

GEOGRAPHICAL INDICATION FOR PROPOSAL
ON
EATHOMOZHY TALL COCONUT



SUBMITTED TO:

GEOGRAPHICAL INDICATIONS REGISTRY

**Intellectual Property Office,
GST, Road,
Guindy,
Chennai – 600 032**

8th August, 2007

FORM GI-I

THE GEOGRAPHICAL INDICATIONS OF GOODS
(REGISTRATION AND PROTECTION)ACT 1999

Application for Registration of a geographical indication in Part A of the Register; Section 11(3), Rule 23(5)

Application is hereby made by for the registration in Part A of the Register of the accompanying geographical indication furnishing the following particulars:

I(a) Name of Applicants: (1) ~~Dr. I. Henry Louis~~, Chairman, Centre for Innovation and Transfer of Technology(CITT)

Representing the
(2) ~~Presidents~~, Coconut Growers ~~Associations~~, Kanyakumari Dt Tamilnadu.

(b)Address: (1) Dr. I. Henry Louis, chairman, Centre for Innovation and Transfer of Technology, 48/2 Gnana Muthagam, Ramanupthoor, Nagercoil-2 Kanyakumari dist, Tamilnadu and Member , Research and Development committee, Coconut Development Board, Government of India, Cochin-600 012.
Mobile: 98422,33602.
(2) ~~Presidents~~, Coconut Growers' Association, Nagercoil in Kanyakumari Dist, Tamil Nadu (Annexure A)

Dr. I. Henry Louis is experienced in the Development and Research aspects of this crop in the state of Tamil Nadu, as Professor and Specialist in Coconut crop in Tamilnadu Agricultural University. He had the opportunity to study and recognize this particular type of Coconut cultivar proposed for GI Registration. His Centre for Innovation and Transfer of Technology is a non-profit making NGO registered under the Society Act. The byelaws of the Learned Society are enclosed(Annexure I). He has trained the chairmen and members of the Coconut Growers' Association in Kanyakumari district, Tamilnadu in various aspects of Coconut Cultivation.

(c) LIST OF ASSOCIATION OF PERSONS/PRODUCERS/ORGANISATION/

AUTHORITY:

1. *K. Padmadhas President - Federation Boomi padukappu Sangam*
2. **ANNEXURE A**
- 1.2 *ANTHONY DAS M.A. Elite Coconut Growers*
Jayachandran - President, Eathamozhy Poomi padukappu Sangam
- 2.4 Parthasarathy - President, Karthikai, Vadali, Poomi padukappu Sangam
- 3.6 R. Ayyaswamy, MA - Kunjanvilai, Poomi padukappu Sangam
- 4.6 Sridharan - Muhilanvilai, Poomi padukappu Sangam
- 5.17 Paramanidoss - Ananda nadar, Kudiyirippu
- 6.8 Kumaraswamy - Virakudiyirappu
- 7.9 *CLAYSON ROBIN M.A. Elite Coconut Growers*
Periya Nadar - President, Poomi padukappu Sangam, Puthur.
- 8.9 *Rev. S. MARIADASAN President Coconut Growers Association Kallukottam.*

BOOMI PADUKAPPUR SANGAM FEDERATION :

1. Eathamoozhy Poomi Padukappu Sangam, Ealhamoozhy Post
2. Vellamodi Surtuvattara Poomi Padukappu Sangam, Vellichanthai Post
3. Kurunthankodu Poomi Padukappu Sangam - Kurunthankodu Post
4. Karthikaivadali Poomi Padukappu Sangam - North Surankudi Post
5. Puthalam Nilavala Padukappu Sangam - Puthalam Post
6. Puthur Poomi Padukappu Sangam - Polikarai Post,
7. Aacharipallam Poomi Padukappu Sangam - Aacharipallam P.O
8. Anandanadar Kudi Poomi padukappu Sangam - Anandanadar Kudi P.O
9. Karavilai Kirama Abivirithi Sangam - Andanadar Kudi Post
10. Illanthavilai Poomi padukappu Sangam - Pallam Post
11. Susintharam Manivilai Vattara Poomi Padukappu Sangam - Susintharam
12. Kumarapuram Thoppur Vattara Poomi Padukappu Sangam -
Kumarapuram Thoppur P.O
13. Sadayalputhur Poomi Padukappu sangam - Vempanur Post
14. Madathattuvilai Poomi padukappu Sangam - Villikkuri Post
15. Manakarai Poomi padukappu Sangam - Villikkuri Post
16. Melasangarakuli Poomi padukappu Sangam - Santhapuram P.O
17. Kattuputhur Poomi padukappu Sangam - Alagiyapandipuram P.O
18. Peruvallai Vivasakkal Sangam - Peruvillai P.O
19. Kulasekaranpudur Poomi padukappu Sangam - Ramapuram P.O
20. Anandanaru VivasakkalNalla sangam - Ethamozhi P.O.

(e) SPECIFICATION:

This is a natural selection from the West coast Tall normally found in Kerala and Tamilnadu. This indigenous type with many derirable traits is found spread in the different revenue blocks like Agastheeswaranm, Rajakamangalam, Eathomozhy and Collachel in Kanyakumari district of Tamilnadu. It is known by the common name Eathomozhy Tall coconut. This cultivar exhibits its full genetic potential not only in K.K.district, but also in different parts of Tamilnadu where the seedlings have been distributed for years. The traditional knowledge and wisdom of the farmers cultivating this Coconut type helps for the high yield and its preservation.



It is known for its sturdy stem, large crown, fairly big sized nuts, with good fibre in the thick shell, kernel and high copra and oil contents. The tree grows to a height of 30metre and lives for a period over 80 to 100 years. The crown with 36-40 leaves, bearing 13-15 large inflorescences and bunches, and having nuts in various stages of development, provides a panoramic view. The nuts are round or oblong and dark or light green in colour . They mature in 11-12 months. The kernel in nuts measures 1.25 - 1.50 cm in thickness. This particular type is cultivated as a rainfed crop almost in 80% of the area where it is found growing in and around Eathomozhy.

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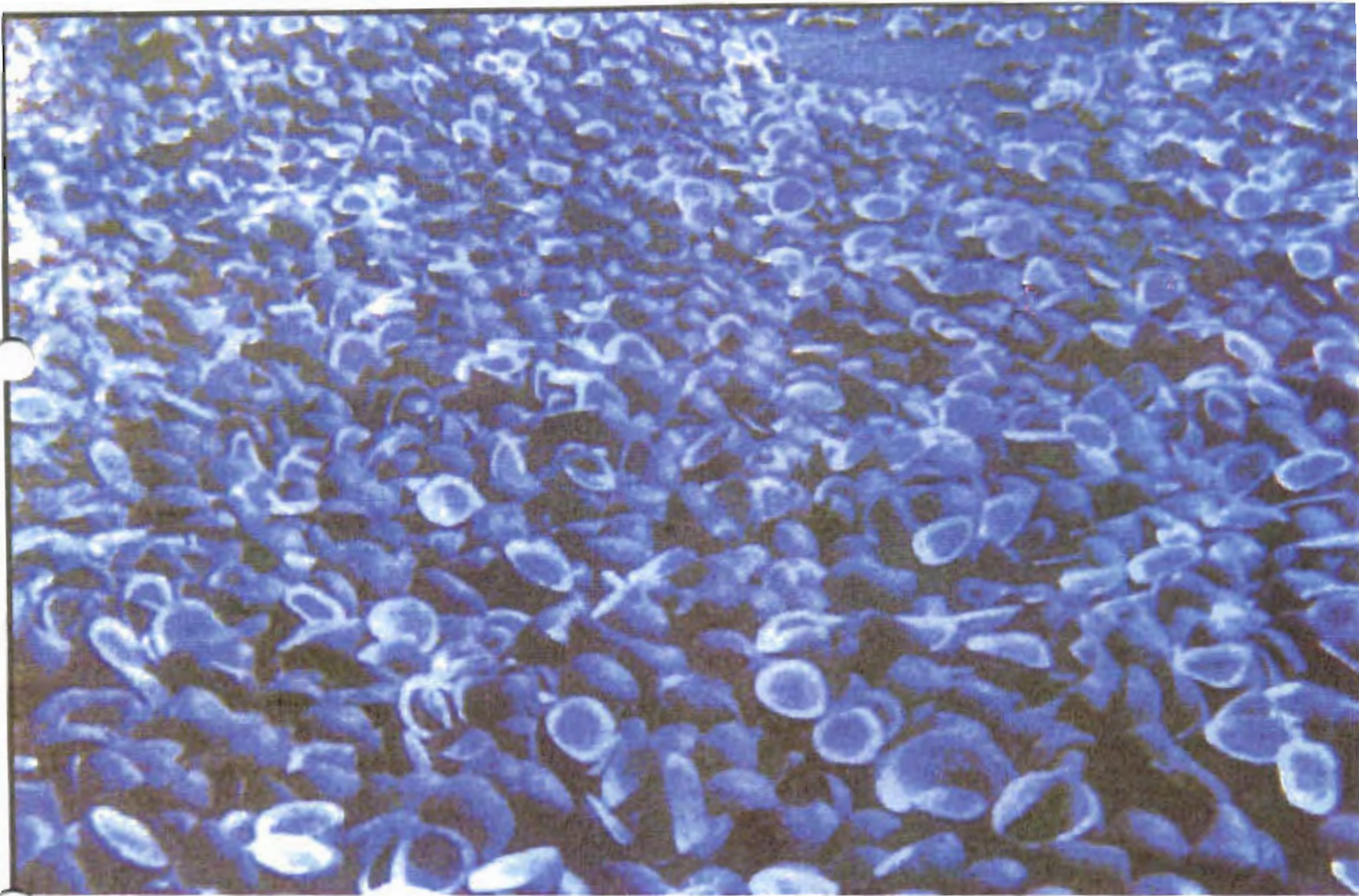
The dehusked nuts in the Chennai market fetches the maximum price per nut and known as Kottar Coconut. The town Kottar is an ancient trading centre in the chera dynasty located in Kanyakumari district, Tamilnadu.



The brown fibre prepared from this nut by retting the husk in backwaters is known for its strength, and high price. The special ropes made out of this brown fibre as a tiny and Small Scale Industry is known for many centuries photo of fibre extraction, a rope making.



Since the nuts well suited for the Industrial products, copra makers and desiccated Coconut manufacturers from other parts of Tamilnadu prefer the nuts from the Ezthomozhy Tall coconut type.



This very type has now spread in about 6000 acres. Since the same population is allowed to inter-breed in the area certain amount of purity and stability due to homozygosity is observed.

(f) NAME OF THE GEOGRAPHICAL INDICATION & PARTICULARS: EATHOMOZHY-

TALL- COCONUT. In the southern most part of the peninsular India Kanyakumari district is bordered both by Kerala state on the West and the fertile region district of Tirunelveli of Tamilnadu State in the East , where this crop is claimed as a heritage of historical and commercial importance.

A long strip of Coastal and Inland area in Kanyakumari District, starting with Thengapattinam, Colachel, Rajakkamangalam, Alathankarai, eathomozhy and Puthalam revenue blocks bear this special type with more opportunity to inbreed and maintain the most desirable morphological and other traits.

GEOGRAPHICAL INDICATIONS OF THIS COCONUT TRACT:

North Latitude between 8.03 and 8.35

East Longitude between 77.05 and 77.36

(G) DESCRIPTION OF THE GOODS:

The Coconut cultivar Eathomozhy Tall has high potential for copra and oil contents, and is identified for multiplication and supply to farmers to increase the production, improve quality of the products and thus raising the per capita income of the coconut growers in the area.

(h) GEOGRAPHICAL AREA OF PRODUCTION AND MAP:

In Kanyakumari district, the southern most part of the Peninsular India is bordered both by Kerala state supposed to be the Gods Own Land and the of Tirunelveli District of Tamil Nadu state, where this crop is claimed as a heritage of archeological and commercial importance.

Map of Kanyakumari Dt (showing the border lands of Kerala and Tamil Nadu)

Temperature:(Degree Centigrade)**Maximum** .. 38.7⁰c**Minimum** .. 18.1⁰c**Rainfall****Normal** .. 1443 mm**Winter** .. 50.30mm**Summer** .. 317.70mm**South West monsoon..** 551.70 mm**North East Monsoon ..** 523.30mm**No.of rainy days** .. 86**Total cultivated area..** 10,6559**Soil type** .. Sandy,coastal alluvial,Deep red loam,Laterite**Soli pH(values)** .. Ranges between 4.5 to 8.0**Saline Soil** .. Nil**Acid Soil** .. Pockets in Melpuram, and Thuckalai blocks**(i) PROOF OF ORIGIN:**

Cook(1901) pointed out that coconut has a long history of existence in the eastern and western hemispheres. Coconut has a recorded history of 2000 to 3000 years in the coastal areas of South India.

Ancient religious literature and cultural programmes in the GI area clearly indicate that this crop is inherent to this strip of land from time immemorial. To begin with, West Coast Tall and East Coast Tall varieties of coconut adapted well to the local soil and agro-climatic conditions in the coastal areas. The Eathomozhy Tall Coconut cultivar has adapted well to conditions in this Special tract.

Now there are many organizations seriously interested in protecting and preserving this rare type of Coconut cultivar. The Special morphological traits found in this variety due to its superior of genetic make up needs to be protected and preserved.

Dr.Henry Louis has trained the Presidents and members of the different Coconut Growers Associations in this tract. They have understood the speciality of this type and are interested in the conservation & promotion of this Coconut Cultivar.

(j) METHOD OF PRODUCTION:

Coconut crop in this district as a whole is cultivated over an area of 22586 ha, But in the earmarked area for the specific cultivar the area runs to about 6,000 acres. The nutrient status of the lands ear-marked under this special coconut cultivar is given in Table 3 Coconut crop in this area is mostly organics based. Farmers apply Sunnhemp, Glyricidia, Vagai, and other forest green manure leaves as organic manure. In addition soil sediments containing micronutrients, and other micro organisms are regularly transported from the nearby by ponds in summer months to be applied.

Mother palms from this special tract with Eathomozhy Tall are selected which have regular bearing habit, 30-36 leaves on the crown, leaf scars on the trunk with narrow inner spaces, spadix opening up regularly and with normal looking female flowers, and free from diseases. Seed nuts of the cultivar take about 105-120 days to germinate. Germination potently is 90-92%. In the Nursery sprinkler or flow irrigation is adopted. Seedlings of 9-12 months age are lifted for planting.



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Climate and Rainfall

SEASONWISE RAINFALL DETAILS IN KANYAKUMARI DISTRICT (IN.M.M)

Season	Month	Normal	1997	1998	1999	2000	2001	2002
Winter (Jan-Feb)	(January)	29.70	7.70	0.70	13.50	7.60	54.20	6.80
	February	20.60	2.90	2.10	39.20	196.50	19.70	21.40
Total		50.30	10.60	2.80	52.70	204.10	73.90	28.20
Summer (Mar-May)	march	47.80	20.10	4.40	25.00	29.70	21.60	46.90
	April	111.70	114.60	73.80	120.20	80.20	294.00	129.30
	May	158.20	134.50	162.20	313.40	28.90	103.60	165.40
Total		317.70	269.20	240.40	458.60	138.80	419.20	341.60
South West Monsoon (June-Sep)	June	211.40	154.20	187.70	317.20	252.40	146.30	79.60
	July	150.00	102.20	102.00	177.90	46.50	156.40	27.50
	August	87.60	114.40	89.20	30.30	414.30	89.30	94.10
	September	102.70	389.50	288.90	65.00	181.10	260.90	30.90
Total		551.70	760.30	667.80	590.40	894.30	652.90	232.10
North East Monsoon (Oct.Dec)	October	246.80	257.60	492.20	449.00	134.00	245.20	430.40
	November	206.20	313.60	351.80	132.70	166.90	222.40	314.10
	December	70.30	82.20	225.30	20.30	59.90	17.20	6.10
Total		523.30	653.40	1069.30	602.00	360.80	484.80	750.60
Grand Total		1443.00	1693.50	1980.30	1703.70	1598.00	1628.80	1352.50

RELATIVE HUMIDITY OF TEMPERATURE

Month	Year 2001			
	R.H.		Temperature	
	M.	E.	Max.	Mini.
Jan	74.2	63.2	29.2	21.4
Feb	74.0	62.3	30.1	23.2
Mar	72.9	61.6	32.8	24.4
Apr	78.8	69.8	34.4	24.8
May	76.1	67.7	34.2	25.1
Jun	74.2	69.0	33.6	22.4
Jul	73.5	68.5	32.8	23.8
Aug	76.6	69.3	33.9	23.2
Sep	70.4	64.8	32.4	24.1
Oct	82.4	66.4	32.6	22.9
Nov	89.0	72.0	31.4	23.1
Dec	87.0	71.0	31.2	22.2

M - Morning

E - Evening

NUTRIENT REQUIREMENT(kg)PER TREE:

Period of growth	N	P ₂ O ₅	K ₂ O
One month after planting	0.15	0.10	0.20
End of first year	0.30	0.50	0.50
End of second year	0.65	0.75	0.75
End of third year	1.05	1.00	1.00
End of fourth year and beyond	1.30	1.50	2.00

Every year 5-10 kg of neem oilcake and 20-30 kg of farmyard manure or compost are applied per tree.

Insect, mite and nematode pests and fungus and virus diseases can attack the coconut cultivar as any other variety from the nursery stage to crop maturity stage. Package of integrated management of pests and diseases developed by the TNAU or CPCRI are adopted. Chemical pesticides are avoided as they will leave residues in the produce and destroy the natural enemies and honey bees and other pollinators. Commercial apiaries are common in the GI areas and bee pollination enhances the nut production, besides giving additional income to the farmers.

DISTRIBUTION OF COCONUT SEEDLINGS:

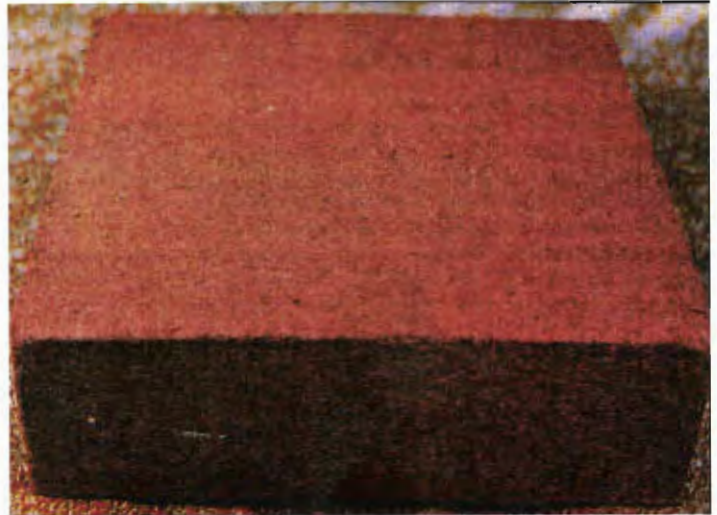
The Government coconut Nursery, Puthalam, Kanyakumari Dt. produces quality seedlings of Eathomozhy Tall coconut variety in an area of 1.95 ha with a target of 30,000 seedlings every year.

There is a great demand for the seedlings of Eathomozhy Tall Coconut from other parts of India and the other Asian countries, where it may perform better compared to the local varieties and hybrids, as it is a hardy cultivar. The applicants the NGOs and the coconut farmers produce seedlings with a scientific basis, when the real need arises.

The President and members of the Coconut Growers Associations have been trained by Dr.Henry Louis on improved methods of cultivation including mother tree and nut selection, nursery technology, spacing and planting method in the main field, water/ nutrient/ weed/ pest / disease management, diagnostic characters for commercial purposes and coconut products from the variety, etc.

There was no environmental pollution in the production of fibre by the wetting process in the back waters. The farmers do not employ the child labours in the tiny and Small scale industries run to process the products of this coconut in the entire area.







i) CHARACTERISTICS AND UNIQUENESS:

The soil and agro-climatic conditions are unique in this geographical area. The Eathomozhy Tall Coconut is cultivated in more than 6000 acres. This variety is very unique and it performs as per its genetic potential in this geographical area.

The characteristics and stability and varietal characters, nut production and quality are given in the Table below:

CHARACTERS OF EATHOMOZHY TALL COCONUT

	CHARACTERS	MEASUREMENTS
i.	No.of leaves in 1-year old seedlings	9.10
ii.	Height of 3 -year old juvenile palm	3.70 - 3.70
iii.	Girth of 3 -year old juvenile palm	75-80 cm
iv.	No.of leaves on the crown of an adult pam	32-36
v.	No.of leaves produced per year by an adult farm	14-16
vi.	No.of leaflets in a full leaf	210-225
vii.	Length of full leaf	4.8-5.2m
viii.	Length of petiole of full leaf	1.2-1.4m
ix.	Pre-flowering period in months	74-80
x.	No.of bunches produced per year	11-13
xi.	No.of female flowers per year	300-330
xii.	Setting %	20-21
xiii.	No.of nuts per year	55-65
xiv.	Thickness of Kernel	1.25-1.50 m
xv.	Weight of kernel per nut	330-350 g
xvi.	Weight of copra per nut	165-175 g
xvi.	Oil content on dry wt basis in copra	65-72%

Coconut oil is unique as it contains:

- > lauric acid and
- > fatty acids

It is used as cooking medium and in various industries manufacturing

- # soaps
- # surfactants
- # detergents,
- # cosmetics
- # hair tonics and
- # hair oils

The oil has a cooling effect on the body, and is preferred as a cosmetic oil due to low viscosity and pleasant aroma.

(k) INSPECTION BODY: will comprise of nominees from the following organizations :

- i. CCDO, Coconut Development Board, GOI, Kochi
- ii. A.O(Coconut) Government Coconut Nursery , Puthalam Kanyakumari Dt.
- iii. Professor and Head , Horticultural Research station, TNAU, Pechiparai, Kayakumari Dt.
- iv. One NGO in Agricultural Development

(i) OTHER INFORMATION:

Coconut crop is grown in over 80 countries in Asia and Pacific regions. During the year 2000, India could harvest about 14,925 million nuts from an area of 1.91 million hectares, ranking first in the world production.

In India, coconut is now grown in 13 states including the traditional states of Kerala, Karnataka and Tamil Nadu and non-traditional states like Gujarat, Madhya Pradesh, Rajasthan, Uttar Pradesh and Tripura. Millions of men and women labourers depend on the cultivation, development and industrial activities of this wonder crop. so far more than 100 by-products of commercial value had come to the market.

Coconut cultivars with high potential for copra and oil contents, suited to a geographical and agro-climate region, if identified for multiplication and supply to farmers, would be able to raise the production, improve quality of the products and increase farmers profits, and compete with leading coconut producing countries like the Philippines and Indonesia in the world market. Hence, the Registration of geographical Indications of the Eathomozhy Tall Coconut type in Kanyakumari District would protect this valuable heritage variety, and would result in larger area under its cultivation and production in the identified geographical area.

This type of the Cultivar seems to be a natural selection in the course of many years of cultivatar. After the proposed registration, the applicants will promote the type and will share the benefits with the community. The centre for Innovation & Transfer of Technology and the coconut Grower Associations in Kanyakumari District which are the N.G.Os, will have the responsibility. They will enable farmers to enroll as members of Coconut Grower Associations to be established in places they are not available for the production and supply of seedlings of the Eathomozhy Tall Coconut cultivar type in larger numbers to the farming community elsewhere. The Coconut Development Board's Regional office(GOI)at Chennai or its unit in Kanyakumari District or Government Department or the concerned Sub-Centres of the Agri.University would be involved in preserving and promoting this Special Coconut type.

Name & Signatures of the Applicants:

1. N. Paramanythas B.A, Ex P. union chairman and Coconut grower. *(Signature)*
 2. *(Signature)*
 3. *(Signature)* President Federation K. Padmaiah BSc. LLB
 4. S. Krishna Swamy President Poovani Pathrakapu Sap. L.H. *(Signature)*
 5. V.M. Kamaswamy *(Signature)*
 6. Mr. S. Narayanasan *(Signature)*
 7. GLADSON ROBI M.A. MPhil. *(Signature)* (would be provided in course of time)
- Place: Nagercoil
 Date: 5-8-2007

N.B. Enclosures: Proof of Origin and Bye-laws of CITT, Nagercoil, K.K.District would be provided later.