

Oil Palm *in* FOCUS



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

President Speaks



President Speaks

I am very happy to bring out this second issue of the News letter, *Oil Palm in FOCUS*, after getting feed backs and encouragements from our senior veterans in Agriculture who have been involved in oil palm development in the country are anxious to attain self sufficiency in vegetable oil production to meet the ever growing demand. Now awareness has been created at all levels and everybody feels that oil palm is the only crop which can come to the rescue of increasing the vegetable oil pool of the country. It is the right time to move towards swift oil palm development in the country taking proper advise from people who are having practical experience and expertise in the crop. Hon'ble Prime Minister is keen in promoting oil palm in the country and having discussion at various levels. A crop originated in the West Africa travelled from there to Indonesia as ornamental palm became the mother palm source for oil palm development in Malaysia and Indonesia and occupying the top two positions contributing about 36% of global vegetable oil. This could be possible because of strong political commitment. We can now expect such commitment since the Prime Minister himself is keen in oil palm development in the country.

Time to time the SOPOPRAD had made policy papers / strategic solutions to increase the vegetable oil pool of the country through oil palm development but unfortunately very little attention was given to the strategy papers. So oil palm development is going on at slow space and at this rate it may take many more years to achieve our goal of reducing dependency for vegetable oils.

Since the year 1983, when the concept of irrigated oil palm as a small holders crop was proposed by me and planted as a new crop in the farmers' field in 1987 in A.P., and initiated Oil Palm Development Project from 1990-91 we have completed one crop cycle period of three decades with mixed results about the performance in the potential states of the country.

Now we are in the second cycle of oil palm development and it is necessary to modify the approach. So for we were considering only small farmers and SC/ST farmers. Since our aim to increase the vegetable oil pool through oil palm our strategy needs to be modified including oil palm as plantation crop and keep away from land ceiling limit and also encouraging captive plantations by the entrepreneurs and others. Pricing for the FFB is yet another important aspect which can be solved by implementing CACP recommendations which is pending for a long time. Since indigenous production of tenera hybrid planting material can hardly sufficient for taking up field planting in about 20,000 ha, it is also necessary to import high yielding compact planting materials to meet larger area expansion. Group farming / Cluster farming approaches to be encouraged. Rural service providers for harvest need to be encouraged.

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 News Letter 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 and also make in India programme a successful one.

Dr. P. Rethinam
President, SOPOPRAD



Prime Minister's Address on 23 - July - 2020 - Promoting Organic Oil Palm cultivation in North Eastern Region.

PM pushes oil palm cultivation in North-East

RutamVora Ahmedabad | Updated on July 23, 2020 Published on July 23, 2020

Agri-scientists and agro economists are saying that North-East farmers have a potential to take up oil palm cultivation. If they actually take it up, it will be a big help to the country, the North-Eastern region and the farming community here. (Because), India is an assured market for palm oils. If the N-E farmers do it along with the organic farming, imagine how big the service to the nation that would be and a boost for our economy,” Modi said in his address.

“Prime Minister has appealed to farmers of Manipur and North Eastern states to adopt Oil palm plantation in a big way to support *Atmanirbhar Bharat* programme to reduce the import of palm oil. The industry has welcomed the Prime Minister's suggestion terming it to be a step to support *Atmanirbhar Bharat* initiative.

Hon'ble Prime Minister's talk inspired me to write the Strategy paper as a person involved in introducing the concept of irrigated oil palm in the country; also involved in the OPDP from the inception *i.e.*, 1990 to till date as well as involved in identifying the potential areas for oil palm cultivation in the country including NEH Region. I had travelled more than six times in the NEH Region states in connection with oil palm development had discussions with the Government officials of Agri/ Horti. Departments. Also provided technical advice to the processors and oil palm farmers. This report will give the present status and the suggested strategies to be considered by GOI for successful implementation of Technology Mission on Oil Palm in NEH Region says Dr. P. Rethinam, President, Society for Promotion of Oil Palm Research and Development (SOPOPRAD). This paper will be submitted very shortly to GOI.



Message from Dr.M.S.Swaminathan, Founder Chairman, MSSRF, Chennai.

Dear Dr Rethinam,

Thank you very much for your kind letter. I congratulate you on the outstanding quality and contents of the newsletter. I wish you continued success in the very important work you are doing.

With warm personal regards,

Yours sincerely,

M S Swaminathan

Message from Dr R.S.Paroda, Chairman of Trust for Advancement of Agricultural Sciences, New Delhi.

Dear Dr Rethinam

Greetings and best wishes. Let me congratulate on your new initiative to start an e-newsletter of SOPOPRAD. The cover design and colour combination looks quite attractive. I am sure it will be a good vehicle to share information on all aspects of Oilpalm research, cultivation, production and marketing for the stakeholder. My only suggestion is that the first issue should have an article highlighting overall progress in Oilpalm over the last three decades, through graphs/charts and the strategy to become self-sufficient. Too many messages could possibly be avoided. Hope you are planning to publish it in regional languages? It would attract a greater reader base. Also in future you may consider including a section on policy matters drawing attention for needed support for R&D on Oilpalm. Wishing you a great success in this endeavour.

Best regards

Raj Paroda

Message from Dr . D.P. RAY, Former Vice Chancellor, OUAT, Bhubaneswar

Dear Dr. Rethinam

I have gone through the News letter of volume-1 of Oil Palm in focus which is published from the society for promotion of Oil Palm Research and Development (SOPOPRAD). First of all I congratulate and thank Dr. P. Rethinam, President (SOPOPRAD) to bring out the first issue of the News letter which was long pending since 1996. This News letter will be very much beneficial for the Farmers, Scientists, & Departmental Officers dealing with the Oil Palm research & Development. It will be also very much useful for the greater Development in the enhancement of area. Production & Processing of Oil Palm industry the country. I thank Dr. R. K. Mathur, Director, ICAR-IIOPR & Vice-President, Dr. V. M. Reddy, Vice-President & Dr. B. N. Rao, Secretary, SOPOPRAD for their support and contribution for giving their views regarding the larger Development of Oil Palm. In area, production and its industry in the country.

I am very happy that Indian Vegetable Oil Producers Association has organized the Global Webinar on "IS COVID A BULL OR A BEAR FOR VEG OILS" on 29th May, 2020 at 2:30pm. It was well attended by the eminent speakers on oil palm development for increasing the vegetable oil palm and reduction of dependency on import and also on ground level problems at farmer level.

I also agree that oil palm board with full autonomous authority is needed and established as existing in similar line with spices Board/Tobacco Board, which will help synchronization of Central & State Governments for successful implementation of the oil palm programmes in the country.

With my all personal regards.



Prof. D.P. Ray

Former Vice Chancellor, OUAT, Bhubaneswar



3. Highlights of over all progress of irrigated small holders' crop of oil palm in the country over three decades

Irrigated oil palm cultivation as a small holders' crop was started in the West Godavari District of Andhra Pradesh during 1987-88 and the Oil Palm Development Programme (OPDP) was implemented in 1991-91 during Eighth Five Year Plan. Now one cycle of thirty years are over. Starting with six states, extended to nine and later to 12 and now in 16 states covering an area of 3.31 lakh ha with a production of 16.25 lakh tons of FFB which could contribute to 2.70 lakhs tons of Crude Palm Oil during the year 2017-18.

Though the achievement of area expansion is not matching with the target fixed by TMOP/NMOOP/NFSM – Micro Mission II oil palm, there are many positive benefits we have achieved which had laid a strong foundation and encouragement which will pave way for smart oil palm development in future rectifying the short falls, to increase the vegetable oil pool of the country through palm oil production.

1. When every expert within country and abroad including FAO Expert on Tree Crops had raised doubt about the successful performance of oil palm in India because of low rainfall and high summer temperature in the East Coast and low minimum temperatures in some regions including NEH Region, we have proved that irrigated oil palm as small holders' crop in 18 potential states identified by Chadha and Rethinam Committees of GOI during 1988, 2006 & 2012, which represent varied agro-climatic zones with pH ranging from 6.0 to 8.5; Maximum Temperature upto 45°C and above for some days during summer; Minimum Temperature even below 10°C in East and North East Hill Regions. India may be the first country to cultivate large scale irrigated oil palm under such varied agro-climatic and environmental conditions.
2. In matured plantations, yield level of 20 to 25 t FFB/ha/yr. obtained by many farmers and maximum yield of 50 t FFB /ha/year by some farmers gave the confidence that we can successfully cultivate oil palm in the country. Maximum calculated yield potential of 12 t CPO /ha/yr.

The State-wise details of area achieved under oil palm cultivation and production of FFBs and CPO up-to the year 2017-18 are given below:

Sl. No.	State	Area achieved during 2017-18 (ha)	Total Area Coverage upto March 2018	Production (MT) 2016-17		Production (MT) 2016-17	
				FFBs	CPO	FFBs	CPO
1.	Andhra Pradesh	6157	162689	1136579	190854	1427827	234695
2.	Telangana	1413	18312	88549	10979	147516	27274
3.	Karnataka	1120	43517	11912	2051	12917	2224
4.	Tamil Nadu	589	30900	7422	1115	6983	938
5.	Gujarat	76	5797	853	NA		
6.	Goa	-	953	NA	NA		
7.	Odisha	1005	21777	4965	NA		
8.	Tripura	-	530	NA	NA		
9.	Assam	814	1849	0	0		
10.	Kerala	7	5785	34198	5929	30220	5191
11.	Maharashtra	-	1474	NA	NA		
12.	Mizoram	885	28295	4796	626		
13.	Chhattisgarh	773	4222	0	0		
14.	Andaman & Nicobar	-	1593	NA	NA		
15.	Arunachal Pradesh	843	1416	0	0		
16.	Nagaland	800	1973	0	0		
	Total	14482	331082	1289274	220554	1625463	270322



was also obtained in the plantations near Jangareddygudem, Andhra Pradesh as against 18 t CPO/ha /yr as maximum potential yield of oil palm reported by Malaysia.

3. The poor performance in many states made us to examine the on ground realities which were discussed in SOPOPRAD WhatsApp group participated by farmers, processors, Development Department Officers and Scientists and an elaborate Status Report on oil palm was prepared by Dr. V.M.Reddy and Mr.Uadaykumar. A brief summary of the report is presented in this News letter and the main report was put in SOPOPRAD WhatsApp group by the authors.
4. In the process of cultivation of oil palm crop we have developed lot of production technologies including raising of suitable inter/ mixed/ multistoreyed cropping / farming systems to get a sustainable income by the farmers.
5. Starting from Zero we have developed 26 processing units in the country which has the processing capacity of 584.3 t/hr. Andhra Pradesh alone has 13 units with processing capacity of 454 t/hr and occupy the top rank in the country both in area and production. Most of the machineries for the processing units are manufactured locally except a few critical equipments. So indigenous skill has been developed in the processing technology .
6. More than 21 entrepreneurs are involved in Oil Palm Development Programme in the country of which four entrepreneurs are operating in more than one state.They are very confident that oil palm can be grown successfully and profitably if some shortfalls identified are removed .
7. Lot of employment opportunities could be developed in cultivation and processing of oil palm.
8. Since 26 processing units have been set up in rural areas, the socio economic situation in the rural areas around the factory zones has increased and livelihood security has been assured to thousands of skilled and unskilled people.
9. In addition to the above possibilities for allied industries which will further help in generation of employment and income.
10. Indian oil palm is contributing as on today 3.5 lakh ha of forest since the crop remains for more than 30 years. If 2.0 million ha is going to be brought under oil palm that much forest will be created over a period of time.
11. Indian oil palm is being developed using agricultural lands and it is unique in the world with no deforestation. So it is beyond the scope of criticism and threat from the

environmental, development and non governmental organisations (NGOs) predominantly based in Europe, USA or in any country which Malaysia and Indonesia are facing during last 15 years.

12. Dr. Chadha and Dr. Rethinam Committee reports also paved the way for setting up of a Research Institute for Oil Palm to give adequate support to farmers .
13. Over a period of time we could develop six hybrid seed gardens to produce tenera hybrid seeds in the country and could reduce the import of planting materials.

4. Country wise yield of oil palm FFB and India's Position

The country wise FFB yield /ha given in the table below indicate that except the top three countries like Nicaragua, Thailand and Colombia, all other countries are below 20 tons/ha. Normally the yield is worked out based on the matured harvested area. In India, if we work out leaving the five years old planted area from 2015 to 2019 and then calculate the yield we will also be within top 10 countries. A correct assessment is yet to be made. However, in all the states where oil palm is at matured stage (seven years and above) many farmers harvested more than 20 t FFB/ha/yr. and upto 35 t/ha.

Country-wise yield of Oil Palm Fruit

Country	FFB yield - 2018 (tons /ha)
Nicaragua	58.73
Thailand	21.69
Colombia	20.37
Malaysia	18.80
Cameroon	18.09
Colombia Benin	17.86
Indonesia	17.01
Brazil	14.35
Costa Rica	14.14
Dominican Republic	14.07
Peru	13.92
United Republic of Tanzania	13.70
Papua New Guinea	13.64
Mexico	13.50
Honduras	13.13
Guatemala	13.04
China, mainland	12.93
Congo	12.48



Ecuador	12.44
Solomon Islands	12.30
Angola	12.04
Madagascar	11.64
Senegal	11.26
Cambodia	10.85
Venezuela (Bolivarian Republic of)	10.29
Equatorial Guinea	10.26
Panama	10.16
Gambia	09.99
Burundi	09.87
Liberia	09.80
Sao Tome and Principe	09.53
Paraguay	09.46
Sierra Leone	09.17
Central African Republic	08.78
Togo	08.55
Guinea-Bissau	08.36
Philippines	07.99
Ghana	07.03
Democratic Republic of the Congo	06.60
Cote d'Ivoire	06.44
Gabon	04.28
Guinea	02.67
Nigeria	02.60
Suriname	02.43

Note : FAO Statistics - July, 2020

5. Status of Oil Palm Development in India - a brief summary report of SOPOPRAD Group Discussion

Oil palm as a small holders' crop under irrigation has completed one crop cycle of 30 years as the replanting of the earliest planted oil palm has started a couple of years back. At this juncture it was thought that it is essential to assess the impact of oil palm contribution to the vegetable oil basket and to evolve strategies for future development. SOPOPRAD had organised a WhatsApp discussion during June – July, 2020 and brought out a detailed Status Report on Oil Palm by Dr. V.M.Reddy, Vice President, SOPOPRAD and Mr. Udayakumar. This report is available in SOPOPRAD WhatsApp group. A brief summary is given here.

- In order to take up oil palm cultivation on a massive scale, an Oil Palm Development Programme (OPDP) was launched during 1991-92 in the country under the purview of the “Technology Mission on Oilseeds and Pulses” (TMOP) under the Department of Agriculture

& Cooperation and implemented through the State Dept. of Horticulture/ Agriculture.

- The three expert committees, two of them headed by Dr. Chadha (1988 and 2006) and one by Dr.Rethinam (2012) have estimated a potential area suitable for oil palm cultivation of nearly 19.33 lakh hectares.
- The present area planted under oil palm is over 3.6 lakh hectares in 30 years. If this business-as-usual continues, then it will take very long time to exploit the total estimated potential area of 19.33 lakh hectares under this crop.
- The present total Fresh Fruit Bunch (FFB) production stands at 23 lakh tons and 3.70 lakh tons of Crude Palm Oil (CPO) which is just 1.0 ton of oil/ha. Whereas the country is importing 155 lakh tons of vegetable oils of which palm oil constitutes 93 lakh tons.
- The oil palm cultivation in India has given mixed results with success in Andhra Pradesh and Khammam District in Telangana, while all other states are lagging behind and yet to establish as a profitable enterprise. Both states together have 56% of area planted with 96% of CPO production.
- The Crude Palm Oil (CPO) yields are 2.90 and 2.46 tons/ha in Telangana and Andhra Pradesh, respectively. It's unfortunate that this yield levels didn't replicate in any other state in the country.
- The two main concerns expressed by the farmers in both states where oil palm is highly successful are, i) Volatile FFB prices and ii) Harvesting problem in aged plantations. These two points need to be addressed to sustain the oil palm cultivation in both states.
- Introduction of “Oil Palm Cess” on all vegetable oil imports could address the volatile FFB price problem. Based on vegetable oil imports in the year 2018-19, the weighted average price of FFB of that year and with Support Price of FFB @ Rs 10,000 per ton, the Oil Palm Cess would be just Rs 308 per ton of vegetable oil imported. The price increase due to the “Oil Palm Cess” would be merely Rs 0.28 per litre of oil. The Cess doesn't hurt the revenue to the Government on imports and also it doesn't have much effect on the retail price of vegetable oils to the consumers.
- Volatile FFB price is a main concern for oil palm sustainability in Andhra Pradesh and Telangana states. Paradoxically, support price for oil palm FFB being implemented in Karnataka, Goa and Gujarat states is



- going in vain. None of these states show any progress in oil palm development.
- Three Key Success Factors for oil palm development are i) the net ground water availability ii) land holding sizes and iii) crops grown in the area. The success, however, could be affected individually or by a combination of these factors. For example, Srikakulam district in Andhra Pradesh has enough ground water to support the oil palm but only 3% of the land holdings are above 2 ha thus resulting in poor area expansion. Whereas, Nellore district in Andhra Pradesh with large holdings without sufficient ground water to irrigate the palms resulted in perished or uprooted plantations to the extent of 80% of the total planted area. Narmada district in Gujarat has sufficient ground water to irrigate the palms and 35% of the land holdings of more than 2.0 ha with 68% of the total area, thus meeting the criteria of ground water and size of land holdings. But, returns from oil palm couldn't compete with returns on banana and sugarcane resulting poor response to oil palm in Narmada district. Thus, The poor performance of oil palm in other states and parts of Andhra Pradesh is a result of Target oriented approach without considering the factors mentioned above.
 - In a span of 25 years from VIII plan to XII plan, only 5.64 lakh hectares (just 29%) set as area expansion target and the actual area covered is just 55% of the target while the potential identified is 19.33 lakh hectares. The estimated area survived is just 51% of the planted area.
 - At all India level, Andhra Pradesh state ranks first in area expansion while Telangana ranks first in FFB and CPO production per hectare. Andhra Pradesh and Telangana states together produce 96% of total production of FFB and CPO in India.
 - The success of oil palm within Andhra Pradesh state is not uniform among the districts identified. Out of 11 districts, only three districts planted more than 50% of the potential area identified by the expert committees. West Godavari District topping with 72% of the potential area planted in the district and 53% of the total area planted in Andhra Pradesh in 30 years.
 - West Godavari district, however, covered only 49% of the irrigated area under tube wells leaving the other 51% to other crops. Is it an indication that only 50% of the area irrigated under tube wells is maximum potential in any district?
 - In Karnataka state the area under oil palm is shrinking and the Key Indices like FFB and CPO production per ha are less than an oilseed crop despite Support Price for FFB is in practice. A plantation crop like oil palm which needs a handheld support after one full crop cycle of 30 years is unlikely to be sustainable.
 - Oil palm development in N-E going to be different, since it is predominantly rainfed, with establishment of many small-scale palm oil mills in operational areas to ease the logistics of FFB collection and processing. Since the crude vegetable oil consumption is prevalent in NE, CPO can be directly sold to the people in surrounding areas of small mills.
 - The pace and scale of expansion of small holder irrigated oil palm will depend upon two challenges – i. Compensating farmers for opportunity cost of their land during lock-in period of three years, and ii. Helping the farmers to create irrigation facilities through tube wells and micro irrigation systems.
 - Although an estimated potential of 19.33 lakh hectares for oil palm was arrived by different committees, Rethinam (2012) suggested a micro-level survey for ascertaining sufficient irrigation for oil palm. In addition to ground water availability, land holding sizes, crops grown in the identified area and socio-economic conditions of the farmers also need to be taken into consideration.
 - The strategy of irrigated oil palm development needs a different vision, a different investment strategy, and a different pricing policy for FFB to take a giant leap forward 15 towards exploiting the remaining potential of this crop at the earliest as this would have high economic pay-off.

6.WEBINARS on Vegetable Oils and Palms organized by various Agencies /Organizations

1. Indian Vegetable Oil Producers Association (IVPA) organized a WEBINAR on **Is Covid A Bull or A Bear for VEG Oils? on 29 May, 2020.**

Swami Ramdevji, Mr. Sudhanshu Pandey, Mr. Aditya V Agarwal, Mr. Siva Kumar, Mr. Gustavo and Dr. Varka Sathia participated and delivered talks.

Swami Ramdevji, M/S. RuchiSoya industries has highlighted the potential of oil palm and their interest to expand oil palm cultivation to 5.0 lakh ha in next 10 years. Mr. Sudhanshu, Secretary, Food, GOI expressed



that oil palm is a potential source to increase the vegetable oil pool in the country since it could give 4.0 tons of oil /ha /year but the performance of oil palm in the country is not comparable to Malaysia and Indonesia. He also stressed the need of concerted efforts to be made for increasing the productivity.

Mr. Siva kumar from ITC also said that the oil palm is a good source for increasing vegetable oil production and the expert teams had identified potential areas of about 2.0 million ha which need to be exploited.

2. Dr.P.Rethinam, President, SOPOPRAD gave an Endowment lecture on “Endemic COVID 19- Opportunities and Challenges of Oil Palm in Vegetable Oil Economy and Farmers Prosperity in India-Special Reference to Tamil Nadu” Organised by Post Graduate School of TNAU in a WEBINAR, at Coimbatore on 29 June, 2020.

In his presentation he narrated on the vegetable oil situation in India; ever increasing demand to satisfy consumer needs, inadequate domestic production and on the potential of nine oilseeds and secondary sources and highlighted on potentiality of oil palm, a perennial oil yielding crop with more production in less land; success stories on performance of small holders oil palm in the country; constraints and problems faced over the years; strategy for accelerating development of oil palm and on the performance of oil palm in Tamil Nadu.

3. Solvent Extractors Association of India (SEA) jointly with Globe Oil organized a WEBINAR on Future of Palms in India on 26 June, 2020.

The following experts had highlighted on various issues

Mr. Atul Chaturvedi, President, SEA; **H.E. Mahendra Siregar**, Vice Minister of Foreign Affairs, Government of Indonesia and **H.E. Sidharto R. Suryodipuro**, Ambassador of Indonesia, New Delhi gave brief introduction.

Mr. Dorab Mistry, Director – Godrej International Limited, Singapore had an Interactive Session

Mr. Nasim Ali, CEO - Oil Palm Plantation, Godrej Agrovet Limited highlighted the Challenges and Opportunities in Oil Palm Cultivation in India,

Dr. Swati Maheshwari, Senior Internal Medicine Specialist, Medisky Health Solution, Health Benefits of Palm Oil,

Mr. Sandeep Bhan, COO - Global Trading, Sime Darby Oils Malaysia Palm Oil – Way Forward in India,

Dr. Shatadru Chattopadhyay, MD, Solidaridad Network Asia Ltd. - Role of IPOS in Promoting Sustainable Palm Oil in India. He suggested oil palm as inter crop in Tea plantations

Mr. Angshu Mallick, Dy. CEO, Adani Wilmar Limited in his presentation on Marketing Challenges in Promoting Palm Oil usage in India highlighted palm oil consumption in India

Mr. Atul Chaturvedi, President, SEA, Director, Adani Wilmar Limited presented the Need for the Image Make Over of the Palm and

Dr. B. V. Mehta, Executive Director, SEA highlighted the questions and proposed vote of thanks.

4. Remarks and observations by Dr.P.Rethinam, President, SOPOPRAD on a few presentations on oil palm sent to Dr. B.V. Mehta, ED, SEA.

Sir, Greetings,

Thanks for the opportunity given to me to attend and also make my comments Dr. B.V. Mehta made very good presentation on oil seed scenario, edible oil import and stressed the need to develop oil palm in the country. He touched on very vital points,

1. Oil palm to be treated as a plantation crops and land ceiling should not affect area expansion
2. Oil palm gives the highest oil yield of 4 to 6 tons of oil /ha/yr
3. In the next five years 5.0 lakh ha to be brought under oil palm cultivation.

The first two points we fully agree and this is what we have been trying with DAC and then with the State governments, since Agriculture is a state subject. As far as bringing 5.0 lakh ha in next five years is concerned, we too welcome the same, but it is not possible even if starts right now i.e 2020.

Because our indigenous oil palm hybrid seed production will cover up to 20,000 ha per year and hence bulk of the sprouts has to be imported from other oil palm growing countries. Every year for planting one lakh ha we will require 170 lakhs sprouts.

If we place orders to external sources to import, the suppliers require 6 months to pre-germinate and supply.



Import Permit and Quarantine clearance etc will take some time. But that can be managed.

After getting the sprouts, a nursery has to be raised and seedlings of 12 months old have to be supplied to farmers. So an advance planning of minimum two years is needed if one has to plan for one lakh ha per year. If we start the process today, on priority it will be possible to plant in 2023 only. A Strategy Paper prepared by SOPOPRAD, copy of which is available with Dr. B.V. Mehta.

In an earlier Webinar suggestions came that oil palm inter crop in tea plantation is a potential source. But we have yet to understand the impact of oil palm in tea plantation on quality aspects of tea. In 1988 we have suggested in Chadha Committee report that in tea estates lot of vacant lands are available and that can be utilised for oil palm plantation.

So it is essential to have a competent technocrat with practical field knowledge in the subject to give right kind of advice to government. Presently this is lacking. In addition the important factors presented by Mr. Nasim Ali, Godrej AGROVET are very relevant, primarily the support price, crop insurance, increasing drip irrigation subsidy to 100% etc. need to be addressed.

7. For Farmers' Note book

i) Expected Commercial Fresh Fruit Bunch (FFB) yield according to age of palm

Farmers says that the initial juvenile period (Pre-bearing) for oil palm is 6 to 7 years and will not have any income during that period therefore they are not willing to go for oil palm cultivation. That is a wrong notion. One year old oil palm seedling planted in the field will come to flowering in 18 months and ablation is being done for another six months and then the flowers are left for maturity and at 30 months age the first harvest can be done. The following table showing the yield trend at various ages of oil palm. But practically many of the farmers are not getting because of non adoption of optimum input management.

An ideal plantation can give 10 to 12 Bunches/palm / year with a bunch weight of 15 kg can get an yield of (143 palms x 10 bunches x 15 kg bunch wt.) 21.4 t FFB or 4.29 t of CPO. Farmers are advised to take palm cultivation as a business.

Commercial fresh fruit bunch (FFB) yield according to age in oil palm

Age (years)	Fresh fruit bunches fresca (t/ha/year)	Oil (t/ha/year)
3	7.9	1.6
4	16.5	3.6
5	23.6	5.4
6	25.8	6.0
7-18	28.0	6.7
19	28.0	6.6
20	28.0	6.6
21	27.0	6.6
22	26.2	6.1
23	25.9	5.9
24	24.7	5.5
25	23.5	5.2

Many of our farmers have got such yields even in 1998 within eight years of planting oil palm and the yield data with farmers photos have been published in the SOUVNIR in 1998.

ii. Fertigation

a) Advantages

Advantages of fertigation

1. Increases Fresh Fruit Bunches (FFB) yield by 25-30%
2. Saving in fertilizers costs by 30-50%
3. Precise application and uniform distribution of fertilizers
4. Minimises nutrient losses
5. Nutrients can be applied as per plant requirement
6. Saving in time, labour and energy
7. Magnesium and Boron can also be applied

b) Quantities

5 Kg urea, 3 kg Di Ammonium Phosphate (DAP) and 5 KG Muriate of Potash per month per acre are taken separately in 15-20 litre of water filled in a plastic bucket and stir continuously to avoid sedimentation and make it 200 l by adding water and feed through drip.

Source: ICAR-IIOPR, Pedavegi



Field Performance of Oil Palm at Research centre, Pasighat, Arunachal Pradesh

Demonstration on Oil palm production potential in North East Region (Pasighat, A.P.)

Date of planting: 2006

Crop management practices

29 Oil Palm seedlings were planted to demonstrate the cultivation of oil palm in North Eastern region with application of recommended dose of fertilizers (900 : 450 : 900 g NPK/ palm/year), planted with proper spacing (9m x 9m) and water management practices were taken up.

Year	Growth characters			Yield attributes and yield		
	Plant height (cm)	Collar girth (cm)	No. of leaves /palm	No. of FFB	Average bunch weight (kg)	Yield (t/ha)
2015-16	113.1	249.3	21.8	9.1	13.6	17.7
2016-17	207.1	258.1	22.0	10.7	17.9	27.4
2017-18	275.0	249	22.0	9.21	19.6	25.8
2018-19	370.0	250	22.0	8.4	18.7	22.8
2019-20	398.0	267	22.8	9.2	18.5	24.3

Source- Project Coordinator AICRP

The table beside clearly indicates that the number of bunches, bunch weight and FFB yield level are similar to the conventional oil palm growing countries. With care and management it should be possible to get similar yields in farmers fields of NEH Region also.



Oil Palm in Arunachal Pradesh



Oil Palm in Mizoram

8. Policy issues need attention from Government

i) To Farmers

- ✓ Upward revision of planting material assistance from ₹ 12,000/ha to ₹ 30,000/ha as the planting material cost is increasing.
- ✓ Enhancement of Input assistance from ₹ 20,000/ha to ₹ 40,000/ha for a period of 4 years as cost of inputs are increasing enormously.
- ✓ 100% assistance for Micro-irrigation / Water harvesting ponds.
- ✓ Establishment of Harvest Banks and encouraging Rural Service Providers for such activities.
- ✓ Fixing support Price of ₹10,500 /ton of FFB.
- ✓ Encourage group / cluster farming approach as well as large scale oil palm cultivation to any extent.
- ✓ Extending the facilities crop loan, crop insurance.

ii) To Industry

- ✓ Government land may be allocated on long term lease for establishment of state of art nursery, processing mill, waste management, ETP, by- product utilisation, Demo oil palm plantation and Farmers' training center etc., may also be supported to start a small R&D unit to cater the need of the farmer.
- ✓ Financial Assistance may be granted for establishment of processing mills to cater the requirement on PAN India basis.

- ✓ To achieve more area, financial assistance may be extended for development of oil palm in institutional/private lands.
- ✓ Allotting cultivable waste lands with adequate underground water potential and financial assistance may be extended to companies for establishment of oil palm.

iii) By Government

- Treating oil Palm as plantation crop and exempt from land ceiling Act
- Area expansion should be decided two years before so as to make arrangements for importing seeds sprouts and raising seedlings
- Ensuring fund allocation to reach the beneficiaries well in time and without any reduction
- Creating oil palm cess fund from the collection of Import duty on vegetable oil.
- Creating Price stabilization fund to support the farmers when ever the FFB price goes below support price.
- Effective implementation / monitoring mechanism at State level with special staff for OPDP as was done at the initial period when OPDP was started.
- Effective utilisation of experienced retired officers in the relevant field as Advisors.
- An effective well monitored mission mode approach for getting desired goal without diverting funds to any other activities by the implementing states operating OPDP.

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: sopoprada@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

President

Dr. P. Rethinam

Vice Presidents

Dr. R.K. Mathur

Dr. V.M. Reddy

Secretary

Dr. B. Narsimha Rao

Treasurer

Dr. K.L. Mary Rani

Chief Editor

Dr. P. Rethinam

Asst. Editor

Dr. B. Kalyana Babu

Members

Dr. M.V. Prasad

Sri P. Subba Rao

Sri T.T. Krishna Murthy

Sri S. Rama Reddy

Sri M. Murali Krishna

Sri N. Nagabhushana Rao

Sri Poola Mallesham

Sri Nasim Ali

Dr. R.V.S.K. Reddy

Promote Oil Palm as Swadeshi movement to reduce import of edible oil and dependency on others

