the meeting is annexed.

The following Agenda items were taken up for discussion:

## AGENDA No. 1: Confirmation of the Proceedings of 26th Project Approval Committee Meeting held on 11.2.2008

The Committee approved the proceedings of the 26<sup>th</sup> PAC Meeting.

#### AGENDA No. 2: Action taken report of the 26th PAC Meeting

The committee perused the action taken report of the 26<sup>th</sup> meeting of the PAC.

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

#### 1. PROCESSING & PRODUCT DIVERSIFICATION

1. Installation of coconut oil manufacturing unit at Pullikada, Kollam- Swamy Oil mills, Kollam- at a total cost of Rs.119.00 lakhs.

Shri. P. Ashok, one of the partners of the unit presented the project before the PAC. The objective of the project is to set up a coconut processing unit for manufacture of coconut multi-filtered branded and packaged coconut oil at Pulikada, Kollam. Capacity of the unit is to process 10 tones of copra per day. The promoter stated that construction of the building for installation of the coconut oil production unit has been completed and installation of

machineries is in progress. The committee after detailed discussion approved the project in principle and to extend 25% of the eligible project cost as back-ended capital subsidy subject to the following conditions:

- 4. The budget proposed for generator and electrification is on the higher side. There should be correlation between production capacity and cost estimate for electrification. Similarly, the cost estimates for Tin packaging has to be reworked. Cost of Tin manufacturing unit need not be included. The promoter has to rework the cost estimate for plant and machinery.
- 5. The promoter should setup his own quality control lab at the project site.

The project should be revised accordingly and resubmitted. The committee authorized Chairman PAC to sanction the eligible subsidy.

### 2. Project for setting up of a unit for Marketing of Minimally processed Chilled Tender Coconut Water - M/s. Solar Energy Company, Thane, at a total cost of Rs.221.71 lakhs

The objective of the project is to establish commercial production unit for production and marketing of branded and packaged minimally processed chilled tender coconut for sales in Mumbai. The promoter of the project, Solar Energy Company is a proprietary firm established in the year 2005 engaged in marketing value added agri-products, & renewable energy solutions. The process developed by Kerala Agrl. University for minimal processing of tender coconut ie removing the husk a maximum of 80% and treating the nuts by dipping in preservative solutions and then drying and wrapping the nuts with cling film and storing in cooling chamber will be adopted for setting up of the unit.

The promoter conducted a pilot study in 3 centres processing 250 nuts/day and trial marketing in super markets and IT campus and multiplex in Mumbai. Installed capacity of the unit proposed to setup under the project is to process 50000 tender nuts per day ie. 12500 nuts in the 1<sup>st</sup> year which will be increased to 50000 nuts from 3rd year onwards. The promoter has made agreements with a farmer society and 2 farmer's clusters for continuous supply of tender nuts. The promoter proposes to sell the product under the brand name "Cocofresh" by setting up of 500 chilled kiosks at vantage points like Bus stands, Beach front, Hawking zones and other important trading points in Mumbai in association with NGOs.

The committee observed that the capacity of the unit proposed ie to process 50000 nuts per day is too high and the committee expressed its apprehension about continuous supply of such a huge quantity of tender nuts. The committee also observed that the budget proposed for processing and Cold storage facility, Rs.43.92 lakhs (processing room, 25ft x 15ft x 10ft ht, Cold storage, 25ft x 15ft x 10ft ht, Ante Room, 8ft x 15ft x 10ft) is on the higher side. The minimum height of the processing room should be 14'.

Hence the committee after detailed discussion opined that the capacity of the unit shall be scaled down to 10000 nuts per day. The proposal for cold storage facility may be considered at later stage based on the capacity utilization of the unit. The promoter may be asked to revise the project by reducing the installed capacity and rework the costing and submit to CDB for approval of eligible subsidy.

3. Setting up a Rural Training Centre for capacity building in Coconut-based Processing Industries including Convenient-foods – M/s. Navasakti Trust, Reg. No. 38/IV/2007, Vengattampally, Thazhava, Karunagappally at a total cost of Rs. 33.90 lakhs

The project was presented by Dr. Rohini Iyer, Managing Trustee Navasakti Trust. The objectives of the project are capacity building for adoption in coconut-based processing industries including convenient foods and handicrafts, production of bio-agents for the management of diseases and pests for the manufacture of vinegar and Nata-de-coco, mushrooms growing and coir pith compost production, to empower Self-Help-Groups for the production of value-added products from Coconut and handicrafts from shell, to apprise entrepreneurs about Good Manufacturing Practices, to explore marketing avenues, establish tie-ups with marketing outlets and promote sales during festivals, DRDA kisan melas, exhibitions and other occasions.

The Committee observed that even though the objective spelt out are desirable, the project submitted is for setting up a training centre only. The Board has developed sufficient infrastructure facilities for imparting training to entrepreneurs on coconut based convenience foods at TDC, Vazhakulam. Hence similar facilities for imparting training alone need not be supported. The committee also noticed that, duration of the training programme is too short. Training programmes on entrepreneurship development (EDP) with sufficient time period has to be included. Hence the Committee decided that the project as such need not be supported.

However the proposal could be recast in a manner to federate viable SHGs engaged in micro enterprises and formation of a producers company. All products produced by SHGs shall be linked with the producers marketing company for marketing as done by Subicsha, Perambra, Calicut. In order to achieve the objective envisaged on a sustainable basis, the project needs to be revised by identification and federation of good SHG's engaged in micro enterprises, imparting of EDP training, formation of a producers and market company, establishment of proper market linkages etc.

As such the Promoter was advised to revise the project so as to lead to value addition, marketing and income generation.

# 4. Setting up of a small scale Industrial unit for the manufacture and marketing of coconut oil and Cake and to undertake processing of copra- M/s. S.N.Industries, Parippu.P.O., Kottayam at a total cost of Rs.9.996 lakhs.

The objective of the project is setting up of an industrial unit for production of copra and coconut oil at Aymanam village. The installed capacity is to process 5000 coconuts per day. Internal rate of returns worked out in the project is 30% and break even point at 45.50% of capacity utilization. The committee after detailed discussion approved the project and decided to extent 25% of eligible project cost as back-ended capital subsidy to the unit subject to a maximum of Rs.1.278 lakhs. The component viz. details of subsidy worked out are as follows:

Components	Amount	Eligible project cost	Eligible subsidy
		( Rs. In lakhs)	
Land (15.5 cents)	Own	-	-
Building (35.80Mt.Sq.)	2.500	2.060	0.515
Machinery & Equipments	2.576	2.576	0.644
Transportation/Erection/Electrification and Contingency	0.450	0.429	0.107
Preliminary & Pre-operative Expenses	0.250	0.051	0.012
Working Capital	4.220		-
Total	9.996	5.116	1.278

5. Expansion and modernization of the existing coconut oil Extraction unit at Nedumbassery - M/s. Manayampilly Flour and Oil Mills, Nedumbassery, Kaprassery.P.O.,,Ernakulam Dt. At a total cost of Rs.20.00 lakhs.

The objectives of the project is expansion and modernization of existing oil mill in to an integrated processing unit for Production of value added products such as filtered coconut oil, coconut vinegar, coconut oil based washing and bath soaps and hair oil. The installed capacity of the unit is to process 8000 coconuts into Filtered Coconut oil (0.8 tons of copra per day, Vinegar (50 Ltrs of coconut water per day), washing soap and bath soap (2000 pieces per day) and Hair tone and hair oil (500 bottles of 100 ml per day). Internal rate of returns worked out 30% and break even point 45.02% of capacity utilization.

The committee after detailed discussion approved the project and decided to extent 25% of eligible project cost as back-ended capital subsidy to the unit subject to a maximum of Rs.4.368 lakhs. The component viz. details of subsidy worked out are as follows:

Components	Amount	Eligible project cost	Eligible subsidy
		(Rs. In lakhs)	
and	3.00	1.80	0.450
Building	6.00	6.00	1.500
Plant and machinery	9.00	9.00	2.250
Furniture and Office Equipments	0.50	0.50	0.125
Preliminary & Pre-operative Expense	0.50	0.17	0.043
Working Capital Margin	1.00	-	-
Total	20.00	17.47	4.368

6. Establishment of a Coconut Processing Unit at Bandaduka, Kasaragod - M/s. Bandaduka Agricultural Marketing and Processing Co-operative Society Ltd. No. S.274, Bandaduka.P.O., Kasaragod Dt. At a total cost of Rs. 8.80 lakhs.

The objective of the project to set up a copra processing unit at Bandaduka village by installing a dryer with a capacity to process 5000 coconuts a day for the production of Edible and Milling Copra. The society was registered on 16.02.1998. Society at present

undertakes procurement of coconut, areca nut, pepper and marketing of agricultural products, providing warehousing facilities for farmers. Internal rate of returns worked out in the project is 20% and break even point 32% of capacity utilization. The society proposes to procure coconut required for the unit directly from the farmers.

The committee after detailed discussion approved the project and decided to extent 25% of eligible project cost a s back-ended capital subsidy to the unit subject to a maximum of Rs.1.07 lakes by limiting the cost of building to 40% and land to 10% of the project cost. The component viz. details of subsidy worked out are as follows:

Components	Amount	Eligible cost	Eligible subsidy
		(Rs. In lakhs	s)
Land (13cents)	1.25	0.38	0.10
Building (1500sq.ft.)	4.43	1.70	0.43
Plant and machinery	2.67	2.07	0.52
Furniture & Office Equipments	0.05	0.05	0.01
Preliminary Preoperative exp.	0.10	0.04	0.01
Working capital margin	0.30	-	-
Total	8.80	4.24	1.07

### 7. Establishment of Coconut Oil unit - M/s. Modern Oil Mills, Kozhikkattiri.P.O. Palakkad at a total cost of Rs. 6.09 lakhs

The objective of the project is to set up a multi-filtered packaged branded coconut oil production unit at Muthalamada village of Palakkad district. The installed capacity of the unit is to process 520 Kg Copra per day.

The committee after detailed discussion approved the project with a view to developing micro enterprises having linkages with farming groups for value addition and processing quality products and decided to extend 25% of eligible project cost a s back-ended capital subsidy to the unit subject to a maximum of Rs.0.949 lakhs. The component viz. details of subsidy worked out are as follows:

Components	Amount	Eligible cost	Eligible subsidy
		(Rs. In lakhs)	
Land (1.9 acres)	Own	-	-
Building (1000 sq.ft.)	1.00	1.00	0.25
Machinery	2.74	2.74	0.685
Pre-operative Expenses	0.075	0.055	0.014
Working Capital	2.05	-	-
Total	5.865	3.795	0.949

### 8. Setting up a Coconut Oil Manufacturing Unit- M/s. Sreya Oil Extractors, Chellanam, Ernakulam Dt., PIN- 682 008 at a total cost 55.99

The objective of the project is to set up coconut processing unit for production of good quality branded coconut oil with agmark certification. The installed capacity of the unit is to process 30000 coconuts per day into 3.25 MT of coconut oil per day, Ice Cream Cups -3000 cups per day and ball Shell – 2000 shells per day. Internal rate of returns worked out in the project is 20% and break even point 35% of capacity utilization.

The committee after detailed discussion approved the project and decided to extend 25% of eligible project cost a s back-ended capital subsidy to the unit subject to a maximum of Rs.11.289 lakhs. The IRR, profitability and cash flow should be re-worked since it appears to be inflated. The proforma invoice for plant & machinery and equipments have to be furnished. The component viz. details of subsidy worked out based on the project report are as follows:

Components	Amount	Eligible cost	Eligible subsidy
		(Rs. In lakhs)	
Land & Land Development	5.225	4.47	1.117
Building and Civil works	8.000	8.00	2.00
Plant & Equipments	26.800	26.80	6.70
Furniture and Fittings	0.750	0.750	0.187
Electrical Installations	4.50	4.500	1.125

Total	55.999	45.16	11.289
Working Capital Margin	3.287	1	-
Preoperative Expenses	3.387	0.640	0.160
Vehicle	3.500	1	1
Electronic Equipments	0.550	-	-

#### **Market Research & Promotion**

9. Market Promotion of 'AMRUTHAM' Brand Coconut water based vinegar.- M/s. Jaimatha Estates, Monippally P.O. Kottayam Dist, Kerala-686 636 at a total cost of Rs. 6.50 lakhs.

The proposal is for carrying out various market promotional programmes for 'Amrutham' Brand Coconut water based vinegar. The committee after careful examination sanctioned 50% of the project cost or 10% of the sales turn over limited to a maximum of Rs.3.25 lakhs on reimbursement basis.

10. Export of raw coconut from Kerala to middle east countries – Smt. Sandhya Engoor, Divyadarsan Engoor, Engoor House, Thirthallur P.O., Trichur at a total cost of Rs.47.06 lakhs.

The objective of the project is to procure raw coconut from coconut farmers and export the same to Middle East Countries through packaging, branding etc. The market promotion activities are envisaged at a total cost of Rs.47.06 lakh. The committee noted that Smt. Sandhya Engoor, Divyadarsan Engoor was making a determined effort to enter the Gulf market for raw coconut which is almost entirely dominated by Sri Lanka. In order to meet the competition the exporter would need to carry out an aggressive promotion campaign highlighting the special characteristics and goodness of the commodity from India. In view of the quantum jump in production of nuts and the fast approaching peak production season, such ventures are urgently required to prevent decline in prices. The committee observed that the present situation is conducive for exporting raw coconut to Middle East Countries as the present production in Sri Lanka, Indonesia etc are not sufficient to meet the domestic/export demand. The committee after detailed discussion approved the proposal for market promotional activities under eligible heads

under TMOC up to a maximum of 50% or Rs.10.00 lakhs which ever is less. However the financial assistance proposed for transport assistance need not be considered at present.

11. Market Promotion of 'M.P.Brand Super' Brand Coconut Oil -M/s Sree Shanmugha Coconut Drying & Oil Mill, Ramanattukara, NH-17, Calicut at a total cost of Rs.20.00 lakhs.

The objective of the project is to carry out various market promotional programmes for 'M.P.Brand Super' Brand Coconut Oil. The committee after detailed discussion approved the project and agreed to provide 50% of the market promotional expenses limited to a maximum of Rs.10.00 lakhs to the unit on reimbursement basis. The committee also suggested that the subsidy should not exceed 10% of the sales turn over of the unit.

12. Market Promotional Programme for 'Sneha' Brand Coconut Products - M/s. Chettoor Agro Products, Peringazha, Perumballoor P.O., Muvattupzuha, Kerala-686 673 - at a total cost of Rs.7.00 lakhs.

The objective of the project to carry out various market promotional programme for 'Sneha' Brand Virgin Coconut Oil, Coconut based Curry Powder, Curry Masala Paste. The Committee after detailed discussion approved the project and agreed to extend 50% of the market promotional expenses limited to a maximum of Rs.3.50 lakhs to unit on reimbursement basis. The committee also suggested that the subsidy should not exceed 10% of the sales turn over of the unit.

#### PEST & DISEASE MANAGEMENT

13. Soil and plant health management through organic recycling in coconut based production system. - Dr. V. Krishnakumar, Senior Scientist (Agronomy), Central Plantation Crops Research Institute, (Indian Council of Agricultural Research), Kasaragod - 671 124 at a total cost of Rs.48.63 lakhs.

The objective of the project is (i) to demonstrate location specific technologies for organic recycling aiming at developing sustainable organic production system in coconut growing areas including root wilt disease affected tracts, (ii) to develop low cost crop residue recycling systems to produce high quality vermi-compost and vermi-wash for soil health management in coconut based organic production system, (iii) to assess the efficacy of vermi-

wash as bio pest repellant and prophylactic agent for disease and soil health stimulant, (iv) to evaluate the feasibility of crop diversity management in organic coconut based production system through intercropping with location specific medicinal plants, tuber crops, vegetables, spices and fruit crops and (v) to study the sustainability of the system through assessment of various indicators such as soil fertility, soil biological properties, reduction in disease incidence as well as pest and disease suppression.

The committee observed that the concept as such is relevant to the present scenario especially for standardizing technology. However, development of technologies at the Research Centers of CPCRI should be undertaken directly by CPCRI and cannot be considered under TMOC. However if standard technologies are developed especially for production of high quality organic manures, vemiwash, and use of vermiwash as prophylactic agent for disease management such technologies should be demonstrated in the farmers field for large scale adoption.

Organically maintained gardens in southern states may be identified for incorporating the treatment, so as reduce the project period. The project should be revised incorporating the inputs (costing) from CPCRI and limiting the duration to 4 years. The project is to be revised on the above lines and resubmitted to PAC for consideration.

### **OTHER ITEMS**

It was decided by the PAC that the Model Projects being worked out by the TMOC cell may be presented in the next PAC

### 2. Proposal for extension of project period- Training center-Dept. of Horticulture, Karnataka

Shri. D.L.Maheswar, Additional Director of Horticulture, Karnataka proposed the revalidation of unspent balance of Rs.41.47 lakhs and for further extension of the project period before the Committee. However there was no concrete proposal for completion of the project within a time frame.

The Committee expressed their anguish over the serious lapse on the part of Government of Karnataka in delaying the project since its sanction during the year 2002-03. The PAC and the NSC have heeded to the request of the Dept. of Horticulture and extended the

project period 4 times since 2005. Hence further extension of the project period cannot be granted. It was decided to write to the Chief Secretary, Karnataka to refund the money released under the project, (Rs.100.47 lakhs)

### 3. Proposal for extension of project period for "Establishment of Biological Control Laboratory" at Regional Office, CDB, Bangalore.

The committee approved the proposal for extension of project period for one more year for continuing the production of parasites on need basis. The lab should be self sustainable by then and if not, facilities created could be out sourced to other agencies. However it was decided that during the current year, lab attendants may be engaged only on need basis depending on actual demand for production of parasites. Hence the costing proposed shall be reworked based on actual production target and submitted to Chairman for approval.

# 4. Proposal for extension of project period- Survey & identification of root wilt tolerant palms and production of seedlings- Onattukara Regional Agricultural Research Station, Kerala Agricultural University, Kayamkulam.

The committee observed that 5 more months are required to complete the procurement of targeted number of seed nuts in 5 seasons as envisaged in the project and again one more year to raise seedlings from the seed nuts procured in the final year. Hence the proposal for extension of project period for one year and five months was approved ie. upto May 2010

# 5. Extension of project, "Setting up of a demonstration and training centre on the coconut processing in Konkan Region of Maharashtra" – by Konkan Krishi Vidyapeeth, Dapoli, Ratnagiri District.

The Committee deferred the project proposal since the Principal Investigator did not turn up for presentation. The progress of activities may be reviewed and KKV may be requested to submit final report.

### 6. Revision of norms for different components of eligible project cost for calculation of subsidy.

The Committee observed that the cost of construction of building has been increasing over a period of time. Hence the proposal for enhancing the maximum limit for calculation of eligible subsidy for building from 40% to 50% of the eligible project cost was approved by the Committee subject to the condition that space for establishment of the plant & machinery,

storage of raw materials or finished goods ie; godowns, store rooms, warehouse etc., only will be considered. The Plan and estimate of the building shall be obtained and verified for the purpose.

The Committee also decided that similar proposals where ever the cost of machinery installation is less than 50% of the project cost can be considered on a case to case basis and the maximum limit for calculation of eligible subsidy for building may be enhanced up to 50% and such proposals shall be placed before the PAC for approval. However eligible cost for building in any case shall not exceed 50% of Project cost

# 7. Extension of Project "Demonstration and adoption of technologies on coconut: Participatory planning and action through Self Help Associations of Coconut Farmers in Dindigal District of Tamil Nadu"

Dr. Subburaj, Principal Investigator (PI) presented the progress of the project and proposal for utilization of unspent balance under off-farm technologies before the Committee. The Committee approved the revised proposal for utilizing the balance fund available with them for adopting off- farm technologies as per the revised list for assembling yards, Copra Dryer, Tractor and Trailer for collection / assembling coconut and tarpaulin for copra making etc. However the subsidy will be limited to 25% of the cost of the infrastructure up to a maximum of Rs.1.5 lakhs for each association. The PI was requested to surrender further balance and submit a detailed completion report. The Committee placed on record its appreciation for the work done by the PI in motivating the farmers in developing models for PPA through Self Help Associations (SHA's) and also suggested that such models may be replicated in other areas as well. The committee also suggested that the entire report may be published in detail for further dissemination.

### 8. Extension of project "Setting up of Quality Control Laboratory attached to the Coconut Development Board, Regional Office, Bangalore".

The committee approved the proposal for extension of project period for 15 months from 28.12.2008 to 31.3.2009 utilizing the available budget (Rs.39.415 lakhs) and ratified release of Rs.36,000/- during the first quarter of 2008-09. The lab should be self sustainable by then and if the facilities created can be out sourced or merged with the Quality Testing Lab (QTL), Vazhakulam .

### 9. Consumer Acceptability of newly developed coconut convenience food products.

The committee approved the proposal of the Board for conducting the study of Consumer Acceptability of coconut convenience food products (4 products developed recently by CFTRI and other 4 products viz. Desiccated Coconut Powder, Coconut Milk Powder, Coconut chips and Tetra packed coconut water). The study would be conducted through IMRB International, Mumbai at a total cost of Rs.12.886 lakh (inclusive of service tax) lakhs with duration of 6 weeks.

### 10. Development of technology for the production of virgin coconut oil by wet processing – Payment of excess amount of Rs.3.791 lakhs

The committee after detailed discussion decided that Board shall stick on to the conditions stipulated in the MoU executed for the project. Accordingly the matter has to be again taken up with CFTRI

# 11. Ratification for extension of project period and release of fund under the project, "Demonstration and adoption of technologies under Technology Mission on Coconut" sanctioned to the Department of Horticulture, Orissa.

The committee ratified the action taken by the Board and also approved the extension of the project period up to 31.03.09 (15 months more)

### 12. Ratification of the eligible subsidy sanction to Moson Extractions, Thalassery, Kannur

The committee ratified the approval given for the project by Chairman PAC based on the progress in implementation of the project and also the release of 1st installment subsidy of Rs.5.625 lakhs during the last financial year

### 13. Extension of the Project, Development of faster methods for production of ball copra

The committee ratified the action taken by the Board in extending the project period for six more months (till Sep. 2008) for completing the remaining work without incurring any additional expenditure

# 14. Refining of coconut oil by utilizing membrane filters as the major unit operation and development of a process to improve nutritional quality of refined coconut oil for frying and other edible uses – CFTRI, Mysore.

The committee approved the proposal for extension of the project period from 1.2.2008 to 31.7.2008 without any additional funds.

# 15. Farm Level Processing and Value addition for Coconut – Introduction of Modern Copra Dryers.

The Committee approved the proposal to earmark Rs.22.00 lakhs for introduction of Modern copra dryers to promote Farm Level Processing and Value addition for Coconut during the year 2008-09 to the following States on need basis.

Kerala Rs.10.00 lakhs

Tamil Nadu Rs.7.00 lakhs

<u>Karnataka</u> <u>Rs.3.00 lakhs</u>

Others Rs.2.00 lakhs

## 16. Extension of contract for a further period of 3 months – Generic Promotion of Coconut Products.

The proposal for extension of contract for a further period of 3 months on the same terms and conditions under the approved programme for Generic Promotion of Coconut Products by the Board at a total cost of Rs.11, 79,780/- was approved by the Committee.

### 17. Proposal for meeting the Expenditure of major Exhibitions & Fairs of the Board.

The Committee approved the proposal of the Board for meeting the expenditure for participation in major National and International Exhibitions (expenditure above Rs.1.00 lakhs) under TMOC sub head Market Promotion. An amount of Rs.91.00 lakhs was approved for the following major National and International Exhibitions during the year 2008-09 and Chairman was authorized to sanction funds considering the merits of each case.

### **Estimated Expenditure**

<u>Domestic</u>		
1 Arogya 2008, N. Delhi	- Rs	. 1,00,000
2 Aahar 2008- Chennai/Shillong/N Delhi	-	11,50,000
3. Annapoorna-World of Food India 2008, Mumbai	-	3,50,000
4. Food & Bev. Tech. 2008, Mumbai	-	5,00,000
5. Agri Intex 2008, Coimbatore/Ahmedabad	-	2,20,000
6. Agro Tech 2008, Chandigarh	-	1,50,000
7. International Horti Expo 2008, N. Delhi.	-	2,00,000
_	Total - Rs	s. 26,70,000

#### **International**

1. Fispal Food Service Show, Brazil	-	Rs. 13,00,000
2. Inter National Fancy Food Show, New York	-	12,00,000
3. Food Festival Sharjah UAE/ Food Show Dubai	-	12,30,000
4. World Food, Moscow, Russia	-	15,00,000
5. Winter Fancy Food Show, San Francisco, USA		12,00,000
Total	_	64,30,000

#### **Grand Total** - Rs. 91,00,000

#### Other Decisions

The committee suggested that the Board may explore the possibility of establishing a pilot plant at TDC, Vazhakulam for providing facilities to entrepreneurs and prepare a feasibility report.

The committee has also recommended to collect standard rates of equipments and machineries of ISI standard from popular brands for comparing the cost estimate and also to prevent any escalation in total project cost.

In conclusion the Chairman PAC placed on record the PAC's appreciation for excellent support extended by Mr. R. Jnanadevan, Asst. Director (Proj.) who is taking up a new assignment with Kerala State Govt., in monitoring the TMOC programmes over the past 6 years.

The meeting concluded at 5.00 P.M

### 27<sup>th</sup> Meeting of PAC of TMOC on 12<sup>th</sup> June 2008 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. George V Thomas Director, CPCRI, Kasaragod -671 124.  Representative of: Dr. S.N. Pandey, ADG (Plantation crops), ICAR, Krishi Anusandhan Bhavan –II, Pusa Krishi Bhavan, New Delhi-110 012
3	Dr. T. Vilas Chandran General Manager (Tech), Investment Credit Department, 3rd Floor, B Wing, NABARD, Plot No. C –24, G Block Badra -KurIa Complex ,Post Box No.8121, Bombay - 400 051
	Shri. Thangaraj, Asst. Agricultural Marketing Adviser, DMI, Kochi, 6th floor, A Block, Agmark, Kendriya Bhavan, Kakkand
4	Representative of Agricultural Marketing Adviser to Gol, DMI, GoI, Faridabad-121 001
5	Shri M Thomas Mathew, Chief Coconut Development Officer, Coconut Development Board, Kochi - 11
В	EXPERTS
6	Dr. M. Aravindakshan, Chairman, CDB (Retd.), 17 / 794, Green Park Peringanam, Thrissur-680 018
7	Dr. A.N.Srivatsa, Scientist (Retd.),DFRL, 411, A & B Block, Navilu Road, Kuvempu Nagar, Mysore – 570 023.
C	OTHERS
8	D. L. Maheswar Additional Director of Horticulture, Karnataka Representative of Secretary, Government of Karnataka
9	Dr. K. Muraleedharan, Director, Coconut Development Board, Kochi – 11

10	Shri. A.N. Muraleedharan Achari, Secretary i/c, Coconut Development
11	Shri. Rajeev P.George, Deputy Director (Dev), Coconut Development Board, Kochi
12	Dr. P.T. Thomas, Deputy Director (Marketing), Coconut Development Board, Kochi
13	Dr. Remany Gopalakrishnan, Deputy Director (IT), Coconut Development Board, Kochi
14	Shri. P. Balachandran Nair, Marketing Officer, Coconut Development Board, Kochi
15	Shri. Chandrasekharan, Statistical Officer, Coconut Development Board, Kochi
16	Shri Sreekumar Poduval, Jr. Processing Engineer, Coconut Development Board
17	Shri. R. Jnanadevan, Assistant Director (TMOC), Coconut Development Board, Kochi
18	Shri. K.S. Sebastian, Asst. Marketing Officer in charge, Coconut Development Board, Kochi
19	Shri.M.K.Singh, Sr. Technical Officer(Dev), Coconut Development Board, Kochi
20	Smt. Jayasree .A, Technical Officer, Coconut Development Board, Kochi
21	Smt. Leeena Mol, M.A, Technical Officer, Coconut Development Board, Kochi

## Proceedings of the 28th meeting of PAC of Technology Mission on Coconut held at Kochi on 7th October 2008

The 28<sup>th</sup> meeting of the Project Approval Committee (PAC) on Technology Mission on Coconut was held at the Board Room of Coconut Development Board, Kochi on 7<sup>th</sup> October 2008 at 9.30 am, under the Chairmanship of Ms. Minnie Mathew IAS, Chairman, CDB and Chairman of PAC. Dr. M. Aravindakshan, former Chairman, CDB, Dr. A.N. Srivasta, Scientist (Retd.), DFRL attended the PAC as Expert Members. Dr. T. Vilasa Chandran 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, Representative of Asst. Agricultural Marketing Adviser, representative of Govt. of Karnataka and representative of Govt. of Kerala were also present. The list of members and others who attended the meeting is annexed.

The following Agenda items were taken up for discussion:

## AGENDA No. 1: Confirmation of the Proceedings of 27<sup>th</sup> Project Approval Committee Meeting held on 12.06.2008

Dr. T. Vilas Chandran General Manager (NABARD) suggested that under item no. 6 the maximum limit for calculation of the eligible subsidy for buildings may be enhanced to 50% of eligible project cost only on a case to case basis depending on the requirement and need not be generalized. Subject to the above the Committee approved the proceedings of the 27th PAC Meeting.

### AGENDA No. 2: Action taken report of the 27th PAC Meeting

The committee perused the action taken report of the 27<sup>th</sup> meeting of the PAC.

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

## I. DEVELOPMENT OF TECHNOLOGY FOR PROCESSING & PRODUCT DIVERSIFICATION

1. Project proposal for Diversified uses of diseased coconut wood - Dr. U. S. Sarma, Director, Central Coir Research Institute (CCRI), Kalavoor, Alleppy at a total cost of Rs. 25.44 lakhs

The project was presented by Dr. U.S. Sarma, Director, CCRI. The objectives of the project are to isolate cellulose and hydrolyze it for producing lingo sulphonate and to extract valuable chemicals like bio-oils, to use the wood as a raw material for particle boards without adding resin, to convert the stem into pulp for making hand made paper and corrugated boxes and to set up a pilot plant for demonstration of technologies to be developed.

The committee after detailed discussion approved the project and observed that Rs.5.25 lakhs earmarked over the period of 3 years for materials appears to be low. However the PI suggested that CCRI will be able to undertake the study within the projected cost. Detailed studies on bio-fuel obtained from the lignin need not be taken up. The PAC approved the project at a total cost of Rs.25.385 lakhs to be completed within 30 months from the date of signing MoU.

## 2. Development of Processes and Herbal formulations based on Virgin Coconut Oil, AVTAR, Coimbatore, at a total cost of Rs. 19.21 lakhs

Dr. P. Ram Manohar, Director, AVTAR presented the proposal. The study would involve evaluation of VCO obtained through different processes and as per APCC standards and selection of a suitable VCO; Optimizing methodology to blend VCO with poly herbal extracts (Vyoshadi yogam); Phytochemical studies to standardize the blended VCO and physiological & pathological studies of the formulation on animals for hyper lipidemia. If the outcome is satisfactory experiments on human being to be included in the 2<sup>nd</sup> phase so as to develop a herbal drug with validation for herbal properties. It was also suggested that estimates of poly phenol in the blended oil and its anti oxidant properties may also be evaluated. The committee approved the proposal for Rs.20.36 lakhs with 10.36 lakhs share of the Board. The project duration will be 2 years from date of signing of MoU.

Items	Share of Board	Share of AVTAR	Total
Contractual Services		(Amount in Rs.	)
JRF	1,44,000/-		1,44,000/-
SRF	1,92,000/-		1,92,000/-
Biostatistician	50,000/-		50,000/-

Testing of VCO	4,50,000/-		4,50,000/-
Animal experimentation	2,00,000/-		2,00,000/-
Data entry operator		1,20,000/-	1,20,000/-
VCO		10,000/-	10,000/-
Herbal drugs (100 kg) -		1,00,000/-	1,00,000/-
Manufacturing cost		1,60,000/-	1,60,000/-
QA/QC of herbal drugs		70,000/-	70,000/-
HPLC / GC analysis of herbs		2,50,000/-	2,50,000/-
Stationery		50,000/-	50,000/-
Institutional cost		1,60,000/-	1,60,000/-
(including remuneration of PI)			
Computer		25,000/-	25,000/-
Travel Cost		50,000/-	50,000/-
Miscellaneous		5,000/-	5,000/-
Grand total	10,36,000/-	10,00,000/-	20,36,000/-

# 3. Technology of value added coconut based products. - Dr. Sakina Khatoon, Scientist Gr. IV (4), Department of Lipid Science & Traditional Foods, CFTRI, Mysore, at a total cost of Rs. 5.52 lakhs

The objective of the project is scaling up the technology for four coconut based value added products namely, Coconut based instant rice mix, Chutney powder/mix, Filling powder, Coconut bites (Ready-to-eat sweet snack); conduct shelf life studies after standardizing packaging; physio chemical analysis of value added products; advance quality specifications; plant lay out and technology demonstration to prospective entrepreneurs (Identified by Coconut Development Board)

The committee approved the project at a total cost of Rs.5.52 lakhs for taking up the project.

### II. ADOPTION OF TECHNOLOGY FOR PROCESSING AND PRODUCT DIVERSIFICATION

- 4. Marketing of Minimally processed Chilled Tender Coconut Water M/s. Solar Energy Company, 704, 2B, Garden Enclave, Pokhram Road No.2, Thane- 400 601, at a total cost of Rs. 221.71 lakhs.
- Sri. Varadarajan presented the project for Production and marketing of 50000 nos. of branded minimally processed tender coconuts. After detailed discussion the committee suggested

that the decision of the 27<sup>th</sup> PAC may be adhered to and promoter was requested to revise the project for 10000 nuts per day and submit to Chairman for consideration and approval.

# 5. Setting up of "Desiccated Coconut Powder Manufacturing Unit"- M/s. Vittal Agro Industries, D.No. KM-VIII-577, Govt. Hospital Circle, Hosdurg, Kanhangad, at a total cost of Rs. 277.25 lakhs

Shri. Santhosh Kamath presented the project. The objective of the project is to set up a SSI unit for the manufacture of Desiccated Coconut Powder of installed capacity at 1440 tons p.a. at Hosadurg, Kanhangad. 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.50.00 lakhs.

Components	Total cost (Rs. in lakhs)	Eligible cost (Rs. in lakhs)
Land (3.75 acres)	4.20	4.20
Building (1098.25 sq ft)	83.15	83.15
Plant & Machinery	153.45	153.15
Preliminary & Pre-operative Expenses	8.15	2.49
Deposit with Electricity Dept.	0.70	-
Working Capital Margin	27.60	-
TOTAL	277.25	242.99
Eligible subsidy		50.00

The unit should obtain HACCP / ISO certification and the product should meet BIS standards. The product samples should be periodically analyzed at QTL, Vazhakulam.

# 6. Expansion of the Integrated coconut processing Unit at Kallamkunnu, Nadavaramba, Thrissur. - The Kallamkunnu Service Co-operative Bank, Ltd. No.R.314, H.O Kallamkunnu P.O, Nadavaramba, Irinjalakuda, Thrissur, at a total cost of Rs. 58.50 lakhs

The project was presented by Shri. Saby, Secretary, Kallamkunnu SCB. The objective of the project is to improve the infrastructure for upgradation of quality of copra purchased and provide ample storage space furnished with wooden / steel racks, increase the efficiency of the expeller

system by installation one more expeller with motor and cooker cum roaster, improvement in the packaging system by the installation of automatic packing machines for pouch filling, bottle filling and sealing machines and production of coconut vinegar from coconut water. The party has already availed subsidy of Rs.33.39 lakhs for setting up of a 10 tone copra crushing unit. The capacity of the unit will remain the same.

The committee approved the project costing Rs.58.50 lakhs and decided to extend 25% of eligible cost as back ended capital subsidy to the unit limited to a maximum of Rs.13.56 lakhs subject to the receipt of loan sanction details and proforma invoice for machineries. The society may be requested to submit profit & loss statement for last three years. The product samples should be tested regularly at QTL, Vazhakulam. The unit should obtain ISO certification and the product should be of 'Agmark' standards.

Components	Existing	Expansion	Eligible cost
Land (58.75 cents)	13.88	6.00	6.00
Building & Other Civil Works (2000sq.ft.godown)	50.28	25.00	25.00
Plant & Machinery	99.74	21.50	21.50
Furniture & Office Equipments	6.66	1.75	1.75
Vehicle	1.28	-	-
Preliminary &Pre-operative Expenses	8.81	0.50	0.50
Working Capital Margin	10.25	3.75	-
TOTAL	190.90	58.50	54.25
Eligible Subsidy			13.56

# 7. Coconut Shell Based activated Carbon – Value addition Plant and Setting up of 100% Subsidiary Company in US M/S. Indo German Carbons Ltd, 57/3 Old Mosque Road, Edayar Industrial Area, Binanipuram, at a total cost of Rs. 206.00 lakhs

The promoter presented the project. The objective of the project is Production of Special Grade Powder activated Carbon acid and washed Carbon for special applications.

The committee after detailed discussion approved the project for the value addition plant at a total cost of Rs.164.00 lakhs at Edyar, Ernakulam and decided to extend 25% of eligible cost as back ended capital subsidy to the unit limited to maximum of Rs.41.00 lakhs subject to the condition that a minimum term loan of 40% of the project cost should be availed from the Bank / Financial Institution.

Components	Amount (Rs. In lakhs)	Eligible cost
Building and other amenities	14.00	14.00
NSF Certification	15.00	15.00
Plant and Machineries	130.00	130.00
Erection & Commissioning Charges	5.00	05.00
Others	2.00	-
Set up of Sales and Marketing office in USA	40.00	-
Total	206.00	164.00
Eligible subsidy		41.00

The unit should regularly furnish the details of production / sales / exports etc. for documentation.

# 8. Setting up of "Coconut Shell Based Activated Carbon Plant" M/s. Belmont Carbon and Adsorbents Pvt. Ltd., Belmont Plaza, Banerji Road, Kochi-18, at a total cost of Rs. 623.14 lakhs

The Promoter presented the project. The objective of the project is Production of Activated Carbon from Coconut shell Charcoal. The unit has been appraised by South Indian Bank and sanctioned a loan of Rs.259.00 lakhs.

The committee approved the project for Rs.623.14 lakhs and decided to extend 25% of eligible cost as back ended capital subsidy to the unit limited to maximum of Rs.50.00 lakhs.

Components	Amount ( Rs. In lakhs)	Eligible cost
Land & Land Scaping	16.00	16.00
Building & Plot Devpt.	58.50	58.50
Plant & Machineries	358.17	358.17
Working Capital	190.47	-
TOTAL	623.14	432.67
Eligible subsidy		50.00

The unit should obtain ISO certification and should regularly furnish the details of production / sales / exports etc.

# 9. Setting up of Virgin Coconut Oil Manufacturing Unit (CFTRI, Process)- M/s. Keratech Coconut Oil Manufacturing Company (P) Ltd., 1/332 B, P.O. Engandiyur, Trichur, at a total cost of Rs.116.44 lakhs

The Promoter presented the project. The objective of the project is mainly the production of Virgin Coconut Oil (CFTRI technology) and other by-products and sales in Indian and Foreign Markets.

The committee after discussion approved the project for Rs.116.44 lakhs and decided to extend 25% of eligible cost as back ended capital subsidy to the unit limited to maximum of Rs.14.697 lakhs. Cost of Vehicle Rs.9.93 lakhs and fixed asset including cost of computer and lap top for Rs.1.502 lakhs shall not be considered for working out eligible subsidy. The first installment of subsidy will be released after availing 50% of the term loan sanctioned by the financial institution.

Components	Amount (Rs. In lakhs)	Eligible cost (Rs. In lakhs)
Building Advance	5.00	-
Machinery & Equipment	49.43	49.43
Vehicles	9.93	-
Misc. Fixed Asset	9.08	7.57
HACCP registration fee	1.00	1.00
Pre-operative & Contingency	5.00	0.79
Working Capital	37.00	-
TOTAL	116.44	58.79
Eligible Subsidy		14.697

The unit should obtain HACCP / ISO certification. The product should meet the BIS / APCC standards. Samples should be periodically analyzed at Quality Testing Laboratory, Vazhakulam.

# 10. Setting up of "Integrated Copra Processing Complex" M/s. SKM Animal Feeds and Foods (India) Ltd. Coconut Oil Division, Nanjaiuthukuli. P.O., Erode, T.N. PIN- 638 104, at a total cost of Rs. 414.45 lakhs

M/s. GSPU and associates, the consultant presented project. The objective of the project is to set up a New Packing line, Storage Tank, Packing and Filling Unit, Panel Board and Generator, Finished Foods godown etc. for the already established coconut oil manufacturing unit.

The committee after detailed discussion approved the project for Rs.414.45 lakhs and decided to extend 25% of eligible cost as back ended capital subsidy to the unit limited to maximum of Rs.50.00 lakhs. Cost of electronic equipments shall not be taken into consideration for eligible cost. The unit should be visited by the officers of the Board and the existing facilities available ascertained.

Components	Total cost (in Lakhs)	Eligible cost (in Lakhs)
Land & Land Development(2.5 acre)	30.00	30.00
Building & Civil Works (16500 sq ft)	115.50	115.50
Plant & Equipments	156.80	156.80
Furniture & Fittings	3.00	3.00
Electrical Installations	12.80	12.80
Electronic Equipments	2.45	-
Preoperative Expenses	15.39	3.34
Working Capital Margin	78.51	-
TOTAL	414.45	321.44
Eligible Subsidy		50.00

The unit should obtain HACCP / ISO certification. The product should be of 'Agmark' standards.

## 11. Setting of "Desiccated Coconut Manufacturing Unit" - M/s. K.M.R. Industries, SS Buildings, Chinnakannara Street, Mayiladuthurai –609 001, at a total cost of Rs. 43.00 lakhs.

M/s. GSPU and associates presented the project. The objective of the project is to procure fully ripened coconut, manufacture Desiccated coconut powder, and market the product in small packs in the brand name "KMR" Desiccated Coconut Powder & Vinegar.

The committee after detailed discussion approved the project for Rs.43.00 lakhs and decided to extend 25% of eligible cost as back ended capital subsidy to the unit limited to maximum of Rs.9.237 lakhs. The PAC also recommended that the officials of the Board inspect the unit to assess the investment, Bank loan etc. before releasing the subsidy. The term loan should be minimum of 40% of total project cost. The CDB subsidy need not be included in the financial analysis.

Components	Amount (in Rs.)	Eligible cost (in Rs.)
Land & Land Development (12 cent)	6,30,000.00	4,00,000.00
Building & Civil Works (2840 sq ft)	7,00,000.00	7,00,000.00
Plant & Equipments	20,95,000.00	20,95,000.00
Furniture & Fittings Lab & Training Centre)	75,000.00	60,000.00
Electrical Installations	4,50,000.00	4,00,000.00
Pre-operative Expenses	50,000.00	40,000.00
Working Capital Margin	3,00,000.00	-
TOTAL	43,00,000.00	36,95,000.00
Eligible Subsidy		9.237

The products should be periodically tested at QTL, Vazhakulam, Aluva and the unit should obtain BIS certification.

# 12. Setting up of a New fully Automated Coconut Shell Powder Manufacturing Unit - M/s. Kongunad Angro Products, SF No. 1468/1, Panchapalayam Village, Olappalayam. P.O. Kangayam Taluk, Erode Dt., T.N, at a total cost of Rs. 240.00 lakhs

M/s. GSPU and associates presented the project. The objective of the project is to procure dried coconut shell, manufacture coconut shell powder and marketing the product in bulk 50 Kg. Plastic bags.

The committee approved the project at a total cost of Rs.240.00 lakhs and decided to extend 25% of eligible cost as back ended capital subsidy to the unit limited to a maximum of Rs.50.00 lakhs subject to verification of Bank loan details. The committee also suggested that

labour quarters, office room, guest room and canteen proposed need not be considered to workout eligible subsidy. The term loan should be a minimum of 40% of the project cost. The unit should obtain ISO certification.

Components	Total Cost (Rs. In lakhs)	Eligible cost
Land & Land Development	10.00	10.00
Building & Other Civil Works	88.00	88.00
Plant & Machinery	91.00	91.00
Furniture & fittings	6.00	06.00
Pre operative expenses	05.00	2.25
Electrification	25.00	25.00
WC Margin	15.00	-
Total project cost	240.00	225.00
Eligible Subsidy		50.00

13. Setting up of a "Desiccated Coconut Powder & Vinegar Manufacturing Unit"- M/s. T.N.S. Cocoanuts – Agro Products, Plot No.21,22, Thadicombu Road, Near MVM College, TNP Building, Dindigul District, Tamilnadu-624 001, at a total cost of Rs. 76.84 lakhs

M/s. GSPU and associates, the consultant presented project. The objective of the project is to procure fully matured coconut and manufacture Desiccated coconut powder & vinegar and marketing the products in small packs in the brand name 'WINNER". The committee approved the project at a total cost of Rs.76.84 lakhs and decided to extend 25% of eligible cost as back ended capital subsidy to the unit limited to maximum of Rs.16.085 lakhs. The unit should obtain ISO / HACCP certification and BIS certification for the Desiccated Coconut and FPO certifications for the vinegar.

Components	Total cost (in Rs.)	Eligible cost (in Rs.)
Land & Land Development (2 acres)	7,00,000.00	7,00,000.00
Building & Civil Works (5000 sq ft)	18,50,000.00	18,50,000.00
Plant & Equipments	32,99,000.00	32,99,000.00
Furniture & Fittings	75,000.00	75,000.00
Electrical Installations	4,50,000.00	4,50,000.00
Pre-operative Expenses	60,000.00	60,000.00
Working Capital Margin	12,50,000.00	-
TOTAL	76,84,000.00	64,34,000.00
Eligible Subsidy		16.085

14. Setting up of an "Copra Dryer Unit – Capacity 10000 nuts per day"- The Thirurangadi Taluk Karshikolpanna Sambarana Vipanana Samskarana Sangham Ltd. M.780, Calicut University.P.O.PIN- 673 635, at a total cost of Rs. 32.62 lakhs

M/s. GSPU and associates presented the project. The objective of the project is to procure matured coconut, dehusking and drying and marketing the copra in 50 Kg. Gunny Bags. The committee after detailed discussion approved the project at a total cost of Rs.32.62 lakhs and decided to extend 25% of eligible cost as back ended capital subsidy to the unit limited to maximum of Rs.6.423 lakhs subject to receipt of Bank loan details. A minimum of 40% of the project cost should be availed as term loan from the Financial Institution / Bank.

Components	Amount (in Rs.)	Eligible cost (in
		Rs.)
Land & Land Development(25.4 cents)	5,52,000.00	2,90,200.00
Building & Civil Works (2850 sq ft)	10,00,000.00	10,00,000.00
Plant & Equipments	11,50,000.00	11,50,000.00
Furniture & Fittings	50,000.00	50,000.00
Electrical Installations	50,000.00	50,000.00
Pre-operative Expenses	1,00,000.00	29000.00
Working Capital Margin	3,60,000.00	
TOTAL	32,62,000.00	25,69,200.00
Eligible Subsidy		6.423

# 15. Expansion of the unit Preservation and Packaging of Tender Coconut water"- M/s. Fortune Beverages Pvt. Ltd., Corporate Office, 402-403, Sarthik-2, S.G. Highway, Ahmedabad, at a total cost of Rs. 207.80 lakhs

The objective of the project is expansion of the Preservation and Packaging of Tender Coconut water unit by introducing automation systems at a total cost of Rs.125.92 lakhs. The committee decided that the capacity utilization over past 5 years and justification for expansion should be obtained from the promoter. The PAC deferred the project proposed for the time being.

# 16. Setting up of "Coconut Shell Charcoal Manufacturing unit" Shri A.Saravanan, MAP Carbochems, 9/250, Nanmai Alwar Street, Kurumbalaperi, Keela Pavoor (Post), Thenkasi, at a total cost of Rs. 23.69 lakhs

The objective of the project is to set up a coconut shell charcoal production unit. The committee approved the project at a total cost of Rs.29.06 lakhs and decided to extend 25% of eligible cost as back ended capital subsidy to the unit limited to maximum of Rs.4.82 lakhs.

Components	Amount	Eligible cost
	in lakhs	
Building (12500 Sq.ft.	13.5	9.41
Plant & Machinery	5.0	5.0
Water Storage tank and borewell	0.50	0.50
Material Handling Equipment, Packaging Machine, Weighing Balance	1.42	1.42
Instrumentations	0.60	0.60
E.B Advance	0.15	-
Erection & Preliminary Expenses	2.52	2.35
Working Capital TOTAL	5.37 <b>29.06</b>	 19.28
Eligible Subsidy		4.82

## 17. Expansion of Activated Carbon Unit – Absorbent Carbon Tuticorin, at a total cost of Rs.100.00 lakhs

The objective of the project is expansion / modernization of their activated carbon plant to produce acid washed activated carbon. The unit has already availed an assistance of Rs.36.62 for existing Activated Carbon unit under TMOC during 2006. The unit has been inspected by the Officers of the Board and recommended the proposal for consideration.

The committee approved the project proposal at a total cost of Rs.100.00 lakhs and decided to extend 25% of eligible cost as back ended capital subsidy subject to a maximum ceiling of Rs.50.00 lakhs for the unit including assistance already availed under TMOC.

Components	Existing	Cost for acid washed carbon	Eligible cost
	cost	unit (Rs. In lakhs)	
Building and other amenities	39.04	15.571	15.571
Plant and Machinery	155.93	76.439	76.439
Electrification for machinery	-	7.99	7.99
Total	194.97	100.00	100.00
Eligible subsidy			25 .00
Subsidy availed earlier (Rs in lakhs)			36.62
Balance eligible subsidy (Rs in lakhs)			13.38

The unit should obtain ISO certification.

# 18. Setting up a unit for Production of Roasted Coconut Oil, Vinegar, Palm Fibre, Organic Compost - Shri.K.B .Sivadas, Managing Director, Keramitra Coconut Oil Manufacturing Unit, Engadiyoor, Thrissur, at a total cost of Rs. 84.43 lakhs

The objective of the project is to diversify the existing virgin Coconut Oil unit for Production of Roasted Coconut Oil, Vinegar, Palm Fibre, Organic Compost. The unit has already availed a subsidy of Rs.5.2 lakhs for VCO unit from the Board. The committee approved the project with a total cost of Rs.84.43 lakhs and decided to extend 25% of eligible cost as back ended capital subsidy to the unit limited to maximum of Rs. 8.535 lakhs. Cost for palm fibre unit and loading/unloading charges is not considered for working out eligible subsidy.

Components	Total cost	Eligible cost
	Rs. in Lakhs	Rs. in Lakhs
Land	18.00	-
Buildings, Technical and	10.48	10.48
Civil Works(229.91sqm)		
Plant & Machinery	32.45	23.16
		(Existing 9.29 lakhs)
Working Capital	23.50	-
Technology transfer fee		0.50
Total	84.43	34.14
Eligible Subsidy		8.535

The unit should obtain HACCP / ISO certification and Agmark / FPO certification for the products. The products should be periodically tested at QTL Vazhakulam.

# 19. Expansion of Kairali Virgin Coconut Oil unit for the production of roasted coconut oil Virgin Coconut Oil and Vinegar. - Shri K.V.Mohanan, Kairali Virgin Coconut Oil, Thirumangalam West, Engandiyoor.P.O., Thrissur, at a total cost of Rs. 78.76 lakhs

The objective of the project is to diversify the Kairali Virgin Coconut Oil unit for the production of roasted coconut oil Virgin Coconut Oil and Vinegar. The unit has already availed a subsidy of Rs.5.2 lakhs for VCO unit from the Board. The committee approved the project at a total cost of Rs.78.76 lakhs and decided to extend 25% of eligible cost as back ended capital subsidy to the unit limited to maximum of Rs. 7.79 lakhs. Vehicle for Rs.3.86 lakhs shall not be considered for working out eligible subsidy.

Components	Amount (Rs.	Eligible cost
	In lakhs)	( <b>Rs.</b> )
Land (18 Cents)	7.20	-
Building with Civil Works(253 sqm)	30.38	17.83
Plant & Machinery	29.24	12.08
Furniture and fittings	1.25	1.25
Working Capital	10.69	0.00
TOTAL	78.76	31.16
Eligible Subsidy		7.79

The unit should obtain HACCP / ISO certification. The product should be of Agmark standards. The samples should be periodically tested at QTL, Vazhakulam.

# 20. Expansion of Virgin Coconut Oil Production Unit for production of roasted coconut oil. M/s. Shawn D.M.E.& Associates, Chathanad, Ezhikkara.P.O. North Paravur, at a total cost of Rs. 54.00 lakhs

The objective of the project is to diversify Virgin Coconut Oil unit for production of roasted, Coconut Oil, Oil Cake and Vinegar. The unit has already availed a subsidy of Rs.5.2 lakhs for VCO unit from the Board. The committee approved the project for Rs.55.73 lakhs and decided to extend 25% of eligible cost as back ended capital subsidy to the unit limited to maximum of Rs. 8.195 lakhs. Clarification should be obtained regarding the promoters share and bank loan.

Components	Total	Expansion/ Eligible cost
	(Rs in lakhs)	(Rs in lakhs)
Land (22 cents)	2.00	-
Land Devpt.	0.62	-
Building (990sq ft +3303sq ft)	19.00	12.50
Plant & Machinery	30.87	19.78
Electrical and Sanitary Fittings	1.94	0.50
Other Fixed Assets	1.30	1.30
Other Expenses	-	-
TOTAL	55.73	32.78
Eligible subsidy		8.195

The unit should obtain HACCP / ISO certification. The product should be of Agmark standards. The samples should be periodically tested at QTL, Vazhakulam.

# 21. Setting up of a 'Coconut Processing unit - Chathamangalam, Kozhikode Dt. - The Kozhikode Sahakarana Marketing Society Ltd. No.D.2817, Chathamangalam, Kozhikode Dt., at a total cost of Rs. 60.00 lakhs

The project envisages the establishment of a coconut Processing unit for the production of quality filtered coconut oil. The by-product, coconut water will be processed into coconut vinegar. The committee approved the project for Rs.54.5 lakhs and decided to extend 25% of eligible cost as back ended capital subsidy to the unit limited to maximum of Rs. 13.625 lakhs subject to the receipt of bank loan details and proforma invoice for machineries. The unit should avail a minimum of 40% of the project cost as term loan.

Components	Total cost (in lakhs)	Eligible cost (in lakhs)
Land (12 cents)	3.00	3.00
Building & Civil Works	16.00	16.00
Plant & Machinery	34.00	34.00
Furniture & Office Equipments	1.00	1.00
Preliminary &Pre-operative Expenses	1.00	0.5
Working Capital Margin	5.00	-
TOTAL	60.00	54.50
Eligible subsidy		13.625

The product should be of Agmark standards.

# 22. Setting up of "Desiccated Coconut Powder and Vinegar Manufacturing Unit" - M/s. PON Agro Products, Thirumalai Nagar, 1/176 A, Mathur Colony, Mathur P.O, Madurai North, at a total cost of Rs. 16.54 lakhs

The objective of the project is to set up a SSI unit for the manufacture of Desiccated Coconut Powder and vinegar at Mathur, Madurai with a capacity to process 10000 nuts / day. The committee approved the project for Rs.16.54 lakhs and decided to extend 25% of eligible cost as back ended capital subsidy to the unit limited to maximum of Rs. 3.435 lakhs.

Components	Total cost (Amount in Rs)	Eligible cost (Amount in Rs)
Land (58 cents)	2,80,000.00	1,50,00.00
Building ( 2700 sq ft)	6,00,000.00	6,00,000.00
Plant & Machinery	624000.00	6,24,000.00
Working Capital Margin	150000.00	-
TOTAL	16,54,000.00	13,74,000.00
Eligible subsidy		3,43,500.00

The product should be of BIS standards. The samples should be periodically tested at QTL, Vazhakulam. The unit should obtain HACCP certification.

## 23. Setting up of unit for Integrated Coconut Products - M/s. Devi Industries, K.S.Gaddige., K.M.Halli(P.O) V.I.A., Rathnapuri, Mysore-89, at a total cost of Rs. 20.00 lakhs

The objective of the project is to set up a unit for production of Coconut Oil, Shell Charcoal, Coconut Vinegar, Ice cream cups, etc. The committee approved the project for Rs.20.00 lakhs and decided to extend 25% of eligible cost as back ended capital subsidy to the unit limited to maximum of Rs. 4.40 lakhs. Nata de Coco may not be taken up at this stage. Shell charcoal unit should be separate from the unit for Food Products.

Components	Amount (Rs. in Lakhs)	Eligible cost
Land	Own	
Building & Civil Works	5.10	5.10

Plant and Machinery	12.00	12.00
Electrical Installation	0.50	0.50
Working Capital	2.40	-
Total	20.00	17.60
Eligible Subsidy		4.40

The oil should be of Agmark standards and vinegar FPO standards. The unit should obtain HACCP certification.

#### III. PESTS AND DISEASE MANAGEMENT

24. Massive Demonstration for the Adoption of Technologies on Coconut through Participatory Planning and Action among Coconut growers in Theni and Dindigul District, Tamil Nadu Coconut Farmers Self Help Society, M. Pudupatty, (PO) Sithayankottai, Dindigul District, Tamil Nadu, at a total cost of Rs. 135.63 lakhs

Dr. Subburaj, Consultant presented the project in detail. The objective of the project is Promotion of Self help associations among coconut growers, knowledge sharing and capacitating for the adoption of appropriate technologies on coconut, demonstration and adoption of cultural technologies for the promotion of model coconut gardens, participatory planning and action for the adoption of post-harvest technologies on coconut and promotion of human resources with entrepreneurial skill for trade development on coconut.

The committee after detailed discussion decided that the proposal for the first phase ie. the adoption of technology for promotion of model coconut farms may be implemented under the ongoing coconut cluster programme through the society. The guidelines for the same may be sent to the promoter. The contingency charges for meeting the travel expenses, documentation, stationery etc. will be limited to Rs.10,000 /- per month. The field programme like exposures, visits, training and printing of literature for circulation etc. also will be met under the ongoing programme for which separate proposal may be sent on need basis.

For promotion of self help associations, participatory planning and action for the adoption of post harvest technologies on coconut a detailed project may be submitted by PI for consideration of PAC.

#### IV. MARKET RESEARCH AND PROMOTION

## 25. Market Research Study in Coconut - Xavier Institute of Management, Bhubaneswar, at a total cost of Rs. 23.99 lakhs

The objective of the project is (i) to estimate the production of coconut in Orissa – Tender-nut and fully matured nuts; (ii) assessment of potential for area expansion and increase in production; (iii) existing marketing channels for coconut and its products; (iv) demand of various categories of products within Orissa and in the up country market; (v) evaluation of infrastructural facilities for primary processing and value addition within state; (vi) price behavior of coconut and its products over a period of time; (vii) to prepare a roadmap for the promotion of coconut / coconut products / value addition so as to achieve sustainable development of coconut in Orissa and (viii) suggest strategy for starting coconut based enterprises in the state.

The committee after detailed discussion suggested that the title of the project should be modified as 'Strategic plan for coconut development in Orissa'. In the objective the item nos. 1-6 should cover value chain analysis and 7 and 8 will be the outcome. The PAC approved the project at a total cost of Rs.23.99 lakhs with share of the Board limited to Rs.11.93 lakhs.

## 26. "Citco" Grade 1 Agmark Coconut Oil - M.M. Kurians, Cheekkanal Industries & Trading Co., at a total cost of Rs. 16.00 lakhs

The objective of the project is to undertake Market Promotion activities for Citco brand oil by way of buyer, seller meetings exchange of delegations etc. The committee after discussion approved the project and agreed to extend 50% of the market promotional expenses limited to maximum of Rs.8.00 lakhs to the unit on reimbursement basis. The committee also suggested that the subsidy should not exceed 10% of the sales turn over of the unit.

## 27. Retail outlet for tender coconut and other products - Sri. A.Sukumaran Nair, Baba's Coco Juice Park, Veli, Trivandrum, at a total cost of Rs. 1.87 lakhs

The objective of the project is to promote Tender Coconut Water as a health drink in hygienic condition.

The committee approved the project and agreed to extend 50% of the market promotional expenses limited to maximum of Rs.0.63 lakes to the unit on reimbursement basis. The committee also stated that the subsidy should not exceed 10% of the sales turn over of the

unit. Rent deposited with Tourism department and wage of employees for one year @ Rs.2250/each per month) may not be considered.

The proposal of the TMOC secretariat / ISC to widen the scope of coconut corners at strategic points such as tourist centres, Museum , Hospitals, Pilgrim centres, Air port, Railway Stations etc. was also approved by the PAC.

## 28. Retail outlet for tender coconut and coconut products - Women self help group, Kudumbasree, Kozhikode, at a total cost of Rs.1.00 lakhs

The objective of the project is to promote the women's self help associations with in the corporation area under community development society "Kudumbasree" to sell quality coconut products.

The committee approved the proposal and agreed to extend 50% of the cost of the fixed assets limited to a maximum of Rs.0.40 lakes to the unit on reimbursement basis. The committee also suggested that the subsidy should not exceed 10% of the sales turn over of the unit. Working capital and the other expenses shall not be considered.

# 29. Market Promotion- Providing tender coconut vending machines to entrepreneurs from SC/STs. - The Kerala State Development Corporation for Scheduled Castes and Scheduled Tribes Limited. Town Hall Road, Thrissur, Kerala-680 020, at a total cost of Rs.4.00 lakhs

The objective of the project is promotion of tender coconut consumption by procuring 10 nos. Push carts from M/s.Fruit Hut Beverages, Hyderabad and distribute to entrepreneurs belongs to SC/ST community for vending tender coconuts and create employment and income generation.

The committee after discussion approved the project and agreed to extend 50% of the cost of the equipment and transportation charges limited to maximum of Rs.15000 per unit on reimbursement basis. The total expenditure for the programme by the corporation will not exceed Rs.1.50 lakhs.

30. Market Promotion- Procuring 15 Nos. of tender coconut push carts for placing in important public places in Hyderabad City. - Shri M.Satynarayan, C/o.Pandari Nath, 15-125, P&T Colony, Dilsukhnagar, at a total cost of Rs.3.75 lakhs

The objective of the project is to promote tender coconut consumption by procuring 15 nos. Push carts from M/s. Fruit Hut Beverages, Hyderabad and placing them in important places in Hyderabad City for vending tender coconut water.

The committee approved the project and agreed to extend 50% of the cost of the equipment limited to maximum of Rs.12500 per unit and for a maximum of 15 nos. on reimbursement basis. The committee authorized Chairman to approve the project on obtaining satisfactory reports from the Dy. Director, State Center, CDB, Hyderabad on the background of the promoter, financial capacity, arrangements for supply of tender coconut, monitory mechanism etc.

# 31. Market Promotion- Procuring 10 Nos. of tender coconut push carts for placing in important public places. - M/s.Dapoli Mandangad Shikshan Prasarak Mandal, Dapoli, at a total cost of Rs. 2.50 lakhs

The objective of the project is to promote tender coconut consumption by procuring 10 nos. Push carts from M/s.Fruit Hut Beverages, Hyderabad and placing them in important places in Ratnagiri district, Maharashtra.

The committee approved the proposal and agreed to extend 50% of the cost of the pushcarts limited to maximum of Rs.12500 per unit on reimbursement basis for a maximum of 10 pushcarts. The committee authorized Chairman to approve the project subject to the condition that the role of the mandal with respect to un-interrupted supply of tender coconut and monitoring of the project regularly should be ascertained.

#### **OTHER ITEMS**

## 1. Quality Control Laboratory at Technology Development Centre, Vazhakulam, Aluva-CDB: Budget sanction for 2008-09.

The committee perused the proposal for budgetary support for the QTL for the year 2008-09. Chairman stated that even though target have been fixed for quality analysis of products the income generated is not yet commensurate to take care of recurring expenses.

Dr. A.N.Srivatsa emphasized the need for supporting the laboratory in the early stages. Even large national laboratories established by the Govt. of India are run with the budgetary support from the organization. The PAC agreed that it may not be feasible for the laboratory to run on a self sustaining basis in the initial years. It has to gradually acquire a reputation through the services provided. Besides this is an effort by the Board to provide service to the industry for instilling quality consciousness. The QTL cannot there for be treated as a purely commercial venture and will have to continue to supported till the public gain confidence in the value and services provided by the laboratory.

The PAC ratified the expenditure of Rs.9,75,847/- incurred during 18.10.2007 to 30.09.2008 and also approved an amount of Rs. 12.60 lakes towards the expenditure from Oct. 2008 to March 2009 for running the laboratory. The QTL should take up regular sample analysis not only of coconut products but also other food products.

### 2. Pilot project for establishment of demonstration cum training centre for coconut products-Dept. of Horticulture, Govt. of Karnataka

The PAC ratified the action taken by the Chairman in revalidating the un-spent balance of Rs.41.47 lakhs lying with Govt. of Karnataka for utilization during 2008-2009 and also agreed to extend the duration of the project up to March 2009 for completing the activities.

## 3. Automation of tender coconut water processing system for large scale production - DFRL, Mysore

PAC ratified the extension of the project by 4 months ie. up to 23.12.2008 for designing, developing and evaluating the complete automation system for tender coconut water for processing and packaging by DFRL.

4. Ratification for release of fund under the project, "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" -Amrita Institute of Medical Sciences and Research Centre, Kochi.

The committee observed that the study is timely and useful. The committee approved the project involving an outlay of Rs.79.568 lakhs with 50% share of the Board and cost of oil. PAC also ratified the release of first installment of Rs.19.052 lakhs for initiating the study to Amrita Institute of Medical Sciences and Research Centers, Kochi.

#### 5. Extension of contract period for a Generic Promotion of coconut products. - Delhi Metro

The committee noted the comments of the ISC and ratified the extension of the generic promotion programme of coconut products in Delhi metro railway stations for a further period of 3 months from 27th Sep. to 26th Dec. 2008 involving a cost of Rs.11,79,780 /-. Chairman informed that no further extension will be granted.

# 6. Extension of time for implementation of the Market Promotion Programmes of the Kalpasree Brand Coconut products promoted by M/s. Kallamkunnu Service Co-operative Bank Ltd. No.R.314, Irinjalakuda, Thrissur, at a total cost of Rs.30.00 lakhs.

The committee ratified the action taken in extending the time by one year for completing the approved market promotional activities for Kalpasree Coconut products by Kallamkunnu Service Co-operative Bank, Irinjalakkuda.

## 7. Modification in the guidelines for Market Promotional Activities under Technology Mission on Coconut.

The committee approved the proposal for a more flexible scheme under market promotion where in the promoter can avail assistance under any of the components of his choice from among the approved components subject to a limit of Rs.3 lakhs per activity and an over all ceiling of Rs.10.00 lakhs per unit. Erection of hoarding for brand promotion can also be included under eligible components for assistance under market promotion programmes.

### 8. Release of 1<sup>st</sup> installment of subsidy to the processing units on signing the MoU.

At present the 1st installment of eligible subsidy is released to the subsidy reserve fund maintained by the financial institution in the name of promoters only after the promoters avail 50% of the sanctioned loan. In view of the delay in releasing the subsidy, it was considered by the PAC whether subsidy could be released to the Bank after signing the MoU. Dr. Vilaschandran, G.M, NABARD and Shri. Thangaraj, Asst. Agricultural Marketing Officer, DMI opined that since the subsidy is kept in the reserve fund with the bank and not released to the promoter the same can be released after the promoter executes the MoU and the clauses in the guidelines may be corrected accordingly. The PAC approved the modifications.

#### 9. Setting up of a virgin coconut oil manufacturing unit by Kanjikuzhy Block Panchayath.

M/s GSPU & Associates was permitted by the Chairman, PAC to the present the project proposal for the Kanjikuzhy Block Panchayath, , Varanam.P.O., Cherthala. The project had not been received for consideration of ISC.

The objective of the project is to establish a VCO unit (CFTRI technology) in the 515 sq.m. building owned by the Panchayat . The promoters are the Panchayath Committee of the Kanjikuzhy Block Panchayath. Cost of the land and building worth Rs.66.12 lakhs is already invested by the Panchayath. The capacity of the unit will be 5000 coconut per day giving an output of 360 litres of VCO and 550 kg of defatted coconut powder at 100 per cent capacity. The products will be marketed by the Marari Marketing Ltd., which is the marketing outfit formed in 2003 by the Panchayath with a paid up capital of Rs.5.00 lakhs.

PAC noted that the entire requirement of investment is proposed as subsidy from CDB. For setting up of VCO unit the promoter has to avail the technology on transfer from CFTRI by payment of transfer fees. CCDO suggested that the proposed incubation center at TDC, Vazhakulam may be set up in the building provided by the Kanjikuzhy Grama Panchayat. After detailed discussion it was decided by the Committee that CDB may also address CFTRI for obtaining their concurrence for setting up of the incubation/ facilitation center for VCO with 100% assistance by CDB at Kanjikuzhy.

Finally, Chairman thanked the PAC members and experts for deliberating on and completing the long Agenda in a single day and the meeting came to an end by 6.15 P.M.

Director

### 28<sup>th</sup> Meeting of PAC of TMOC on 7<sup>th</sup> October 2008 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.  Representative of: ADG (Plantation crops), ICAR
3	Dr. T. Vilasachandran General Manager (Tech), 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 Officer, DMI, Kochi, 6 <sup>th</sup> floor, A Block, Agmark, Kendriya Bhavan, Kakkand <u>Representative of</u> Asst. Agricultural Marketing Adviser to Gol,DMI,GoI,Faridabad-121 001
5	Shri. S.K.Srikanth Joint Director of Horticulture(Plantation Crops), Lalbagh, Bangalore-04 <u>Representative of</u> Secretary, Government of Karnataka
6	Shri. K.S. Sasidharan, Joint Director of Agriculture, Vikas Bhawan, Thiruvananthapuram  Representative of Secretary Agriculture, Government of Kerala
7	Shri M Thomas Mathew, Chief Coconut Development Officer & Member Secretary, PAC Coconut Development Board, Kochi – 11
В	EXPERTS
8	Dr. M. Aravindakshan, Chairman, CDB (Retd.), 17 / 794, Green Park Thiruvambadi P.O, Thrissur-680 022

9	Dr. A.N.Srivatsa, Scientist (Retd.),DFRL
	411, A & B Block, Navilu Road, Kuvempu Nagar, Mysore – 570 023.
С	OTHER OFFICIALS:
10	Dr. K. Muralidharan, Director,
	Coconut Development Board, Kochi – 11
11	Shri. A.N. Muraleedharan Achari
	Secretary i/c, Coconut Development Board, Kochi
12	Shri. Rajeev P George, Deputy Director (Dev).
	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
15	Shri. P. Balachandran Nair,
	Marketing Officer, Coconut Development Board, Kochi
16	Shri. K.S. Sebastian, Asst. Marketing Officer in charge, Coconut Development
	Board, Kochi
17	Shri M.K. Singh, Senior Technical Officer,
	Coconut Development Board, Kochi
18	Smt. Jayasree .A
	Technical Officer, Coconut Development Board, Kochi
19	Smt. Leena mol M.A
	Technical Officer, Coconut Development Board, Kochi

# Proceedings of the 29th meeting of PAC of Technology Mission on Coconut held at Kochi on 9th February 2009

The 29<sup>th</sup> meeting of the Project Approval Committee (PAC) on Technology Mission on Coconut was held at the Board Room of Coconut Development Board, Kochi on 9<sup>th</sup> February 2009 at 11.00 AM, under the Chairmanship of Smt. Minnie Mathew IAS, Chairman, CDB and Chairman of PAC. Dr. M. Aravindakshan, former Chairman, CDB and Dr. R. Samiyappan, Director, Centre for Plant Protection Studies (CPPS), TNAU attended the PAC as Expert Members. Dr. T. Vilasachandran, General Manager (Tech), NABARD, Shri. Thangaraj, Asst. Agricultural Marketing Officer, DMI, Kochi representing Asst. Agricultural Marketing Adviser to Gol, DMI, Gol, Faridabad 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 28th Project Approval Committee Meeting held on 07.10.2008

The Committee approved the proceedings of the 28th PAC Meeting

### AGENDA No. 2: Action taken report of the 28th PAC Meeting

The committee perused the action taken on the decision of the 28<sup>th</sup> meeting of the PAC.

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

#### II. PEST AND DISEASE MANAGEMENT

1. Survey for the occurrence and severity of root (wilt) disease of coconut in south Kanara District of Karnataka - Agricultural Research Station, P.B. No.40, Arsikere, Hassan, Karnataka at a total cost of Rs. 2.468 lakhs

The objective of the project submitted by the Agricultural Research Station, Arsikere is to conduct a survey on the incidence and intensity of root (wilt) disease of coconut in Dhakshina Kannada District of Karnataka, to prepare disease hot spot area maps for systematic rouging of diseased palms to prevent further spread of the disease. Incidence of root

wilt disease in Karnataka [Sulliya taluk of Dhakshina Kannada District] was reported in 2005 by CPCRI

The committee after detailed discussion opined that survey to assess the incidence and intensity of root wilt diseased palms and its early removal in Karnataka is essential for preventing the spread of the disease in the state. Hence the committee approved the project with an outlay of Rs.2.468 lakhs to be met under the "TMOC-Technical support & emergent requirements". As the identification should be immediately followed by cutting and removal of the disease affected tree the committee agreed with the suggestion of ISC that Secretary Horticulture, Government of Karnataka may convene a meeting with UAS, Bangalore and Dept. of Horticulture for the simultaneous cutting and removal of diseased palms by the Dept. of Agriculture.

2. Soil and plant health management through organic recycling in coconut based production system - Central Plantation Crops Research Institute, (Indian Council of Agricultural Research), Kasaragod at a total cost of Rs. 62.366 lakhs

The project was presented by PI in the 27<sup>th</sup> PAC held on 12.06.08. The cost of the project is Rs.48.63 lakh with duration of 5 years. The PAC decided that the proposal for demonstration of technologies developed for production of high quality organic manures, vemiwash, and use of vermiwash as prophylactic agent for disease management in the farmers field for large scale adoption could be considered under TMOC but the project has to be revised incorporating the inputs (costing) from CPCRI and limiting the duration to 4 years by identifying organically maintained gardens in southern states. Accordingly the project was revised and resubmitted.

The objectives of the project are (i) to demonstrate location specific technologies for organic recycling aiming at developing sustainable organic production system in coconut growing areas including root wilt disease affected tracts, (ii) to develop low cost crop residue recycling systems to produce high quality vermi-compost and vermi-wash for soil health management in coconut based organic production system, (iii) to assess the efficacy of vermi-wash as bio pest repellant and prophylactic agent for disease and soil health stimulant, (iv) to evaluate the feasibility of crop diversity management in organic coconut based production

system through intercropping with location specific medicinal plants, tuber crops, vegetables, spices and fruit crops and (v) to study the sustainability of the system through assessment of various indicators such as soil fertility, soil biological properties, reduction in disease incidence as well as pest and disease suppression.

The committee after detailed discussion approved the project subject to the following conditions:

- i. The PI may be asked to clarify the quantity of vermi-compost to be applied to each palm in the project area, the method of procurement of bio-mass for vermin compost and production, number of vermi-compost units proposed to be setup in the project area, etc.
- ii. A package of practice for organic farming in coconut gardens using bio-mass recycling and vermi-compost, vermiwash application should be developed finally under the project which is to be added as one of the conditions of the MoU.
- iii. Organically maintained existing gardens in Kerala / Tamilnadu shall be selected for demonstration (Vechoor & Ettimadai suggested)
- iv. Technical programme shall be reduced to a few major objectives including (i), (ii) and(v).
- v. Source of production of bio-mass to be indicated in the project.
- vi. Perennial intercrops like cocoa proposed for bio mass generation in treatment no.2 may be deleted since bio mass generation and organic recycling will not be possible with in 4 years. However, the gardens already integrated with cocoa plants may be selected.
- vii. The salary of the scientists (3 numbers) proposed in the revised project as CPCRI share may be limited to 2 and accordingly total project cost and institutional charges may be reduced.
- viii. Budget proposed for 'Consumables' may be limited to the minimum.
- ix. Cost of inputs like intercrop, planting materials, green manure seeds, cost of construction of vermi compost unit etc. are shown under "Contingency" head with 100% financial assistance from the Board. The same may be limited to 50% and balance 50% may be met by CPCRI / farmers. Item wise costing under "Contingency" head also may be furnished.

The project may be revised accordingly and submitted to the Board for considering release of fund.

### 3. Control of Leaf blight disease incidence of coconut in Anamalai block of Coimbatore district - Dept. of Agriculture, Govt. of Tamilnadu at a total cost of Rs. 40.013 lakhs

Severe incidence of leaf blight disease caused by a fungus was noticed in Anamalai block of Coimbatore Districts. A Joint Inspection conducted by Scientist of TNAU, Officers of Dept. of Agri., TN and CDB on 18.12.08 had reported that 7 out of 19 villages of Anaimalai block is severely affected by leaf blight disease. 30-50% of the palms in gardens are affected and intensity of disease is 30% & hence immediate intervention is essential to control the disease and to arrest further spread. Hence the proposal is submitted with the objective of controlling the Leaf blight disease incidence of coconut in Anamalai block of Coimbatore district.

Dr. R. Samiyappan, Director, Centre for Plant Protection Studies (CPPS), TNAU stated that the systemic fungicide, Carbendazim (2%) 3 times at quarterly interval proposed in the project is as per the recommendation of TNAU.

The committee after detailed discussion approved the project in view of epidemic nature of infestation and need for immediate intervention to arrest the spread of the disease. The committee also decided that since the issue needs urgent action to arrest the spread of the disease CDB shall meet 100% of the cost of the chemicals ie. Rs.4,70,750/- under the subcomponent 'Demonstration of technology for management of pest & diseases'. A monitoring committee shall be constituted with Shri. Chellamuthu, Vice Chairman CDB, Director, CDB, Director, CPPS and the Joint Director of Agriculture, Coimbatore to monitor the progress of implementation of the project. The JDA, Coimbatore may be requested to submit the time bound action plan, details of the project area, etc. and the project has to be implemented on a cluster approach. The progress of implementation has to be reported on a monthly basis and a impact of assessment to be made after the completion of the project.

### 4. Control of Eriophyid Mite on Coconut in Maharashtra - Department of Horticulture, Govt. of Maharashtra at a total cost of Rs. 61.984 lakhs

The objective of the project submitted by the Department of Horticulture, Govt. of Maharashtra is to Control of Eriophyid Mite on Coconut in 300 ha in 15 blocks of coastal region of Maharashtra. Adoption of packages recommended by National Steering Committee on mite involving application of recommended doses of organic manures & fertilizers, growing green manure crops and 3 times root feeding with Azadirachtin (5%) - 7.5 ml in 7.5 ml water are envisaged in the project. Out of total cost of Rs.61.984 lakhs, 25% of cost of inputs Rs.15.498 lakhs is shown as Board share, 40% (Rs.24.792 lakhs) of cost of inputs as State share and 35% (Rs.21.694 lakhs) of cost of inputs as Farmers share. State level approval also communicated accordingly.

The committee after detailed discussion suggested that Government of Maharashtra may be asked to furnish the following:

- 1. Whether any survey has been conducted to asses the present level of infestation of the pest and to furnish the intensity of pest infestation as a baseline data.
- 2. A detailed proposal indicating the various programmes (INM & IPM packages) and duration of the programme as well as schedule of operations.
- 3. Revised budget reflecting the cost of other project components such as cost of FYM, labour charges etc.
- 4. A Government Order indicating the specific head of account under which the State share will be released.
- 5. To clarify whether there is any duplication in the present project area with that of earlier project under TMOC and the 200 ha area proposed by the State Govt. during the current year under ongoing LODP programme.

PAC authorized Chairman, CDB to approve the project subject to submission of the above details by Govt. of Maharashtra.

5. Studies on the efficacy of coir pith based vermi-compost as a nutrient management strategy for the suppression of coconut eriophyid mite - Orissa University of Agriculture and Technology, Bhubaneshwar, Orissa at a total cost of Rs. 5.98 lakhs

The objective of the project submitted by Orissa University of Agriculture and Technology is to study the efficacy of coir pith based vermin compost enriched with bio-agents / biofertilizers, on the coconut eriophyid mite incidence, to study the seasonal incidence of the eriophyid mite and document its natural mortality factors, to evolve a cost-effective nutrient management strategy for adoption in the IPM of eriophyid mites and for enhancing the production of healthy coconut. The committee was of the view that there is no established study on soil application of vermin-compost for control of Eriophyid mite *Trichoderma harzianum* is a bio control fungicide for plant pathogens and is not effective for control of mite. *Trichoderma harzianum* may possibly help to increase the health of the palm and increase resistance to pest and diseases. If this was the objective of the study, the title should be revised as "Development of nutrient management strategy for improving the health of the palm to build resistance to pests".

The Committee after detailed discussion decided to communicate these remarks to the PI.

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

6. Activated carbon from coconut shell charcoal - Indian Institute of Chemical Technology (IICT) Hyderabad, India at a total cost of Rs. 129.22 lakhs

The project was submitted by Director, Indian Institute of Chemical Technology (IICT) Hyderabad. The objective of the project is a) to set up a pilot plant (2 Kg/hr of activated carbon capacity) to manufacture granular activated carbon from carbonized char of coconut shell as raw material by steam activation, b) to minimize the energy consumption in production of activated carbon so that competitive indigenous technology can be developed, c) to collect experimental data optimizing different process parameters for design of commercial units, d) to demonstrate the indigenous technology on pilot scale it is well known that some of the manufacturers of activated carbon in India are able to sustain and to derive profits with their daily production capacity of 1.0 tone/day. The committee sought the views of Sri. Ragin Rehman C.P, Managing Director, Active Char Products Pvt. Ltd., a representative of the activated carbon industry. He suggested that there is no dearth of technology for production of activated carbon. The major concern of the industry is to address the pollution issues in the shell charcoal industry and develop new value added carbon products such as impregnated carbon,

acid washed carbon etc. R & D efforts on these lines will be beneficial for the industry instead of funding a project at the basic level.

The committee after detailed discussion suggested that the IICT may be addressed as to whether they would be interested in development of technologies for low cost activated carbon with higher surface area [more than 1500 m<sup>2</sup>] value added activated carbon and a system for production of charcoal under pollution free condition on a commercial scale.

## IV.b) ADOPTION OF TECHNOLOGY FOR PROCESSING AND PRODUCT DIVERSIFICATION

7. Setting up of a New fully Automated Coconut Shell Powdering Unit - M/s. Sri Lakshmi Trading Company, 232, Sivaya Nagar, IIIrd Cross Street, Reddiyur Alagapuram, Salem District, Tamil Nadu at a total cost of Rs. 62.145 lakhs

M/s. GSPU and associates, the consultant presented project. The objective of the project is establishment of coconut shell powder manufacturing unit of different mesh size with installed capacity 12 MT shell / day and marketing the products inside coated poly bags locally

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.15.524 lakhs.

Components	Project cost	Eligible cost	Eligible subsidy
	(in Rs.)	(in Rs.)	(in Rs.)
Land & Land	5,20,000.00	5,20,000.00	1,30,000.00
Development (0.80 acre)			
Building & Civil Works	12,82,000.00	12,82,000.00	3,20,500.00
(3672.26 sq ft)			
Plant & Equipments	40,00,000.00	40,00,000.00	10,00,000.00
Furniture & Fittings	10,000.00	10,000.00	2,500.00
Electrical Installations	3,37,500.00	3,37,500.00	84,375.00
Pre-operative Expenses	3,50,000.00	64,995.00	16,248.00
Working Capital Margin	5,48,000.00		
TOTAL	70,47,500.00	62,14,495.00	15,52362.00

8. Project for setting up of copra drier and coconut oil production unit - M/s. Kerachaithanya Agro Industries, Palathadam, Puthariyadukkam.P.O., Kasargod Dt. at a total cost of Rs. 59.95 lakhs

M/s. GSPU and associates, the consultant presented project. The objective of the project is to set up a coconut processing unit for the production of copra and coconut oil at Palathadam,. Kasargod District of Kerala State. The installed capacity of the unit is to process 35000 coconuts per day.

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.14.238 lakhs subject to the condition that the unit should acquire Agmark standard for copra and coconut oil.

Components	Project cost	Eligible cost	Eligible subsidy
	(in Rs.)	(in Rs.)	( in Rs.)
Land & Land	16,20,000	6,89,641	1,72,410
Development			
Building & Civil Works	18,00,000	18,00,000	4,50,000
Plant & Equipments	25,86,417	25,86,417	646604
Furniture & Fittings	50,000	50,000	12,500
Electrical Installations	5,00,000	5,00,000	1,25,000
Pre-operative Expenses	3,40,000	68,964	17,241
Working Capital Margin	14,79,986		
TOTAL	83,76,403	56,95,022	14,23,755

9. Setting up of Coconut Oil Manufacturing Unit and Coconut Wood Processing Unit - M/s. Karunya Oil Mills and Wood Processing Unit, Kanchampazhinji P.O, Poovar, Trivandrum Dt. at a total cost of Rs. 73.59 lakhs

M/s. GSPU and associates, the consultant presented project. The objective of the project is production of Coconut Oil, Coconut Oil Cake, Coconut Wood of different size, Coconut Wood Furniture, Coconut Wood based packing box (Carton) for export of vegetable & Fruits. The total cost of the project is Rs.73.59 lakhs.

The committee opined that the proposed capacity of 10 MT of copra per day is too high. Availability of such a huge quantity of raw material is doubtful in view of the acute shortage of copra faced by the existing units. However the Committee suggested that officers of the Board may visit the site and ascertain the feasibility of the projects.

### 10. Setting up of a new "Copra Dryer" Installed Capacity 10000 nuts per day - Shri Mohammed Jaleel Moosan Kakkada Moosankakkada House, Andrott Island, Lakshadweep at a total cost of Rs. 12.76 lakhs

M/s. GSPU and associates, the consultant presented project. The objective of the project is procurement of matured coconut, de-husking and drying and marketing the copra in 50 Kg gunny bags. The installed capacity of the unit is to process 10000 coconuts per day. PAC suggested that the capacity utilization may be limited to 85% and corrected in the project.

The committee after detailed discussion approved the project for Rs.12.76 lakhs and decided to extend 25% of eligible cost as back ended capital subsidy to the unit limited to maximum of Rs.3.20 lakhs subject to the condition that the unit should acquire Agmark standard for copra

Components	Project cost Eligible		Eligible
	(in lakhs)	cost	subsidy
Land & Land Development	2.20	1.62	0.41
Building & Civil Works	8.00	6.48	1.62
Plant & Equipments	4.00	4.00	1.00
Furniture & Fittings	0.50		
Electrical Installations	0.50	0.50	0.13
Pre-operative Expenses	1.00	0.16	0.04
Working Capital Margin	3.10		
TOTAL	19.30	12.76	3.20

### 11. Establishment of activated carbon unit - M/s Global Eco carbon Pvt. Ltd., Tumkur, Karnataka at a total cost of Rs. 390.00 lakhs

The Promoter presented the project. The objective of the project is production of four tons of activated carbon per day.

Components	Amount (Rs. In lakhs)	Eligible cost (Rs. In lakhs)	Eligible Subsidy (Rs. In lakhs)
Land Advance	80.00		
KSFC Land (lease)	15.00		}
Reactor for Charring Operation I	70.00	70.00	}
Reactor for Charring Operation II	45.00	45.00	}
Rotary Kiln for activation operation	130.00	130.00	} 50.00
Pre-Activation Plant	13.00	13.00	}
Post Activation Plant	15.00	15.00	}
Turbine for Electricity Generation	110.00	110.00	}
D.G.Set (200 KVA)	7.00	7.00	}
Technical Fees	10.00		}
Others	10.00		}
Working Capital	100.00		}
Total	605.00	390.00	

The committee after detailed discussion approved the project at a total cost of Rs.390.00 lakhs and decided to extend 25% of eligible cost as back ended capital subsidy to the unit limited to maximum of Rs.50.00 lakhs subject to the following conditions:

- a. Land lease period should be a minimum of 15 years or repayment period of term loan which ever is more.
- b. Detailed plan for procurement of raw material and marketing to be included in the project report.
- c. Certificate from Pollution Control Board should be produced.
- d. IRR worked out at 14% is very low and the same may be reworked for 10 years.
- e. Bank loan availed details to be furnished.
- f. Quarterly reports on production, sale, export etc. to be furnished.

The project may be revised accordingly and submitted to the Coconut Development Board.

# 12. Expansion and modernization of the unit Preservation and Packaging of Tender Coconut water - M/s. Jain Agro Food Products Private Ltd., No.356, V Main, RPC Layout, Vijayanagar, Bangalore at a total cost of Rs. 31.06 lakhs

The objective of the project is expansion and modernization of the unit Tender Coconut water preservation and packaging unit by enhancing installed capacity from 22.5 lakh bottles to 30 lakh bottles per annum. The unit has already availed financial assistance of Rs.22.30 lakhs for setting up of the unit from the Board.

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.7.765 lakhs.

Components	Project cost	Eligible cost	Eligible
	(Rs. in	(Rs. in	subsidy
	lakhs)	lakhs)	(Rs. in lakhs)
Civil Works –Shed	7.52	7.52	1.88
PLANT & MACHINERY			
SS Steam Jacketed Plan (2 Nos.)	2.25	2.25	
SS Water Tank (500 Ltr Capacity – 2	0.56	0.56	
Nos.)			
Industrial Online Non Contact Printer –	2.03	2.03	
1No			
Accessories for contact Printer	0.12	0.12	5.885
Continuous Flat Belt Conveyor	0.40	0.40	
Thermal Shrink Packaging Tunnel	0.50	0.50	
Boiler with Accessories	14.03	14.03	
Pnumatically operated Bottle cap	1.15	1.15	
Sealing machine (4 Nos)			
Transportation, Erection &	2.25	2.25	
Commissioning			
Other Deposits	0.25	0.25	
TOTAL	31.06	31.06	7.765

<sup>13.</sup> Project for expansion and modernisation of Desiccated Powder unit - M/s. Ganesh Kalpathau Industries, N.H.17, Koteshwara – 576 22, Kundapura Taluk, Udupi District at a total cost of Rs. 28.25 lakhs

The objective of the project is expansion and modernization of existing D.C. powder manufacturing unit to increase the existing processing capacity of 20000 nuts per day to 35000 nuts per day.

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.7.0625 lakhs.

Components	Amount (Rs.	Eligible	Eligible
	in lakhs)	cost	subsidy
Land	Existing		
Factory Building	Existing		
Plant & Machinery (Additional)	23.97	23.97	5.9925
Stainless Steel Screw Conveyer	1.50	1.50	0.375
with gear box and motor			
Disintegrator	0.75	0.75	0.1875
Disintegrator Motor	0.53	0.53	0.1325
Transportation Charges	1.50	1.50	0.375
Total	28.25	28.25	7.0625

## 14. Setting up of a copra drying unit - The Karshakavedi Trust, Karuvarakundu, Malappuram Dt. at a total cost of Rs. 20.176 lakhs

The objective of the project is production of Copra to be used as raw material for coconut oil industries. The installed capacity of the unit is to process 12000 nuts per day. The committee observed that details such as asset accrued statement, bank loan availed, and production etc. has not been furnished by the promoter. However in view of the shortage of copra faced by the processing units the committee authorized Chairman PAC to approve the project and sanction 25% subsidy of Rs.5.044 lakhs after the details are furnished by the promoters.

	Amount	Eligible cost	Amount
Components	(Rs. in lakhs)		
A. Fixed Capital Investments			
Land	2,15,000.00	2.15	0.5375
Building	23,66,500.00	12.526	3.1315
Dryer (6Nos)	4,50,000.00	4.5	1.125
Furniture/Tools	1,00,000.00	1.00	0.250
Subtotal	31,31,500.00	20.176	5.044

B. Working Capital			
Investments			
Director Expenses – One	73,000.00		
month			
Indirect Expenses –Other than	40,150		
dep (one month)			
Stock in Trade:			
Raw material (30 days)	5,07,000.00		
Finished Goods (25 days)	4,22,500.00		
Subtotal	10,42,650.00		
GRAND TOTAL	41,74,150.00	20.176	5.044

#### V. MARKET RESEARCH AND PROMOTION

# 15. Project proposal for market promotional activities under the TMOC - Nadukkara Agro Processing Co. Ltd, Nadukkara, Avoly P.O, Muvattupuzha at a total cost of Rs. 50.00 lakhs

The objective of the project is to carry out various market promotional programmes for 'JIVE PINACOLDA', a mix of coconut milk and pineapple juice in tetra pack. The committee approved the project and agreed to extend 100% of the expenditure incurred for Market Promotion activities limited to a maximum of Rs.25.00 lakhs on reimbursement basis as per the norms of TMOC. However the assistance shall not exceed 10% of the annual sales turn over. The committee suggested that only items eligible for financial assistance need to be included in the agenda note for the approval of PAC.

### **16.** Project proposal for market promotional activities of VCO- Keratech coconut oil manufacturing Co., Engandiyoor, Trissur at a total cost of Rs. 30.257 lakhs

The objective of the project is to carry out various market promotional programmes for Virgin Coconut Oil. 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. However the assistance shall not exceed 10% of the annual sales turn over.

# 17. Project proposal for market promotional activities of coconut cream - M/s. Dinesh Foods, Dinesh Bhavan, Payyambalam Road, Kannur, Kerala at a total cost of Rs. 53.50 lakhs

The objective of the project is to carry out various market promotional programmes for 'Dinesh' Brand Coconut Milk. The committee approved the project and agreed to extend 100% of the expenditure incurred for Market Promotion activities limited to a maximum of Rs.25.00 lakhs on reimbursement basis as per the norms of TMOC. However the incremental sales turn over should be assessed after release of the subsidy. The assistance shall not exceed 10% of the annual sales turn over.

# 18. Project proposal for market promotional activities of activated carbon - M/s. Indo German Carbons Limited, 57/3, Old Mosque Road, Edayar Industrial Area, Binanipuram at a total cost of Rs. 24.00 lakhs

The objective of the project is to carry out various market promotional programme for 'INDOCARB" 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.10.00 lakhs on reimbursement basis as per the norms of TMOC. However the incremental sales turn over to be assessed after the subsidy is availed. The assistance shall not exceed 10% of the annual sales turn over.

# 19. Project proposal for market promotional activities of coconut oil - M/s. Kodur Service Co-operative Bank Ltd., No.F 1523, Kodur P.O. Malapuram at a total cost of Rs. 30.00 lakhs

The objective of the project is to carry out various market promotional programmes for Agmark certified Keramrith coconut oil. The unit is satisfactorily functioning since 2002 and capacity utilization is reported at 140%. The present turnover of the unit is Rs.5.25 crores and 1.00 lakh litres of coconut oil is being marketed per month.

The committee approved the project and agreed to extend 100% of the expenditure incurred for Market Promotion activities limited to a maximum of Rs.25.00 lakhs on reimbursement basis as per the norms of TMOC since the unit is in the co-operative sector.

However the sales turn over needs to be assessed after release of the subsidy. The assistance shall not exceed 10% of the annual sales turn over.

20. Project proposal for market promotional activities of coconut water based vinegar - M/s. Jaimatha Estates, Monippally P.O., Kottayam, Kerala at a total cost of Rs. 8.00 lakhs

The objective of the project is to carry out various market promotional programmes for Amrutham brand coconut water based vinegar. The unit has already availed Rs.3.25 lakhs as market promotion assistance during the preceding year (website 0.50 lakh, printing of leaflets 2.00 lakhs, electronic & print media 0.75 lakhs).

The committee approved the project and agreed to sanction 50% of the expenditure incurred for Market Promotion activities on reimbursement basis as per the norms of TMOC. However the increased sales turn over has to be assessed after release of the subsidy. The assistance shall not exceed 10% of the annual sales turn over.

21. Market Promotional Programme for 'Sahakari' coconut oil - M/s.Anjarakandy Farmers' Service Co-operative Bank Ltd., No. 1141, Mamba P.O. Kannur at a total cost of Rs. 28.00 lakhs

The objective of the project is to carry out various market promotional programmes for Agmark certified 'Sahakari' brand coconut oil.

The committee approved the project and agreed to extend 100% of the expenditure incurred for Market Promotion activities on reimbursement basis as per the norms of TMOC. The assistance shall not exceed 10% of the annual sales turn over.

22. Market Promotional Programme for 'Subicsha' Brand Coconut Products - M/s. Subicsha Coconuts Producer Company Ltd., Door No.NP9/708 A, Nochad P.O., Naduvannur-673 624, Kozhikode at a total cost of Rs. 46.15 lakhs

The objective of the project is to carry out various market promotional programmes for 'Subicsha' Brand Coconut Products viz. Coconut Pickle, Tender Coconut Jam, Tender Coconut Squash, Coconut Chutney Powder, Coconut Chips, VCO, Coconut oil, Coconut Vinegar, Defatted DC and Snowball tender nut.

The committee approved the project and agreed to extend 50% of the expenditure incurred for Market Promotion activities on reimbursement basis as per the norms of TMOC subject to the condition that copy of the FPO licence for coconut based product marketed by 'Subicsha' is produced. The assistance shall not exceed 10% of the annual sales turn over.

The committee suggested that the item wise / component wise scale of assistance and maximum limit that can be extended to Co-operative Societies and other Govt. Agencies may be prepared and placed in the next PAC for approval. The PAC also suggested that maximum time limit for availing the sanctioned assistance under market promotion programme will be 3 years from the date of sanction.

#### **OTHER ITEMS**

### a. Ratification of expenditure incurred under the project "Integrated Coconut Development for Bud rot affected area, Kasaragod District

The project was submitted by the District Collector Kasaragod on 23.10.2008. The project envisages supporting the farmers of severely Bud rot affected areas of the district by giving compensation for the removal of completely damaged disease affected palms and to contain the spread of the disease by adopting disease management practices as recommended by CPCRI. It is proposed to cut and remove 78344 Nos. of completely damaged coconut palms during 2008-09. The total cost of cutting and removal of a palm is Rs.1000/- per palm. An amount of Rs.250/- per palm will be provided by the Board as compensation for cutting the palms. The balance of Rs.750/palm will be borne by the farmers themselves. An amount of Rs.108 per palm (Rs.15/- farmers contribution for basin opening, Rs.75/- Grama panchayath and farmers share for organic manure and Rs.18/- CDB share for fertilizers) for adopting recommended INM practices. Besides an amount of Rs.101.50 per palm (CDB's share - Rs.30.90 and Farmers contribution - Rs.70.60) is earmarked for adopting IDM practices. The share of various agencies involved in implementation of the project is:

1. CDB's share - Rs. 373.10 lakhs
 2. Grama Panchayath - Rs. 25.00 lakhs
 3. Beneficiaries contribution - Rs.1245.810 lakhs

Total - Rs.1643.910 lakhs

The PAC noted the serious economic losses suffered by the farmers on account of the spread of the bud rot disease. The PAC also noted that this was a farmer participatory programme and that there was a contribution from the beneficiary farmers and the local Gram Panchayat. It was also noted that the District Collector Kozhikode was monitoring the implementation.

Keeping in view the severity of the disease and the urgent need for taking measures at the right time to contain the disease, the PAC ratified the action taken to sanction the project under the subcomponent, 'Adoption of technologies for the management of insect pest and disease affected gardens' and release the 1<sup>st</sup> instalment of financial assistance of Rs.186.51 lakhs. The committee also suggested that release of second instalment should be made based on the progress of implementation of the project. The Monitoring Committee should periodically review the progress of implementation and furnish a report to the Coconut Development Board.

### b. Extension of project period "Production of Cheaper and Healthier Blends of Coconut oil with other Vegetable oils -CFTRI

The PAC extended the project period up to 31.05.2009 to complete animal experiments and bring the study to a conclusion.

### c. Extension of project period "Development of technology for value addition to the by products in coconut processing.- CFTRI.

The PAC extended the project period up to 20th May 2009 considering the time required for the completion of the shelf life studies, and to fine tune the process for dry mixes Coconut souffle and standardization of whey proteins without any additional expenditure.

#### d. Approval of revised project - M/s. Modern Oil Mills, Kozhikairy, Pattambi, Palakkad

The Committee did not agree to revise the subsidy already sanctioned.

### e. Procurement of mobile tender coconut water dispensing unit from M/s. Fruit Hut beverages, Hyderabad.

The committee approved the proposal for procurement of mobile tender coconut water dispensing unit from M/s. Fruit Hut beverages, Hyderabad at a total cost of Rs60,000/- as the firm is the sole manufacturer for the equipment in India

## f. 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. A lot of persuasion was required for taking up integrated nutrient management practices instead of organic cultivation. Hence there was some delay in implementation. Taking into consideration the points mentioned by the Secretary District Panchayat, the PAC extended the project period up to 31<sup>st</sup> March 2009.

### g. Production of root (wilt) resistant / tolerant coconut seedlings for root (wilt) disease prevalent tracts" submitted by the CPCRI, R.S Kayamkulam, Extension of project period

Considering the delay in commencement of the programme, the PAC ratified the action taken for extension of project period up to 18.07.2009 so as to complete the committed technical programme of the project.

PAC members / experts appreciated the perceptible improvement in the documentation and presentation of the proposals put up to the PAC by the TMOC cell.

Finally, Chairman thanked the PAC members and experts for their guidance and cooperation in completing the appraisal / approval of the agenda items. The meeting came to an end by 4.30 P.M.

Sd/ Chief Coconut Development Officer. Member Secretary (PAC)

## $29^{\text{th}}$ Meeting of PAC of TMOC on $9^{\text{th}}$ February 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. T. Vilasachandran General Manager (Tech), Investment Credit Department, 3rd Floor, B Wing, NABARD, Plot No. C –24, G Block, Badra -KurIa Complex, Post Box No.8121, Bombay - 400 051
	Shri. Thangaraj, Asst. Agricultural Marketing Adviser, DMI, Kochi, 6 <sup>th</sup> floor, A Block, Agmark, Kendriya Bhavan, Kakkand Representative of
3	Asst. Agricultural Marketing Adviser to Gol,DMI,GoI,Faridabad-121 001
4	Shri M Thomas Mathew, Chief Coconut Development Officer & Member Secretary, PAC Coconut Development Board, Kochi – 11
В	EXPERTS
5	Dr. M. Aravindakshan, Chairman, CDB (Retd.), 17 / 794, Green Park, Thiruvambadi P.O, Thrissur-680 022
6	Dr. R. Samiyappan, Director, Centre for Plant Protection Studies, TNAU, Coimbatore – 641 003
C	OTHERS
7	Dr. K. Muralidharan, Director, Coconut Development Board, Kochi
8	Shri. A.N. Muraleedharan Achari, Secretary, Coconut Development Board, Kochi
9	Dr. P. T. Thomas , Deputy Director, Marketing, Coconut Development Board, Kochi
10	Dr. Remany Gopalakrishnan, Deputy Director (Dev), Coconut Development Board, Kochi
11	Shri Sreekumar Poduval, Jr. Processing Engineer, Coconut Development Board
12	Shri. R. Jnanadevan, Assistant Director (TMOC), Coconut Development Board, Kochi

### Proceedings of the 30<sup>th</sup> meeting of PAC of Technology Mission on Coconut held at Kochi on 25<sup>th</sup> May 2009

The 30<sup>th</sup> meeting of the Project Approval Committee (PAC) on Technology Mission on Coconut was held at the Board Room of Coconut Development Board, Kochi on 25<sup>th</sup> May 2009 at 10.00 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. Rajmohan, Head Dept. of Plant Biotechnology, College of Agriculture, Vellayani, Trivandrum attended the PAC as Expert Members. Dr.S. Rajan, Assistant Director General (Plantation crops), ICAR, New Delhi, Dr. T. Vilasachandran, General Manager (Tech), NABARD, 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 29th Project Approval Committee Meeting held on 09.02.2009

The Committee approved the proceedings of the 29<sup>th</sup> PAC Meeting

#### AGENDA No. 2: Action taken report of the 29th PAC Meeting

The committee perused the action taken on the decision of the 29<sup>th</sup> meeting of the PAC. The committee while reviewing the action taken report noted that implementation of the project sanctioned under emergent requirements for immediate control of pest in Maharashtra / Tamil Nadu is being delayed. There is no point in sanctioning projects unless quick action is taken by the State Govt. to implement the projects on a war footing.

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

#### VI. PEST AND DISEASE MANAGEMENT

23. Scaling up the production of planting material from coconut root (wilt) disease resistant palms through plumule culture. – Dr.Anitha Karun, Principal Scientist (Horticulture Biotechnology) at a total cost of Rs. 68.954 lakhs

The project was submitted by Horticulture Biotechnology division, CPCRI, Kasaragod & presented by the Dr.Anitha Karun, Principal investigator. The objective of the project is- a) to refine the coconut plumular culture protocol for achieving higher multiplication rate, b) to study the seasonal variation for plantlet recovery and ex vitro establishment, c) enhancing production of coconut seedlings from root (wilt) disease resistant varieties through plumule culture for distribution among farmers and d) establishing seed gardens and to study the genetic uniformity among the plumule culture derived plantlets through molecular markers.

The committee was unanimous in their opinion that break through in plumule culture would pave way for large scale multiplication of promising / released varieties and cultivars such as Kalyani coconut1, Gouthami Ganga, Kera Keralam, Kera Bastar, Kahi Kuchi Hybrid 1, Kerachandra etc. and this should be the main focus area. Further additional protocol like early germination, draught tolerance etc. may also be assessed. PAC also felt that SRF (2) and JRF (1) should be a consolidated salary and the project period should be for three years. Accordingly the PI was requested to revise the project and resubmit. The committee authorized the Chairman to approve the revised proposal.

# 24. Technologies for farm mechanization and processing for higher income generation from coconut - Dr. T. Vidhan Singh, Senior Scientist (Farm Machinery & Power) Central Plantation Crops Research Institute, Kasaragod, at a total cost of Rs. 97.539 lakhs

The joint consultative meeting of ICAR with CDB held on 17<sup>th</sup> March 2009 at ICAR identified, among other aspects, mechanization as a priority area in research programme of CPCRI and decided to explore the possibility of development of climbing and spraying devises using the plat form model available for mango harvesting and boom sprayers. It is also decided to scale up the prototype developed by CPCRI for solar drying of copra, tractor operated basin opener etc. Accordingly a project was prepared and presented by Dr. T.Vidhan Singh, Senior Scientist, CPCRI. The objective were to commercialize coconut basin opener, tractor operated post pole digger, solar tunnel dryer and shell fired copra drier through large scale demonstration at a total cost of Rs.97.54 lakh (Revised).

The committee was of the opinion that the main objective is only demonstration of the prototype developed. The cost involved is exorbitantly high. Modification / scaling up of the

models already developed has not been included. The PI has not presented the project in detail with photographs, drawings, advantages etc. The members suggested that CDB may initially test the prototypes developed in the identified coconut clusters and if found suitable for commercial exploitation the same could be mass produced and demonstrated on a large scale. It is also noted that the model developed by Konkon Krishi Vidhyalaya, Dapoli, Maharashtra for a tractor mounted ladder for harvesting and plant protection operation could be considered for further modification and testing. The committee did not approve the project submitted by Dr. T.Vidhan Singh.

25. Quick Detection of root wilt diseases of coconut using molecular kit - Dr. R. Manimekalai, Scientist (Sr. Scale) Biotechnology, Central Plantation Crops Research Institute, Kasaragod, at a total cost of Rs. 66.24 lakhs

The project (revised) was submitted by CPCRI, Kasaragod and presented by the Dr. R. Manimekalai, Scientist, Principal investigator of the project. The objective of the project is development and application of molecular based detection kit for root wilt disease (phytoplasma) in coconut palms.

The total cost of the project is Rs.50.06 lakhs. Members appreciated the presentation of the project for development of a technology for screening the mother palms for the presence of phytoplasma. Once the kit is developed and tested the kit could be utilized by KVK's and farmer groups and could screen about 100 palms per day. The committee suggested that only a consolidated salary may be fixed for the SRF's and other staffs for the duration of the project. Similarly both contingencies and 10% overhead (institutional charges) should not be included. The PAC approved the project for a period of three years subject to the project being revised accordingly.

26. Production of quality planting materials for improving coconut productivity-Dr. S. Arulraj, Project Coordinator (Palms), All India Coordinated Research project on palms CPCRI, Kasaragod, at a total cost of Rs. 78.70 lakhs

The project was presented by Dr. S. Arulraj, Project Coordinator (Palms), All India Coordinated Research project on palms CPCRI, Kasaragod. The objectives of the project are a) to produce nucleus seed material of released varieties b) to establish nucleus seed gardens,

large scale multiplication of newly released coconut varieties and hybrids in different agroclimatic regions and documentation of elite palms of coconut. Mother palm selection will be carried out and production of planting material of released varieties will be taken up for the establishment of nucleus seed gardens of newly released varieties / hybrids at different AICRP on palms centers. For each cultivar, elite seed gardens will be established using the seed nuts produced through *inter se* mating. The PI has stated that 10,000 seedlings will be produced from each center by establishing nucleus seed gardens of released varieties suitable for cultivation for different states after 10 years. Duration of the project is 3 years and the estimated cost is Rs.78.70 lakhs.

The committee after detailed discussion suggested that the establishment of nucleus seed garden for multiplication of nucleus materials of high yielding varieties with high copra content and tender nut water is to be supported. However the committee suggested that the project should be revised in the following lines:

- a. The title of the project should be changed as Network project for establishment of nucleus seed garden for production of quality planting materials of promising released cultivars.
- b. The area for the nucleus seed gardens will be a minimum of 4 ha.
- c. Only two varieties recommended for each states covered by the AICRP center should be taken up in each center (2 ha. For each variety).
- d. Establishment of seed garden should be restricted to few centers. Seed gardens may be established at Bhavani (Aliyarnagar), Ambajipetta, Ratnagiri, Mondouri, DSP farm Kondagoan and Pattukottai. Hybridization programmes for production of seedlings from inter-se only to be taken up at Kasaragod center. Accordingly the costing has to be reworked for each centers.
- e. Sustainability of the project beyond the project period has to be committed by the project coordinator (palms) ICAR. A tri-party agreement should be executed by the Board with the coordinator (palms) ICAR, the State Agriculture University or the agency who provides the land for establishing seed garden so as to ensure the future maintenance of the seed garden after the project period.
- f. The budget proposed for contingencies is too high and should be revised to bare minimum.

g. The revised project incorporating the above including details of activities to be carried out by each centers ie. identification of mother palms, hybridization, collection of seed nuts, raising nursery, planting etc. with the time schedule for each activity may be submitted to Chairman, CDB Kochi at the earliest.

The committee authorized the chairman PAC to approve the revised project if it is revised on the above lines.

27. Pilot Scale Technology Demonstration on Coconut mite control in major Coconut Growing States of India. - Dr. P.S. Mukherjee, Scientist-G & Head, Advance Materials Technology Department, Institute of Minerals & Materials Technology, Bhubaneswar at a total cost of Rs. 494.78 lakhs.

The project was submitted by Institute of Minerals & Materials Technology, Bhubaneswar. This is a continuation of the study sanctioned to IMMT. Two projects were sanctioned to IMMT at a total cost of Rs.69.00 lakhs for development of a biocide and to conduct multi-locational trials to test its effectiveness. The result of the study indicate that Hyptis spray (40ml/litre per palm) with soil application of Hyptis based herbicidal manure @ 3 kg per plant was significantly superior resulting in 68.17% reduction in mite population and the surface damage of nuts due to eriophyid mite attack was reduced from 87.32% to 19.73%. On an average the level of infestation of mite has shown reduction from 75% to 22.5% after the application of biocide after 5 treatments.

The objectives of the present project are to conduct large scale demonstration covering 20 ha. contiguous mite affected area in the states of Kerala, Tamilnadu, Andhra Pradesh, Karnataka and Orissa to study of bio-efficacy of the formulated botanical biocide for controlling mite in coconut as well as on other associated pathogens, study of effect of the botanical formulations on important qualitative and quantitative traits of coconut, study of environmental stability and biosafety issue related to the formulated products, The technical programme of the study involves collection and processing of raw materials for formulation of spray formulation and herbal preparation of organic pesticidal manure and its application in the endemic areas covering 20 ha. in 5 treatments, four replications in randomized block design. The total cost of the project is Rs.4.95 crores and duration is 3 years.

The committee after detailed discussion opined that for any new biocide developed the same should be tested for its efficacy, bio safety etc. by the State Agricultural Universities or ICAR institutions before it is recommended for large scale trials in the farmers field. The cost of the project is too high to be accommodated with in the norms of the TMOC. It was finally suggested that CDB may request NSC on mite to restrict the trials to 2 hectares in each location through a network programme involving the State Agricultural Universities. The biocide formulation may be supplied by the PI of the project at IIMT, Bhubaneswar for which support could be extended under TMOC.

## VII. a) DEVELOPMENT OF TECHNOLOGY FOR PROCESSING AND PRODUCT DIVERSIFICATION

28. Virgin Coconut Oil – A Functional Food to Control HIV / AIDS - Dr. A Jyothi, Professor Dept. of Home Sciences, Sri Padmavathi Mahila Visvavidyalayam, Tirupati, Andhra Pradesh at a total cost of Rs. 13.50 lakhs.

The project was submitted by Sri Padmavathi Mahila Visvavidyalayam, Tirupati. The objectives of the project are to formulate and develop a functional food by using extracted virgin coconut oil, to estimate the composition and lipid profiles of the developed product and to see the effect of developed functional food on PLWHA. (People living with HIV / AIDS).

The committee after detailed discussion opined that such studies should be taken up by competent medical professionals rather than food technologist. The project was rejected.

## VIII.b) ADOPTION OF TECHNOLOGY FOR PROCESSING AND PRODUCT DIVERSIFICATION

29. Establishment of Activated Carbon Manufacturing Unit - M/s. ABI Technochem (P) Ltd., No.145/4, Ettayapuram Road, Tuticorin at a total cost of Rs.266.00 lakhs

The project was submitted by M/s. ABI Technochem (P) Ltd., Tuticorin. The project was presented by the promoter before the PAC. The objective of the project is to set up an activated carbon production unit from coconut shell with a capacity to produce 1200 MT of activated carbon per year through steam activation process.

The committee after detailed discussion approved the project and sanctioned 25% of the project cost limited to a maximum of Rs.50.00 lakes subject to the following conditions:

- 1. Cost estimate for the building is too high compared to its capacity, which should be revised as per the actual requirement.
- 2. Documentary evidence to be produced for assured raw material supply and marketing of finished product.

## 30. Setting up of Copra Production Unit- Dr. S.N.Misra, Goa Coconut Products, Flat No.F1/D, Bansai Plaza, Bansai-Kakoda, Curchorem, Goa at a total cost of Rs. 19.252 lakhs

The project was submitted by Goa Coconut Products, Bansai Plaza, Bansai-Kakoda, Curchorem, Goa. The promoter proposes to set up a Copra manufacturing unit with a capacity to process 10,000 nuts per day and market the product to Marico Industry for production of Parachute Coconut Oil.

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.4.213 lakhs.

Components	Project Cost ( Rs. in lakhs)	Eligible cost ( Rs. in lakhs)	Eligible subsidy ( Rs. in lakhs)
Land including Registration and Rent( On lease from IDC,Goa)	2.50	2.40	
Building	13.03	9.60	2.400
Machinery and Equipment	6.252	6.252	1.563
Consulting feeds, Furniture & Fixture, License fees, Know-how expenses etc.	1.00	1.00	0.250
Working Capital Margin	2.00		
Working Capital	10.00		
TOTAL	34.782	19.252	4.213

## 31. Setting up of Coconut Artistic Complex- Shri K.R.Sanchu, Jupiter Enterprises, N.H.Junction, Vayalar, Pattanakkad.P.O., Cherthala, Alappuzha District at a total cost of Rs.13.77 lakhs

The project was submitted by Jupiter Enterprises, N.H. Junction, Vayalar, Pattanakkad. The objective of the project is to set up a modern Coconut Workshop-cum-Training Centre, installing advanced machineries for carving and manufacture of utility items, furniture, interior decorative items, building materials etc. based on coconut wood and shell and to market the finished products so as to popularize the use of coconut wood and shell based items.

The committee after detailed discussion approved the project and decided to extend 50% of eligible cost as back ended capital subsidy to the unit limited to maximum of Rs.6.885 lakhs. The committee also suggested that the cost of own land proposed in the project need not be considered for grant of subsidy.

Components	Project Cost ( Rs. in lakhs)	Eligible cost ( Rs. in lakhs)	Eligible subsidy ( Rs. in lakhs)
Land 5 cents @ Rs.1 lakh	5.00		( "" " "")
Plant and Machineries	5.40	5.40	2.70
Building & Civil works(1000 sq ft)	3.87	3.87	1.935
Electrical Fittings & generator	2.00	2.00	1.00
Furniture & Fixtures	1.50	1.50	0.750
Preliminary & Preoperative Expenses	1.00	1.00	0.50
Working Capital	1.00	-	-
TOTAL	19.77	13.77	6.885

**32.** Establishment of Coconut Oil unit - M/s. Modern Oil Mills, Kozhikkattiri.P.O., Palakkad at a total cost of Rs. 20.90 lakhs

The project was submitted by M/s. Modern Oil Mills, Kozhikkattiri. P.O. Palakkad. The objective of the project is to set up a coconut processing unit with a capacity to process 10,000 nuts per day into multi-filtered branded coconut oil with Agmark standard.

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.5.225 lakhs subject to the unit taking up branding, packaging and obtaining agmark certification.

Components	Project Cost ( Rs. in lakhs)	Eligible cost ( Rs. in lakhs)	Eligible subsidy
			( Rs. in lakhs)
Land and Land Development (10	2.20	2.10	0.525
cents)			
Building & Other Civil Works	5.00	5.00	1.25
91200 sq ft)			
Plant &Machinery	13.40	13.40	3.35
Furniture & Office Equipments	0.20	0.20	0.05
Preliminary & Pre-operative Expenses	0.20	0.20	0.05
Working Capital Margin	1.50		
Total	22.50	20.90	5.225

33. Setting up of a Demonstration Plant for Coconut Milk Extraction, Processing and Packing in Tetra Pack- M/s. Nadukkara Agro Processing Co. Ltd., Nadukkara, Avoly.P.O., Muvattupuzha at a total cost of Rs. 1356.50 lakhs

The project was submitted by M/s. Nadukkara Agro Processing Co. Ltd., Muvattupuzha. The objective of the project is to set up a Demonstration plant for extraction, sterilization and Aseptic packing of Coconut milk in Tetrapak packages.

The committee after detailed discussion suggested that in the first phase the project should be for standardization of process for extraction and preservation of coconut in tetra pack under aseptic conditions. In the second phase demonstration cum pilot plant could be setup. Finally the NAPCL should commercialize the product and bring to the market. Accordingly the project may be revised and costs reworked and submitted to Chairman. The

PAC authorized the Chairman PAC to approve the revised project if it is submitted in conformity with recommendation of PAC.

34. Construction of Godown for the production of Ball Copra Construction of Godown for the production of Ball Copra- Smt.A Rukmini Devi, W/o.Sita Rama Raju, Kesanapalli, Malikipuram, Mandal, (Via)Sivakodu, Andhra Pradesh at a total cost of Rs.10.60 lakhs

The project was submitted by Smt.A Rukmini Devi, W/o.Sita Rama Raju, Kesanapalli, Malikipuram, Mandal, (Via) Sivakodu, Andhra Pradesh. The objective of the project is production of Ball Copra and storage.

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.2.65 lakhs as per the norms of TMOC since the facility would bring the value addition and better prices for coconut at the community level.

Components	<b>Project Cost</b>	Eligible cost	Eligible subsidy (in
	(in Rs.)	(in Rs.)	Rs.)
Ground Floor	5,60,000.00	5,60,000.00	1,40,000.00
!st Floor	3,00,000.00	3,00,000.00	75,000.00
2nd Floor	2,00,000.00	2,00,000.00	50,000.00
Total	10,60,000.00	10,60,000.00	2,65,000.00

35. Setting up of Desiccated Coconut Industry Setting up of Desiccated Coconut Industry - M/s. Vaishnavi Co-co Foods, By Pass Road, Huchanahatti, Halepalya Post, Tiptur, Tumkur Dt. Karnataka at a total cost of Rs.56.57 lakhs

The project was submitted by M/s. Vaishnavi Co-co Foods, Huchanahatti, Halepalya Post, Tiptur. The objective of the unit is to manufacture Desiccated Coconut Powder which is a fast moving consumable product.

The committee after detailed discussion approved the project and decided to extend 25% of eligible cost as back ended capital subsidy to the unit. The committee also suggested that the CDB may have a re-look the cost and area of the building proposed in the project and limit the subsidy for building to the maximum necessary level.

36. Setting up of "Desiccated Coconut Powder Manufacturing Unit" - M/s. Sarvashakthi Agro Products, S.No.202/3, Kenjoor Village, Udupi, Karnataka at a total cost of Rs.117.37 lakhs

The project was submitted by M/s. Sarvashakthi Agro Products, Kenjoor Village, Udupi. The objective of the project is to set up a Desiccated coconut powder producing unit with a capacity to process 60,000 nuts per day.

The committee after detailed discussion observed that the projected capacity of the unit is too high. The budget proposed for the building is on the higher side which is also to be revised based on the actual requirements. As such the PAC suggested that the promoter should consultant a specialist in the field to assess the technical / financial feasibility and revise the project accordingly. PAC also authorized the Chairman to approve the revised project if it is inconformity with TMOC norms.

37. 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., Muplliyam Village, Mukundpuram Taluk, Thrissur at a total cost of Rs.35.304 lakhs

The project was submitted by the Inchakundu Service Co-operative Bank Ltd. No.R.197, Inchakundu, Thrissur. The objective of the project is procurement of fully mature coconut and quality copra directly from the farmers and manufacturing, quality copra and edible grade quality branded coconut oil and market the products in bulk and small packs in brand name.

The committee deferred the project for the time being since the capacity of the unit is very low to be viable. The committee suggested that the promoter may be asked to scale up the capacity to a minimum of 10,000 nuts per day. The cost of the building proposed is also

on the higher side. This should be revised to the minimum required and resubmitted for consideration of PAC.

### 38. 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 procurement of coconut conversion of coconut into copra, procurement of copra, manufacturing of coconut oil and marketing coconut oil and cake.

The committee observed that the cost of building & machinery are on the higher side. The committee also suggested that the modern driers should be used for quality copra production. The committee suggested that CDB may work out the realistic requirement for building and civil works and limit the subsidy to that extent. The existing drying yard need not be included for grant of subsidy. The project may be approved subject to revision of costing as above. Packed branded Agmark oil only should be marketed by the unit.

## 39. Setting up of Coconut Oil Processing unit - M/s. AMS Group, D/No.6/29-C,AMS Complex, Thirithala Road, Nhangattiry P.O. Pattambi at a total cost of Rs.279.487 lakhs

The project was submitted by M/s. AMS Group, Nhangattiry, Pattambi. The objective of the project is procurement of coconut conversion of coconut into copra, procurement of copra, manufacturing of coconut oil and marketing coconut oil and cake and also undertake crushing of copra from Government Agencies.

The committee opined that the cost of land & land development; building is on higher side. The project may be revised based on realistic terms and resubmitted. CDB may limit the assistance for buildings and civil works to the essential minimum. PAC authorized the Chairman to approve the revised project.

**40.** Setting up of Coconut Oil Processing unit - M/s.Rare Industries, Manipuram.P.O., Muthambalam, Koduvally, Kozhikode District at a total cost of Rs.66.132 lakhs

The project was submitted by M/s.Rare Industries, Manipuram, Kozhikode. The objective of the project is procurement of coconut conversion of coconut into copra, procurement of copra, manufacturing of coconut oil and marketing coconut oil and cake. The promoter informed that nearly 1600 shops in Idukki district is identified for marketing the oil.

The committee pointed out that the lease period of the land should be minimum 15 years. The assistance by CDB for building and civil work should be minimum as per norms developed. The unit should produce and market packed branded oil with Agmark certification. Subject to the above PAC authorized the Chairman to approve the project.

41. Setting up of "Coconut Processing unit & Coconut Shell Charcoal manufacturing unit - Smt. S.Janaki, W/o. Shri C. Syam Prasath, Thiru Kumaran Enterprises, V.G.Pudur, Annapatti.P.O., Udumelpet, Coimbatore at a total cost of Rs.80.926 lakhs

The project was submitted by Thiru Kumaran Enterprises, V.G.Pudur, Annapatti. The objective of the project is manufacturing of Coconut shell charcoal and Copra.

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

- 1. Drying yard with area of 7000 sq. ft., labour cost, quarters etc. to be excluded.
- 2. Shell charcoal unit should be separated from edible components and copra production unit.

#### **OTHER ITEMS**

1. Revision of components wise scale of assistance for to Co-operative Societies and other Govt. Agencies under Market Promotion activities.

The committee approved the revised guidelines as detailed below:

Component	Govt. of Agencies & Co- operatives	Private Entrepreneurs (Scale of assistance)
Brand publicity through electronic media including website	100% of the expenditure incurred limited to Rs.12.50 lakh	50% of the expenditure incurred limited to Rs.5.00 lakh
Brand publicity through print Media.	100% of the expenditure incurred limited to Rs.10.00	50% of the expenditure incurred limited to Rs.5.00 lakh.
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Parlours, Kiosks, Ware house,	100% of the expenditure	50% of the expenditure incurred
etc.	incurred limited to Rs.10.00	limited to Rs.3.00 lakh
	lakh.	
Undertaking activities like	100% of the expenditure	50% of the expenditure incurred
buyer-seller meet, exchange of	incurred limited to 10.00	limited to Rs.3.00 lakh
delegations, Participation of	lakh	
Exhibitions/Fairs/ Melas etc		
Printing of Leaflets, Pamphlets,	100% of the expenditure	50% of the expenditure incurred
Brochures, Posters, etc.	incurred limited to Rs.10.00	limited to Rs.5.00 lakh
	lakh.	
Developing/hiring of display	100% of the expenditure	50% of the expenditure incurred
facilities in major food chain	incurred limited to Rs-	limited to Rs.3.00 lakh
market for a minimum period of	10.00lakh	
3 years		
Transportation Vehicles only	50% of the cost limited to	50% of the cost limited to
goods vehicles / New Cargo	Rs.1.00 lakh	Rs.1.00 lakh
Display of coconut products at	100% of the expenditure	50% of the expenditure incurred
Air Ports/Railway Stations	incurred limited to Rs.10.00	limited to Rs.3.00 lakh
Exaction of boardings	lakh	500/ of the average diturn in averaged
Erection of hoardings	100% of the expenditure incurred limited to Rs.10.00	50% of the expenditure incurred
	lakh	limited to Rs.5.00 lakh

The committee also suggested that the assistance for transportation vehicle should be sanctioned on selective basis after assessing the actual requirements & turn over of the unit etc.

### 2. Proposal for extension of project period for "Establishment of Biological Control Laboratory" at Regional Office, CDB, Bangalore

The PAC approved the proposal to extend the project for two more years with a financial outlay of Rs.7 lakhs and production target of 25 lakh parasites per annum. Further, release of 1st quarter fund (Rs.76,441/-) effected for continuing the production of parasites during 2009-10 was also ratified.

3. Extension of time for implementation of the Market Promotion Programme of the Velco Brand Coconut Products promoted by M/s. Vellur Service Co-operative Bank Ltd. No.R 3971, Vellur P.O., Kannur

The PAC approved the proposal to extend the project time up to 31.3.2010 for implementing the market promotion programme in full as envisaged.

4. Extension of time for implementation of the Market Promotion Programme of coconut products manufactured and marketed by M/s.Sevashram, Angamaly, Ernakulam.

The PAC ratified the proposal to extend the project time up to 31<sup>st</sup> December 2009 and to include hoarding also in the approved components of market promotion.

5. Extension of time for implementation of the Market Promotion Programme of the Neethi Brand Coconut Products promoted by M/s.Karalam Service Co-operative Bank Ltd. No.600, Thanissery, Thrissur.

The PAC approved the proposal to extend the project time up to 31.3.2010 for implementation of the project in full as envisaged.

6. Extension of time for implementation of the Market Promotion Programme of coconut products manufactured and marketed by M/s.St.Mary's Oil Industries, Muvattupuzha.

The PAC approved the proposal to extend time up to 31.3.2010 from the date of expiry of the project period.

7. Waiving of component-wise ceiling of eligibility for reimbursement of market promotion assistance to M/s. Jaimatha Estate, Monippally, Kottayam.

The PAC approved the proposal for relaxing the component wise ceiling on printing of leaflets brochures etc. by the unit and reimburses 50% of the expenditure incurred for the component under the approved revised guidelines as market promotion assistance.

8. The Project "Setting up of Quality control Laboratory attached to the Coconut Development Board," Regional office, Bangalore

The committee perused the recommendations & justifications furnished by the Internal Screening Committee of Technology Mission on coconut and after discussion suggested that the laboratory may be continued for one more year as a service to the coconut processing industry in the region. Competent personnel may be engaged for running the laboratory. Efforts should be

strengthened to analyze more number of samples of Desiccated Coconut, Copra, oil etc. etc. through enrolling additional processing units established in Karnataka, Goa etc. Microbiological parameters can be tested at Quality control Laboratory, Vazhakulam.

9. Proposal for extension of project period for "Multilocational Technology Demonstration on Coconut Mite Control in Coconut Growing States -sanctioned to Institute of Minerals & Materials Technology [Regional Research Laboratory, C.S.I.R), Bhubanewar

The PAC approved the proposal for extension of the project period up to 31.05.2009 with out incurring any additional expenditure.

10. Proposal for additional fund requirement for the period April 2009-March 2011 for Quality Testing Laboratory, CDB at Vazhakulam

The PAC approved the proposal in principle. The expenditure on individual components should be incurred only after the recommendation of Technical Advisory Committee. The committee suggested that the revenue of the lab should be improved so as to run the lab on sustainable basis as far as possible after 2 years.

11. Allocation of fund for the year 2009-10 – Modernisation of coconut Processing and Value addition by the introduction of Modern Copra Dryers.

The PAC approved the proposal for allocation of funds for modern copra driers at a total cost of Rs.20.00 lakhs for 2009-10.

The PAC also suggested that the TMOC cell of CDB may work out the realistic requirement of buildings and civil work and costing for the same. This may be included in the model projects already prepared and should form the basis for recommending subsidy under the component.

The meeting came to an end by 6.00 P.M.

### $30^{th}$ Meeting of PAC of TMOC on $25^{th}$ May 2009 at Kerabhavan, Kochi

#### **List of Participants**

Sl. No.	Name and address
A	MEMBERS
	Smt. Minnie Mathew, IAS,
1	Chairman, Coconut Development Board, Kochi – 11
2	DrS. Rajan, Assistant Director General (Plantation crops), Indian Council of Agriculture Research (ICAR), Krishi Anusandhan Bhavan –II,
	Pusa Krishi Bhavan, New Delhi-110 012
3	Dr. T. Vilasachandran General Manager (Tech), 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 M Thomas Mathew, Chief Coconut Development Officer & Member Secretary, PAC Coconut Development Board, Kochi – 11
В	EXPERTS
5	Dr. M. Aravindakshan, Chairman, CDB (Retd.), 17 / 794, Green Park, Thiruvambadi P.O, Thrissur-680 022
6	Dr. A.N.Srivatsa, Retd. Scientist, 411, A & B Block, Navilu Road, Kuvempu Nagar, Mysore – 570 023.
7	Dr.Rajmohan, Head Dept. of Plant Biotechnology College of Agriculture, Vellayani, Trivandrum
C	OTHERS
8	Dr. S. Arulraj, Project Coordinator (Palms), All India Coordinated Research project on palms CPCRI, Kasaragod
9	Dr. K. Muralidharan, Director, Coconut Development Board, Kochi
10	Shri. A.N. Muraleedharan Achari, Secretary, Coconut Development Board, Kochi
11	Shri Sreekumar Poduval, Jr. Processing Engineer, Coconut Development Board
12	Shri. R. Jnanadevan, Assistant Director (TMOC), Coconut Development Board, Kochi