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TAMIL ARASU

In scope this month

Dr. Tetsuo Kanno honoured

The famed neuro-surgeon of Japan, Dr. Tetsuo Kanno who visited Tamil Nadu was honoured by the State at a function on 12th December, 1986.

—A Report

Tamil Nadu leads in Medical facilities

At the function held on December 17th at the DMS campus, the Hon'ble Chief Minister inaugurated the five-storeyed annexe to house the Medical Services Directorate.

Record Flag Day Collections

On January 8th, at a special function held at Raj Bhavan, His Excellency, the Governor placed in record his appreciation of Tamil Nadu for the State's performance in Flag Day Collections.

Man did not weave life...

A profound interpretation to "Environment and Ecology" by a Red Indian Chief made in 1855. Because of its relevance, "Tamil Arasu" presents excerpts from "the classic".



Thiruvalluvar Year 2017

January 1987

Markazhi-Thai



Dr. Kanno Honoured

For the famed neurosurgeon, Dr. Tetsuo Kanno, the function at Kalaivanar Aranganam on December 12th to felicitate him was memorable for more than one reason. Both he and his 'miracle' patient the Hon'ble Chief Minister, Dr. MGR, was much overwhelmed by the occasion. And it became evident later that the empathy between the two was not confined to a mundane doctor-patient relationship.

Dr. Kanno said he understood the plight of the poor people as he had himself experienced poverty when young. He commended the Chief Ministers' concern for the poor and the downtrodden.

At the request of the Chief Minister Dr. Kanno had examined free of cost, hundreds of poor patients in 6 sessions lasting over 12 hours in the past three days. Dr. Kanno said that mentally retarded children he had examined needed sympathetic care by society.

Honorary consultant:

At the function, the Hon'ble Chief Minister Dr. MGR announced the appointment of Dr. Kanno as the honorary consultant in neuro surgery and visi-

ting professor at the Madras University and in the proposed Tamil Nadu Medical University.

Dr. Kanno had successfully treated Dr. MGR for stroke



when he was very ill in October 1984. Dr.Kanno who was chairing a medical convention in Arizona flew back Tokyo to fetch the medicine before arriving here. There were anxious moments as Dr.Kanno was held up at Singapore and Tmt.Indira Gandhi, the then Prime Minister arranged for a special aircraft to fetch him here.

Dr. MGR moved:

Dr.MGR nearly broke down while recalling Late Prime Minister Indira Gandhi's

He hoped that Dr.Kanno would visit the State at any time convenient to him and make his services and expertise available to neurosurgeons here. He described Dr.Kanno as an outstanding world neurosurgeon who had become a professor at a young age.

Hon'ble Law Minister Thiru C. Ponnaiyan read out the scroll presented to the Japanese specialist. It stated that the Government of Tamil Nadu desired that a system should be evolved by which

to be established shortly in Tamil Nadu.

The Hon'ble Ministers, Dr. V.R.Nedunchezian, Thiru S. Ramachandran, Thiru C.Ponnaiyan, Thiru K.Rajaram, Thiru T.Ramaswamy, former Information Minister, Thiru R.M. Veerappan, Speaker Thiru P.H. Pandian, Chairman of Tamil Development Council, Thiru M.P.Sivagnanam, and Deputy Secretary of the AIADMK, Dr. H.V.Hande said that the people



concern for his health and the arrangements she had made for his health and the arrangements she had made for his treatment abroad two years ago. The Hon'ble Chief Minister presented Dr.Kanno as memento a statuette of an elephant in gold weighing 1.6 kg costing Rs.4.5 lakh.

his outstanding contribution to neurosurgery can be shared with professors and other neurosurgeons in Tamil Nadu. In pursuance of this desire, the government is pleased to make him an honorary consultant and Professor of neurosurgery in the University of Madras and later in the Medical University

of Tamil Nadu were beholden to Dr.Kanno for saving the life of MGR.

The Hon'ble Health Minister, Thiru P.U. Shanmugam welcomed the gathering. Dr. P.Narendran, proposed a vote of thanks.

Philisophy means first doubt; and afterwards the consciousness of uncertainty and of ignorance, the consciounsess of limit, shade, degree, possibility. The ordinary man doubts nothing end suspects nothing.

—Henri Fre'de'ric Amjet



TAMILNADU - FIRST IN GIVING

MEDICAL FACILITIES TO RURAL PEOPLE

The Hon'ble Chief Minister Dr.M.G.R. declared open a five storeyed building complex inside the DMS compound in Teynampet of Anna Salai on December 17th.

Built at a cost of Rs.1.1 crore, the new building will house the Directorate of Health Services and Family Welfare

and the Directorate of Public Health and Preventive Medicine.

Thiru P.U.Shanmugham Honble Health Minister, who presided, said with the establishment of primary health centres in almost all the villages. Tamilnadu stood first in extending all medical facilities to

the rural people. The PHCs had helped in exceeding the family planning target fixed for the State and also to get the best performance award from the Centre consecutively for the third year.

The Government had given utmost importance to providing drinking water in villages. But



its efforts got spoiled due to the water bed pollution by industrial effluents, the Minister said and cited the polluted Palar bed which had been spoiled due to the effluents from the tannery there. The Government had now taken steps towards installation of effluent treatment plants by industries.

ESI benefit: Thiru K.A. Krishnaswamy, the Hon'ble Local Administration Minister said only 50,000 workers in the

State were covered under the ESI scheme five years ago, but now the benefit had been extended to about six lakh workers. The scheme would be soon extended to the employees working in match industries, printing presses and cracker units in Sivakasi and also to the small units in Salem.

Thiru K.K.S.S.R.Ramachandran, Hon'ble Cooperation Minister said all the hospitals in the State had been

equipped with necessary instruments to meet any type of emergencies.

Dr.P.Gowrishankar, Director of Health Services and Family Welfare who welcomed said it was the first stage of the proposed ten storeyed building. Thiru N.Balasubramanian, Chief Engineer, Public Works Department read a report and Thiru V. Kapali, Director of Public Health and Preventive Medicine proposed a vote of thanks.

RECYCLING OF MATERIALS

The importance of recycling and reuse of materials was stressed by the distinguished scientist, Dr. T.N. Khoshoo in his presidential address to the 56th annual session of the National Academy of Sciences held at Jaipur recently.

Dr. Khoshoo, who is a former secretary to the Department of Environment, Government of India, said that it was now becoming clear to developed countries like the United States, United Kingdom and Japan that stable economic growth with an assured enhancement of the living standards of the masses was not possible without recycling and reuse of wastes and residues. But the concept was not new to India, he pointed out and, to illustrate his point, quoted the following story from Buddhist lore :

"Shyamavati, the queen consort of King Udayana, offered five hundred new garments to Ananda, the favourite disciple of Buddha, who received them with great satisfaction. Hearing of this, the King suspected Ananda of dishonesty and so he went to Ananda and asked him what he was going to do with 500 garments. Ananda replied: Oh King, many of the brothers are in rags; I am going to distribute the garments among the brothers.

What will you do with the old garments ?

We will make bed-covers out of them.

What will you do with the old bed covers ?

We will make pillow cases.

What will you do with the old pillow cases ?

We will make floor covers of them.

What will you do with the old floor covers ?

We will use them for foot towels.

What will you do with the old foot towels ?

We will use them for floor mops.

What will you do with the old floor mops ?

Your Highness, we will tear them into pieces, mix them with mud and use the mud to plaster the house walls."

There cannot be a better example of recycling and reuse of materials than this, a concept which has been ingrained in our history, culture, religion and philosophy", Dr. Khoshoo added. (CEE-NFS)

SOUND THREAT

AHMEDABAD: Three major cities of the country - Calcutta, Bombay and Delhi - suffer from a noise level which is more than twice the prescribed international limit. The average noise level stands at 95 decibels and never falls below 60, according to a survey conducted by the All India Institute of Medical Sciences. This is against the prescribed international limit of 45 decibels. Sixty five percent of the work sites in Delhi had noise levels between 90 and 120 decibels, the survey said.

A separate study by the Department of Environment, Forests and Wildlife reports that 98 per cent of the citizens of Delhi felt that the noise was so intense that it affected the quality of their lives. Fruit sellers and cobblers have a high per centage of noise-induced deafness and hearing problems. Studies show that too much noise can be lethal for heart patients and aggravate the conditions of people suffering from cardio vascular diseases. Even menstrual bleeding among women living in areas adjoining busy airports has been found to last longer than normal. (CEE-NFS)





His Excellency, the Governor, Thiru S.L. Khurana commended the generosity of the people of Tamil Nadu and the drive of the State Government in mobilising funds for the welfare of exservicemen, on January 8th.

Giving away special trophies and awards for districts and to officials for outstanding performance in the Flag Day collections for 1984, at a function at the Raj Bhavan, Thiru Khurana expressed the hope that Tamil Nadu would be able to reach the Rs. 1 crore mark in this year's collections.

The Governor complimented the State administration on exceeding the targets set for collections every year. Against a target of Rs. 47 lakhs for 1985, the State collected Rs. 64 lakhs. For 1986, the target was Rs. 73 lakhs and an achievement of Rs. 90 lakhs to Rs. 1 crore would not be difficult, he said. (The tally for 1986 was not yet available)

Governor pats Government for Flag Day Collections

"When I came to this State as Governor, the collections were only Rs. 7 lakhs. They reached Rs. 64 lakhs in 1984 and I hope they will touch the Rs. 1 crore mark before I lay down office in the next few months."

A special committee had gone into the schemes for the welfare of exservicemen and how to enthuse the people to contribute to their rehabilitation. The Centre had accepted 46 out of its 68 recommendations and a special wing, headed by an Additional Secretary, was in charge of implementation of the recommendations.

The Directorate of Ex-servicemen's Welfare had launched several schemes to help these men and their families and Tamil Nadu was the only State to recognise the drive of the district administration in Flag Day Collections.

The Hon'ble Finance Minister, Thiru V.R. Nedunchezian said Tamil Nadu had bagged the all-India trophy for the highest collections for the Flag Day in the very first year the award was instituted in 1985 and should be in a position to retain it.



Welcoming the gathering Mrs. Sheela Balakrishnan, Director of Exservicemen's Welfare, said two new schemes had been introduced in 1986. Two women dependents who joined training in the tailoring institutes of the department would get a sewing machine at the end of the course (free of cost for widows and at 50 per cent subsidy for others) and those who underwent major surgery such as kidney transplant or open heart surgery could get a financial assistance of Rs. 20,000.

In addition to awards for the districts which topped in collections, districts which exceeded their targets successively for five years were being given shields from this year. Officers who collected more than Rs. 8,000 were given a silver medal and those who mopping up more than Rs. 5,000 a certificate of appreciation.

The shields and trophies (1984) presented by the Governor were : best collection shield, based on per-

tage, went to Periyar District, which collected Rs. 8.06 lakhs against a target of Rs. 1.25 lakhs. The Collector, Mr. Arun Ramanathan, received the shield; another for second best collection was bagged by Dharmapuri for realising of Rs. 1.79 lakhs against a target of Rs. 0.75 lakh. The present Collector, Thiru R. Balakrishnan, received the shield while the then Collector, Thiru M. Madhavan Nambiar, was presented with a special memento.

A consolation trophy for the higher collection was given to Madras district—Rs. 12.93 lakhs against a target of Rs. 6 lakhs and the Collector, Thiru G. Bhujanga Rao received it.

Four districts—Kanyakumari, Dharmapuri, Madras and South Arcot—received shields for the five - year achievement of exceeding targets.

Two Collectors, Thiru Lal Rawna Sailo (Madras—Rs. 15.34 lakhs) and Thiru Arun Ramanathan (Periyar—Rs.

7.26 lakhs) were given special silver mementos for extraordinary collection in 1985.

Twenty one officers and non-officials, including the Director of Information and Public Relations, Thiru R. Karpoor Sundarapandian (as Pudukottai Collector in 1983) and Thiru A. Ranganathan, Deputy Chief Inspector of Factories, were presented with silver medals for collections.

Mrs. Indira Khurana distributed the annual maintenance allowance of Rs. 600 to nine widows of the 1971 Pakistan war an annual maintenance grant of Rs. 500 to eight disabled personnel of the 1971 conflict, a grant of Rs. 1,000 to three war widows to celebrate the marriage of their daughters and financial assistance to four war widows to buy sewing machines.

The Governor and his wife hosted a party for the ward winners, exservicemen and their families on the lawns of the Raj Bhavan.



EMINENT PERSONS HONOURED

The Annamalai University organised a Special Convocation on December 4, 1986 in commemoration of the 81st birth-day of the Second Founder-Pro-Chancellor, Dr. Rajah Sir Muthiah Chettiar, and conferred the degree of Doctor of Letters and Doctor of Laws (*Honoris causa*) on eight eminent persons. The recipients of the Degrees are Thiru C.Subramanian, a versatile political statesman, Thirumuruga Kirupananda Variar Swamigal, an eloquent expounder of true religious and ethical ideals, Thiru S.M. Gavaskar, a marvellous cricketer, Thiru 'Sivaji' V.C.Ganesan, a multi-splendoured personality in the celluloid world, Dr.N.A. Palkhivala, an indefatigable upholder of the fundamental rights of man, Thiru 'Chitra' S.Narayanaswamy, an imaginative industrial pioneer, Prof. T.V.Ramanujam, a public spiritual promoter of fine arts, and Prof.S.V.Chitti-

babu, a dynamic educationist, and Vice-Chancellor of Annamalai University.

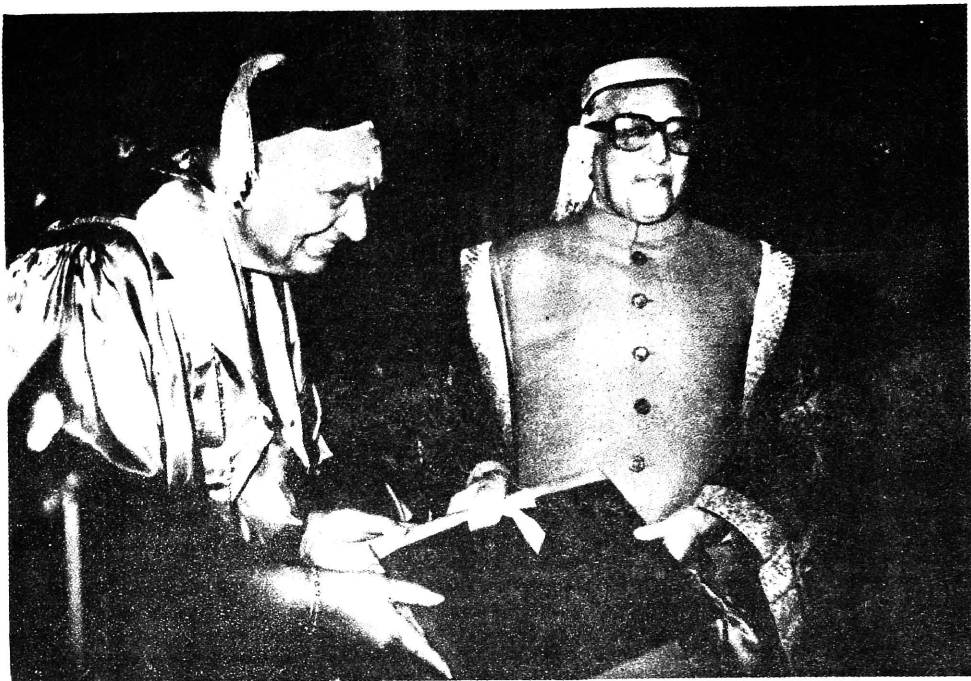
The degree of Doctor of Letters was conferred 'in person' on Thiru C.Subramaniam, Thiru Kirupananda Variar, Thiru 'Sivaji' V.C. Ganesan, Thiru 'Chitra' S.Narayanaswamy, Thiru T.V. Ramanujam, and Prof. S.V.Chitti babu. It was conferred 'in absentia' on Thiru S. M. Gavaskar and Thiru N.A. Palkhivala.

The citation presented to Thiru C.Subramaniam underscored the role played by him in the making of important national policies during his tenure of office as Minister. It said, "As planning and Finance Minister, he did everything possible to shape the national policy in the direction of a rapidly expanding economy with social objectives." It also emphasised his remarkable skill

as a political trouble-shooter. He, it said "ran through the gamut of high public offices with consummate skill as an administrator and problem-solver par excellence".

The second citation was on Thirumuruga Kirpananda Variar. It was a glorious spectacle to see Variar grace the occasion fully-robed in a convocation gown. The citation was in Tamil. It described him as "a forerunner in imparting non-formal education".

The citation on "Sivaji" Ganesan received wide acclamation from the audience. References to his popular films **Parasakthi, Veera Pandia Kattabomman and Kappalottia Thami** zhan made the large gathering cheer lustily. The citation referred to Ganesan's 'matchless ability to play variegated roles with effortless ease.'



Thiru 'Chitra' S.Narayana-swamy rose to prominence by establishing Chitra and Company, a famous stock-broker firm in Madras. He was chosen for the award because of his 'unquestioned competence and skill to manage and administer industrial affairs'.

Prof.T.V.Ramanujam was a disciple of the great carnatic maestro Ariyakkudi Ramanuja Iyengar. He played a great part on "setting up the magnificent Shanmukhananda Hall, which is today one of the cynosures of eyes of Bombay." Prof. T.V. Ramanujam was described as

one who has trained himself to be the servant of a tender conscience, with an intellect that can 'spin the gossamers as well as forge the anchors of the mind'.

The citation on Prof.S.V. Chittibabu referred to him as a doyen who had "made memorable contributions to the cause of education and educational administration". He has "gathered a vast fund of knowledge of men and matters and gained enormous experience and expertise to acquit himself well in any situation."



The honorary degrees on Thiru N. A. Palkhivala and Thiru S.M.Gavaskar were conferred 'in absentia'. Thiru Palkivala was described as a man who 'explores legal issues and themes with commendable insight and searching acumen.' The citation on Thiru S.M. Gavaskar called him "a creator of cricket history" and eulogised his amazing in-built ability of swing into action".

Man did not weave life - he is merely a Strand of it.

Here, stated quite simply over 300 years ago is the essential message this magazine is intended to convey. That the earth, the air, the water are important resources and that we should appreciate their value and the wealth that they represent. People throughout history have appreciated the value of the environment. The environment is not an abstract notion. It is a resource to be used in development the water for drinking, irrigation, fish cultivation, the land for food production, recreation, housing, the air for breathing. Man depends as much on the natural environment as on the man-made environment for his well being. But if in attempting to develop the man-made environment he destroys the natural environment then he will destroy himself. Nowhere has this been expressed more clearly and more movingly than in the statement which Chief Seattle who commanded the tribes in the 'Pacific north-west of the United States, made to the American President in 1855, when the latter wanted him to 'sell his land to the government.

"How can you buy or sell the sky, the warmth of the land? The idea is strange to us.

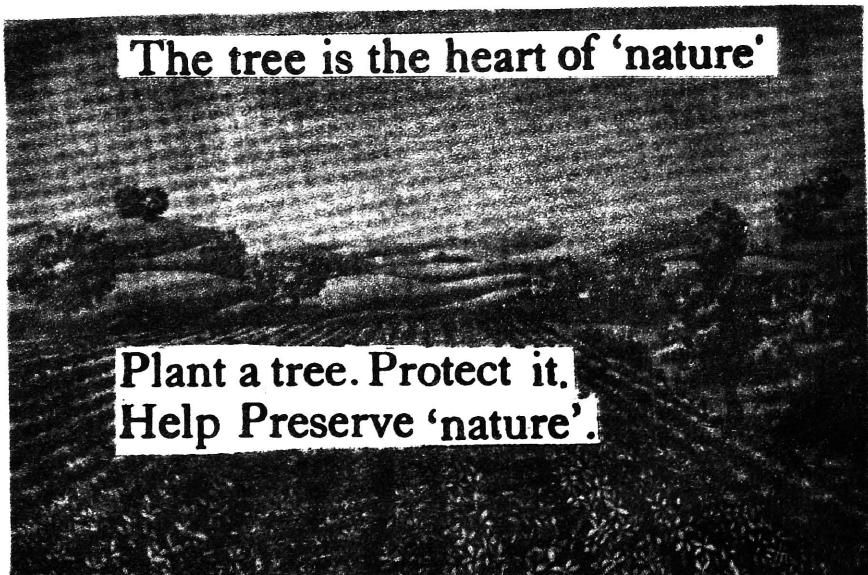
"If we do not own the freshness of the air and the sparkle of the water, how can you buy them?

"Every part of this earth is sacred to my people. Every shining pine needle, every sand shore, every mist in the dark woods, every clearing and humming insect is holy in the memory and experience of my people. The sap which courses through the trees carries the memories of the red man.

"The white man's dead forget the country of their birth when they go to walk among the stars. Our dead never forget this beautiful earth, for it is the mother of the red man. We are part of the earth and it is part of us. The perfumed flowers are our sisters; the deer, the horse, the great eagle, these are our brothers. The rocky crests, the juices in the meadows, the body heat of the pony, and man - all belong to the same family.

"So, when the Great Chief in Washington sends word that he wishes to buy our land, he asks much of us. The Great Chief sends word he will reserve us a place so that we can live comfortably to ourselves. He will be our father and we will be his children. So we will consider your offer to buy our land. But it will not be easy. For this land is sacred to us.

"This shining water that moves in the streams and rivers is not just water but the



The tree is the heart of 'nature'

**Plant a tree. Protect it.
Help Preserve 'nature'.**

blood of our ancestors. If we sell you land, you must remember that it is sacred, and you must teach your children that it is sacred and that each ghostly reflection in the clear water of the lakes tells of events and memories in the life of my people. The water's murmur is the voice of my father's father.

"The rivers are our brothers, they quench our thirst. The rivers carry our canoes, and feed our children. If we sell you our land, you must remember, and teach your children, that the rivers are our brothers, and yours, and you must henceforth give the rivers the kindness you would give any brother.

• "We know that the white man does not understand our ways. One portion of the land is the same to him as the next, for he is a stranger who comes in the night and takes from the land whatever he needs. The earth is not his brother, but his enemy, and when he has conquered it, he moves on. He leaves his fathers' graves behind, and he does not care. He kidnaps the earth from his children, and he does not care. His father's grave, and his children's birthright are forgotten. He treats his mother, the earth, and his brother, the sky, as things to be bought, plundered, sold like sheep or bright beads. His appetite will devour the earth and leave behind only a desert.

"I do not know. Our ways are different from your ways. The sight of your cities pains the eyes of the red man. But perhaps it is because the red man is savage and does not understand.

"There is no quiet place in the white man's cities. No place to hear the unfurling of leaves in spring, or the rustle of an insect's wings. But perhaps it is because I am a savage and do not understand. The clatter only seems to insult the ears. And what is there to life if a man cannot hear the lonely cry of the whippoorwill or the arguments of the frogs around a pond at night? I am a red man and do not understand. The Indian prefers the soft sound of the wind darting over the face of a pond, and the smell of the wind itself, cleansed by a mid-day rain, or scented with the pinon pine.

"The air is precious to the red man, for all things share the same breath - the beast, the tree, the man, they all share the same breath. The white man does not seem to notice the air he breathes. Like a man dying for many days, he is numb to the stench. But if we sell you our land, you must remember that the air is precious to us, that the air shares its spirit with all the life it supports. The wind that gave our grandfather his first breath also receives his last sigh. And if we sell you our land,

you must keep it apart and sacred; as a place where even the white man can go to taste the wind that is sweetened by the meadow's flowers.

"So we will consider your offer to buy our land. If we decide to accept, I will make one condition; The white man must treat the beasts of this land as his brothers.

"I am a savage and I do not understand any other way. I have seen a thousand rotting buffalos on the prairie, left by the white man who shot them from a passing train. I am savage and I do not understand how the smoking iron horse can be more important than the buffalo that we kill only to stay alive.

"What is man without the beasts? If all the beasts were gone, man would die from a great loneliness of spirit. For whatever happens to the beasts, soon happens to man. All things are connected.

"Whatever befalls the earth befalls the sons of the earth. Man did not weave the web of life, he is merely a strand in it. Whatever he does to the web, he does to himself.

"Even the white man, whose God walks and talks with him as friend to friend, cannot be exempt from the common destiny. We may be brothers after all. We shall see, One thing we know, which the white man may one day discover - Our God is the same God. You may think now that you own Him as you wish to own our land; but you cannot. He is the God of man, and His compassion is equal for the red man and the white. This earth is precious to Him, and to harm the earth is to heap contempt on its Creator. The whites too shall pass; perhaps sooner than all other tribes, Contaminate your bed, and you will one night suffocate in your own waste.

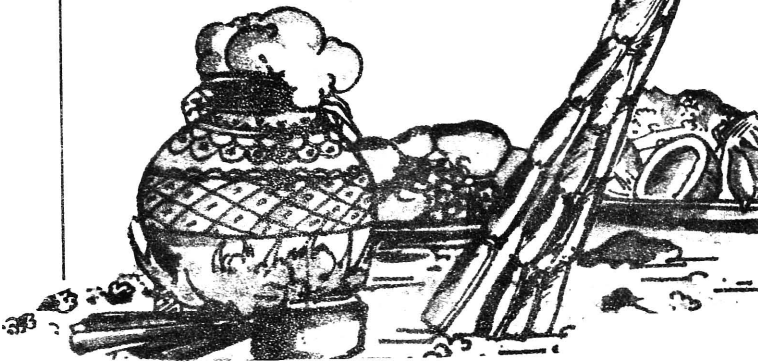
"But in your perishing you will shine brightly, fired by the strength of the God who brought you to this land and for some special purpose gave you dominion over this land and over the red man. That destiny is a mystery to us, for we do not understand when the buffalos are all slaughtered, the wild horses are tamed, the secret corners of the forest heavy with scent of many men, and the view of the ripe hills blotted by talking wires.

"Where is the thicket? Gone. Where is the eagle? Gone. The end of living and the beginning of survival",

COURTESY: Environmental Policy and Law.

PONGAL FESTIVAL

V. VEMBIAN.



Significance of Festival ;

Festivals enliven social life and unite the people by bringing them together in joyful celebration of significant events and in shared remembrance of a common past.

Common Festival :

Since the advent of Agriculture this Pongal Festival has been spread over four days from the last day of Tamil month 'Marghazhi' to first three days of Tamil month 'Thai' as Bhogi, Grand Pongal, Pongal for Farm Animals (Mattu Pongal) and Pongal for off-springs or for greeting one another. It is now celebrated in Tamil Nadu as Bhogi day (Marghazhi last day), Pongal-New Year day (Thai-1), Thiruvalluvar Day (Thai-2), Farmers' Day (Thai-3). Cleanliness, husbandry, industry, gratitude, worship of the SUN mark these days with grace and charm, common to all religions the coloured or linguistic groups and the different nationalities.

Thiruvalluvar Year :

On this day of the Grand Pongal (Thai-1), the Tamil Thiruvalluvar Year starts and the Thiruvalluvar era dates back to B.C. 31 and hence Thiruvalluvar Year is reckoned with the English Year thus 1987-31-2018. Tamil month 'Thai' is the first month and 'Marghazhi' is last month of Thiruvalluvar Year. First day of Thai month is Tamil (Thiruvalluvar) New Year Day.

Festival of the South :

In Andhra Pradesh, the festival is celebrated as Bhogi Panduga, Peththa Panduga, Pasuvula Panduga, Kanumu Panduga for four days, in Karnataka as Bhogi, Makara Sankaranthi and Kanuhabba for three days and in Kerala as Makara Sankaranthi as well as Markara Vilakku on the Pongal day. It is therefore, clear that the Pongal is not only the Festival of the Tamils but the festival of the South. On this day, the Tamils, the Andhras, the Kanarese and the Keralites rejoice and take immense pleasure.

National Festival :

In North India, this period is known as 'Uttarayana Punya Kalam' and is greeted with joy. For unmarried girls, the period Uttarayanam is considered very auspicious for celebrating their marriages. The Tamil Proverb 'Thai Piranthai Vazhi Pirakkum' means if the month of Thai is born, good things will happen, clearing all the obstacles on the way. Thus the Pongal Festival assumes national importance and rightly the former Chief Minister of Kerala Mr. C. Achutha Menon has hailed it as 'National Festival'. Here the pride of the North and rightful claim of all lies in the happy participation of Pongal celebration.

Therefore it is concisely arranged in the order here-under :

PONGAL FESTIVAL

Marghazhi

Last Day

January — 13

—Bhogi Day

Thai — 1

January — 14

—Pongal-New Year Day

Thai — 2

January — 15

—Thiruvalluvar Day

Thai — 3

January — 16

—Farmers' Day

Thai — 4

January — 17

—Iyal Tamil Day

Thai — 5

January — 18

—Isai Tamil Day

Thai — 6

January — 19

—Nataka Tamil Day

ORDER OF CELEBRATION DECIDED BY

The Academy of Tamil Scholars of Tamil Nadu & The Government of Tamil Nadu

The Undersea World- Yesterday & Tomorrow



"The tempo of human evolution during recorded history is at least 100,000 times as rapid as that of pre-human evolution."

—Julian Huxley, *Biologist*.

Introduction

It is said that the inventions or improvements of a magnitude that took perhaps 50,000 years to accomplish during the early Paleolithic era has, with the advent of settled civilization been reduced to a mere century. The rate of change in our present **modern** world has increased **even further**, so much so, that our imagination cannot keep pace. Only exaggerations appear to be true. A chain reaction is in motion—discovery, application, impact, further discovery.

By
SURG CDR S. KUNDU, MD

It is envisaged that the rate of change will continue to accelerate upto as yet unreached limits of human adaptability and man's survival will hence be totally dependent on his adaptability and capability to live with these changes.

More than two thirds of the planet's surface is covered with water. This underwater world is rich in oil, coal, diamonds, uranium and other minerals. It teems with fish and exotic plant life, edible and non-edible. An altogether new world is waiting to be discovered. So far only divers have any idea of this under sea world. The day is not far

when entire populations will be actually living and breeding inside the sea.

History of Diving

Man has gone down into the sea since earliest recorded history. Archaeologists have classified mother of pearl artefacts dating as far back as 4,500 B.C. Emperor Yu in China is reported to have received two Oyster pearls as tribute from tribesmen in 200 B.C. It is said that military diving operations took place during the Trojan War in 1194 B.C. The Mediterranean was an optimum sea for many underwater explorations. Alexander the Great employed divers and swimmers in breaching the boom defence of Tyne in 333 B.C. and is alleged to have *himself* descended to the

sea floor in a transparent diving bell. Aristotle in 4 BC writes of the use of a diving apparatus - a kettle or diving bell, by local sponge divers. The bell with modifications and modernisation is still in use even today, in off shore oil and Naval Diving.



Leonardo da Vinci in 1680 evinced tremendous interest in military applications of underwater breathing, resulting in the devising of an ingenious, honest to goodness Self Contained Underwater Breathing Apparatus (SCUBA) for underwater swimmers. Although not successful, Borelli the designer was on the right track, and is considered to be the person responsible for fins to be introduced for underwater swimmers. Then in the 17th century came the hardhat helmets with surface supplied air. Air in those days was supplied by a large bellows system on the surface.

The Future

That was yesterday. What about tomorrow? Man is today very restricted in his utilisation of Inner Space with a practical working limit of only 300 metres beneath the surface of the sea. But has man really reached his limit? Can he not make any further progress, in living in an unrestricted manner as he does on land? What are we going to do in the future? Living in Inner Space without any restriction no doubt. Thus I take you 50 years ahead in time, the year 2037, 300 metres deep in the Indian Ocean where we live, now-a-days.

In contrast to land, which is over populated, my family and myself along with others have recently established ourselves on the ocean floor. Here there is a vast expanse, uninhabited, untouched by man's alarming progress and very beautiful. The initial changeover was difficult considering that where we had spent most of our lives on land, we

had to adjust to living in water. We had made a successful return to the environment of our ancestors, although under very different circumstances.

Our little village is actually a huge bubble, transparent and able to withstand a high pressure of water. We live in dry conditions as such in our small dwellings. The people who live with us are mainly dependent on farming and they grow exotic vegetables never grown on land before. Our main source of oxygen is from the surrounding sea water via large semi-permeable gas exchangers and we live in, absolute comfort. A number of scientists, doctors and engineers form a part of this closely knit family each involved in further research, on which our next generations will survive. So we have much work to do.

At present, many a time we do have to return to land for various reasons till such time as we totally settle down. For this reason, each of us has his own artificial gill by which, via a system of locks, we can enter or leave our bubble at will. Our artificial gills enable us to extract Oxygen from the sea water with ease and without any worry of pressure, Oxygen percentages etc. just like a fish. Perfecting the artificial gill has taken over 70 years so that now the under sea world is just another country to visit or stay in.

Anticipating future requirements, we are at present

on the point of a breakthrough with regard to developing means to be totally self-sufficient, as far as vital Oxygen requirements during our life under water. By our methodology, man will no longer have to worry about using artificial gills as we would be actually able to live in a watery environment, without resorting to artificial means like the way it is today. We have succeeded in breeding animals and are on to our next stage, man himself. Our experimental animals are like fish themselves. They cannot live on land anymore. They are the new breed of sea animals who can work for us as they did on land.

We are also looking at genetics, which we are practically certain is the key to man's total adaption to the under sea world. Man's evolution into an under water resident will take many-many years and so we must not wait. Man's very survival lies in adapting to a watery environment as early as possible.

With regard to transportation, we use dolphins. Each family has a pair of dolphins for convenience of travel. We have learnt to communicate with them. Our little children are experts at seating themselves on these lively mammals. But our older citizens prefer to be pulled along gently through the water. The day is not far off when these very dolphins along with the sea cow will help us in our farming, once we completely adapt to living in water itself.

THE WORLD OF PRESS CONFERENCES

UGC ALLOTS Rs. 1 CR TO TAMIL UNIVERSITY

The University Grants Commission has allotted Rs. 1 crore to the Tamil University under the Seventh Plan. The money will be utilised for the general improvement of the University, conduct of training courses for the staff, appointment of professors, purchase of equipment books for library and construction of buildings under certain categories, said Prof. S. Agasthalingam, Vice-Chancellor, on January 8th.

He told pressmen that for the current year the UGC had granted Rs. 7 lakhs, to organise workshops and seminars.

The Tamil Nadu Government had granted an additional sum of Rs. 35 lakhs for the same period to enable the completion of the University library building, estimated to cost Rs. 1 crore by April this year. The Government had already sanctioned Rs. 40 lakhs for the administrative building, expected to cost about Rs. 2.5 crores. A sum of Rs. 1 crore would be spent on the building next year and the structure, modelled on the Thanjavur Big Temple, would be completed within two years.

Drive against illiteracy : The Tamil University will initiate a special programme to eradicate illiteracy among tribals living in the State in the

next four years. The adult education centre of the University has evolved a scheme to teach reading and writing within three months and it had been commended by specialists in the field.

About Rs. 10 lakhs would be spent on quarters for the staff of the Institute of Tribal Studies at Udhagamandalam. The Tamil Nadu Government was giving a grant of Rs. 10 lakhs a year to this project and the Central Government was also contributing an equal sum. An administrative building for the centre of Philosophy at Kancheepuram would be constructed at a cost of Rs. 10 lakhs. The University would do whatever was necessary to

ALL STEPS TO MEET WATER SHORTAGE

Madras would continue to get water supply at the present level of 55 million gallons per day (mgd) till March end; thereafter, it might be reduced to 40 mgd.

Indicating this on January 6th, Thiru, Jeppiyar, Chairman Madras Metropolitan Water Supply and Sewerage Board (Metrowater Board), said the Board was taking steps to tide over the shortage of water posed by the failure of the north-east monsoon.

Thirty more borewells had been sunk at Poondi, Kortaliyar plains and Kannigaiper, all situated between Tambaram-pakkam and Palar. The wells, which would be commissioned fully by March and would yield 12 mgd of water.

A Rs. 2.50 crore project to get one mgd of water from Thiruvanniyur for supply to Velacheri and Tharamani and a Rs. 23-lakh scheme to get 0.5 mgd of water for supply to K.K. Nagar, Ashok Nagar and M.G.R. Nagar would also be ready by March end.

The additional 13.5 mgd of water from these new schemes would supplement 20 mgd of water that could be obtained by pumping the available storage in the Red Hills lake and 6 mgd from the existing well fields in Minjur and Panjeti, to make a total supply of 40 mgd of water to the city, he added.

According to Dr. Vigneswaran, Geologist associated with the project, the aquifer at

the new well fields would not face any recharging problem. Studies have shown that the aquifer would not be affected even if water was drawn for three consecutive years without any let up, he said.

At Red Hills, the water storage stood at 870 million cubic feet (mcft), as against the total capacity of 2,852 mcft. Water from the Poondi reservoir has started flowing into the Red Hills to augment the storage.

Thiru S. Daivamani, Engineering Director of the Metrowater Board, Thiru E. Veda-giri, Chief Engineer (Operations and Maintenance), and Thiru S. Srinivasan, Chief Engineer (Resource Planning), accompanied the press party.

make Tamil a suitable medium for the highest branch of learning. The University had already made a complete catalogue of the Tamil manuscripts found in various parts of the world. It now planned to take copies of the manuscripts and books which were not easily available in the country.

A worship for giving the necessary guidance to youngsters endowed with a poetic bent of mind will be organised by the University. A comprehensive grammar for Tamil and a history of the language in six volumes will be brought out.

Rs. 300 Gift for Government Staff

The Hon'ble Chief Minister Dr. M.G.R. on January 8th, announced a 'Pongal gift' to the State Government employees at a flat rate of Rs. 300

each, and dearness allowance increase ranging from Rs. 21 to 135 a month from July 1, 1986.

The one-time gift payment will be made to not only to regular full-time servants but also to those on consolidated pay and part-time workers getting a honorarium including noon meal centre organisers, said the Chief Minister who met newsmen after a meeting of the Standing Finance Committee at the Secretariat.

The number of beneficiaries is estimated to be around 11 lakhs and the Government's commitment on account of the 'Pongal gift' alone will be Rs. 33 crores, according to the Hon'ble Finance Minister, Thiru V.R. Nedunchezian.

Last year the Pongal gift was given at a slab rate, varying between Rs. 200 and 300, for fulltime employees and at Rs.

100 for those on consolidated pay. It was not extended to part-time employees.

The D.A. increase announced follows the Government decision to change the existing rules and to adopt the Centre's pattern for employees in the B.C. and D categories. For category A employees and pensioners the present practice will be continued, pending the Centre's decision on the matter.

The revised rates of D.A. will be effective from July '1, 1986 and the employees paid arrears for six months. The additional commitment in a full year will be around Rs. 40 crores. D.A. calculation Explaining the change in the calculation of D.A., the Finance Secretary, Thiru C. Ramachandran, said that until now for every eight point increase in the cost of living index, the quantum went up by 1.5 per

PRESIDENT'S MEDAL FOR 12 TAMIL NADU POLICEMEN

Twelve Officers of the TamilNadu police are among the recipients of the President's medal announced on the occasion of 1987 Republic Day.

Thiru G. Varadarajan, DC Madras City, Thiru Sundara varadan ASP, Prohibition, Enforcement, Chengalpattu (East) are the two officers who have been selected for their distinguished service.

The following in the list of the Ten officers who had been awarded for meritorious service.

Thiru V.K. Rajagopal, DIG; A.X. Alexander DIG, Enforcement; Thiru T. Vivekandaraaj, D.P, Spl. Branch C.I.D. Madras ; Thiru D. D. Manoharan DSP, Vigilance Anti Corruption, Madras; M.P Pandian, Inspector, Prohibition Intelligence Bureau, Madras ; Thiru G. Govindan, Inspector,

Regimental centre Avadi; Thiru K. Natesan, Inspector TSP, II Bin, Avadi; Thiru M. M. Shahul Hameed, Sub-Inspector, Civil Supplies CID, Madras ; Thiru M. Thiagarajan Head constable, Traffic, Madras and Thiru S. Murugesan Gr. II Police Constable, Erode.

Fire services :

Three persons from TamilNadu are among the 19 who figure in the Presidents fire-services medals for their meritorious services. They are, K. Mayandi Deven Ocha Thevar, station fire officer, Thiru Govinda Subramani, leading fire man, and Thiru Kadaswami Dharmalingam, leading fireman.

Home Guards :

The following are the Home Guards and Civil Defence personnel who have been awarded

the President's medal for distinguished and meritorious services from Tamil Nadu. Thiru V. Sankaranarayanan, Assis - tant platoon commander (Volunteer) and Thiru Thambikuppu Padmanabhan area commander (Honorary).

R/D awards :

Dr. R. Viswanathan of Government Stanley Medical College and Thiru V.D. Venugopal of Vellore are among the 10 persons who get awards from the National Research Development Corporation for their inventions this year.

Dr. Viswanathan gets Rs. 25,000 for his noninvasive device to detect CSF shunt tube patency in surgeries carried out in the brain. Thiru V.D. Venugopal gets Rs. 10,000 for his portable power ghani for extracting edible oil.

cent. of the basic salary for those whose income was below Rs. 1100 and by 1.2 per cent. for others. Under the new pattern, the rates would be revised only twice a year—in January and July—and 100 per cent neutralisation for the increase in the cost of living index would be given.

Another important decision was to give up the four-month interval which existed between the Centre's announcement granting a fresh instalment of D.A. and the State Government giving effect to it. Hereafter the State Government employees would get the revised D.A. from the same date as applicable to the Central Government employees.

Thiru. Ramachandran also clarified that at the time of wage revision for Central Government employees, the D.A. upto 608 points was merged with the basic pay. When the Centre announced D.A. revision effective from July 1, 1986, the increase in the cost of living index was 24 points, and the rate was calculated at four per cent of the basic pay. However, for State Government employees, the scales were fixed with reference to 528 points only. Therefore, for calculating the D.A. increase at four per cent, the basic pay would be notionally revised by adding to it the D.A. instalment paid upto 608 points.

RS. 375 INCENTIVE BONUS TO BUSMEN.

The Hon'ble Chief Minister, Dr. M.G.R. has sanctioned payment of incentive bonus to the tune of Rs. 2.81 crores to the employees of the 15 State transport corporations as 'Pongal gift.'

Giving this information to newsmen on January 9th the Hon'ble Transport Minister, Thiru S. Muthusamy said the one-time payment would be made at a flat rate of Rs. 375 to each of 75,000 employees, the amount would be disbursed immediately.

Inter-state service : The Tamil Nadu and Kerala Governments had agreed to expand their bus operations in each other's territory on a reciprocal basis. According to the proposals finalised after a three-day official and ministerial level discussions in Madras, seven Tamil Nadu corporations would open 39 new routes, increasing the total operations within Kerala to nearly 31,000 km.

Of the new routes, 12 would be operated by the Thiruvalluvar Transport Corporation and the others by Rani Mangammal (9), Nesamani (6), Kattabomman and Cheran (four each), and Pandian and Jeeva (two each). The operations would start on February 1.

The new TTC routes are : Madurai-Quilon, Madras - Guruvayur, Velankanni-Guruvayur, Madurai-Trivandrum, Shencottah-Palghat, Kalpakam-Ernakulam, Velankanni-Quilon, Tuticorin-Kottayam, Kanyakumari-Munnar, Madras Kozhikode, Madurai-Ernakulam and Kumbakonam - Palghat."

CENTRE'S PLEA FOR SIDDHA INSTITUTE FACILITIES UNDER STUDY

The Tamil Nadu Government is examining the Centre's request for grant of facilities

in the State for setting up a national Institute and research council on Siddha system of medicine.

Indicating this to newsmen here on January 12th, the Hon'ble Health Minister, Thiru Shanmugam said the Centre was planning to start a Siddha institute, and was looking for facilities in States. The State Government was considering whether it could make over the facilities available at the Siddha Medical College at Palayamkottai. "Since it is a policy matter, the Chief Minister will take a decision soon."

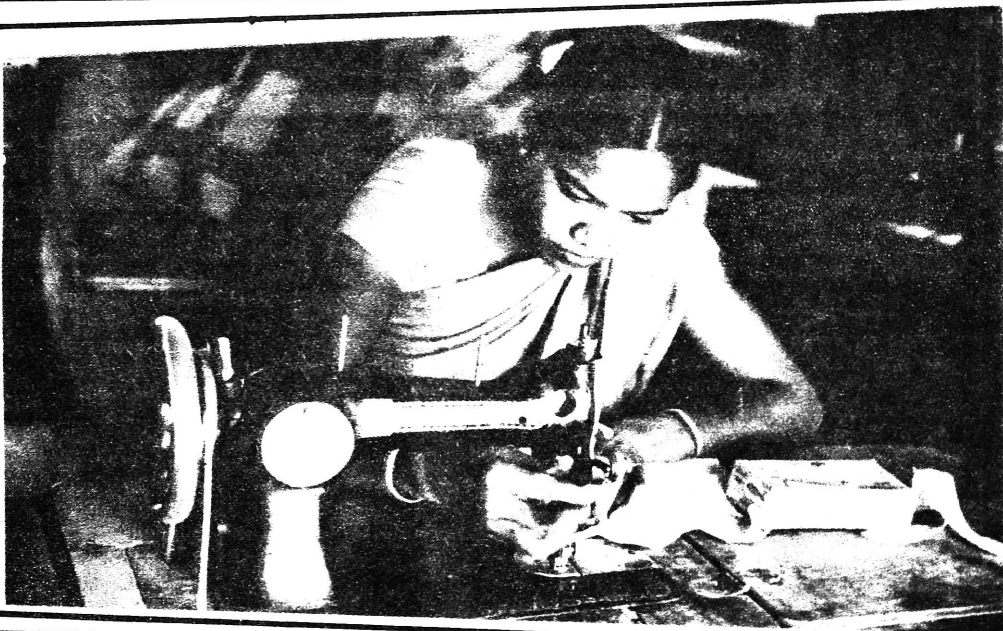
Full body scanners to be sought : The Hon'ble Chief Minister, Dr. M.G.R. would write to the Centre seeking allotment of two full-body scanners for Tamil Nadu. The Centre was in the process of importing 10 such units. Among Government hospitals in the State, this facility was now available only in Madurai. Some private institutions were having the equipment but only the rich could afford to pay their charges. If two units were given to Tamil Nadu one could be kept at the General Hospital in Madras and the other in either Thanjavur or Coimbatore for the poor.

The draft legislation for the proposed Medical University would be ready in a week. When the institution came into being, all eight Government medical colleges would be affiliated to it.

In the recent cholera attack in the Pammal-Anakaputhur area near Madras, 184 persons were affected and 11 of them died. As a result of prompt medical measures like chlorination of wells and mass inoculation, the disease was controlled.

20 POINT PROGRAMME

in Madurai District



Cropping System

In Madurai District Pulses are group in dry, garden and wet land system in varying types of soils. In rainfed Black soils Redgram, Blackgram, Greengram and Cowpea are important pulses group in mixed and pure crop condition. In rainfed Red soils, Redgram, cowpea, Lab Blackgram, Horse gram are mostly growth. In garden lands, green gram, Cowpea, Black gram are growth. In Periyar and Vaigaiya-cut Areas, Greengram or Blackgram is group in rice fallows after harvest of paddy crop during February—March, April.

There is scope to increase the productivity of Pulses. Efforts are being made to increase the productivity in every farm holding by transfer of improved package of practices through Agril. Extension Personnel working under T/V System and by implementation of various state and centrally sponsored schemes especially under 20 point programme.

Point No. 6—Bonded Labours :

During 1985-86, 34 members who were kept as bonded labour at Sathna district in Madya

Pradesh were released from the clutches of the master bonded labourers and out of the 34 sixteen members were sent to Anna District and the remaining 18 persons were retained in Madurai district viz., 1. Melur Taluk 4 members 2. Periyarkulam Taluk—14 members. All of them were given house site and one of them employed as N.M.R. labourers in Public Works Department at Vaigaidam houses are being constructed to them under R.L.E.G.P. and all of them have been sanctioned financial assistance at Rs. 4,000 per family. Action is also being pursued to sanction sheep or plough bulls through the Panchayat Union Commissioners concerned. The target under this scheme has levelled by 106%.

Point No. 7 (1)—Scheduled Caste Families Assisted :

During the Financial year 1985-86 the Target under Scheduled Caste families to be assisted were fixed at 48. Under this scheme 40 Adi Dravidars were sanctioned loan for the purchase of plough bulls through Nationalised Banks at Rs. 2,400 each and each of them were sanctioned a subsidy 1/3 amount of loan

sanctioned or Rs. 600 whichever is less. Since all were given loan receive Rs. 9,800 all of the 40 persons were sanctioned subsidy of Rs. 600 each totalling to Rs. 24,000. This amount has been sent to the respective Banks for the adjustment of 1/3 share of loan.

Likewise there is a scheme granting subsidy to this Adi Dravidars for digging new irrigation well or these loans sanctioned either through L.D. Banks or through Nationalised Banks. Under this scheme 8 Adi Dravidars were sanctioned loans of Rs. 1,25,500 through Nationalised and L.D. Banks. For which a sum Rs. 39,020 was also sanctioned as subsidy to adjust the loan amount due from the Adi Dravidars. Thus the target 48 under this point has been achieved in full.

Point No.9 (1) - Grant of House Sites to Adi Dravidars:

Under this item target was fixed at 1300 to this Office. During the year 1985-86, 1348 house site pattas have been distributed to weaker Adi Dravidars by acquiring patta lands in order to construct a house and to live. Thus under this point above the target has been achieved in Full.

INTEGRATED RURAL DEVELOPMENT PROGRAMME :

During 1985-86, the Financial Target is Rs. 176.64 lakhs under I.R.D.P. The target



of families to be assisted is 11311. Rs. 176.44 lakhs has been made as expenditure against the financial target of Rs. 176.65 and provided assistance for Rs. 302.03 lakhs from the banks. This is the 100% achievement in 1985-86. 13432 families have been benefitted against the total target of 11311 families. This is 118.8% achievement against the total physical target. 6811 Scheduled Caste families have been benefitted against the target of 6430 S.C. families. Rs. 64.77 lakhs of subsidy have been made as expenditure for S.C. families and provided loans of Rs. 129.72 lakhs. This is 106% achievement on S.C. families. Moreover, 56 Scheduled Tribe families have been identified in Madurai district and assisted them with 0.90 lakhs as subsidy and provided loans of Rs. 1.89 lakhs from the banks. This is the 100% achievement of ST families. 4610 Women beneficiaries have been benefitted with Rs. 53.52 lakhs as subsidy and provided loans Rs. 107.52 lakhs from the banks. This is the 101% achievement against the annual target of Women beneficiaries.





HOPE FOR THE RURAL

Since the 20-Point Programme has been designed for the general welfare of rural community, Rural Development Department is concerned directly with some of the programmes.

“Expansion of the irrigation facilities”—is the aim of the First Point. Deepening, desilting and strengthening of minor irrigation sources received due attention, and nearly 12,226 minor irrigation tanks have been improved at a total expenditure of Rs. 887 lakhs. Lakhs of hectares of lands had been brought under this scheme for copious irrigation facility.

The Massive Scheme for Small and Marginal Farmers has been implemented from July 1983 in all Panchayat Unions. Each Panchayat Union gets Rs. 5 lakhs under the scheme. Sinking of wells for minor irrigation, installation of pumpsets, improvement of land facility and plantation of fuel and fruit bearing trees are important components of this scheme. The scheme also lays importance to the use of fertilisers, seeds and cultivation of oil seeds and cereals. During 1983-84, a sum of 1468.52 lakhs was sanctioned and out of which Rs. 972.32 lakhs had been spent. During the same year, another instalment of Rs.

1889.98 was sanctioned and again Rs. 1431.46 lakhs was spent for the benefit of small and marginal farmers in our State. The number of beneficiaries under this programme has increased from 27061 in 1983-84 to 48551 in 1984-85. In terms of irrigation, 86,443 hectares were brought under it, resulting in increased food production.

During the Sixth Plan, 13,96,016 families were assisted as against the Sixth Plan target of 11,30,100 families. The total amount of subsidy disbursed to the eligible families during the Sixth Plan under I.R.D.P. was Rs. 146.61 crores and the total amount of credit mobilised was Rs. 257.28 crores.

During 1985-86, as against the target of 1,96,239 families to be assisted, 2,09,696 families were assisted under I.R.D.P. During 1985-86 the total amount of subsidy disbursed was Rs. 30.24 crores and the total amount of credit mobilised was Rs. 58.89 crores. Under I.R.D.P. the annual allocation for 1986-87 for Tamil Nadu is Rs. 37.95 crores. As against this financial allocation, the expenditure for the period from 1-4-1986 to 30-9-1986 has been of the order of Rs. 16.26 crores. This represents 43% of the overall allocation for the financial year. Coming to physical



targets for 1986-87, as against the annual target of 80,000 new families, 35,450 families have been assisted under the Programme upto 30-9-1986. This represents 44% of the target set for the whole year. As regards

the coverage of old families requiring second dose of assistance, 69,197 families have been covered upto 30-9-1986 against the annual target of 1,41,030 old families. This represents 49% of the annual target set for the whole year. As against the target of 30% coverage fixed for the I.S.B. sector by the Government of India, the coverage in I.S.B. Sector in Tamil Nadu upto 30-9-1986 has been of the order of 42%. Out of the total number of families assisted under I.R.D.P., upto 30-9-86, Scheduled Tribes/Scheduled Castes represent 46%. As regards women beneficiaries, they represent 29% of the total beneficiaries assisted under I.R.D.P., upto 30-9-1986.

From 1981 to 1985, training had been imparted to 1,49,805 persons. Out of them, 85,366 persons have business of their own. Wage earners constitute 44,471 persons.

Under the National Rural Employment Programme (NREP), the financial allocation for Tamil Nadu for 1986-87 is Rs. 36.22 crores (exclusive of the value of foodgrains). As against this, the level of expenditure upto 30-9-1986 has been of the order of 18.37 crores (exclusive of the value of foodgrains), which represents 50.73 per cent. of the annual allocation. The target for generation of mandays for 1986-87 is 263 lakh mandays. As against this, we have been able to generate 164.31 lakh mandays upto 30-9-1986 which represents 62.48% of the annual target. Government of Tamil Nadu have earmarked Rs. 23.83 crores for the construction of 23,565 houses for Scheduled Castes and Scheduled Tribes under NREP which represents 50% of the total allocation for NREP for 1986-87 (including the value of foodgrains).

ACID RAIN

Little known except among experts just a decade ago, acid rain has emerged as an important and exceptionally challenging environmental problem. Certain substances, primarily sulfur and nitrogen compounds emitted by power plants and smelters, can combine with moisture in the atmosphere or on the surface of the earth to form droplets with a high acid content sometimes as acidic as vinegar. Though the term "acid rain" has captured the public's imagination, it actually understates the problem. Acid precipitation includes not only rain but also acidified snow, hail and frost, as well as sulphur and nitrogen dust. When sufficiently concentrated, these acids can kill fish and damage material structures. Under certain circumstances they may reduce crop and forest yields and cause or aggregate respiratory diseases in humans.

Since the airborne compounds can travel hundreds and perhaps thousands of miles, ignoring city, state and national boundaries, a solution to the problem will require coopera-

tion among numerous jurisdictions. The temptation to pass the buck will be great, and as concern about acid rain grows, questions will be raised as to whether our political institutions both national and international can keep up with an usually rapid advances in knowledge.

In Europe, where acid precipitation has received the most attention,⁴ its ill effects have been detected from the Mediterranean basin to the Arctic. Acid is thought to have killed all fishlife in hundreds of lakes in Scandinavia while in Athens and Rome it has contributed to the disintegration of historic treasures like the Parthenon and Coliseum. In the United States, the acidity of precipitation has increased up to fiftyfold in some parts of the East during the past 25 years, and even in some remote places in the West the rain and snow appear to be getting more acidic at an alarming rate. The greater acidity is thought to have killed off fish in hundreds of lakhs in the northeastern United States and Southeastern Canada.



ADULT EDUCATION ACTIVITIES IN THANJAVUR DIST.,

In Thanjavur District the scheme was introduced in Buddalore, Kuttalam, Kivalur, Kottur and Thiruthuraipoondi Blocks. The first phase of State Adult Education Programme was started on 18-1-80 and the first batch of centres started on the same date and the second batch on 1-2-80. For Non-formal and Adult Education, the District head is the District Adult Education Officer at Thanjavur. The Project Officers were given training and had an orientation training.

In each Block hundred centres were opened each under an Animator. The Animators were given ten days pre service training before starting the centres and one day in-service training every month was also given.

In each centres a minimum of thirty learners were enrolled. Social backwardness was also a main critarion for selecting the centres.

The learners were supplied with Primers, Slate, Slate pencil, Note Books, Lead Pencil, Flashcards etc. at the rate of Rs. 7.50 per head and the teaching aids free of cost from the beginning. Every Supervisor was put in, charge of about 33 Centres. They visited the centres frequently and offered necessary guidance to run them effectively. The Animators were paid a monthly honorarium of Rs. 50 p.m. plus Rs. 20 for Kerosene and Rs.5 for contingent expenses. The monthly meeting of Project Officers at District Adult Education Officer's Office, Thanjavur helped resolve the problems arising in running the centres.

The centres worked for 200 days in a period of ten months at the rate of $1\frac{1}{2}$ hours per day in the evening suitable to the learners.

Contribution by the Development Functionaries :—

Various Development department officials visited the Adult Centres and gave demonstration lectures. The learners were apprised of the various development schemes and welfare measures launched by the Government for the welfare of the people. Thus a social awareness was created among the learners. In women centres needle work, plastic wire bag making, Plmyrah mat weaving were taught. The necessity of family planning was stressed in the Centres. Excursion, Cultural activities celebration of festivals were arranged to create unity among them.

Rural Functional Literacy Project is a major Adult Education Programme implemented in the State with cent percent financial assistance from Government of India. Rural Functional Literacy Project was first introduced in the State in July '79. In each project, three hundred Adult Education Centres functioned. These centres were located in two or three contiguous backward block of the Districts selected by the District Collector, Adult Education class were run for $1\frac{1}{2}$ hours to 2 hours a day for two hundred days during 10 months period in a year. In 16 Blocks the scheme is being implemented in phase I to VI.

During the year 1985-86 it was programmed to provide drinking water supply to 235 problem habitation in Thanjavur District under Point No. 8 of 20 point programme and this was entrusted to the TWAD Board for implementation. Provision of drinking water supply to all these 235 habitations have been completed by the TWAD Board and the target achieve in full. The Unionwise details of habitations population benefitted and the expenditure incurred are given below.

Name of Union	Code No.	Population benefitted	Expenditure incurred (Rs. in lakhs)
Orathanadu	21	20499	38.86
Pattukottai	19	20866	22.06
Thiruvonam	2	1948	4.07
Peravurani	2	561	2.83
Papanasam	2	2468	2.49
Sethubavachatram	7	4936	13.92
Thanjavur	2	1278	4.10
Mannargudi	5	8856	3.53
Thiruvaiyaru	1	1146	0.31
Vedaranyam	10	4315	2.58
Thalanayar	35	10251	10.27
Muthupet	9	6855	11.60
Nagapattinam	97	59665	44.97
Needamangalam	3	2580	5.22
Kollidam	4	1731	5.21
Sembanarkoil	6	8625	8.00
Mayiladuthurai	2	1291	1.09
Thirumarugal	8	4227	11.87
Total	235	162098	192.980

Defining Pesticides

Pesticide is a general term for any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any pest, including insects, rodents, fungi or weeds. There are three major types of synthetic pesticides, classified, by chemical components:

Chlorinated hydrocarbons, or organochlorines, are "hard" pesticides that break down chemically quite slowly and can remain in the environment for long periods. They include DDT, DDD, DDE, Eieldrin, Chlordane, Toxaphene, aldrin, endrin, helpachlor and lindane.

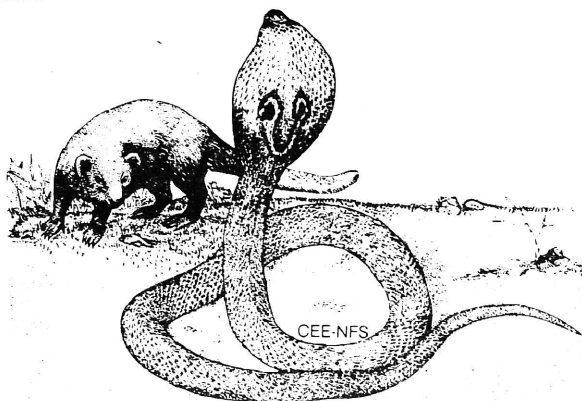
Organic phosphates, or organophosphates are highly toxic to humans but are not persistent in the environment. They include parathion, malathion, chlarethion, themet, phosdrin, methylparathion and trichlorphone

Carbamates are compounds that have low toxicity to humans.

Source: Congressional Quarterly Inc., Environment and Health (1981)

Where Hazardous Wastes Come From

Industry
Batteries
Inorganic Chemicals
Organic Chemicals
Pesticides and Explosives
Electroplating
Paint and Allied Products
Petroleum Refining
Pharmaceuticals
Primary Metals smelting and Refining
Textiles Dyeing and Finishing
Leather Tanning
Special Machinery
Electronic Components
Rubber and Plastics
Waste Oil Re-refining



The much misunderstood Cobra

Indian Cobra & Common Mongoose

When we hear the cry 'snake' the first thing that comes to our mind is the hooded cobra. Stories of snake-bites and the revenge wrecked by cobras seeking to avenge the death of mate are so ingrained in our psyche that we invariably think the worst of the cobra.

On the other hand we have many religious myths and legends related to the cobra. Influenced by them, we consider the cobra, the snake God, and for centuries we have performed 'nag' pooja for the continued prosperity and fertility of our families. In folk lore too cobras appear as guardians of hidden treasure.

The cobra belongs to the family *Elapidea* which includes a variety of poisonous snakes. They occur in every continent except Europe. The length of the snake varies according to species. Many cobras can flatten their body when excited and the *Naja* (derived from the Sanskrit word *naga*, meaning snake) cobra can spread its neck ribs to form the familiar hood.

Largest venomous snake

The King Cobra (*Ophiophagus hannah*) is the largest venomous snake on earth. The body is fairly robust and the scales glossy. The hood is proportiona-

tely less wider than that in the common cobra. The snake's coloration varies with habitat from olive brown or gray to deep shiny black. While threatening, the front of the body is raised about one third of its length with spread hood. It can remain erect, swaying its forebody, for several minutes and is the only cobra which can move forward while it is in the threat posture.

Found in most South-East Asian countries, the King Cobra inhabits the forests of the Western Ghats, and in the jungles of Orissa, Bengal and Assam in India.

King Cobras are snake-eaters and the diet include other venomous snakes as well. They feed by day as well as at night.

King cobras are especially feared during the mating season which occurs in March. The eggs are laid five to six weeks after mating. The king Cobra is the only snake which makes a nest and incubates its eggs. The eggs which measure 59.4x34.4 mm, weighs an average 40.85 gm. upto 51 eggs are laid at a time. After a 40-week long incubation new born King Cobras are deep black with yellow-white strips measuring 5 metre. Later this colouration becomes lighter and the con-

trast between the various hues diminishes.

King Cobra venom is extremely potent. The quantity of venom injected in a bite is more than that of other venomous snakes. A human can die within fifteen minutes after bitten unless immediately treated with antivenom.

Widely distributed in India

A more familiar snake, the Indian cobras, *naja naja* are found almost anywhere, in heavy jungles, open cultivated and in populated areas. They freely enter water and like most snakes are strong swimmers. They feed on rats, frogs, toads, lizards, birds and even other snakes. Cobras are known to live upto 20 years.

Cobras live in pairs during the mating season, which occurs at different times of the year depending on the specific habitat. Mating cobras never spread their hoods. Eight to forty five (usually twelve to twenty) eggs are laid after two to three months, often in a hollow tree or inside termite mounds. The female often stays in the vicinity of the eggs and defends them but does not incubate them as the King cobras does. The eggs are oval, with a leathery shell. The young hatch after two months.

SIX HOTEL PROJECTS WITH NRI AID

The Chief Minister Dr. M.G.R has cleared six hotel projects in the State, to be promoted with financial assistance from Non-Resident Indians. The total cost involved in constructing them will be around Rs. 250 crores to Rs. 300 crores. Of the amount required, the State Government will contribute 26 per cent, the NRIs 24 per cent while the remaining 50 per cent will be offered to the public as shares.

Thiru V.V.Swaminathan, Hon'ble Minister for Tourism said on December 15th that these new ventures, intended to cater to different categories of people would be located in Mahabalipuram, Muttukkadu, Thiruvideandai, near Valluvar Kottam and near the area where the city zoo was previously located. (The sixth place has also been decided but is to be announced later)

The Minister was presiding over a function at which Thiru Jagdish Tytler, Hon'ble Union

Minister of State for Civil Aviation, inaugurated the Sindoori Hotels on Greames Lane.

Thiru Tytler referred to the enterprise shown by the family of Dr.P.C.Reddy in opening the Appollo Hospitals and the present three-star deluxe hotel. When he was keen to start a school for the handicapped children where they could receive sound education, Thiru Tytler said, Dr.Reddy offered to contribute Rs.10 lakhs immediately, as he too was interested in such a project. Inspiring persons of his calibre were needed and the Prime Minister was happy to nominate him on the Board of the Indian Airlines.

Thiru Swaminathan thanked Thiru Tytler for having arranged the aero-bridges in the Madras air terminal, the first of its kind in India. Thiru Tytler had agreed to his request that there should be more number of charter flights to Madras

which could bring increased tourist inflow. The opening of the Sindoori Hotels, by the side of the Appollo Hospitals was a concept in vogue in places like Houston in the U.S. There was no such facility in India near Jaslok or Appollo Hospitals. This need has now been fulfilled.

Welcoming the guests, Dr. Pratap Reddy, Chairman, Appollo Hospitals, said that in addition to providing facilities for tourists and travelling businessmen, the hotel would extend special facilities to patients coming for post-medical care check-up and their relatives at the neighbouring Appollo Hospitals.

Mrs.Sucharita Reddy, Chief Executive of the hotel, said despite the quick development of the hotel industry, there was a definite shortcoming to hotel accommodation today which the promoters of Sindoori and in their own way tried to overcome.

National Family Welfare Award

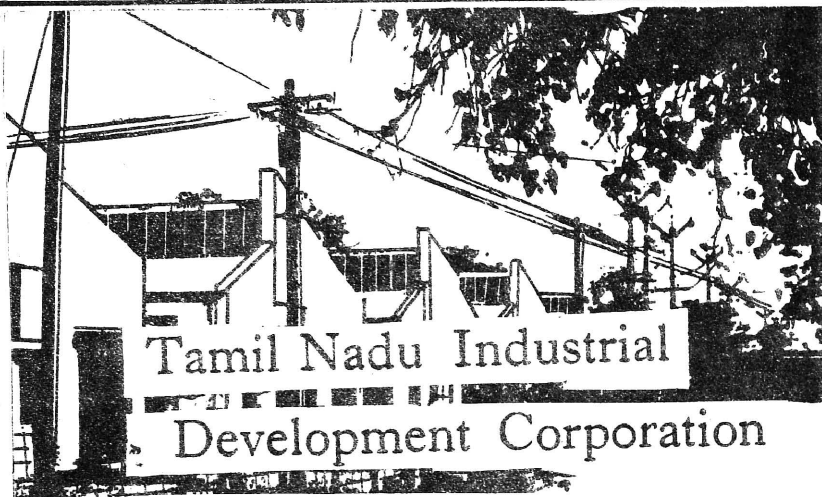
1985-86

Tamilnadu bags the First Prize of Rs.2.5 crores:

The Government of India have instituted a scheme of Annual National Family Welfare Awards to States and Union Territories.

Among the Group 'B' States having a population of more than one crore, Tamilnadu has been awarded the first prize of Rs 2.5crores for 1985-86. Against a target of 4,75,000 sterilisations fixed by the Government of India, Tamilnadu has achieved 5,12,179 sterilisations. This amounts to 107.8 percent of the target. This is the second year in succession, the Government of Tamilnadu is getting the first prize of Rs.2.5 crores.





TIDCO has been the prime mover of industrial growth in Tamil Nadu in the last two decades. TIDCO was incorporated in 1965 by the Government of Tamil Nadu to set up Cement Plant in Alangulam and a Continuous Casting Plant in Arakkonam in public sector. Subsequently, TIDCO expanded its activities in setting up large and medium scale industries in joint sector. The aim was to synthesize the initiative and enterprise of private entrepreneurs and spur the activities for rapid industrial growth in the State. TIDCO sponsors industrial projects both in public and joint sectors for the manufacture of Cement/Steel/Fertilisers/Chemicals /Drugs Finished Leathers/Industrial Explosives/T.V.Sets etc. to cater to the needs of general public and also to accelerate the industrial growth in Tamil Nadu especially in backward areas.

The authorised share capital of TIDCO as on 31.3. 1986 is Rs. 60 crores of which Rs.59.73 crores has been subscribed.

TIDCO has successfully sponsored 46 projects in public and joint sector. The total capital outlay on all these pro-

jects works out to Rs. 649 crores. The TIDCO's investment including bridge loan and interest accrued in these projects works out to Rs. 97.50 crores and the employment opportunities created is for 16,200 persons. TIDCO's operations have ended profitably, during the year 1985-86.

TIDCO, at present, is having 16 new projects under consideration involving an investment of about Rs. 890 crores in the areas of polyols/Telephone cables/Fructose Syrup/Lamp & components/Industrial Diamonds / Petrochemical down stream projects / Propylene Oxide /Float Glass/Butachlor/ 6 APA Sponge Iron/Titanium Dioxide/Ceramic Tiles/Carbon Block/Power Plant etc. The employment potential of these projects would be 5,400 persons. The details of sales turnover of the projects both in public and joint sectors are given below: pertaining to the period from 1.4.85 to 31.3.86.

A-Public Sector Projects.

(Rs.in lakhs)

- i) Tamilnadu Cement Corpn. Ltd
(2 cement units,

Asbestos & Asbestos Pressure Pipes manufacturing units)	5,126.18
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ii) Tamilnadu Steels Ltd (Steel Melting Shop and Re-rolling mill)	1,880.42
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B-Joint Sector Projects	55,088.06
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Total Rs.	62,094.66
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The following companies have commenced trial/commercial production during 1985-86.

Fibre pipes India Ltd.	Apr.85
Fabline Ltd	Jan.86
Tamilnadu Industrial Explosives Ltd.	Feb.86

TIDCO, at present, having 12 projects which are under various stages of implementation. This covers 2 in public sector and 10 in joint sector involving capital outlay of Rs. 295 crores. TIDCO's investment on these projects would be Rs. 21.76 crores and the employment potential to be generated would be for 3,400 persons.



FASCINATING GECKO

The gecko, or wall lizard, is probably the commonest reptile we have and around our homes. This slightly repulsive looking animal has many fascinating but little known characteristics.

Ever seen this little animal staring at you, head down from a wall or even a ceiling with beady eyes, and wondered how it could manage these acrobatics? The Gecko can do this because its toes are equipped with special suction pads that enable it to take a firm grip on any smooth surface, even glass.

The duration of its greatest activity is between the evening night hours, when it leaves its hiding place which is usually in cracks of walls, doors and so on, to track down spiders, beetles, moths and a variety of other insects. The way it catches its prey is interesting; it sneaks up to the prey, pouncing on it suddenly and seizing it into its mouth. It then strikes

it against the ground or a wall with violent movements of the head after which it swallows the prey making visible chewing movements.

The gecko has excellent vision and its eyes are large, with vertical pupils. If one encounters the animal during the day for example, when it is moving on the wall of a house he finds pupils closed down to a narrow slit however when the gecko is out hunting insects in the evening, at twilight or by the dim light of the lamp, the pupils are wide open filling almost the whole eye. The gecko is quite vocal and when it starts out on its nightly patrol, it often makes a clear sound something like "yech, yech, yech." Its voice is particularly loud and animated when it is captured or senses danger.

Egg-layer:

Like the majority of its reptilian relatives the gecko lays eggs. The eggs are always laid aloft in the cracks and holes of walls for example. When laid they are coated with a substance which becomes sticky on drying, enabling the female to attach them firmly to the surface on which they are laid. The colour of the gecko varies from light brown to grey.

When one picks up a gecko (not a simple feat, because of the creature's agility), its skin feels soft and velvety. Like all other reptiles it moults at certain intervals. Again in trying to catch a gecko its tail may suddenly break off. Discarding the tail affords the gecko a certain protection, for the cast-off piece, violently jerking, can distract a predator and give the gecko a chance to flee. Though the tail is later regenerated the new tail is usually shorter than the original one (CEE-NFS).

INDIAN ECOLOGICAL GROUP HONOURED

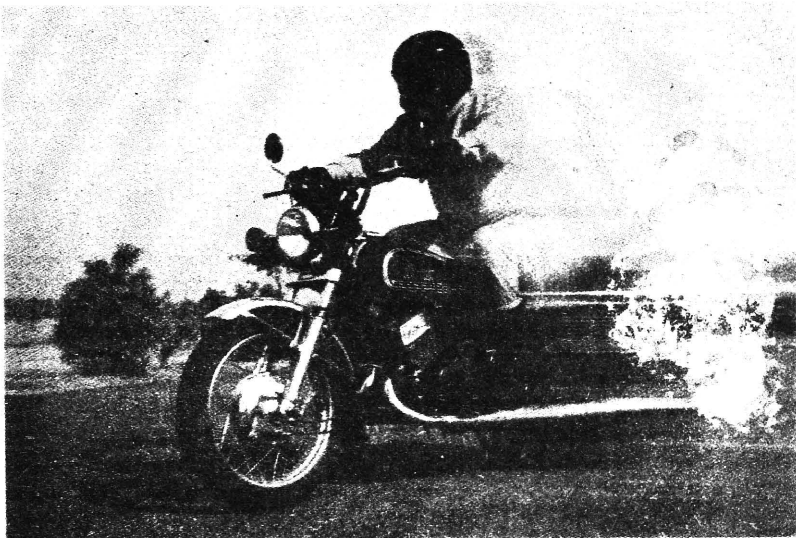
STOCKHOLM

The Ladakh Ecological Development Group is among those receiving this year's Right Livelihood Awards given by the Right Livelihood Foundation, an educational trust situated on the Isle of Man. Others named for the 1986 Awards, worth a total of 100,000 dollars, are two women scientists, Dr. Alice Stewart (United Kingdom) and Dr. Rosalie Bertell (Canada), world authorities on the dangers of low-level nuclear radiation, and Evaristo Nugkuag of Peru, principal spokesman for the

Amazon Indians. The Honorary Award goes to Austrian futurist, Prof. Robert Jung.

The Awards, popularly known as the Alternative Nobel Prizes, will be presented to the recipients at a ceremony in the Swedish Parliament in Stockholm on December 8. First instituted in 1980, the awards have so far been won by 29 people and organisations from 20 countries who, in the opinion of the International Jury, "work on practical and exemplary solutions to the most urgent problems of today."

The Ladakh Ecological Development Group, located in the high Himalayan region of North-west India, works to preserve traditional culture and values against the onslaught of tourism and 'development'. It has introduced appropriate technologies, such as solar-heated Trombe wall houses, solar water heaters, dryers and cookers. A broad educational programme includes traditional medicine, village arts and plays, radio discussion programmes and a newsletter.



Dirty Cars, Dying trees

Car exhaust emissions are dirty—but unnecessarily. Too long after America and Japan, European countries are trying to clean them up. In doing so, however, they are plumping for an expensive and petrol-wasting wrong choice. They ought instead to look at a clean-air car engine recently launched in Japan.

Car engines produce three pollutants; carbon monoxide, hydrocarbons and nitrogen oxides. The first two are the result of incomplete fuel combustion; the third is, effectively, burnt air. The nitrogen oxides from cars, with a bit of help from hydrocarbons, are probably the biggest single reason why, according to an alarming official report this week, disease is now afflicting more than half of Germany's trees.

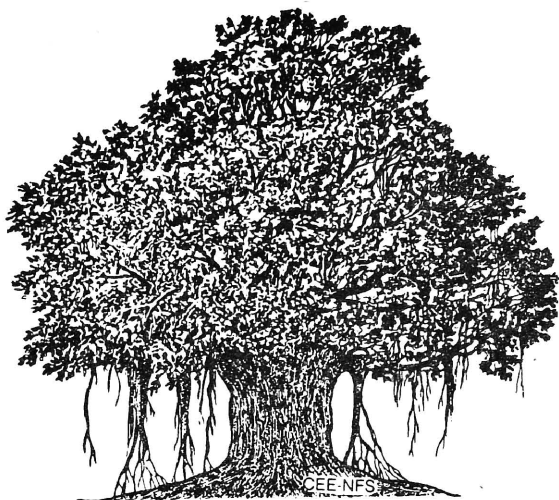
The strictest controls on car exhausts are California's and Japan's. Both demand unleaded fuel, which will be available all over the EEC by 1989. California uses yesterday's method now chosen by the Germans; add a three-way catalyst to the exhaust and—essential if the catalyst is to work—a system that keeps the air-fuel mixture in the cylinder at a 'rich' 14.7 parts of air to one of fuel. It adds about £500 to the cost of the car and works only when the car has warmed up. The system fails when cheats or incompetents use leaded petrol.

A better way to meet the standards is Toyota's 'leanburn' engine, which burns 23 parts of air to one of fuel. It produces negligible carbon monoxide and nitrogen oxides, but

more hydrocarbons than a normal engine. This can be solved with an 'oxidation' catalyst (two thirds the cost and more robust than a three-way converter) on the exhaust. Lean-burn engines are not only cleaner and cheaper. Toyota's goes 18% further on a litre of petrol. There is nothing magic about this merely an improved computerised control of the carburettor and a cylinder with a special shape. There is a small penalty in engine performance—poorer acceleration, more hesitation—but it is not great. Besides, Toyota's engine is the first, not the last, word in lean-burning. One American company believes that ignition by microwave will enable engines to burn as lean as 33 to one, rendering exhausts all but spotless by the 1990s and three-way catalysts obsolete.

If a manufacturer begins now to adapt his cars for three-way catalysts, he will have to stick with rich-burning engines. That is exactly the decision that Ford, a strong advocate of lean-burn, has reluctantly taken, following the German announcement. The result will be dearer, dirtier and thirstier-than-necessary cars for European drivers in the 1990s. Slower speed limits reduce pollution faster. So why does Europe have to go for three-way catalysts?

There is a way that would allow European carmakers to get their lean-burn act together in time to compete with Toyota. But it is a politically inconvenient one; speed limits. Scientists at Heidelberg calculate that the present German three-way catalyst plan would cut nitrogen oxide emissions by 300,000 tonnes a year by 1995.



THE BANYAN TREE

By
DHIRAJ L. BHALANI

Sacred to Hindus, the banyan tree holds a special place in every villager's life. Under the tree is situated the village deity's shrine—the spot where women gather every morning to offer prayers, the point around which the village chauppal is spread, the meeting ground where village elders hold important discussions and take decisions the resting place for weary travellers and a rendezvous for village boys looking for a cool afternoon of fun.

A fast growing, evergreen tree, the banyan (*Ficus bengalensis*) is an outstanding example of epiphyte growth. A seed ejected by a bird, may come to rest among the leaves of another tree. Here it germinates—long roots appear which soon thicken, strengthen and eventually strangle their host. This smooth, grey barked tree can grow to a height of about 20 metres. The mature tree trunk is never cylindrical as it is made up of several amalgamated aerial roots. These roots, given off by the tree's

branches, hang down to penetrate the ground. They then thicken to form new trunks.

Famous banyans

The famous banyan tree in the Indian Botanic Gardens at Calcutta was ascertained to have grown from a seed deposited in the crown of a date palm in 1782. It is now difficult to find out the original trunk of the tree. Another large famous banyan tree is known as 'Kabir Vad' situated in Bharuch district of Gujarat on the banks of the river Narmada.

The tree can be propagated from seeds and cuttings in nurseries. Seeds are sown as soon as they are ripe in pots filled with mould mixed with powdered brick or charcoal. The young saplings are kept well shaded in the heat of the day. Large cuttings about 8 to 10 metres high are planted around January—March and kept well watered until the rainy season.

Banyan trees appear to bear no flowers, only fruits. Actually the flowers are concealed in the fleshy receptacle commonly referred to as the fig. These figs are stalkless and grow in pairs like red cherries in the leaf axils. These contain numerous tiny blossoms of both sexes and also a host of small insects. These are the fig insects without which the tree cannot produce seeds. Each species of fig has its own species of insect attached to it. The insect enters through a hole in the top and lays eggs which hatch out and mature. These new insects on leaving their home become dusted with pollen from the male flowers. They then make their way into another fig thus ensuring fertilization. The figs ripen between February and May.

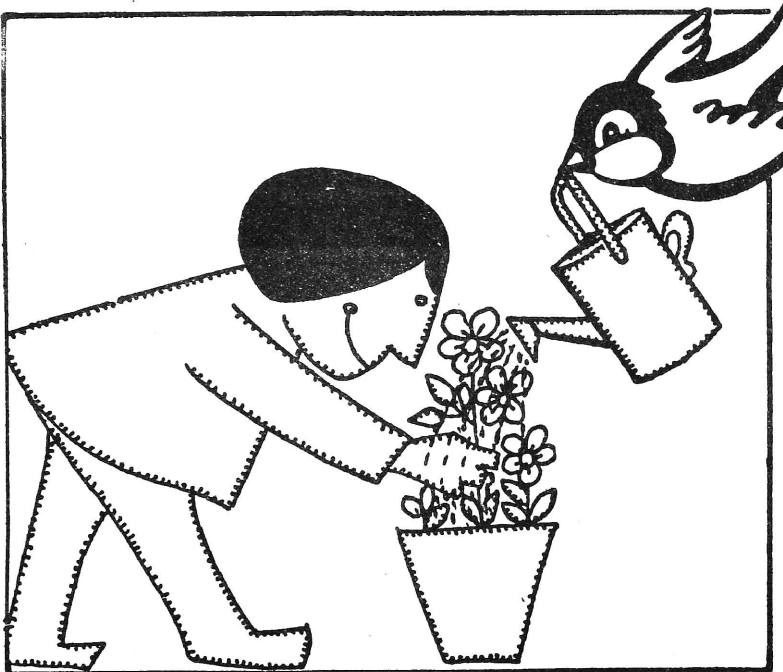
Difficult to eradicate :

The banyan tree is widely distributed throughout the hill forests of India and is extensively planted for shade in gardens, villages and along roadsides. The tree is difficult to eradicate because of the tenacity of its roots and the large size of the tree. Often found growing in wall cracks, these trees can be very destructive to buildings.

There are many uses to the banyan tree. The wood is of little value, but as it survives well under water it is used for well curbs. From the bark and young hanging roots a coarse fibre is obtained which is used for rope making. The leaves are used as plates. Bird lime is made from the sticky milky sap and is used in medicine to provide relief from pains and bruises and for rheumatism. An infusion of the bark is regarded as a powerful tonic in the treatment of diabetes. The leaves are heated and used as a poultice. The fruits are eaten as a famine fruit as well.

The tree is thus an integral part of life in every Indian village. (CEE-NFS)

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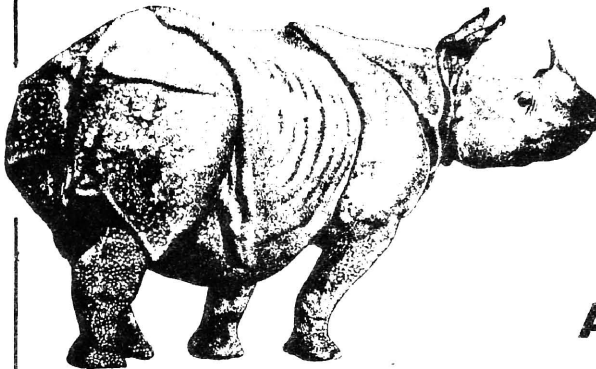


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CEE-NFS

At Man's Mercy

By Roopal Rawal

Mighty and majestic, the ferocious looking rhinoceros is the third largest land animal after the elephant and hippopotamus. Though a rare sight today, rhinos were numerous and conspicuous about 5,000 years ago. The fall in their population came during the last two centuries—not as commonly believed, due to evolutionary failures. The rhino's size itself deters wild predators. Indeed, its only enemy is man. Extermination for sport, horn or hide and encroachment upon its habitat for agriculture and tea plantations, threaten the rhino's survival. Rhinos are heading towards extinction faster than any other large mammal in recent history. Kenya has been specially hard hit by poaching. Out of 20,000 rhinos in 1970, only 550 survive

The horn, the toes, the skin, the stomach, the bones and even, the dung—almost every part of the animal serves man's unending lust. For centuries, rhinoceros horn—compacted hair-like skin fibres—has been used to make cups, bowls, daggers, bows and arrows, decorative carvings, sword hilts, walking sticks, door handles, butts of rifles and pistols.... the list is endless. Rhino horn and hide are believed to cure asthma, tuberculosis, and snake bites. It is

also claimed to have aphrodisiac powers.

Unsavory customs, like bathing in rhinoceros blood to acquire courage, and hanging a rhino tail over the bed of a woman to ease childbirth pains, have also been prevalent. Other meaningless practices are men using rhino horn as a talisman and rubbing ash of rhino horn on the eyebrows to help attract beautiful girls. These beliefs have proved fatal to the rhino. The trade in rhino products is banned. Nevertheless, it does thrive clandestinely.

The Rhino family

There are five rhino species in the world: three Asiatic species—Indian rhino, Javan rhino and Sumatran rhino; and two African species—Black rhino and White rhino. The Javan and Sumatran species have been comparatively less studied as they are extremely difficult to get close to. According to the latest census, there are only around 70 Javan and 500 Sumatran rhinos left.

The Indian rhinoceros is the Greater One-horned rhino and as the name implies has only one horn. Once it dwelt all along the foothills of the Himalayas, Terai region in particular

and the valleys of the rivers Indus, Ganges and Brahmaputra. Today it is restricted to scattered pockets in India and Nepal. There are less than 1800 left and the largest herd resides in Kaziranga National Park, Assam.

The Indian rhino has thick skin with several folds and not much body hair. Though bulky, the body folds enable it to run fast, jump, twist and turn rapidly. African Black and African White rhinos have two long horns and lack those deep folds that Indian rhinos have. While Black rhinos are solitary and white rhinos are, more gregarious, the White rhinos are actually grey in colour with a long head and wide square mouth. African rhinos inhabit low-lying plains whereas the Indian rhinos live in the 12 ft. high elephant grass.

Born Swimmers :

Of all the five, Indian rhino is perhaps the best swimmer and loves water. To watch a rhino wallow is a hilarious sight. They roll and thrash water with their legs in the air. Mudbaths are their favourite pastime. Wallowing serves several other purposes : to lower the body temperature and to prevent fly-bites.



FUN-FARE

ARIGNAR ANNA

"I've definitely made up my mind to be cremated", announced a club bore.

"Good! came a voice from the corner, 'I'll call taxi'.

"All clever men are conceited" she said

"Oh, I don't know" said he. 'I'm not'

A woman asked her husband if he had a good memory for faces.

"Yes? I think I have" he replied boastfully.

"Thank goodness for that" she said, 'I've broken your shaving mirror'.

"I didn't intend taking a holiday this year but the boss insisted.

"How long have you got?"

"Until I find another job".

"Your son tips me more generously than you do sir," a taxi-driver said to a wealthy.

"That's quite possible" was the reply. "He has a rich father. I haven't"

"It is a painful thing to mention," said a patient to the surgeon, "but my wife thinks the fee you charged for my operation was far too high"

"But my dear sir, surely you do not set the same low value on your life as your wife does?"

"I would like to see the income tax-man, please".

"Sorry, he's out".

"Ah, and when do you expect him to be out again?"

"Aren't women funny?"

"Well, if you tell one how many bones there are in the human body she'll believe you. but if a sign says 'Wet paint' she'll have to investigate"

"I was a fool when I married you" said a woman to her husband.

"Yes darling" he replied. "but I was in love and didn't notice it."

"But madam, the hat goes perfectly with your delicate complexion," said a salesgirl to her prospective client.

"May be" was the reply, "but I wasn't looking delicate until you mentioned the price"

"She is rather polished girl. don't you think?"

"Yes she casts reflections on everybody".

"And remember; my boy, a woman can make a fool of a man in fifteen minutes" said father. "Why the look? What are you thinking of?"

"Those fifteen minutes" replied his son.

A woman reported the disappearance of her husband to the police. "Is there any message you wish us to give him in case we find him?" she was asked.

Yes," she said. "Tell him' mother didn't come after all"

A small boy returned home in an obviously dejected state of mind from his first day at school.

"Ain't going to-morrow", he announced.

"Why not?" his mother asked.

"Well I can't read or write, and they won't let me talk" he replied.

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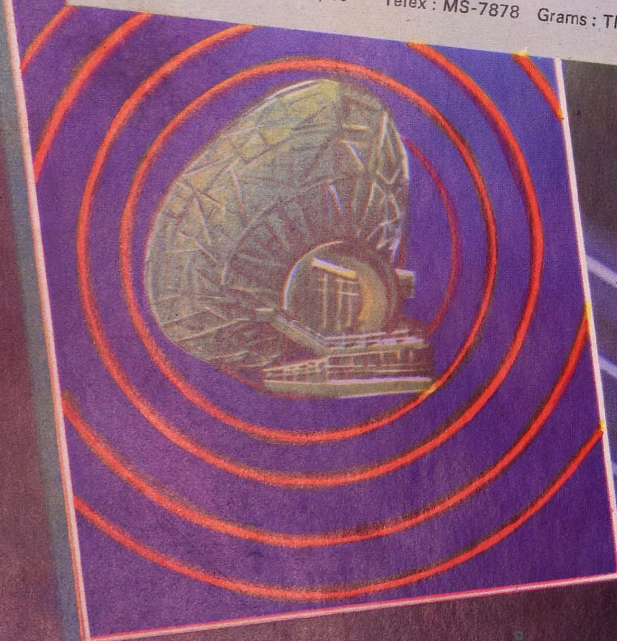
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