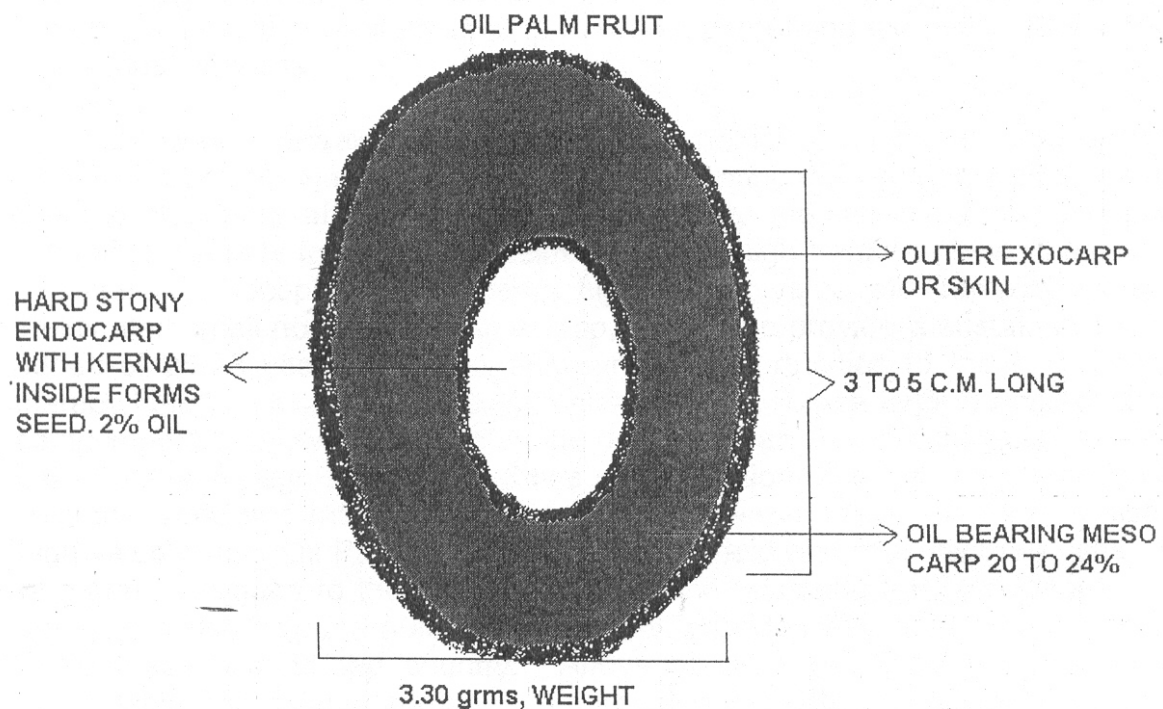


APPROACH PAPER FOR INCREASING AREA COVERAGE, PRODUCTION AND PRODUCTIVITY IN RESPECT OF OIL PALM CROP

CROSS SECTION OF OIL PALM FRUIT



INTRODUCTION

The magnitude of imbalance of demand and supply of vegetable oil as well as nutritional requirement for the ever-growing population in a developing country like India is eternal and continuously facing shortage. When compared to the developing countries where the per capita consumption of vegetable oil is more than 20kg. In the Indian sub-continent the availability is only 7kg per capita, which is far below the world's average (15kg) and this cannot be increased with present level of production of nine annual oilseeds, which can produce 6.5 million tones over an area of 23 million ha (1999-2000). To meet the immediate gap as well as the demand of the future, there is need to go for a high oil yielding crop besides augmenting the production of existing nine annual oilseed.

Oil palm (*Elaeis guineensis* jacq.) being a high oil yielding crop (4-6 tones/ha/year) fits well in the process of augmenting the vegetable oil production in the country. Secondly, after creating the food security, the country is now concentrating on nutritional security for which the palm oil with its high beta carotene (the pro-vitamin A) and vitamin E, tocopherol, tocotrienol, high calorific value, etc. can play a vital role. As an irrigated small holders' perennial crop, it can also provide a sustainable income for a period of 25-28 years and also employment opportunities to these group of farmers thereby help to elevate the socio-economic status. Since large quantities of palm oil is being imported, growing the crop in the country as import substitute can help to save considerable foreign exchange. Since diversification of crops is common concept all over the world and more so in India where low value crops are being substituted with high value crops, oil palm fits well for its high yield and multi-faceted uses. It adds lot of organic residues to the soil, helps to reduce inorganic fertilizer nutrients, which are costly and also helps to build up soil fertility, provides sources for co-generation, which is very essential to the country. Above all, it is eco-friendly and environmentally sustainable one. Value addition, product development, by-product utilization, etc. Will help to develop agro-based industries and thereby create employment opportunities to the rural mass. Thus, Oil Palm can play a vital role in the country's economy.

The increase in production of edible oils during the last decade has been due both to the increase in area under oilseeds as well as increase in average yield levels. However, domestic production of edible oils is still short of the demand. In view of the limitation on area expansion in respect of traditional oilseeds, future efforts for increasing the domestic production of edible oils need to concentrate on yield improvement as also on new sources of oil. In this context, oil palm cultivation assumes significance for augmenting the indigenous availability of edible oil as it is the highest oil yielding perennial crop. With good planting material, irrigation and proper management, there is a potential of 20-25 MT fresh fruit bunches (FFB) per hectare after attaining the age of 5 years. This in turn is capable of yielding 4-5 MT of oil and 0.4-0.5 MT palm kernel oil (PKO). In comparative terms yield of palm oil is 10-15 times the yield of edible oil obtainable from traditional oilseeds.

FEASIBILITY REPORTS

The earlier concept of growing oil palm in cleared forest land was changed following the recommendation of technical team of Indian Council of Agricultural Research in 1985 pioneered by Dr. P. Rethinam, the then project Coordinator (Palms). The team suggested that Oil Palm may be introduced in the different irrigation project areas of Andhra Pradesh, Karnataka, Maharashtra, Tamil Nadu and identified 0.24 million ha of suitable area for the purpose, subsequently, the Govt. of Karnataka constituted a team headed by Dr. P. Rethinam to identify the feasible areas in Karnataka in 1986. A feasibility report was prepared for growing Oil Palm in the Five major irrigation project areas of Karnataka, viz., Tungabhadra, Upper Krishna, Bhadra, Cauvery, Malaprabha and Ghataprabha.

Simultaneously, the Working Crop constituted by Government of India in 1986 under the leadership of Dr. K. L. Chandha, the then Horticulture Commissioner, Govt. Of India, New Delhi and later terms headed by Dr. P. Rethinam identified a total area of 8.01 lakh ha in eleven states in India. About 81% of the area is located in Andhra Pradesh and Karnataka

only. Assam, Gujarat, Goa, Kerala, Maharashtra, Orissa, Tamil Nadu, Tripura and West Bengal are the other potential states (Table-1)

Table-1: Potential areas for Oil Palm cultivation and area covered

State	Potential area identification (in lakh ha)
Andhra Pradesh	4.00
Assam	0.10
Gujarat	0.61
Goa	0.10
Karnataka	2.50
Kerala	0.05
Maharashtra	0.10
Orissa	0.10
Tamil Nadu	0.30
Tripura	0.05
West Bengal	0.10
Andaman & Nicobar Island	
Total	8.01

*Old plantations

OBJECTIVE OF OPDP

The basic objective of giving assistance to farmer for Oil Palm cultivation is the need to induce them to take up Oil Palm cultivation, which is capital, intensive and has long gestation period.

IMPACT OF IMPLEMENTATION OF THE OIL PALM DEVELOPMENT PROGRAMME (OPDP) DURING 8TH, 9TH & 10TH PLAN

In view of its importance and significance, oil palm cultivation was included under the Technology Mission on Oilseeds & pulses in 1991-92. A comprehensive Centrally Sponsored Scheme Oil Palm Development Programme (OPDP) was taken up during Eighth & Ninth Plan under irrigated conditions in India. The Oil Palm Development Programme (OPDP) was launched with a total outlay of Rs. 126.17 crores for development of oil palm over 80,000 ha in the identified states during Eighth Plan (1992-97). Out of this the share of Government of India was Rs. 94.55 crores. OPDP continued during IX Plan to bring an additional area of 80,000 ha under oil palm with an outlay of Rs. 179.65 crores out of which, share of Government of India is Rs. 134.74 crores. During 2002-03 and 2003-04 scheme is implemented on the existing pattern.

It is proposed to continue the efforts to promote oil palm cultivation during Tenth Five Year Plan through implementation of OPDP **broadly on the lines similar to those during Eighth & Ninth Five Year Plan but with suitable modification in light of the experiences gained and the impediments observed during the implementation of the scheme.** Accordingly, an area of 50,000 ha is proposed to be covered under oil palm cultivated through implementation of OPDP/ISOPOM with a financial outlay of Rs. 50.00 crores. As mentioned earlier, scheme is proposed to be implemented as Integrated Scheme of Oilseeds, Pulses, Oil palm & Maize (ISOPOM) during Tenth Five Year Plan with an outlay of Rs. 50.00 crores exclusively for the promotion of oil palm cultivation. It is proposed to continue the scheme with enhanced area expansion target of 70,000 ha with an outlay of 145.00 crores during 11th Five Year Plan.

AREA OF OPERATION & PATTERN OF ASSISTANCE

To promote cultivation of oil palm in India, a Centrally Sponsored Scheme, namely, Oil Palm Development Programme (OPDP) is being implemented in the States having potential for oil palm cultivation. Currently, the states of Andhra Pradesh, Karnataka, Tamil Nadu, Kerala,

Goa, Gujarat, Tripura and Assam are covered under OPDP. It is proposed to bring new areas under the gamut of ISOPOM to bring larger coverage under oil palm crop.

The objective of the scheme is to promote cultivation of oil palm with a view to augmenting the domestic supply of edible oils so as to bridge the gap between demand and supply. Under the scheme, assistance is provided towards the cost of planting material, cultivation inputs, installation of drip irrigation system, diesel pump sets, training, development of waste-land, extension and publicity, establishment & staff, frontline demonstrations, leaf-nutrients analysis laboratories and testing of genotypes under various environmental conditions, etc.

However, it is proposed to provide assistance for new components to bring about positive changes in implementation of the program, based on suggestions received from implementing agencies. Efforts will also be made to provide infrastructural facilities for implementation of the programme, moreover based on the input received, the componential changes and the assistance provide would be enhanced as per requirement from time to time.

PHYSICAL AND FINANCIAL PROGRESS

Year-wise central share allocated & released under Oil Palm Development Programme (OPDP) is given below:

Rs.in lakhs		
Year	Allocation	Central Share Released
1992-1993	7.21	805.00
1993-1994	69.98	1431.53
1994-1995	2024.00	1972.10
1995-1996	2356.00	1992.43
1996-1997	2117.00	463.98
Total for Eighth Plan	6574.19	6665.04
1997-1998	2500.00	244.84
1998-1999	1200.00	380.11
1999-2000	1200.00	898.24
2000-2001	1500.00	707.00
2001-2002	1000.00	850.00
Total for Ninth Plan	7400.00	3080.19
Tenth Plan	Allocation	Central Share Released
2002-2003	840.00	395.00
B.E 2003-2004	720.00	720.00
RE proposed 2003-04	400.00	216.00
Releases made upto January 31,2004		216.00

Year- wise target for area expansion and achievement under OPDP

(in ha)

Year	Target	Achievement	Average Area Lost	Net Existing Area
1992-1993	2,600	1,534	0000	0000
1993-1994	18,00	5,184	1994	3191
1994-1995	18,600	7,836	1994	5842
1995-1996	23,700	10,247	1994	8254
1996-1997	17,100	8,565	1994	6571
Total 8th Plan	80,000	33,366	7976	25391
1997-1998	7,097	7,068	1994	5074
1998-1999	15,975	4,214	1994	2220
1999-2000	17,500	3,414	1994	1450
2000-2001	19,000	2,585	1994	591
2001-2002	20,428	3,469	1994	1476
Total 9th Plan	80,000	20,781	9669	10812
2002-2003	5,000	3,094	-	-
2003-2004	9,000	2,000*	-	-

*Provisional upto 31st January, 2004

COMPONENTS FOR WHICH ASSISTANCE IS PROVIDED/AMOUNT OF ASSISTANCE THEREIN PROVIDED DURING NINTH FIVE YEAR PLAN:

I. Assistance for Planting Material: 75% of cost with a ceiling of Rs.5,400/- per ha, for entire land holding of the farmer. In major States, zone have been already allotted to companies, who are raising Oil Palm nurseries. In the states where zones have not been allotted, State Govt. can establish nurseries on their own under OPDP.

II. Assistance for Cultivation Cost: 50% of the cost during the gestation period of 4 years with a ceiling of Rs.15,500/- per ha admissible upto 6 ha for individual farmer. Illustrative phasing of cultivation assistance during gestation period is indicated below:

Year	Maximum Cultivation Subsidy per ha in Rs.
I Year	4600
II Year	3300
III year	3500
IV Year	4100
Total	15500

III. Assistance for Drip Irrigation: The assistance for drip irrigation will be 50% of the cost for Small, Marginal, SC, ST and Women farmers and for other category of farmers the assistance will be 35% of total cost of the prevailing competitive market rate of the system upto the maximum as indicated in the table below:

A. SC/ST/Small/Marginal/Women Farmers (50% of total cost of system or following whichever is less

(Rs.per Ha)

States	Maximum Permissible Assistance
Andhra Pradesh, Gujarat, Karnataka, Kerala, Maharashtra & Tamil Nadu	7,400
Orissa, Goa & West Bengal	8,600
Assam & Tripura	9,300

B. Other category of Farmers (35% of total cost of system of following whichever is less)

(Rs.per Ha)

States	Maximum Permissible Assistance
Andhra Pradesh, Gujrat, Karnataka, Kerala, Maharashtra & Tamil Nadu	5,200
Orissa, Goa & West Bengal	6,000
Assam & Tripura	6,500

The assistance will be provided for a maximum of 4ha per beneficiary. The State Government's share for drip installation would be 10% for all states except the States of Assam & Tripura for which entire cost on installation of drip irrigation system in oil palm plantation would be met by Centre.

IV. Other Components of OPDP

- a) **Training, Extension & Publicity, Establishment & Staff and other ongoing Schemes:** "Training" by State Governments and NRC for Oil Palm, "Extension & Publicity", demonstration in Kari land in Kerala and Ongoing Schemes of Seeds Gardens in Andhra Pradesh, Karnataka and Kerala, Front Line Demonstrations at Bheemankolli, Leaf Analysis Laboratories with Government of Karnataka and NRC for Oil Palm, testing of Oil Palm genotypes under varied environments would be provided need based support.
- b) **Establishment and Staff:** Existing staff working in the States would be provided need-based support.

V. New Components introduced w.e.f.08.02.200

- a) **Demonstrations:** In blocks where new Oil Palm Plantations of 500 ha or above are being taken up on farmers' fields, one demonstration of 20-25 ha will be taken up with a view to demonstrate to the to the farmers cultivation & management practices, plant protection measures and potential yield of Oil Palm.
- b) **Assistance for Diesel Pump sets:** Assistance of 50% of the cost subject to a maximum of Rs.8,000 for installation of diesel pump set, at least to those farmers who take up 5 ha. and more of oil palm plantation. Pattern of admissible assistance would be kept at par with other schemes of Department of Agriculture & Cooperation for installation of diesel pump sets.
- c) **Development of Wasteland:** 15% of the funds under OPDP have been earmarked for taking up special projects aimed at bringing under Oil Palm the wasteland or low productivity land, owned by farmers or Government land allotted to the farmers. These projects would involve integrated package of activities including procurement/production of planting material, development of land water sources, cultivation of crop, arrangement for installation of processing facility etc. Major assistance for planting material, cultivation and irrigation would be made available under OPDP on the pattern proposed. Projects would be implemented by State

Governments, farmers' co-operatives or voluntary organizations. Projects for wasteland development would be considered and approved at the Central Govt. level by a Screening Committee.

PROPOSED PATTERN OF ASSISTANCE UNDER VARIOUS COMPONENTS FOR TENTH FIVE YEAR PLAN

a) Assistance for Planting Material: 75% of cost with a holding ceiling of Rs. 7,500/ha for entire land of the farmer.

b) Assistance for Cultivation Cost: 50% of the cost during the gestation period of 4 years with a ceiling of Rs. 15,500/- per ha admissible upto 15 ha for individual farmer. (Ceiling of Rs. 15,500/- per ha subject to change, in view of variation in cost of cultivation proposed by NABARD from time to time).

c) Assistance of Drip Irrigation: Assistance for the Drip Irrigation component of OPDP has been revised during 2000-01 as under:

The assistance for drip irrigation will be 50% of the cost for Small, Marginal, SC, ST and Women farmers and for other category of farmers the assistance will be 35% of total cost the prevailing competitive market rate of the system upto the maximum as indicated in the table below:

A. SC/ST/Small/Marginal/Women Farmers (50% of total cost of system or following whichever is less:

(Rs. Per Ha)	
States	Maximum Permissible Assistance
States	Maximum Permissible Assistance
Andhra Pradesh, Gujarat, Karnataka, Kerala, Maharashtra & Tamil Nadu	7,400
Orissa, Goa & West Bengal	8,600
Assam & Tripura	9,300

B. Other category of Farmers (35% of total cost of system or following whichever is less:

(Rs. Per Ha)	
States	Maximum Permissible Assistance
Andhra Pradesh, Gujarat, Karnataka, Kerala, Maharashtra & Tamil Nadu	5,200
Orissa, Goa & West Bengal	6,000
Assam & Tripura	6,500

The assistance will be provided for maximum of 4 ha per beneficiary.

The State Government's share for drip installation would be 10% for all states except the States of Assam & Tripura for which entire cost on installation of drip irrigation system in oil palm plantation would be met by Centre.

OTHER COMPONENTS OF OPDP

Training, Extension & Publicity, Establishment & Staff and other ongoing Schemes: "Training", "Extension and Publicity", and Ongoing Schemes of Seed Gardens, Leaf Analysis Laboratories, Training of Staff/offices and farmers and testing of Oil Palm genotypes under varied environments is provided need based support.

Establishment and Staff: No new staff is proposed. However, the existing staff working in the States will be continued during the Tenth Five Year Plan for implementing the programme.

Demonstration: In block, where new Oil Palm Plantations of 500 ha or above are being taken up on farmers' fields; 10 demonstration of 2 ha each is being taken up with a view to demonstrate to the farmers cultivation & management practice, plant protection measures and potential yield of Oil Palm.

Assistance for Diesel Pump sets : In view of shortage of power, an assistance of 50% of the cost subject to a maximum of Rs.10,000 for installation of diesel pump sets, at least to those farmers who take up 5 ha and more of Oil palm plantation. However ever pattern of admissible assistance may be kept at par with other schemes of Department of Agriculture & Cooperation for installation of diesel pump sets for which comments of required division shall be sought as and when required.

Development of Wasteland : 15% of the funds under OPDP are earmarked for taking up special projects aimed at bringing under Oil Palm the wasteland or low productivity land, owned by farmers or Government land/wastelands owned by the Corporations of State and Centre Government or Cooperatives. These projects may involve integrated package of activities including procurement/production of planting material, development of land and water sources, cultivation of crop, arrangement for installation of processing facility etc. Major assistance for planting material, cultivation and infrastructure facilities for installation of lift irrigation is proposed to be made available under OPDP with a ceiling of 25% of the funds out of 15% funds earmarked for wasteland development under OPDP. Projects for wasteland development shall be considered and approved at the Central Government level by a Screening Committee of the Central Government.

PHYSICAL & FINANCIAL TARGETS DURING 10TH PLAN

Year- wise proposed Financial outlays under OPDP during Tenth Five Year Plan:

(Rs.in lakhs)

2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	Total
840.00	1160.00	1000.00	1000.00	1000.00	5000.00

However, during the year 2003-2004 scheme, is implemented as OPDP on existing pattern for which allocation of Rs. 720.00 lakh has already been made upto 30.09.2003. Scheme is likely to be continued on existing pattern upto 31.03.2004.

Year-wise proposed Physical targets under OPDP during Tenth Five Year Plan:

(Area in ha)

2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	Total
3,371 (Actual)	5,000 (Envisaged)	12,000	14,629	15,000	50,000

OVERALL IMPACT

The overall impact of OPDP has been good despite the serious difficulties and serious set back to the effective implementation of the programme. The programme has resulted in import saving to a greater extent even though it is far below the norm based production level. Level of domestic production and import saving is certainly bound to rise substantially since the programme has created already the necessary infrastructure like the seed gardens nurseries processing mills, price support and marketing arrangements, etc. to facilitate production to take place at accelerated pace. The regulating and facilitating oil palm acts have also been passed and are in process of being enforced.

Self-reliance in seed production has almost been reached. The farmers are also becoming aware of profitability of this crop. The situation is conducive and states are now well poised for the programme to take off at rapid strides to realize the potentials.

SEED GARDENS

Seed gardens have been established in the country to augment indigenous availability of oil palm seed/ sprouts. Presently, they are able to meet the demand of the oil palm seeds/sprouts of the country to a greater extent and as such save lot of foreign exchange. However, additional demands for seeds/sprouts are met from identified sources abroad.

There are Six Seed Gardens presently established in the country, namely:

1. Rajahmundry, Andhra Pradesh
2. Pedavegi, West Godavari Distt, Andhra Pradesh-UNDP Project
3. Navbharat Pvt.Seed Garden at Lakshmipuram, Andhra Pradesh
4. Taraka, Karnataka
5. Thodupuzha, Kerala
6. CPCRI, Palode, Kerala

Expenditure on maintenance of Seed Gardens in Andhra Pradesh, Karnataka & Kerala are met (as per requirement) from OPDP funds. Seed garden at Rajahmundry is in a position to produce hybrid Seeds now. Seed garden at Pedavegi has recently been established and seed production will start by 2009-2010. Seed garden at Lakshmipuram has already started producing hybrid seeds. However so far no Seeds have been produced from seed garden at Taraka, Karnataka. Taraka Seeds garden is in a position to produce hybrid seeds during the financial year 2004-2005.

PROBLEMS FACED IN IMPLEMENTATION OF OIL PALM DEVELOPMENT PROGRAMME (OPDP)/ REASONS FOR SHORTFALL

After the launch of Oil palm Development Programme (OPDP) for promoting cultivation of this new crop in India, annual area covered under oil palm increased steadily up to 1995-96 but declined steadily after that. 1995-96 is the year during which import duty on edible oils was reduced from 65% to 35%. In years subsequent to 1995-96 import duty on edible oils followed downward trend. Further, import of edible oil being under OGL, large quantities of edible oils were imported. Against the estimated gap of 15 lakh tones between the demand and supply, during 1997-98 (November-October) 20.83 lakh tones of edible oils was imported. Import of edible oils reached all time high of around 44.00 lakh tones during 1998-99 (November-October), in which contribution of palm oil was as high as 26.77 lakh tones. Malaysia, which is largest export of palmolein reduced the price of palmolein to \$355 per ton in July, 99 as compared to \$720 per in March, 1995. As a result domestic price of palm oil crashed and price of Crude palm Oil (CPO) which were ruling at about Rs. 35,000 per ton in 1995-96 and Rs.32,690 per ton in November, 1998 declined to as low as Rs. 13,000 to 15,000 per ton in November, 1999. At this price of CPO, oil palm is viable only if the yield levels are good (above 20 tons per ha) but even with profitable level of yields, for oil palm it was difficult to compete with other crops like Sugarcane, Areca nut, Paddy, etc. Other factors, which have hindered area expansion under oil palm, are as under:

- Reluctance of farmers to take up a new crop having gestation period of 3-4 years and requiring high initial investment and assured irrigation.
- Shortage of power and limited availability of new electric Connections.
- Non-enactment of Oil Palm Act by the States excepting Andhra Pradesh, Tamil Nadu, Goa and Karnataka.
- Failure of NABARD's refinance scheme in providing timely loans to farmers for cultivation of Oil Palm.
- Big farmers who can bring larger area under oil palm are not eligible for subsidy under OPDP because the cultivation subsidy is limited to 6 ha per individual farmer.
- Lack of processing facilities available in some states.

CONSTRAINTS

1. Lack of proper package of practice for specific sites, i.e. oil palm being exotic and new crop, very little data/management practices are available for its cultivation in various agro-climatic conditions.
2. Under Indian conditions cultivation of oil palm is carried out in small holdings compared to large estates countries like Malaysia.
3. In India oil palm has to be irrigated and only with good management and substantial investment for providing irrigation facilities, India could match Malaysian oil palm, while as Malaysia enjoys most favourable climatic condition for oil palm cultivation.
4. Synchronization of area expansion under oil palm vis-à-vis creation of processing facilities is required to be undertaken, a practice which has been lacking in the past.
5. It needs immense courage for farmer to spare land for at least 30 years for undertaking the oil palm cultivation in his field therefore results in detail decision making.
6. variation in import duty on edible oils on year to year basis announced by Ministry of Finance, results in major fluctuations in oil palm FFBs prices in the domestic markets. Long-term strategy is required to be formulated for providing assured prices for oil palm FFBs/declaring minimum support price for oil palm FFBs, etc.
7. Oil palm a long gestation period and restricts income flow to farmers for atleast 4-5 years. Intercropping with oil palm requires to be given impetus for providing addition income to the farmer during gestation period.
8. In India oil palm Development has been basically through Government financing without any input from financial institutions while as in Malaysia financial institutes help in promotion the crop without the Government actually investing.
9. Lack of holistic approach for development of all aspects like plantation processing marketing transportation by product utilization and value addition, etc. All these factors are required to be taken up in a synchronized manner.
10. In India R&D programmes is run through Government founding and flow of found is not as assured as in Malaysia. While as Malaysia has built a very strong self sustaining R&D programme with funds raised through collection of cess on oil palm produced.
11. Non-availability/shortage of power and limited availability of new electric connections.

NEED FOR INCREASING EDIBLE OIL PRODUCTION IN THE COUNTRY

Impact of change of income on consumption and market size of edible oils: Agriculture, whose share in Indian's GDP is around 26%, supports more than 70% of country's population. Even though agriculture's share has been steadily declining over time, it is still a major indicator of economy. Oilseeds stand next only to food grains in the acreage, production and value. During last two decades, the gap between demand and supply in the case of oils, both of domestic and industrial uses, has been widening. The situation of demand for oilseeds outstripping supply is not peculiar to India, as the position on a global scale with reference to the availability of oilseeds and oil is far from satisfactory. From a position of being an important exporter at one point of time, India has turned into an importer of edible oils. At present, the demand supply gap is around 1.5 million tones whereas the import of edible oil during 1998-99 is estimate to be at the level of 3.3 million tones. Such a situation cannot be allowed to continue for long and long term strategy may have to be evolved to boost the domestic production of oilseeds. The consumption has increased with the increase in population and increase in the income. The changes in the distribution of household by income classes and their accelerated movement up the income ladder have been the result of the higher growth achieved by the economy.

GROWTH IN INDIAN ECONOMY AND ITS IMPACT ON INCOME DISTRIBUTION

Year 1947 marked a major departure from almost a thousand years of political, economic and social subjugation. Although majority would justifiably feel disappointed at the progress made by India since independence, we must recognize the positive achievements that have indeed been accomplished. After a century or more of zero economic growth, the first three

decades of the post independence period laid the foundation for sustained economic growth of a kind not seen in recorded economic history of the country. But this growth in per capita incomes was undoubtedly inadequate to make any dent in poverty. However, the foundation for modern economic growth was well laid and we saw significant acceleration in the 1980s and 1990s.

The initiation of reforms is indicated by the consequences that can be foreseen to result from economic growth of more than 7 to 8% per year. Population growth has already declined from about 2.2% per year for the 1970s and 1990s to about 1.7% now. It is likely that this can decline further to less than 1.5% and thus the achievement of 7.5% GDP growth would result in more than 6% annual per capita income growth.

The consequences of such economic growth are higher income and savings growth, changes in Indian market demographics, higher consumption growth and lifestyle changes. According to a survey results for the country as a whole, in 1985-86, almost two-thirds of the households were in the low-income class, with barely 1% constituting the high category. The distribution is highly skewed towards the lower end of the income scale, more so in rural than in urban areas. Between 1985-86 and 1989-90 (pre-reform period), the percentage of low-income households declined from 65.2 to 58.8, a drop of 6.4 percentage points in 4 years. On the other hand, in the post-reform period (1992-97), the decline was sharper from 58.2% to 42.5%, a drop of 15.7 percentage points in 5 years. At the same time, the percent of households in the high-income group went up from 1.1% to 1.45, while the corresponding increase in the post –reform period was from 2.3% to 4.8%.

In absolute terms, the number of low- income households remained at the same level in both 1985-96 and 1989-90. Between 1985-86 and 1989-90 about 14 million new households were added. Also, there were inter-class movements of households between different income groups. The resultant change in the distribution showed that in the low-income group, the number of new entrants almost equaled the number that moved out and up the income ladder. Consequently, the size of the class remained almost constant.

For the purpose of discussion, we shall look at the distribution in 1994-95 and 1997-98. Between 1992-93 and 1997-98, the number of households in the country increased by 13.8 million. The household distribution was found to have undergone a significant change with the number of low-income households declining sharply from 90.3 million to 71.9 million, a drop of 15.7%. Middle-income households (13.2%) and high-income households (2.5%) gain this. Thus, the size of last two classes, reckoned as the major consumers, grew nearly seven times as fast as population growth.

Both rural and urban areas exhibited similar trend, although the decline of low-income households was greater in the case of urban areas (17.5%) as compared to the rural (14.8%).

CHANGES IN LEVEL OF CONSUMPTION OF EDIBLE OILS

While policy makers have been mainly concerned with supporting food grains production, the consumption pattern of the population has been changing very significantly to reduce considerably the importance of food grains in their diets. The share of cereals in food expenditure has declined very considerably in both rural and urban areas continuously. In urban areas constituted about 36% of food expenditure in the early 1970s. This had declined to about 26% by the 1990s. Similarly in rural areas the proportion of food expenditure on cereals fell from about 54% to 37% for above periods.

The market size for the consumer expandable goods expended from Rs.540 billion in 1992-93 to Rs.738 billion in 1997-98. This registers an average growth of 6.5% per annum.

Edible oil was found to be consumed by practically all the households surveyed in 1997-98 with a penetration rate of 995 per thousand. Penetration level has been growing and has now reached close to saturation.

The consumption of edible oils has increased from 4.4 million tones in 1989-90 to 8.2 million tones in 1997-98. This shows 8.1% growth per annum. The per capita edible oil consumption has gone up from a more 5.3 kg in 1980-90 to 8.5 kg in 1997-98. The main consumers are low and middle income households with share of 94%.

There are three major factors that affect the demand of edible oil. These are:(i) growth in population; (ii) growth in penetration; and (iii) growth in intensity of use. On the other hand, level of consumption exhibits considerable variation among individuals, caused mainly by availability of oils, type of food habits, taste, price of products and level of income.

The intensity of use is defined as the average expenditure that households incur on the edible oil. It is obvious that the average expenditure per household is found to increase with income.

It was possible to quantify the effect of these factor. It was noticed that growth in population had maximum contribution with 32% to affect the demand of edible oil between 1980-90 and 1997-98 followed by growth in intensity of use (28%). The growth in income and growth in penetration have similar impact around 20% each.

PROSPECTS/THRUST AREAS

Oil palm is comparatively a new crop and highest oil yielding perennial crop having good planting material, irrigation and proper management there is potential of 20-25 MT fresh fruit bunches (FFBs) per ha after attaining age of 5 years. This in turn is capable of yielding 4-5 MT of palm oil and 0.4-0.5 MT palm kernel oil (PKO). In corporative terms yield of palm oil is 10-15 times the yield of edible oil obtainable from traditional oilseeds.

A constant interaction with the implementing agencies and regular monitoring would pave way in achieving the set objectives within the stipulated time. Sincere and vigorous planning is required to be made in achieving the desired success in the programme. Therefore, emphasis is required to be laid on the following parameters to achieve success in implementation of the programme.

- Attention is required for **establishment of more oil palm mills** in various states to restore confidence among oil palm growers.
- Immediate **enactment of Oil Palm Act** by defaulting states to ensure by-back system for produce of FFBs.
- **Establishment/maintenance of various seed gardens** for smooth production and availability of oil palm seed/sprouts within the country.
- Funding research institute like NRC for Oil Palm for undertaking experiments for lowering gestation period of the crop for developing dwarf and water resistant varieties, curtailing transplanting period to **shorten gestation period**. Develop new hybrids for direct transplantation into fields and development of **tissue culture**, conduct **Genotype X Environment** experiments for establishing suitable eco-systems where oil palm could successfully be grown.
- Establishment of more **Leaf Analysis Labs** to assess suitability of the areas for cultivation of the oil palm in each state.
- Emphasis should be laid on **inland and abroad trainings** for staff as well as farmers.
- **More infrastructural irrigation facilities** to be provided for bringing in areas under Wasteland Development.
- **Availability of Loans/advances** to farmers for cultivation of oil palm.
- **Increase in number of demonstration plots** for popularization of oil palm crop to cover more districts/areas.
- **Ensuring availability of inputs/fertilizers** required for development of oil palm at gross root level.
- **Publicity indicating the usefulness of the crop** in local language should be circulated among the farming community.

- Ensure **remunerative prices for oil palm FFBs** through by-back scheme and protection by State and Central Government in adverse circumstances.
- Constant research for **identification of suitable inter-crops** to supplement incomes during gestation period of 4 years.
- Implementation of **Market Intervention Schemes (MIS)** as and when required.
- Ensuring **stable and constant duty structure** on imports of edible oils.

PROPOSED FRESH PHYSICAL AND FINANCIAL TARGETS FOR INCREASING THE AREA/PRODUCTION UNDER OIL PALM---VISION 2011-12

Proposed Physical and Financial targets for increasing Area/Production under oil palm are given at **Annexure-I to II**. Plan –wise targeted area coverage and production of FFBs is given at **Annexure-III**.

A net area of 36,203 ha has been brought under oil palm at the end of 9th Five Year Plan. It is proposed to cover another 50,000 ha under oil palm during 10th Five Year Plan and 70,000 ha during 11th Five Year Plan. Actual FFBs production at the end of the 9th Five Year Plan, (as on 1.4.2002) is 1,28,873 MT (**Annexure-IV**), yielding was around 22,623 MT of CPO (actual) (**Annexure-V**). The projected production of FFBs was around 6,47,823 MT thereby indicating a shortfall of around 5,18,949.67 MT (as on 1.4.2002), the targeted production of CPO as on 1.4.2002 was around 1,03,651 MT indicating a shortfall of 81,038 MT of CPO. However, if proper management practices and required number of irrigations are provided to the plantation, productivity is expected to get boost in near future. The total area to be brought under oil palm by 2011-12 would be 1,56,203ha.

Proper strategies are required to be formulated to bring back luster in oil palm cultivation. Proper planning and methodological scientific farming and techniques are required to be followed for succeeding in achieving the set objective by the year 2011-12. The targeted production of FFBs would be the tune of 19,20,252 MT (**Annexure-VI**) as on 1.4.2012. The targeted production of CPO by 2012 would therefore be to the tune of 3,07,240 MT valued at 921.72 cores (at Rs.30000 per Mt present price of CPO). This indicates that there would be more than 11 times increase in CPO production levels by 2012, which is achievable provided import duties on edible oils is maintained at a level which is remunerative for Indian oil palm farming community.

(Details indicated at **Annexure-VII**).

State Governments implementing OPDP will have to gear up its machinery and man-power, to keep pace with envisaged targets. Sufficient number of officer's/trainers as well as farmers are required to be trained in oil palm cultivation. State Governments must simultaneously create conducive infrastructure in line with the area expansion programme to achieve desired objectives.

PROCESSING FACILITIES

Adequate processing facilities exist in Andhra Pradesh but the overall capacity utilization is below 40%. In Karnataka, there is only one mill at Kabini with one tonne per capacity but operating efficiency is only 0.64 tonne. Further, 10 tonne mill of M/S. KOOL is closed because of some dispute. In Tamil Nadu, Gujarat and Goa, 2.5 tonnes per hour palm oil mills have recently been established. Kerala has around 23.5 tonnes per hour processing facilities. Apart from this Andaman & Nicobar Island has processing capacity of 4 tonnes/hour and Maharashtra has about 5 tonnes processing capacity. At present total processing capacity available in the country is 123.5 MT of FFBs/hour. However, more processing infrastructure has to be created during 10th & 11th Plan in tune with raw material (EEBs) that would be available by the end of 11th plan, to achieve success in the objectives/programme. India would require about 500 MT processing capacity per hour to process 19,20,252 Mt of FFBs produced by the year 2012 as indicated above (**Annexure-VII**).

The state-wise presently oil palm processing facilities available in the country is indicated at **Annexure-VIII**.

STRATAGEIES TO BE ADOPTED FOR OPTAMIZING THE PRODUCTION UNDER OPDP BY THE YEAR 2011-12

In addition to the assistance being provided under various components especially the core components like seeds/sprouts/seedling, cultivation which include all cultivation practices and drip irrigation system as indicated above the need of the hour is to concentrate on optimizing the production to bridge the gap between demand and supply of the edible oils in the country. The various steps to be taken in this regard would mainly be.

(i) Formulate a comprehensive future strategy/action plan: State Government should formulate a comprehensive future strategy/action plan in consultation with NRCOP and TMPO for ensuring smooth implementation of the programme in coming years. Extension activities are required to be geared up to meet challenges and proposed area expansion targets for doubling the palm oil production by the end of 11th Five Year Plan.

(ii) Realistic proposals for area expansion: State should come up with realistic proposals for area expansion so as to clear the back log of 9th Paln. State Governments/implementing agencies should gear-up to cover additional area of 50,000 ha during 10th Five Year Paln and 70,000 ha during 11th Five Year Plan.

(iii) Improve productivity from existing plantation: Sincere efforts should be made by State Governments to improve productivity from existing plantation, proper management practices are required to be followed for optimizing the productivity levels. This constraint would otherwise hinder overall development of oil palm crop in India. State Government should convene regular PMC meetings, take effective steps for rehabilitation of palm oil mills and side by side, ensure that remunerative prices are paid to farmers. Improvement in productivity would supplement the availability of FFBS required by the processing sector during 10th & 11th Plan.

(iv) Reallocation of zones: All pending issues need to be shorted out immediately by the State Governments and reallocation of zones made to augment availability of FFBS in near future. This would ensure uniform availability of FFBS to mill owners during 10th & 11th Plan.

(v) Posting of staff exclusively for oil palm development: Staff should be posted exclusively for oil palm development. State Government should take advantage of financial provisions available under OPDP. This would ensure organized planning, implementation and monitoring of the programme and would help in achieving envisaged targets during 10th & 11th Plan.

(vi) Role of extension agencies: It has been observed that area expansion programme has not picked well in spite of conducive edible oil prices prevailing in National and International Markets---there is a urgent need to gear-up extension agencies to organize Campus, Melas and distribute pamphlets and leaflets to farming community in local language, highlighting importance of Oil Palm Development programme (OPDP). A systematic approach is required to followed to popularize oil palm cultivation during 10th & 11th Plan.

(vii) Ensure availability of Inputs: State Government should ensure availability of all inputs like seeds, fertilizers, irrigation equipments, harvesting tools and also ensure that carrying of FFBS to the processing units is not delayed considerably.

(viii) Ensure proper supply of FFBS to processing units: At the end of 9th Plan the total availability of FFBS per ha from a net area of 36,203 ha is around 1,28,873 tonnes. However, the availability is not even 20 percent of the potential. Low productivity is a matter of serious concern for all of us and concerted efforts be made by all State Government to enhance the yield levels.

(ix) Optimize availability of 10th & 11th Plan: To optimize palm oil production by the end of 11th palm State Governments are required to improve productivity of oil palm plantations by adopting/following the proper management practices made available /supplemented by NRC-OP from time to time. To ensure availability of 19,20,252 MT of oil palm FFBS by the end of 11th plan the availability of FFBS levels should improve from existing levels. Concerted and sincere efforts are required to be made by the State Governments to achieve these objectives.

(x) Indenting requirement with National Research Centre for Oil Palm (NRC-OP): State Government usually fail to indent their seeds/sprouts demand with NRC-OP well in advance—Since it takes around 9 months for development of the seed stocks, It is imperative on parts of State Governments to deposit advance money with NRC-OP (atleast 9 to 10 months in advance) so that availability of seeds/sprouts is ensured as per requirement.

(xi) Apart from above, based on the suggestions furnished by implementing agencies from time to time the restructuring of present scheme implemented as OPDP/ISOPOM would be done in order to optimize the production of edible oils within the country to bridge the gap between demand and supply of edible oil. This would also help in saving lot of foreign exchange required otherwise for import of edible oils.

Annexure-I

Envisaged Tenth Plan Targets for Area/Production and Budgetary requirements under Oil Palm Development Programme/ ISOPOM

Sl. No.	Year	Target(Area in hectares)	Expected FFB Production	Expected Palm Oil Production= FFBsx0.16	Expected kernel Production @ Palm Oil 0.4 MT/ha	Seed/sprouts required @ 150 sprouts/ha. (numbers in lakhs)	Required outlays(Rs. Crores) @ Rs.20,000/ha.per annum	Expected outlays required for establishment of tissue culture lab & other infrastructure & manpower(Rs.in cores)	Total budget required during 9 th Plan (Rs.in crores)
1	2002-03	3371	740020	118403.2	1348.4	5.06	6.74	-	6.74
2	2003-04	5000	804133	128661.28	2000	7.50	10.00	-	10.00
3	2004-05	12000	846056	135368.96	4800	18.00	24.00	0.15	29.36
4	2005-06	14629	867528	138804.48	5851.6	21.94	29.26	0.10	29.36
5	2006-07	15000	951564	152250.24	6000	22.50	30.00	0.20	30.20
	Total 10th Plan	50000	4209301	673488.16	20000	75.00	100.00	0.45	100.45

OPDP/Excel/Kharif Annexures

* Actual

**Envisaged

Annexure-II

Envisaged 11th Plan Targets for Area/Production and Budgetary requirements under Oil Palm Development Programme/ ISOPOM

Sl. No.	Year	Target(Area in hectares)	Expected FFB Production (MT)	Expected Palm Oil Production = FFBsx 0.16 (MT)	Expected kernel Production @ Palm Oil 0.4 MT/ha	Seed/sprouts required @ 150 sprouts/ha.(numbers in lakhs)	Required outlays(Rs. Crores) @ Rs.20,000/ha. per annum	Expected outlays required for establishment of tissue culture lab & other infrastructure & manpower(Rs.in cores)	Total budget required during 9 th Plan (Rs.in crores)
1	2007-08	14000	1052259	168361.44	5600	21.00	28.00	0.20	28.20
2	2008-09	14000	1201349	192215.84	5600	21.00	28.00	0.30	28.30

3	2009-10	14000	1400220	224035.20	5600	21.00	28.00	0.30	28.30
4	2010-11	14000	1641736	262677.76	5600	21.00	28.00	0.30	28.30
5	2011-12	14000	1920252	307240.32	5600	21.00	28.00	0.30	28.30
	Total 11th Plan	70000	7215816	1154530.56	28000	105.00	140.00	1.40	141.40

OPDP/Excel/ Kharif Annexure

Annexure-III
Targeted Area Cover & Production under Oil Palm Development Programme (OPDP) for VIII Plan

Year	Proposed Target for VIII plan (Area in ha)	Corresponding Production Levels					
		1.5MT	5 MT	8 MT	12 MT	16 MT	20 MT
		3 rd Year	4 th Year	5 th Year	6 th Year	7 th Year	8 th Year
Prior to OPDP	8,585	12,877	42,952	68,680	103,020	137,630	171,700
1992-93	1,534	2,301	7,670	12,272	18,408	24,544	30,680
1993-94	3,191	4,786	15,955	25,528	38,292	51,056	63,820
1994-95	5,842	8,763	29,215	46,736	70,104	93,472	11,640
1995-96	8,254	12,381	41,270	66,032	99,048	132,064	165,080
1996-97	6,571	9,856	32,855	52,568	78,852	105,136	131,420
Total	25,392						

OPDP/Area cover/Sheet 2

Targeted Area Cover & FFBS Production under Oil Palm Development Programme (OPDP) for IX Plan

Year	Proposed Target for IX plan (Area in ha)	Corresponding Production Levels					
		1.5MT	5 MT	8 MT	12 MT	16 MT	20 MT
		3 rd Year	4 th Year	5 th Year	6 th Year	7 th Year	8 th Year
1997-98	5,074	7,611	25,370	40,592	60,888	81,184	101,488
1998-99	2,220	3,330	11,100	17,760	26,640	35,520	44,400
99-2000	1,450	2,175	7,250	11,600	17,400	23,200	29,000

2000-01	591	886	2,955	4,728	7,092	9,456	11,820
2001-02	1,476	2,214	7,380	11,808	17,712	23,616	29,520
Total	10,811						

OPDP/Area cover/Sheet 2

Targeted Area Cover & FFBs Production under Oil Palm Development Programme (OPDP) for X Plan

Year	Proposed Target for X plan (Area in ha)	Corresponding Production Levels					
		1.5MT	5 MT	8 MT	12 MT	16 MT	20 MT
		3 rd Year	4 th Year	5 th Year	6 th Year	7 th Year	8 th Year
2002-03*	3,371	5,057	16,855	26,968	40,452	53,936	67,420
2003-04**	5,000	7500	25000	40000	60000	80000	100000
2004-05	12,000	18,000	60,000	96,000	144,000	192,000	240,000
2005-06	14,629	21,943	73,145	117,032	175,548	234,064	292,580
2006-07	15,000	22,500	75,000	120,000	180,000	240,000	300,000

OPDP/Area cover/Sheet 2 *Actual **Envisaged

Targeted Area Cover & FFBs Production under Oil Palm Development Programme (OPDP) for XI Plan

Year	Proposed Target for XI plan (Area in ha)	Corresponding Production Levels					
		1.5MT	5 MT	8 MT	12 MT	16 MT	20 MT
		3 rd Year	4 th Year	5 th Year	6 th Year	7 th Year	8 th Year
2007-08	14,000	21,000	70,000	112,000	168,000	224,000	280,000
2008-09	14,000	21,000	70,000	112,000	168,000	224,000	280,000
2009-10	14,000	21,000	21,000	112,000	168,000	224,000	280,000
2010-11	14,000	21,000	21,000	112,000	168,000	224,000	280,000
2011-12	14,000	21,000	21,000	112,000	168,000	224,000	280,000
Total	70,000						

OPDP/Area cover/Sheet 2

**Annexure-IV
STATE WISE**

PRODUCTION OF OIL PALM FRESH FRUIT BUNCHES (in MT) UNDER OIL PALM DEVELOPMENT PROGRAMME (OPDP)

Sl. No.	NAME OF THE STATE	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-2000	2000-01	2001-02	2002-03
1	Andhra Pradesh	58.00	983.00	3855.00	6966.00	11374.00	33763.005 6152.00	56152.0 0	125000.00	125000.00	108757.00	109688.61
2	Karnataka	0.00	237.00	1197.00	2143.00	2665.00	3439.00	3346.95	4588.54	3998.13	3562.50	3676.65
3	Tamil Nadu	0.00	0.00	0.00	0.00	0.00	12.80	188.18	850.00	2250.00	229.58	434.00
4	Gujarat	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24.90	29.42
5	Orissa	0.00	0.00	0.00	0.00	0.00	70.00	120.00	200.00	265.00	0.00	0.00
6	Goa	0.00	0.00	0.00	28.00	193.00	357.00	700.00	819.00	1300.00	1603.00	1879.05
7	Tripura	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	75.00	80.00
8	Assam	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	Kerala	14051.00	14051.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4820.43	32991.64
10	Andaman & Nicobar	7124.00	9347.00	0.00	0.00	0.00	9771.10	6864.18	12970.88	10010.82	980092.92	8957.00
	Total	21233.00	24618.00	5052.00	9137.68	14232.00	47412.90	67371.31	144428.42	142823.95	128873.33	157736.37

Annexure-V

State-wise, Year-wise quantity of Crude Palm Oil (CPO) obtained under Oil Palm Development Programme OPDP

	Name of the State	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-2000	2000-01	2001-02*	2002-03
1	Andhra Pradesh	150.90	525.90	862.21	7195.71	3710.90	5298.40	9684.00	15729.00	18974.00	18960.00
2	Karnataka	28.92	163.85	347.91	432.35	567.21	535.51	738.76	731.97	573.58	606.64
3	Tamil Nadu	0.00	0.00	0.00	0.00	2.21	30.10	82.09	86.06	0.00	0.00

4	Gujarat	0.00	0.06	0.00	0.00	0.00	0.00	0.06	3.56	2.94	2.94
5	Orissa	0.00	21.71	0.00	0.00	11.19	19.18	21.71	42.35	0.00	0.00
6	Goa	0.00	0.00	0.00	0.00	54.83	102.95	150.00	207.75	243.00	330.85
7	Tripura	0.00	8.00	0.00	0.00	0.00	0.00	8.00	20.64	0.00	0.00
8	Assam	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	Kerala	954.00	5159.15	3955.00	2161.00	4428.00	3812.00	5159.15	6667.26	980.00	6572.00
10	Andaman & Nicobar	0.00	2314.00	0.00	1426.00	1284.00	1142.00	2314.00	1800.76	1840.32	1696.00
	Total	1133.82	8192.67	5165.12	8192.67	10058.34	5165.12	18157.77	25289.35	22613.83	28168.43

*Provisional

OPDP/area cover/oil

**The production of CPO is based on the production of oil extraction ratio, i.e. 16%-17% total Fresh Fruit Bunches (FFBs) produced.

Annexure-VI

Actual/targeted production & shortfalls of FFBs/CPO

Net are as on 1.4.2002 (Total 8 th & 9 th Plan)	36,203 ha
Proposed Area to be covered during 10 th Five Year Plan	50,000 ha
Proposed area to be covered during 11 th	70,000 ha
Total Area to be achieved by 2011-2012	1,56,203 ha
Actual Production of FFBs on 1.4.2002	1,28,873.33 MT
Targeted Production of FFBs as on 1.4.2002	6,47,823 MT
Shortfall of FFBs recorded on 1.4.2002	5,18,949.67 MT
Actual Production of CPO as on 1.4.2002	22,613.83 MT
Targeted Production of CPO as on 1.4.2002 (Targeted FFBx 0.16)	1,03,651 MT
Shortfall of CPO as on 1.4.2002	81,083 MT
Targeted Production of FFBs as on 1.4.2012	19,20,252 MT
Targeted Production of CPO as on 1.4.2012=FFBsx 0.16	3,07,240 MT
Targeted Production of CPO on 1.4.2012 (at present price Rs. 30,000=3,07,240x30,000=946,68,00,000)	921.72 Crore per annum
Actual Crushing capacity available as on 1.1.2004	123.50 MT/hour/day
Targeted crushing capacity as on 1.4.2012	500 MT/hour/day

Formula for calculating yield of FFBs	
Age of Palms	Yield (MT)
1 st to 2 nd year	Nil
3 rd year	1.5 Mt/ha
4 th year	5 Tonnes/ha
5 th year	8 Tonnes/ha
6 th year	12 Tonnes/ha
7 th year	16 Tonnes/ha
8 th year	20 Tonnes/ha
8 th year onwards upto 18 th year 20 ton/ha above 18 years Production remains constant and then gradually starts declining over as period of time.	

OPDP/Excel/Kharif

Annexure-VII
PALM OIL PROCESSING FACILITIES

Details of oil palm processing units working in different states are as given in the following table:

(processing capacity in tones of FFBs per hour			
SI.N o.	Name of the Unit	Sector	Capacity in Operation
Andhra Pradesh			
1.	APOILFED, Pedavegi-West Godavari	Co-op	4
2.	M/s. Radhika Veg.Oil, Garividi-Vijaya Nagaram	Pvt.	5
3.	M/s.SICAL Oil Palm Mill, Ampapuram-Krishna Distt.	Pvt.	10
4.	Simhapuri Agro, Manubrola-Nellore	Pvt.	5
5.	M/s. Foods, Fats & Fert. T.P. Guddem-West Godawari Distt	Pvt.	6
6.	M/s.Godrej Agrovet, Pothapalli-W. Godavari Distt.	Pvt.	10
7.	M/s. Palmetech India Ltd., Poddapuram-E.G.Distt.	Pvt.	30
8.	M/s. Nav Bharat Agro Products, J.R.Gudden-W.G. Distt.	Pvt.	5
	Total		75
Karnataka			

1.	M/s. Kool, Shimoga	Joint Venture of State & Oswal Ltd.	10
2.	Hort. Department, Kabini	State Government (leased to Palmtech)	1
	Total		11
Kerala			
1.	CPCRI, Palode	Central Govt.	1
2.	OPIL, Yerror Estate	Public Sector	20
3.	OPIL, Chitra Estate	Public Sector	2.5
	Total		23.5
Andaman & Nicobar			
1.	Andaman & Nicobar Islands	State Government	4
	Total		4
Maharashtra			
1.	M/s. Sai Dhara Agro Products & Plantations Ltd.	Private Sector	5
	Total		5
Gujarat			
1.	Shri Kalyan Agri. Crops Sales & Processing Coop. Society Ltd., Navasari	Cooperative Sector	2.5*
	Total		2.5
Goa			
1.	M/s. Godrej Agrovvet Ltd., Ponda, Goa	Private Sector	2.5*
	Total		2.5
Grand Total			123.5

*expending upto 5 tonnes