



**Deejay Farms**  
A Unit of Deejay Group

# DEEJAY FARMS - INDIA

## COCONUT BREEDING AND THE BENEFITS OF HYBRID COCONUT FARMS



# DEEJAY GROUP

- Setup in 1969.
- Engaged in Agri Livestock activities and related genetic research in India.
- Focus on Hybrid Coconut Seedling Production.
- Winner of Government Agri Livestock Rural productivity award.

# DEEJAY COCONUT BREEDING STATION



- Started in 1983 - design & technical plan by UN Coconut Breeding Expert Prof. A. Davis.
- Projects located at Madurai, Ambur in Tamilnadu, Bailur in Karnataka and Salaulim in Goa. Starting shortly in Andhra Pradesh.
- 200 ha with over 23,000 mother palms.
- Sold over Two million hybrid coconut seedlings.

# DEEJAY COCONUT BREEDING STATIONS IN INDIA



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Data SIO, NOAA, U.S. Navy, NGA, GEBCO  
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Image Landsat

Google earth



# DEEJAY COCONUT BREEDING STATION AT MADURAI

An aerial photograph of a vast coconut breeding garden. The trees are densely packed and appear to be of a uniform variety. The ground is a mix of green grass and brown soil. In the background, there are rolling hills under a cloudy sky.

**ARIAL VIEW OF DEEJAY COCONUT BREEDING GARDEN**



**DEEJAY DWARF**



137  
Date of planting  
23/10/2007

**THIRTY MONTHS OLD DEEJAY DWARE**





# DEEJAY PARENT LINE CHARACTERISTICS

Specially selected for:

- Early bearing.
- Higher yields.
- Larger nuts.
- More tender coconut water.

# REJUVENATION PROGRAM OF DEEJAY DWARF PARENT



- Mother palms are replanted every twenty years constantly improving the performance in-house and in the field.
- Computerized records of over 23,000 palms are maintained, from the date of planting.
- C A D E S in place (Computerized Automatic Data Entry System).
- New mother palms are produced through pedigreed pollination with maximum selection pressure.



# THE NURSERY



**SOWING OF SEED NUTS**

**A BED OF COCONUT SEEDLINGS READY FOR DISPATCH**



**DESTRUCTION OF REJECTED SEEDLINGS**



# DEEJAY HYBRID TREES PERFORMANCE AT CUSTOMERS' FARMS

A photograph of a man, Mr. Mahendran, standing next to a large coconut tree. The tree is heavily laden with green coconuts. The man is wearing a white shirt and sunglasses. The background shows more palm trees and a clear sky.

**Mr. MAHENDRAN, UDUMALPET**  
**PLANT AGE – 54 MONTHS**  
**FIRST FLOWERING – 24 MONTHS**



A photograph of a coconut tree with several large, dense clusters of green coconuts hanging from its branches. The tree is surrounded by other palm trees in a plantation setting. The ground is dark and appears to be black cotton soil.

Mr. RAJU FARM, UDUMALPETAI,  
54 MONTHS OLD IN BLACK COTTON SOIL

A man with a mustache, wearing a white short-sleeved shirt and white trousers, stands next to a young palm tree. He is pointing towards the trunk of the tree. The tree has a thick, fibrous trunk and several large, green, feathery fronds. The background shows a field of similar palm trees under a clear sky.

Mr. KUPPUSAMY, POLLACHI  
EIGHTEEN MONTHS OLD TREE  
STARTED FLOWEING



Mr. UDAYAKUMAR, UDUMALPET  
FOUR YEARS OLD TREE



**KENYA COCONUT DEVELOPMENT AUTHORITY OFFICIALS  
VISIT TO A DEEJAY CUSTOMER'S GARDEN IN FEBRUARY  
2012**



DEEJAY HYBRID TENDER COCONUTS READY FOR DISPATCH



OFFICIALS OF " M.S. SWAMINATHAN FOUNDATION"  
VISITING DEEJAY CUSTOMER GARDEN

# DEEJAY COMMERCIAL FIELD PERFORMANCE IN INDIA COMPARATIVE CHART



- High yields of 250 plus nuts p.a. compared to 80 nuts.
- Early flowering in 24 mths compared to over 72 mths.
- Copra of 200 grams per nut compared to 140 grms.
- Higher Oil content of 68% compared to 63%.
- 500 ml of sweeter coconut water compared to 200 ml.
- 43750 Nuts per ha. compared to 14000.
- 8750 kgs of copra per ha. compared to 1960 kgs.
- 5950 kgs of oil per ha. compared to 1235 kgs.

\* Based on several farmers' field reports

# COST & REVENUE COMPARISON Per ha



|  | <u>DJ HYBRIDS</u>    | <u>REGULAR TALL</u>  |
|--|----------------------|----------------------|
|  | <b>US \$</b>         | <b>US \$</b>         |
| Year of first yielding                           | 3 <sup>rd</sup> Year | 7 <sup>th</sup> Year |
| Expenses up to first yield                       | 4,869                | 6,278                |
| Income by 5 <sup>th</sup> year of planting       | 13,125               | NIL                  |
| Income by 10 <sup>th</sup> year of planting      | 48,407               | 4,967                |
| Net Profit / (Loss) by the 10 <sup>th</sup> year | 34,768               | (3,974)              |
| Net profit per year after stabilization          | 5,804                | 918                  |

THE ABOVE RESULTS ARE BASED ON INDIAN  
CONDITIONS

(175 trees X 250 nuts X \$ 0.16 = \$ 7000 – exp \$ 1196)





# THE POTENTIAL OF DEEJAY HYBRID COCONUT FARMS



# POSSIBLE IMPACT WITH DEEJAY HYBRIDS

- If 200,000 ha are effectively planted with Deejay Hybrid Seedlings, coconut production would rise to 8.75 billion nuts per annum.

(200,000 ha X 175 trees X 250 nuts per tree per year)

- 200,000 ha = 40 km X 50 km land.
- This would make any country climb to fourth position or above in the World, based on their present production.



# SMALL FARMER DEVELOPMENT PROGRAM

- At 2 ha per family, 100,000 families will get benefited with 200,000 ha hybrid coconut farm.
- 400,000 direct jobs will be created, with millions of indirect jobs.
- 100,000 families will move from poverty to middle income group.
- Unemployment and under-employment will be greatly reduced.



# GROUP FARMING BENEFITS

- Small families are grouped into clusters to create Farmers' Producing Societies.
- Farmers' Producing Societies will reduce costs and improve profitability.
- Farmers' Producing Societies will supply the centralised value addition units.
- Year on year revenue of US\$ 1.4 billion accrue in the hands of farmers from 200,000 ha.
- Each family would generate net income of US\$ 967 per month from 2 ha.

(\$ 5804 X 2 ha / 12 months)

# VALUE ADDITION POSSIBILITIES



- Desiccated coconut.
- Coconut Butter, Coconut Cream, Coconut flour.
- Coconut Milk, Milk powder, Coconut Yogurt.
- Virgin Coconut Oil.
- Coconut vinegar.
- Coconut Coir, Coconut pith.
- Coconut wood.
- Coconut Oil.
- Tender Coconut water.
- Coconut Sugar, Coconut Syrup.
- Coconut Ethanol.



# COCONUT OIL

- 200,000 ha of Deejay hybrid coconut farm would supply 1.75 million MT of copra.

( 200,000 ha X 175 trees X 250 nuts per year X 200 grms copra)

- This gets converted into 1.19 million MT of coconut oil.

( 1.75 million MT X 68% Oil)

- This is equivalent to US\$ 1.13 billion in the international market.

( 1.19 million MT oil X \$ 950 per MT)



# TENDER COCONUT WATER

- 200,000 ha of Deejay hybrid coconut farm would supply 8.75 billion Tender coconuts.

( 200,000 ha X 175 trees X 250 nuts per tree)

- This gets converted into 4.37 billion ltrs of Tender coconut water.

( 8.75 billion nuts X 500 ml water)

- This is equivalent to US\$ 6.55 billion in the international market.

( 4.37 billion ltrs of water X \$ 1.50)



# COCONUT SUGAR

- 200,000 ha of Deejay hybrid coconut farm would accommodate 35 million coconut trees.  
( 200,000 ha X 175 trees per ha)
- At an average of 8 ltrs per day, for 300 days would provide 84 billion ltrs of coconut sap.
- This could get converted into 14 million MT of palm sugar.  
( At one kilo of sugar from 6 ltrs of sap)
- This is equivalent to US\$ 14 billion in the international market.  
( At \$ 1000 per Ton of Sugar)





# COCONUT BIO-ETHANOL

- 200,000 ha of Deejay hybrid coconut farm would accommodate 35 million coconut trees.
- At an average of 8 ltrs per day, 300 days a year would provide 84 billion ltrs of coconut sap.
- This could get converted into 8.4 Billion ltrs of coconut Bio-Ethanol.  
( At 10% ethanol per ltr of sap)
- This is equivalent to US\$ 6.09 billion in the international market.  
( At \$ 0.72 per ltr of ethanol)



# PRIME MOVER ADVANTAGE

- Given enough time, the big Industrialists / Multinationals will take control of food production.
- Organising the small coconut farmer earliest is essential.
- This appears the only way to assist the small farmer to move from poverty to middle class status



# THANK YOU

VISIT US AT

[www.deejayfarm.com](http://www.deejayfarm.com)

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