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Oil Palm in FOCUS

An e-Newsletter from the Society for Promotion of Oil Palm Research and Development (SOPOPRAD)

President Speaks

I am very happy to bring out this first issue of the newsletter *Oil palm in FOCUS* , the long felt need of the Society for Promotion of Oil Palm Research and Development (SOPOPRAD) which was founded in 1996 under my guidance when I was the Director of NRC for oil palm, Pedavegi, Andhra Pradesh.

This society has members drawn from farmers, scientists, department officers implementing the oil palm development projects, processors and their officers, involved in promoting oil palm cultivation and development. The purpose of the newsletter is to invite them to a common platform to discuss, exchange ideas, share knowledge and disseminate the information through seminars, symposia, conferences and interactive workshops. The ICAR- IIOPR, Pedavegi, Andhra Pradesh, the National Research Institute in the country and its Research Centre at Palode (Kerala), besides four centres of All India Co-ordinted Research Project on Palms functioning at Vijayarai, (Andhra Pradesh), Gangavathi (Karnataka), Mulde (Maharastra) and Pattukottai (Tamil Nadu) are addressing the problems in finding solutions arising out of oil palm cultivation aspects. The society as on date has 17 Patrons and 285 life members. It is also proposed to institute a series of awards for best farmers, processors, scientists and extension personals etc.

This Newsletter to be brought out at quarterly intervals for the benefit of farmers is to serve as a link with processors and all members involved in oil palm research and development.

Since the year 1983, when the concept of irrigated oil palm as a small holders crop was proposed by me and planted in the farmers' field as a new crop to the region, during 1987 in Andhra Pradesh, I was closely associated with oil palm development in the country. Foreign experts including those of FAO had expressed their apprehension about the success of this venture considering the high temperatures, low seasonal rainfall and humidity etc. *Nevertheless*, we proved that oil palm can be successfully grown as an irrigated crop in the country. ***Today's' success story of performance of the crop stands testimony for the right decisions taken in the formative years***.

The Government of India acknowled the success story and high oil yield potential of oil palm and included the crop in Technology Mission on Oilseeds way back in 1986 and Oil Palm Development Project (OPDP) in 1990. Our concerted efforts in the R&D of oil palm bore fruits in bringing out 3,31,000 ha oil palm cultivation in 16 states, harvested 16 lakhs tons of FFB and processed by setting

up of 26 processing units of big and small to produce about 3,00,000 tons of crude palm oil and 0.3 lakh ton of crude palm kernel oil as on 2018-19. Oil palm has really made a social impact in the rural and semi urban areas. We have proved that under diversified soil and climatic conditions, oil palm can be successfully grown to harvest **20 to 30 tons FFB** yield per ha per year and highest yield realized being **50 t FFB per ha per year.** Being a wider spaced crop, for effective utilization of interspaces in oil palm at different stages of its growth for additional economic returns to the farmer, intercropping, mixed cropping, multiple cropping and mixed farming system models have been developed and farmers are adopting the same.

The identified companies who promote the oil palm cultivation in selected zones, provide technical guidance in selection of land, supply of seedlings and provide advise on crop management aspects for better growth performance of the crop; establish processing facilities; set up collection centers for FFB in respective zones; make payment through bank account of the farmer (15 days) on the FFB price fixed by Price Fixation Committee set up by respective state governments. Our expectation on area expansion has not moved fast due to obvious reasons of which price fall of FFB is also one of the major issue.

Now, we have to plan and move at a faster pace considering the ever increasing vegetable oil import bill of the country of which palm oil is a major commodity; and address issues related to minimum support price for FFB; drip irrigation subsidy; promoting cluster farming approach; establishing harvesting clubs for FFB with modern harvesting tools; illegal inter-zone transport of FFB violating established norms; activating Project Management Committee (PMC); strict enforcement of Oil Palm Act; allowing to import of planting material of high yielding teneras to meet the requirements etc. which will go a long way in faster development of oil palm cultivation in the country..

When we have made Green Revolution and White Revolution successful, it is not difficult to make vegetable oil revolution a success for which *on the platform laid out so far,* a right structure should be built up as that of NDDB.

This Newsletter will give guidelines to all to increase area, production, productivity, processing and byproduct utilization besides cultivation tips, calendar of operations, research findings, answering farmers questions, success stories etc.

I take this opportunity to thank all the members for their kind cooperation and support extended to nurture the Society. I also invite suggestions and opinions to make the Newsletter more informative and vibrant. I look forward to a greater support from all concerned in the years to come to achieve the goal of producing more palm oil to increase the vegetable oil pool of the country and make oil palm farmers happy by doubling the income.

Dr. P. Rethinam
President , SOPOPRAD

Dr.R.K.Mathur

Director, ICAR-IIOPR &Vice President, Pedavegi

The oil palm research and development has come a long way since first commercial plantation during 1987-90 onwards. It was during VIII Five Year Plan period during which Indian Council of Agricultural Research established National Research Centre for Oil Palm (NRCOP) at Pedavegi, Andhra Pradesh on February 19, 1995 to strengthen the research on all aspects of oil palm under irrigated conditions. Later during April 1999, the CPCRI Research Centre at Palode (Kerala) was merged with NRCOP. During XI plan, NRCOP was upgraded as Directorate of Oil Palm Research (DOPR) with the transfer of six AICRP (Oil Palm) centres to evolve location specific technologies for oil palm. DOPR was later further upgraded as ICAR-Indian Institute of Oil Palm Research (ICAR-IIOPR) during XII Plan. The concerted efforts of scientists of the institute in developing a number of technologies for irrigated oil palm and working hands in glow with the line departments and processing units resulted in the present shape of oil palm development programme at national levels.

Further, to cater to the location specific requirements of the crop, five AICRP centres were established in different States namely: Pattukottai (Tamil Nadu), Gangavathi (Karnataka), Mulde (Maharashtra), Pasighat (Arunachal Pradesh) and Vijayarai (Andhra Pradesh). ICAR-IIOPR is offering the required technical support for the implementation of research programmes at these centres.

Important Technologies developed by ICAR-IIOPR for the benefit of oil palm growers and other stake holders

- Technology for Oil Palm hybrid seed production was developed to produce superior quality tenera hybrid seeds by hybridizing dura mother palm with pisifera pollen. The technology has been adopted at national level for indigenous hybrid seed production by public and private sector seed gardens.
- Three high yielding oil palm varieties viz., Godavari Swarna (NRCOP-4), Godavari Ratna (NRCOP-2) and Godavari Gold (NRCOP-17) recommended for cultivation in Andhra Pradesh & Telangana, Maharashtra and Tamil Nadu respectively by AICRP (Palms) workshop were identified for release at State/Central level.
- Integrated use of bio-fertilizers with 25% of recommended dose of chemical fertilizers is recommended for commercial application in oil palm nurseries in India. POME sludge @10 per cent in potting mixture can be an ideal substitute for chemical fertilizers and the same is recommended for commercial oil palm nurseries in improving the growth and vigour of oil palm seedlings.
- Fertigation with NPK @ 600:300:600 g/palm/year at monthly intervals coupled with irrigation based on potential evapotranspiration (PET) is recommended for higher FFB yield (25% increase) over recommended dose. It can reduce fertilizer costs from ₹ 9633 to ₹ 4664 per hectare. Adoption of fertigation at monthly intervals also reduced application cost, minimum operational hazard, less soil compaction, reduced weeding cost and increased nutrient use efficiency to an extent of 75%.
- Diagnosis and Recommendation Integrated System (DRIS) norms and optimum leaf nutrients concentration of oil palm plantations in states of Karnataka, Gujarat, Goa, Mizoram, Tamil Nadu and Andhra Pradesh have been established for routine diagnostic and advisory purpose for balanced utilization of fertilizer.
- Application of *Isaria fumosorosea* fungus (strain of NBAIR, Bengaluru) proved effective in managing Rugose Spiralling Whitefly at a spore concentration of 130 x 104. So far, 1150 litres of mother culture of

Isariafumosorosea and 3000 litres of commercial formulation were supplied to oil palm growers (for an area of 30,400 ha) in Andhra Pradesh, Telangana and Karnataka for controlling this pest.

- An oil palm trunk chipping bucket was designed and fabricated and a trial was conducted in ICAR-IIOPR, Pedavegi. A total time of 5.47 min. is required (including felling time of 4.53 sec) for complete fragmentation of 6-7 m palm.
- Techniques developed for decomposition and nutrient recycling of biomass which could reduce 50 % of inorganic fertilizers in oil palm plantations. This is being followed in 0.50 lakh ha in different oil palm growing states like Andhra Pradesh, Telangana and Karnataka.
- Standardized different oil palm based cropping systems (oil palm-cocoa, oil palm-red ginger, oil palm-heliconia, oil palm-bush pepper, oil palm-banana, oil palm-ornamental crops) in mature plantations with cost benefit ratio of 1:2.38 to 1:2.86. It is being followed in 1.00 lakh ha in oil palm growing States of India.
- Developed most suitable and profitable oil palm based integrated farming system with fodder crops, dairy and backyard poultry. Higher cost benefit ratio was achieved through mixed farming system (1:3.28) when compared with the sole crop of oil palm (1:2.90) and a farmer can earn an additional income of ₹ 60,000/ha/year from the system.
- The institute has been involved in development of mobile apps, short videos on production technologies in coordination to reach the farmers and other stakeholders involved in oil palm.
- **Development of Mobile apps (available in Google Play Store):**
  - Four mobile apps (in Hindi, English & Telugu languages) on OilPalm - i) Cultivation Practices, ii) Nutrient Management, iii) Pest Management and iv) Disease Management were developed.
  - One mobile app titled "Oil Palm Crop Doctor" has been developed which is interactive one; query can be raised as text messaging or through audio, video or photo.
  - Three static android mobile apps on Water requirement for oil palm in Andhra Pradesh, Karnataka and Tamil Nadu were developed. With the help of this App, oil palm farmers can calculate the amount of water to be given to their plantations for a particular day or week or month (litres/palm/day).
- **Mobile voice/SMS services:** Ninety two contents on oil palm production technologies were developed for text and voice message; The service is continuing to reach oil palm farmers in the country in various languages viz., English, Hindi, Telugu, Kannada and Tamil.
- **Development of video clippings on oil palm production technologies (placed in YouTube)**

Title of Short Video on Oil Palm	YouTube Link	Duration (M:S)
Irrigation Management in Oil palm	https://youtu.be/SUHUhvQcdDQ	2:31
Fertilizer Management in Oil palm	https://youtu.be/X1iJ8k6D42M	3:30
Pest Management in Oil palm	https://youtu.be/c1navCCwX8I	4:31
Disease Management in Oil palm	https://youtu.be/41d7asABW-4	4:51
Green manuring and Cover Crops in Oil palm	https://youtu.be/_HtkDCNLHkQ	1:34
Intercrops in Oil palm	https://youtu.be/i-xl2ntSo90	1:56
Management of Nutrient Deficiencies in Oil palm	https://youtu.be/oZS2xoPKlPc	1:51
Mulching in Oil palm	https://youtu.be/dTqwCt2GqmA	1:07

The ICAR-IIOPR also plays pivotal role in developmental aspects in coordination with DAC&FW and all stakeholders

- The institute has been involved in submitting various committee reports on identification of suitable areas for oil palm cultivation to DAC&FW, GoI from time to time. IIOPR has been involved in conducting feasibility studies for identification of new area for oil palm cultivation in different states of India viz., Andhra Pradesh, Arunachal Pradesh, Meghalaya, Telangana, Sagar and Sundarbans islands of West Bengal and Bodoland Territorial Council (BTC) of Assam etc.
- The institute is involved in offering technical inputs to Project Monitoring Committees being conducted by various oil palm growing states for effective implementation of oil palm development programmes.
- Supply of oil palm seed sprouts from oil palm seed gardens of Pedavegi and Palode to different entrepreneurs involved in oil palm development programme in the country
- Established Oil Palm seed gardens in India for catering needs of germinated seeds for oil palm expansion programme at National level with present production potential of 40 lakh sprouts per annum.
- Establishment of oil palm seed garden in Mizoram in an area of 50.00 ha with the recently identified potential palms from IIOPR and AICRP Centres.
- Institute has been involved in capacity building programmes for various stakeholders involved in oil palm development programmes at National level.

In last, I am happy that SOPOPRAD is bringing out the e-Newsletter for the benefit of all the Stakeholders who are involved in oil palm research and development as well as processing and palm oil consumers. I hope this newsletter will be very informative.

R.K.Mathur

Dr. V.M REDDY, VICE PRESIDENT, SOPOPRAD

I would like to congratulate and thank Dr. P. Rethinam, President, SOPOPRAD for his initiative to start this Newsletter. Hoping this Newsletter will form a good link among the members and help in exchanging information and ideas on oil palm in these unusual times of Lockdown and beyond. In this message I would like to share my experience during the formative years of irrigated oil palm. I am hoping my experiences will be both interesting and amusing to read.

Our first research activity was planting a G X E trial with different Hybrid combinations from ASD Costa Rica withover aged seedlings of three years old transferred from CPCRI Kasaragod maintained by Dept .of Horticulture at Pedavegi farm. Planting this experiment was unusual in that the seedlings were more than 3 years old, the leaves have to be chopped in order to transport and plant and keep them erect. Once planted and irrigated, all the leaves dried and fresh leaves came once the seedlings established. I have to mention here that oil palm was already in farmers' fields for the past 6-8 years in the nearby areas planted under DRDA Programme and were yielding. So, oil palm farmers who passed by were wondering how can a research station grow oil palm in such a way. Some farmers asked us also. Nevertheless there was almost 99% survival, came to flowering and started yielding and the highest calculated yield was 18 t FFB/ ha based on single palm data. Some palms are still standing in the field. The data generated in this experiment was useful in the crucial period, when many of the Processors were struggling for area expansion and left with over aged seedlings and some State governments were insisting not to use the aged seedlings and directing the companies to destroy them. Data from this experiment was used to support the recommendation that aged seedlings can be used to raise near normal plantations. This experiment probably saved several lakhs of rupees spent on aged seedlings on an all India basis. Another indication we got was Oil Palm responds well for proper watering and manuring even under abnormal conditions.

Oil Palm cultivation started seven years before the Research Centre at Pedavegi was started and flood irrigation by farmers with inter crops was very common. But, when we recommended drip irrigation for oil palm, the farmers would say the palm is such a big one how drip system with trickling drops of water can meet the requirements of the Palm. The same farmers after our training and demonstration and adoption by themselves accepted the fact that they cannot grow oil palm without drip irrigation under their conditions. It was satisfying to hear those words from the farmers. Now this system is being adopted by most of the farmers since they observed that the growth of oil palm is good supporting good yield at the same time saving water, which is becoming scarce.

During the initial years of establishment of NRCOP, our main activity was to bring awareness and train oil palm farmers and officials. We have trained several hundreds of farmers and officers under Trainers Training Programme funded by TMOP/UNDP. However, one unfortunate incident was that the oil palm prices went down to ₹ 1700 per ton FFB during 1998 and 1999, farmers started uprooting oil palm. To stop uprooting mixed cropping was proposed to fetch additional income to farmers. Recommendations emanated to grow different perennial crops as inter crops. However, we advised that only Cocoa can be grown in adult oil palm where sufficient light is available for the cocoa. However, farmers took up different perennial crops including cocoa and most of the crops were unremunerative and were discontinued. Even with cocoa the farmers experienced that the yields of cocoa were 1 to 1.5 kg / tree dry beans, while with cocoa in coconut, they were getting around 3 kg dry beans per tree. Once it was pointed that sufficient light is not available in young oil palm for cocoa, one unscientific advise surfaced was to cut oil palm fronds half way. At this stage we have to caution the farmers that sufficient number of leaves are also required to support high yields of about 20-25 t/ha. Fortunately, the practice of chopping the leaves was never followed by the farmers. Now, cocoa is most profitable inter crop to be grown in oil palm, as most of the plantations are 25 to 30 years old and sufficient light reaches to cocoa, resulting in good yields.

I will share more experiences and knowledge about oil palm in future. Wishing the Newsletter a long fruitful life even beyond the Lock down continuously serving for the cause of Oil Palm development in the country.

V. M. Reddy

Dr. B.N. Rao SECRETARY, SOPOPRAD

Oil palm has established as a successful crop in a number of states in the country and productivity levels of 4-6 tonnes oil per ha has been achieved by number of farmers. Oil palm is a hardy crop, easy to manage. First harvest could be done right from 4th year and doubling of farmers income is possible through inter, mixed crops and farming system practices. To increase the vegetable oil pool of the country promotion of oil palm is inevitable in view of its high productivity potential. To reduce the gap between potential and realizing yields through better planting materials and efficient management of water and nutrients would be of crucial importance. Present low level of production in certain areas is due to improper management and small holdings.

Various Expert Committees constituted by Ministry of Agriculture, Government of India have identified a total of 19.33 lakh hectares in 18 states of the country as suitable for oil palm cultivation. So far, an area of 3.31 lakh ha only has been covered under oil palm. Production of palm oil in India continues to be at a meagre level with respect to its actual requirement. Out of 24.04 million tons of total requirement of vegetable oils (2018-19), domestic availability was only 10.66 million tons, the remaining 14.98 million tons were imported

worth ₹ 74996 crore.To reduce the burden on import of vegetable oils, Oil palm Development Programme should be taken up on a Mission Mode to meet at least 1/3rd of its total requirement of vegetable oils by 2030 and 45% by 2050 so that India will have adequate, nutritious and healthy vegetable oil.

Further, in certain states where large areas are suitable for oil palm cultivation, oil palm should be declared as plantation crop. Subsidies should be extended to all plantations of oil palm irrespective of extent of area. Adequate care is to be taken to provide remunerative price to the farmers during price drop in the international market. Oil Palm Act should be enacted in the new states and modify in the existing states to achieve the targeted area and increase the production and productivity of oil palm.

While importing the planting material/ developing new hybrids, cold tolerant material should be given preference to bring larger area under oil palm in the North Eastern part of the country where good quantum of rainfall and distribution is there.

The Society for Promotion of Oil Palm Research and Development having experts on various subjects of oil palm could be utilized effectively to guide the farmers, entrepreneurs and extension functionaries in the country.

B. Narsimha Rao

Prime Minister Address 15 - May-2020 - Corona – Oil Palm

Before the end of every Lockdown period, the Hon'ble Prime Minister addresses the Nation on what is to be done next. This time out of many important issues he raised on various fronts of Country's overall development he stressed on reduced dependency, promote Swadeshi Moment towards achieving self-sufficiency leading to self-reliance. He recalled Make in India concept which he was stressing in the recent times. To my mind immediately came was fast development of Oil Palm for increasing palm oil production and reducing the dependency for vegetable oils. Oil Palm being a perennial oil yielding crop with high oil yield (4.0 to 6.0 t oil / ha /year) from third to 30 years in its life span, needs only 0.22 ha for producing one ton of oil whereas other oilseed crops need more than 2.0 ha. If only the identified potential area of about 2.0 million ha in18 states in the country is brought under Smart Oil Palm Development at a faster rate the country can produce 8.0 to 12.0 million tons of palm oil, 0.8 to 1.2 million tons of palm kernel oil, 1.0 to 1.5 million tons of palm oil Cake, besides providing lot of employment opportunities, biomass for recycling and also producing considerable quantum of electricity and above all good amount of revenue generation by way of GST. Though we started Oil Palm Development Project in 1990 with six states, now it is in 16 States in an area of 3.31 lakh ha and producing about 3.0 lakhs tons of palm oil through 26 processing units of small and big capacities. Andhra Pradesh is having the highest area followed by Karnataka.

The irrigated small holders Oil Palm had definitely made a successful entry and the farmers are getting 20 to 30 tons of FFB /ha /year (4 to 6 t palm oil/ha). The area of the Oil Palm plantation with the processing industry nearby has definitely changer the socio economic situation of that part of rural area. TODAY OIL PALM FARMERS ARE HAPPY - they dispose the Fresh Fruit Bunches (FFBs) at collection centres, the price is being deposited to the farmers' bank account directly within two weeks based on the price fixed by Price Fixation Committee every month. The one unhappy thing is that price is not remunerative.

The Hon'ble Prime Minister also said that if we determine to achieve progress we can do it. Yes, when experts from FAO and others said India cannot grow Oil Palm because the climate is not ideal and particularly rainfall is very less and needs more water for irrigation which will not be available in the long run. But we challenged and move forward and proved its successful cultivation for 30 years getting yields on par to that of Malaysia and Indonesia with optimum package of practices. We also recorded highest yield of 50 tons FFB /ha/ year by a small farmer. As a person associated with Oil Palm Research and Development right from 1982 as Project Coordinator Palms and put forth the concept of irrigated Oil Palm as well as involved in the planning,

preparation, execution, providing guidance and monitoring the small holders Oil Palm, interacting with thousands of farmers growing Oil Palm in different parts of the country, providing field level training at all levels right from farmers to officers in the initial years, and also proved the success of Oil Palm cultivation under varied agro climatic conditions of soil pH ranging from 5.5 to 8.5, maximum temperature in summer going beyond 40°C in East Coast, minimum temperature below 16°C in North East Region, low humidity in many places. I can confidently say that if we determine to increase the area under Oil Palm cultivation and there by palm oil production it will be possible provided if we eliminate certain long standing problems, impediments so that we can go fast in Oil Palm Development. Some important areas which need attention are given below:

To carry forward for the success of the project we need to address the following areas:

1. *The first and foremost thing to be settled is declaring Minimum Support Price.* As recommended by CACP ₹ 10,035/MT of FFB (pending for a long period) may be ensured. If FFB price fluctuates lower than this the differential amount may be directly paid by government to farmers. .
2. *Making drip irrigation as an integrated part of oil palm* cultivation for the entire area to be brought under oil palm as well as the existing plantation. Subsidy level to be increased to 100%. This is a must to get per drop more crop.
3. Though this project was linked with NABARD *refinancing,* the banks are still reluctant to give loan for oil palm activities.
4. Making harvest easy by setting up harvest clubs and impart training to unemployed labour; providing state-of-art harvesting tools etc and sort out the problems of labour, providing with presently available power operated as well as light weight poles. The farmers has to pay for the number of bunches harvested. The processors in that area or Oil Palm growers Association can take up this activity with trained unemployed labourers.
5. The existing subsidy up to 20 ha can further be relaxed and extended to larger areas; should be considered to bring in more farmers /area into oil palm cultivation. To start with subsidy was announced for five ha, subsequently raised to 10, 15 and now to 20 ha. This can even further relaxed to a larger area, since our aim is to produce more palm oil in the country it should be considered positively. Farmers are willing to go for more area if the government subsidy is extended to entire area. Financial Assistance for Institutional/ Private land as well as for cultivable waste lands with sufficient underground water potential to take up Oil Palm cultivation will help to bring more area under oil palm.
6. Hybrids with very high oil yield and compact hybrids to be imported for new planting/replanting as some of our promising hybrid materials recommended recently for release will take some more time for large scale seed production. Further, we must buy such superior materials for area expansion where ever our local planting materials are not adequate. Upward revision of Planting Material Assistance is also necessary to match with cost escalations by enhancing to ₹ 30,000/ha.Enhancement of Input assistance from ₹ 20,000/ha to ₹ 40,000/ha. Is also necessary as the fertilizer cost and other related agric input cost has gradually gone up.
7. **Oil Palm Act:** :Every State operating Oil Palm Development Project has the Oil Palm Act for proper regulatory measures indicating the duties and responsibilities of Farmers, Processors, Government departments by giving clear cut roles of each and penalty measures in case if they do not follow the regulations.There will be an Oil Palm Commissioners appointed by the department who is empowered to monitor regularly and take action if there are any complaints like not setting up of processing unit within he stipulated time, setting up of collection centres for FFB and making payment, operating within their zone and not procuring fruits from other Factory Zone etc.
8. Zonalisation : Oil Palm Development Project (OPDP) when it was started in 1990 it was suggested to allot the Mandals/Districts to a Processing Company selected based on their merit through advertisement and

selection and agreement was between the Government and Processor and paying a caution deposit. The Processor will buy sprouts either indigenous and/or import, raise the nursery and distribute to selected farmers after quarantine clearance. Farmer selection done by the company will be visited and approved by the officers of the Department of Agriculture/Horticulture who is implementing the Project. The company will provide all technical advice/help for growing the crop. When the crop comes to harvest the company will set up collection centres at an appropriate places and settle the payment for FFB within two weeks after collection. They help in other cultivation related activities like laying out drip system, processing for bank loan etc., and maintain good linkage with the farmers. This zonalisation has greatly helped for Oil Palm Development in the country.

9. Project Management Committee (PMC): The Project Management Committee is the High Powered Committee with Agricultural Production Commissioner of the state as the Chairman with members from State Finance Department, TMOP, Director, ICAR-IIOPR, Processors and Farmers. They meet once in six months, review the progress and Policy decision if any, to be taken.

10. Special staff at State level as it was envisaged originally a Project Director unit headed by Additional Director of Agriculture/Horticulture at State level and Asst. Director for Oil Palm in each operational district. This could help to certain extent only for achieving the desired objects.

11. Prime Minister has announced ₹ 20 lakh crores as development fund for various activities to boost. Finance Minister announced the allocation to various improvements including Agriculture. The country also spending more than ₹ 70,000 crores for vegetable oil import annually, recently it has gone up to about ₹ 77,000 crores. If only a fraction of amount of the import bill say ₹ 1000 to 1500 crore annually allocated for Oil Palm Development, it will definitely help for this SWEDESHI MOVEMENT for faster production of palm oil and to increase the vegetable oil pool of the country. (Dr. P. Rethinam)

Corona and Oil Palm

Oil Palm is the one crop which was not affected by CORONA except for the fact that regular visit to field was not done due to Lock down. Many of the farmers are getting the yields without reduction. Harvesting usually done once in 15 days and that was delayed in some areas due to manpower availability was restricted because of Lockdown.

Manure your Oil Palm

ICAR-IIOPR has prepared excellent video on manuring of oil palm, which is available at https://youtu.be/X1iJ8k6D42M. However, the dosage of 1200 g of N, 600 g P_2O_5 and 1200 g of K_2O, was originally evolved for rain fed oil palm of 15 to 18 t/ha FFB. A number of processors have increased the application of K_2Oup to 3000 g per palm per year with the justification that FFB yields of 25 to 30 t/ha and mine large amounts of K into bunches, which are not recycled in most cases. A prudent way of fertilizer application will be to evolve location specific fertilizer recommendations based on soil and leaf analysis and a number of Processors have established Soil - Leaf Analysis Laboratories.

In the next issue we will tell about fertigation – a system for effective use of water and nutrients and other productivity improvement tips.

News on Webinar on Vegetable Oils

Indian Vegetable Oil Producers Association (IVPAorganized) Global Webinar on" IS COVID A BULL OR A BEAR FOR VEG OILS? on 29th May 2020 at 2:30 pm. It was well attended. Many eminent speakers talked about oil palm and also raised some issues of the productivity not comparable with Malaysia and Indonesia. But they stressed the need to go for Oil Palm development for increasing vegetable oil pool and reduce the dependency

on import. These issues raised can be sorted out if the ground level problems are solved. We will deal this in greater detail in the next issue.

Strategy for future Oil Palm Development

As we have potential area of 2 million hectares for area development, it is highly necessary to form Oil Palm Board with full autonomous authority in similar line with Spices Board/Tobacco Board which will help in synchronization of Central & State Governments for successful implementation of the Oil Palm Project.

Palm Oil Board with special empowerment to implement Mission mode action plan for next 20 years with assured allocation of funds will definitely help in Palm Plantation Development as the existing system has got lot of limitations for timely implementation / execution of the program.

This will not only help in achieving edible oil security but also saves foreign exchequer to the tune of ₹ 77,000 crores.

- ✔ By FY 2020-40 the Area Coverage may reach – 1.75 million hectares.
- ✔ By FY 2039-40 the FFB Volumes may reach – 34.2 million metric tons.
- ✔ By FY 2039-40 the CPO Volumes may reach: 6.86 million metric tons.
- ✔ By FY 2039-40 the CPKO Volumes may reach: 0.76 million metric tons.
- ✔ By FY 2039-40 the Palm Kernel Cake Volumes may reach: 0.95 million metric tons.
- ✔ By FY 2039-40 the Biomass Volumes may reach: 9.51 million metric tons.
- ✔ By FY 2039-40 the Processing Capacities may raise: 9800Mt FFBs/hour.
- ✔ By FY 2039-40 the Anticipated revenue to Govt by way of GST : ₹ 1.74 millions.
- ✔ By FY 2039-40 the Anticipated Employment Generation may be : 1.04 million man days
- ✔ By FY 2020-40 the Cost to be incurred & Support required to cover 1.75 million hectares towards cost of Planting material/Inputs/Micro Irrigation and Othersaround : ₹ 1.69 millions.

The details are available with SOPOPRAD.

Oil Palm for Farmers' Prosperity!
Vegetable Oil Security!!.

Doubling income - Year round income

Multiple/Multi - storeyed/mixed farming

Per Drop More Crop

Reduce inorganic fertilizer use through regular Organic Cycling of biomass

Mera OIL PALM Mera Gaurav - Swadeshi movement to reduce import

MEMBERSHIP

Membership of the society is open to all individuals interested in oil palm by filling up of the following proforma and submit with appropriate membership fee.

SOCIETY FOR PROMOTION OF OIL PALM RESEARCH AND DEVELOPMENT

APPLICATION FOR MEMBERSHIP

To

The Secretary,
SOPOPRAD,
ICAR-Indian Institute of Oil Palm Research (ICAR-IIOPR),
Pedavegi - 534 450, West Godavari district
Andhra Pradesh, India. Mail: sopoprad@gmail.com

Recent Passport size Colour Photo

Dear Sir,

I may please be enrolled as a Patron/ Life/ Corporate member/ Student member of the Society. I have read the constitution of the Society and I agree to abide by all rules and regulations of the Society.

My particulars are given below:

1. Name (in block letters) :
2. Permanent Address :
3. Present Address :
4. Mobile No., Tel No. & E-mail ID :
5. Profession :

Membership fee details

Membership Type _____ Mode of payment: Cheque/DD/Cash/UTR No.

Issuing Bank Name _____ Issuing date : _____

Amount (₹) _____

Date: _____ **Signature**

Cheque/DD should be drawn in favour of SOPOPRAD, payable at ELURU, Andhra Pradesh
Online Transactions @ : Account No. 448052563 Bank: Indian Bank, IFSC Code : IDIB000N063

Corporate Member ₹ 1,00,000 (US $ 6000)

Life Member ₹ 2,000 (US $ 350)

Patron ₹ 25,000 (US $ 1500)

Student Member ₹ 200 (US $ 40)

Executive Committee Members