



The Chief of the Naval Eastern Command, Vice Admiral Thiru Nadkarney called on the Hon'ble Chief Minister Dr. MGR on 7.5.85.



In scope this month



Pay rise to Government Employees

Based on the recommendations of the Fourth Pay Commission Report, the Chief Minister Dr. M.G.R. increases Government Employees Pay by upto Rs. 150.



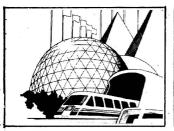
Sekkizhar Temple at Kunrathur

Minister for Information, Thiru R M. Veerappan inaugurated the renovation of the temple dedicated to Sekkizhar on 18.5.85. A report.



Tamil Nadu Leads in Industrial Development

A glance at the figures prove that Tamil Nadu has kept up with the pace of the Industrial Development in India. A Note.



Expo '85

A write up on Expo '85 being held in Tsukuba Science City, Japan, A fascinating potrait of what science can achieve.



Family Welfare Programme in Tamil Nadu

Tamil Nadu had set its sights on controlling its population. A programme that is bound to succeed and help all-round growth of Tamil Nadu.

Tamil Arasu

The Informative Monthly of Tamilnadu Government

June, 1985 Thiruvalluvar Year 2016 Vaikasi - Aani



The Tamil Nadu Government announced an increase in emoluments ranging from Rs.30 to Rs.150 a month to its employees, on the basis of the recommendations of the Fourth Pay Commission.

About 9.42 lakh employees will get the increased pay with

allowance paid to the employees is to be merged with their basic pay.

The Hon'ble Finance Minister, Dr. V.R.Nedunchezhian, and the Finance Secretary, Thiru C.Ramachandran, IAS, said the arrears due from October 1,1984, would be paid as soon as the formal orders a fitment benefit of seven percent of the basic pay is granted. With the minimum benefit at Rs.30 and the maximum at Rs.150, the average benefit works out to 9.5 percent of the basic pay.

A new dearness allowance formula at 1.5 percent of the

PAY RISE TO GOVERNMENT EMPLOYEES

retrospective effect from October 1, 1984, which will cost the State Exchequer Rs.90 crores in a full year. The additional commitment in the current financial year (1985-86) will be Rs.145 crores payable to the employees and the non-adjusted portion of the interim relief granted during the Pongal festival.

The decisions of the Cabinet on the recommendations of the Pay Commission were announced by the Hon'ble Chief Minister Dr. M.G.Ramachandran, at a press conference in the Secretariat on 26.5.85. A portion of the dearness

were issued and at any rate before the end of July.

The Pay Commission, headed by Thiru N.S.Ramaswami, retired Judge of the Madras High Court, was set up in June 1984. It submitted its report on April 10, 1985.

Reading out the Cabinet decisions, on behalf of the Chief-Minister, the Finance Minister said the D.A instalments paid up to the consumer price index level of 528 point would be merged with the basic pay.

Other highlights are: A new pay structure with 17 scales has been prescribed. While fixing the level in the new scales,

basic pay up to Rs.1,100 and at 1.2 percent for pay above this level, for an increase of eight points in the consumer price index, will be adopted: the maximum will continue to be Rs. 30 per instalment. In the case of the minimum, the Cabinet has modified the commission's recommendation and raised it from Rs.six to Rs.eight for each instalment.

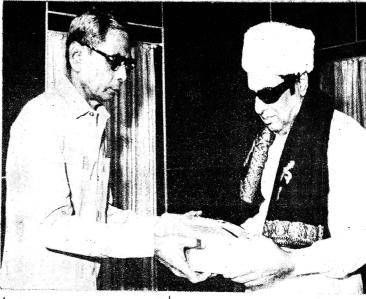
New rates for house rent allowance and city compensatory allowance have been prescribed, and the rural compensatory allowance has been doubled to Rs.20. Limits for house building advance are also relaxed.

Pension amounts are revised on a graded basis from seven to 30 percent. Including a lumpsum grant of Rs.20, the minimum pension is raised to Rs.235 from the present level of Rs.125. The pensioners will be granted D.A. at the same rates as for the serving personnel

Once in three years, D.A. instalments granted will be converted into dearness pay.

The scales of heads of departments and of technical personnel are rationalised and raised. Parity to Indian medicine doctors with allopathy doctors is granted.

Indicating the areas where the Cabinet had modified the commission's recommendations The Financial Minister said the house rent allowance suggested for Madras city and areas within 32 km from it had been raised.



The scales of Tahsildars, block development officers, inspectors of police and forest rangers. who played an important role in implementing the Government's policies, had been raised by one level higher than recommended.

On the same lines, the scales of Under Secretaries, and Assistant .Commissionars of Commercial Taxes wer also raised, and a special allowance of Rs. 100 was granted to Section Officers in the Secretariat

REGIONAL RURAL BANKS

In Tamil Nadu at present the Indian Overseas Bank. functioning in Tirunelyeli and Ramanathapuram districts with head-quarters at Sathur. There are 114 branches of this bank in year 1983, the outstandings 8.75 lakhs and the balance under priority sector for this of Rs. 3.75 lakhs is from the with more than 1.2 lakh ting the orders of Govern-accounts. The entire priority ment of India, the bank is to the weaker sections.

The Government there is only one Regional also agreed to have one more Rural Bank viz. Pandiyan Regional Rural Bank establi-Grama Bank sponsored by shed in Dharmapuri District. This bank is being sponsored by Indian Bank. The bank will have a total share capital of Rs. 25 lakhs, of which the Government of India's share would be Rs. 12.5 lakhs. The these two districts. During the sponsoring bank's share is Rs. bank stood at Rs. 19.3 crores State Government After getsector advances were disbursed expected to function from 1985 onwards.

SMALL AND **SMALLER**

Raja of Panagal who was the Chief Minister of Tamil Nadu and a party collegue of Sir Theagarayar was arriving at Madras. Sir Theagarava went to the railway station to receive the Raja.

The Raja said, "Why is it you have come all the way to receive me. You need not have come at all. You could send an ordinary person or a small boy"

Then came the reply from Sir Theagaraya: "I too thought of sending a small ordinary boy, and I searched for one. But there is nobodyelse smaller than myself. That is why I have come here."

Government to erect memorial to Sekkizhar

The Tamil Nadu Government will erect a suitable memorial for Sekkizhar, the Prime Minister of Chola emperior of 12th century AD, who turned a divine poet and contributed the Peria Puranam, the immortal classic containing the biographies of the 63 Saivite Saints called Nayanamars.

Thiru RM. Veerappan, Hon'ble Minister for Information and Religious Endownments, announced this at Kunrathur, the poet's birthplace. The Minister also said a centre to honour this avant would be chosen by a committee. It might be on the lines of Kamban Kottam, and the Valluvar Kot tam.

Apart from the Sekkizhar complex, the memory of another illustrious poet, Elango Adigal would also be perpetuated, the Minister added. The Information Minister inaugurated the renovation of the present temple dedicated to Sekkizhar in this village on 18.5.85.

The house where Sekkizhar was born had been converted into a temple which is in neglected condition. Funds would not be a constraint to honour such an illustrious son of Tamil Nadu, Hon'ble Thiru RM. Veerappan said. The Tamil people, who have forgotton to repay the debt of gratitude to scholars and saints, should pay homage to them in proper way by recollecting their contribution to Tamil culture.

The occasion was also unique in that a six-decade-old dispute was resolved at the instance of the Hon'ble Minister and an idol of Sekkizhar, which was not hitherto being allowed to enter the Thiruunageswarar temple which he had constructed, by strange circumstances was led in. Sekkizhar before being invited by Anapaya Chola to head his cabinet, was living inThirunageswaram (near Kumbakonam) and was a devout devotee of the deity there. When he shifted his venue of activities to Kunrathur, he built a temple like the temple where he had been hitherto workshipping.

The Information Minister helped in ending this dispute and the idol was taken into the Nageswarar temple's sanctum and the Lord and His devotee were "made to meet" after a lapse of 62 years. Oduvars recited hymns and there was jubilation at this "re-union".

Hon'ble Thiru Veerappan expressed regret that even today, Tamil was not being allowed to be used in the famed Chidambaram temple. Sekkizhar and Kam ban were like the two eyes of Tamils but the former had not been made so popular. The Peria Puranam reflected the genius of Tamil culture, the service by the saints to uplift humanity, the then civilisation and the administrative efficiency of the people 800 years ago.





"Sekkizhar and his work must be popularised among common man. We honour those who serve humanity but we have not paid homage to a great poet who called out the life-history of 63 outstanding men who served society, after touring the entire State". The

Minister also referred to the manner in which foreign countries paid tributes to their great sons like Shakespeare.

Tirumoolar's biography in the Peria Puranam spelt out the theme of "one caste. one



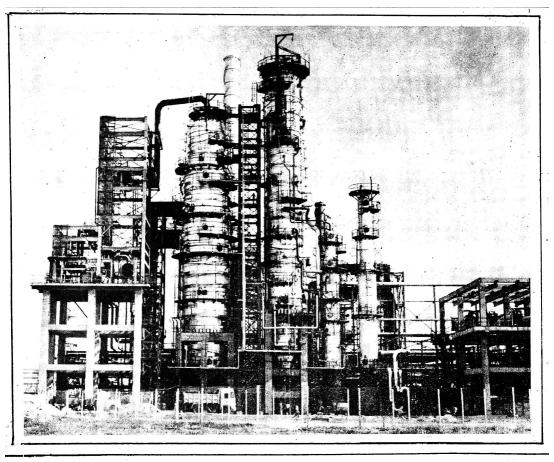
God". Sekkizhar's account contained lives of apostles from all strata of society. Caste was no barrier to reach God, who visited these men who strove to serve society.

Thiru M.P.Sathyavel Muru gan welcoming, thanked the Government for its keen interest to revive Tamil Culture by honouring men of erudition.

Thiru K.Aludia Pillai, I.A.S., Commissioner, HR&CE, said Tiruvalluvar and Sekkizhar were God's gifts to Tamils. Sekkizhar stayed at Chicambaram for one year to complete his Peria Puranam with 4,253 verses. God himself gave him the "lead for his divine poem. After completion, he and his classic were honoured by being taken in a procession on an elephant, the emperior himself standing in attendance.

Thiru T.N.Ramachandran said Peria Puranam which has been translated into Sanskrit contained the message in the Vedas, Upanishads and the Agamas. Thiru S.T.Kasirajan, I.A.S. Transport Cmmoissioner said but for Peria Puranam, posterity could not have learnt about the devotion of Kannappa Nayanar and Pusalar Nayanar.

Thiru V.Muthuswami said by a study of Peria purnanam, one could recaptulate the glory of Tamil literatue which existed during the Sangam age. H.H. Sri Gnanaprakasa Desika Pharamacharya (Thondai Mandalam Adheenam) said, the Peria Puranam has been reckoned as a scripture. Thiru. Arul Mozhi Thevar, thanking the visitors, suggested the naming of Chingleput as Sekkizhar district and also establishing a university in his memory.



Manali-A Major Petro Chemical Complex

Manali, 30km from Madras where the Madras Refineries Limited (MRL) and the Madras Fertilisers Limited (MFL) are located, is emerging as a multicrore petrochemical complex and hectic activity is in the area, a vast expanse of semi-marshy land.

The major plants coming up there would produce import substituting intermediaries like Linear Alky Benzine (Lab)proplyene oxide, polyglycol, polyol and isoproplyene.

The newly formed jointsector, TamilNadu Petroproducts (TNPL) is setting up a Rs. 140-crore plant at Manali for the production of 50,000 tonnes of LAB per year with technical know(MFL)howfrom Universal Oil-products, USA, LAB is the main raw material used in the manufacture of detergents.

The TNPL executive director Thiru Balasubramanian said work on a 40-acre site had already begun and the plant is expected to go on stream in the last quarter of 1987.

The company has been formed by the Southern Petrochemicals Industries which invested Rs.25crores, besides the Tamil Nadu Industrial Development Corporation's (TIDCO) investment of Rs.26 crores and

Rs.49 crores raised from the Public. The balance would come from financial institutions.

Thiru Balsubramanian said at present 50,000 tonnes of LAB was being imported as indegenous production of 40,000 tonnes per year by the Indian Petrochemicals Ltd (IPCL) could not meet the demands of the detergent industry. TNPL'S LAB, once available would obviate the need for import.

The Company would also produce isopropyine and polyol with the proplyone provided by MRL. A Rs 15-crore investment in plant and machinery is envisaged for this.

The Sector continues to receive utmost important both at the Centre and the State level. As the Development in the Sector is left largely to private initiation and enterprises', the State Government have been endeavouring to create a climate conducive for growth. The figures relating to the development of this sector show an encouraging level.

The simplified registration procedures and the special drive for increasing the pace of growth have yielded the highest increase in permanent registration in recent years since the formation of the District Industries Centres in 1978.

TAMIL NADU LEADS IN INDUSTRIAL DEVELOPMENT

It may be seen from the figures that the Industrial growth in Tamil Nadu has been consistently higher than that of the All India figures.

We have also strengthened the Single Window Mechanism under which the District Industries Centres play a co-ordinating rule in highlighting problems in the commissioning of industries and securing solutions therefor. This mechanism was introduced in May last and in the last one year, of the 1611 cases identified solutions have been found for 906 cases and it is expected that the clearances would be obtained for the remaining cases also very soon.

The implementation of the Self-employment Programme was vested with the District Industries Centres which have been able to acquire themselves creditably during both the years of implementation viz. 83-84. Particulars of target and achievement for the two years are given below:

It may be relevant to point out that the performances of this State have been commended at the All India Level.

It may be of interest to note that as against the target of 10,000 units under the 20 Point Programme last year the achievement was 11,700 units. During this year (1985-86) we propose to give a qualitative orientation to the number of new units to be generated in the State under which out of 6,000 new small scale units anticipated, industry-wise targets are as follows:—

Electricals & Electronics.. 600

Chemicals, Pharmaceuticals, Plastics ... 400

Year	No. of perma- nently registered units	Employm en t
31-3-1978	18,700	2,60 836
31-3-1983	46,378	5,30,985
31-3-1984	49,920	5,70 0 02
31-3-1985	60,250	7,23,108

The index number of Industrial growth from 1978 onwards for all India and Tamil Nadu is given below:

Year	IN	INDIA		TAMILNADU		
	Index No.	Growth percentage	Index No. No.	Growth percentage		
1978	148	6.8	164.1	14.7		
1979	150	1.2	172.7	5.2		
1980	151	0.7	182.5	5.7		
1981	165	9.3	201.7	10.5		
1982	172	4.2	213.3	5.8		



Year	Target	Achievement Units	Amount (Rs. in lakhs)
1983—84	17500	21,247	3315.50
1984—85	21700	22,425	4233.20

Automobile ancilleries ... 600
Engineering ... 1400
Others ... 3000

We have also proposed to take up certain areas for moderinsation, mention may be made of a scheme for establishment of prototype process Development Centre for pumsets at Coimbatore at a cost of Rs. 160 lakhs which has been cleared by the planning Commission for implementation by the Department of Industrial Development, Government of India. The following two pro jects have also been suggested for third country assistance under the United Nations Development programme:

- 1. Auto Parts Development Centre in or near Madras to design and develop auto parts and improve the quality of existing parts at a cost of Rs. 520 lakhs.
- 2. Electronic Development Centre at Madras at a cost of Rs. 660.55 lakhs.

We have been using the Industrial Co-operatives Sector as an instrument for the development of identified rural industries and employment gene ration in rural areas. The number of such societies has increased from 297 in March 1978 to 723 at the end of March 1985. Their production and sales have gone up from Rs.

15.00 crores and Rs. 17.65 crores in 1977-78 to Rs. 79.93 crores and Rs. 88.34 crores respectively in 1984-85. This year we expect to reach the level of Rs. 100 crores in sales.

Among the societies, mention may be made of the four common Leather Finishing Service Societies at a cost of Rs. 1 crore each at Vanivambadi, Dindigul, Perambur and Ranipet. These are intended to help small tanners to increase their earnings through the furnishing facilities provided at a nominal cost. The Teac Co-operatives which have had a major import on the lines of small tea leaf growners in Nilgiris have proved to be very effective. The production and sale of these societies have increased from Rs. 787 lakhs and Rs. 729.88 lakhs in 1977-78 to 1949.91 lakhs and Rs. 1980.53 lakhs in 1984-85.

During this year, we intend to enter into new areas like Electronic particularly with women as beneficiaries with a view to encourage the growth of electronic units. We propose to create raw-material banks.



Bharathidasan Aathichuudi Prelude

Translation by Dr.N.Sanjeevi

Laudable love of Nationality love of the Mother-land

Are aimed to nourish world-love

Otherwise

How to hound out

In this world of To-day

Dangerous Atom-bombs and piling of war-weapons

Also poisonous Environmental pollution

How to usher in peace?

The aim of this poem is

To establish only one common (Socialist) govt Of the (esteemed) United nations

As this poem is like

the ancient poem of Avvaiyaar

In the same style

is the title

- All (in the world) are our kith and kin
 Unify all the governments in the world
- 3. Music becomes magnificient

depending on its language

- 4. Partaking is pleasure
- 5. All wealth should be socialised6. Only the mind that deepens disseminates
- 7. Write original works
- 8. You are the author of all five works

(Of creation, protection, improvement, change and compassion)

- 9. You are the creator and destroyer
- 10. Unity of mind (s) leads to universal peace
- 11. Jealousy is leprosy
- 12. The Ignorant suffer
- 13. He who claims high by birth is low
- 14. Destroy narrow thoughts
- 15. Annihilate evil thoughts against others
- 16. Hear well: Answer well
- 17. Banish widowhood
- 18. Patron's excess is theft
- 19. Seek the welfare of children
- 20. Achieving fame is only
 - by one's action here and now
- 21. Cultivate good taste
- 22. Engage in any work examining the environment

- 23. Sharpness of mind is wealth24. Develop Dramatics

- 25. Strengthen the power of speech26. Demolish depression27. Slash down slavery (of all kinds)
- 28. The well-liberated never fall ill
- 29. Peasantry is prosperity
- 30. Grow more fruit-trees
- 31. Pain is the root of pleasure
- 32. Grow more trees (all along the streets)
- 33. Make music sweet as honey
- 34. Speak sharply and sweetly35. Discard the dead past
- 36. Failure levers success
- 37. Ignorance breeds fear
- 38. Four-tier castesism is false
- 39. Catch up clarity in thought 40. The whole world is your home
- 41. Strive subtlety more and more
- 42. Conceive every second fresh thoughts
- 43. Establish more and more universities
- 44. Religious bigotry is bad
- 45. The immature is useless
- 46. Self-respect is sovereign
- 47. Man and woman are equal
- 48. No Devil exists except religion
- 49. Mother Tamil is the language prime
- 50. Practice military manoeuvres all around
- 51. To hide and name it sacred is sacrilege
- 52. Change is natural
- 53. Eschew extravagance
- 54. Be an example
- 55. Yield not to dotage (old age)56. Defication is public crime
- 57. Establish your name and fame for the future
- 58. Abhor opportunism
- 59. Black-marketing is public crime
- 60. Sharpen your smell-sense 61. Poverty is the result of betrayal
- 62. Total liberation is dearer than life
- 63. Death has nothing further
- 64. Give-up empty talk
- 65. Take necessary timely meals
- 66. Live to let live the world

Our body requires energy giving food stuffs like carbohydrate, protein and fat. These food stuffs are digested by various enzymes and absorbed from the intestines. The carbohydrate gets converted into glucose and glucose gets deposited in the lever and muscle as glycogen. When necessary the glycogen gets converted back to glucose. Thus in a normal person blood sugar is kept at a constant level (100-120mgm). Insulin is formed by the B cells of Islets of Langerhans. Its main action are (1) to facilitate the entry of glucose into the cells and combustion of the same in the tissues; (2) deposition of glycogen in the muscles and liver and (3) Deposition of fat in the adipose tissue. When the blood sugar gets reduced to go 560mgm% or less, we call it Hypoglycemia. Usually it is due to treatment of Diabetes with insulin. gives rise to various symptomsif they are not promptly noticed and treated, the patient goes into coma.

Ketosis is an acute complication of Diabetes either untreated or poorly treated. Previously, it was called Diabetic coma. Now-a-days, it has to be recognised at pre-coma stage and is called Ketosis. If not treated vigorously, it also goes to coma. Before insulin treatment 50% of the diabetic patients used to die to Ketosis. now it is less than 2%. In diabetics because of absolute or relative lack of insulin, carbohydrate is not utilised properly. Fat is mobilised and metabo lised. Normally, fat gets converted to certain fatty acids (aetoacetic acid) and it gets exidised to carbon dioxide and water. But when fat combustion is proceeding at abnormal level. acete acetic acid and its derivaties B. hydroxy butyric acid and acetone begin to to accumulate and appear in excessive amounts in the blood, producing Ketosis. Untreated cases can go in for coma and death.

Hypoglycemia:

In 1922, Insulin was discovered. Before 1922, hypoglycemia was a rarity. Since then, the condition has become common. Symptoms usually occur when the blood sugar falls to 60 mgm %. But in long standing Diabetic with 300 mg. or more blood sugar level symptoms may appear at 100 mgm % level also. It can be due to (1) treatment Diabetes of (2) spontaneous hypoglycemia.

Till recently we thought that insulin alone can give rise to hyposgylcemia, but not the oral antidiabetic drugs. Now we

- 1. Blurring of vision and diplopia (Double vision)
- 2. Headache
- 3. Spastic character in movements, especially in the legs
- 4. Frequent and uncontrolled yawning
- Rare fits (In Epilepsy, hypoglycemia must be suspected)
- Chronoic hypoglycemia may cause neurotic pains

III. Psychic changes:

- Depression and irritability (may look like a drunkard)
- Drowsiness in day time and sleeplessness at night.
- Inability to concentrate, weakness and easy fatiguability.

If hypoglycemia is not treated

what is Diabetes?

get few cases of hypoglycemia with oral drug also.

SYMPTOMS

Earliest occurance of hypoglycemia will be a sense of apprehension, hunger, sweating, trembling, palpitation and unsteadiness. Awareness of smyptoms may be masked by sedatives (Sleeping tablets).

- 1. Symptoms due to the effects of hyposglycemia on the autonomic nervous system:
 - 1. Profuse sweating even in a cold day
 - 2. hunger
 - 3. paraesthesia of the lips and fingers
 - 4. Pallor
 - 5. Palpitations
 - 6. Fine tremors

II. Symptoms due to the effects of hypoglycemia on the Central Nervous System.

promptly at this stage it may develop coma, leading on to permanent brain damage and death.

DIAGNOSIS

When hypoglycemia is suspected, the urine must be examined and the absence of sugar in the urine increases the probability of hypoglycemia while the presence of sugar rules out hypoglycemia. However, you must be careful to collect the urine which is being formed at that time, and not merely examine the urine collected in the bladder earlier. For this purpose if the urine shows some sugar, the bladder must be completely emptied, and again urine collected after a few minutes. This urine has been secreted at the time of symptom and correlates truly with the blood sugar.

Hypoglycemia can be defi-

nitely confirmed only by blood sugar examination. Levels below 50 mg% of blood sugar are diagnostic of hypoglycemia. Now a days, instant home diagnostic kits are available.

TREATMENT:

- 1. Glucose must be taken immediately by the patient
- 2. I.V.Glucose given in more severe cases by Doctors.
- Subcutaneous adrenaline or glycogen injection by doctors.

For this purpose, glucose or a lump of sugar must be kept handy and readily available. If the patient is semi conscious the relative of friend must immediately administer glucose.

PREVENTION

- 1. Type and dose of Insulin must be carefully adjusted to prevent hypoglycemia.
- 2. Snacks of 10-15 gm. of Carbohydrate between meals and also at bed time.
- 3. Any unfamiliar symptoms must be regarded as symptoms of hypoglycemia.
- 4. Allow for Exercise (take extra carbohydrate or reduce insulin)
- 5. Identification Cards to be kept by the patients, may be life saving and the cards should show the fact that the holder is a diabetic, the type of insul in he is taking and also mention "If I am found unconscious or behaving peculiarly, please give me some sugar."

Ketsois:

With the introduction of insulin therapy, the death due to Ketosis has come to down to less than 2%.

Ketosis is very common in

children and any type of Diabetics, because they are more dependent on insulin. Ketosis may be the first evidence of diabetes in these people.

The acid intoxication resembles that which develops in a sormal individual when he stops eating carbohydrate. Here fat is mobilised and burnt and if fat is eaten in excess, fat ceases to be burnt completely and fatty acids increase in blood. That adds to coma and death. Similar events happen in the diabetic due to lack of Insulin The other effects of ketosis are loss of water, salt from the body.

CAUSES:

1. Insulin lack—in the young



diabetics; in the poorly treated severe diabetics; with holding of insulin especially in the presence of vomiting.

- 2. Infection—which makes the diabetes more severe and because of the accompanying fever, metabolism is increased and fat burnt more.
- 3. Myocardial Infarction can precipiatate Ketoacidosis.

SYMPTOMS AND SIGNS

Dry mouth, increased thirst (Polydipsia), Polyuria, malasise weight loss are premomitory for hours or days. They may blend rapidly into symptoms related to Ketoacidosis i.e. laboured and increased rapid respiration, nausea or vomitting prostration, abdomi nal pain,

oliguria and shock. As a rule, these vents occur slowly. But in children they may occur suddenly within hours.

DIAGNOSIS:

Urine must be examined for sugar and ketone bodies. The presence of Acetone in large quantities in the urine is diagnostic.

INSTRUCTIONS TO THE PATIENT WHEN KETOSIS IS SUSPECTED:

- 1. Send for the Doctor
- 2. Keep a specimen of urine ready for examination by the doctor
 - 3. Go to bed
 - 4. Take Liquid diet
 - 5. Take an enema
- 6. Do not omit insulin if urine shows sugar
- 7. Keep warm and keep a reliable attendant.

When the doctor confirms the diagnosis patient has to be treated in a hospital with intravenous fluid and insulin; antibiotics and when recovering with potassium.

PREVENTION OF COMA:

1. Insulin must not be omitted .It is wrong to omit insulin when the patient is not eating.

Particularly when the patient has infection, the insulin requirement is more and he must be encouraged to eat easily digestable food and insulin must be given. The tendency to avoid eating and at the same time, omit insulin si dangerous.

CONCLUSION

When in doubt, give sugared drink by mouth. In Hypoglycemia, the patient will recover immediately. In a diabetic coma, no change will be noticed.



INAUGURATION OF NEW BUILDING OF MYLAPORE-TRIPLICANE TALUK OFFICE

The Tamil Nadu Government plans to construct another 10-storeyed office complex in the city like the one in the Secretariat, according to Hon'ble Finance Minister Dr. V.R. Nedunchezhian.

The Government had to spend huge amounts to rent buildings to house various offices and very often without adequate facilities, he said. Therefore, it was thinking of constructing another multistoreyed building. The Secretariat building had cost about Rs. 10 crores then and it was estimated that a similar structure would now work out to Rs. 22 crores.

Inaugurating the new build-

ing of the Mylapore-Triplicane Taluk Office on Greenways Road, on 6th May, Hon'ble Dr. V. R. Nedunchezhian said the Government was setting aside Government Hospital for Women and Children in Egmore at a cost of Rs. 1.75 crores. A 100 bed hospital was proposed at Perambur, where

10-storey building for Govt. Offices planned

about Rs. 45 crores each year to construct buildings for its offices all over the State, in a phased programme. About Rs. 250 crores had been given to the PWD for this in the past five years.

The budget for 1985-86 had provided for the construction of a 500 bed ward at the

a children's museum would also come up.

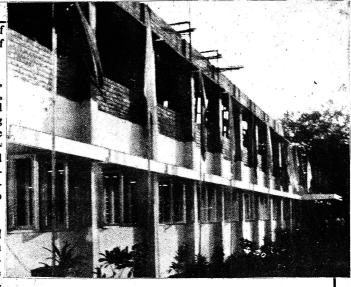
The Minister said a hostel would be built at Chintadripet in the city to provide accommodation for Government officials coming on duty here from the districts. A 20 acresite in Mylapore was being considered for a huge confe-

rence hall in memory of Thanthai Periyar at a cost of Rs. 2.5 crores.

Presiding over the function, Thiru K. A. Krishnaswami, Hon'ble Labour Minister, said the new taluk office building would serve people in five Assembly constituencies (Triplicane, Chepauk, Thousand Lights, Mylapore and Tambaram). The Revenue Department was being toned up to serve the people better.

The Chief Engineer, General and Buildings, PWD, Thiru C.R. Gopalakrishnan, presenting a report said there were plans to construct 19 Government office buildings in the city in the next two years at a cost of Rs. 12 crores.

The new taluk office building, he said, cost Rs. 23 lakhs in addition to Rs. 6.82 lakhs for the 22-ground site. While the ground floor would house the taluk office, there more floors would be constructed for the Commercial Taxes Department at a cost of Rs. 68 lakhs.



Thiru A. Padmanabhan, IAS, Special Commissioner, Revenue Administration, said the Government had paid special attention to the building requirement for offices to improve the working conditions. Sanction would soon be accorded for the two remaining Taluk offices in the city which needed their own buildings-Mambalam-Guindy and Tondiarpet.

At the function, pension payment orders were presented to a few of the 300 eligible persons for whom it had been granted recently. Indian Bank and United Commercial Bank distributed loans of Rs. 5000 each to 20 beneficiaries for motorised cycle rickshaws. Professional kits were distributed to 20 dhobies and 10 barbers and tailoring machines to 37 persons.

☐ The Swallows Co-operative Society

The Swallows Handicrafts Industrial Cooperative Society is situated in the slum area, New Washermenpet, close to the sea in the northern parts of Madras.

Here, the Swallows in Sweden and Denmark join the Indian branch of service Civil International, who had started a community development in the area in 1962. The Swallows is a Voluntary Social Service Organization, working as part of the International, Emmaus Movement, according to the principle; "Help people to help themselves"

The project consisted of

medical and educational activities, and eventually a handicrafts production unit was started to create an income, mainly for the poor women in the area.

At present, there are about 70 members of the society most of them being women. These previous illiterrate and oppressed women, have now taken over the whole responsibility of running the co-operative.

The greater part of the production is colourful batik; like wallhangings that tell old tales of Indian folklore, skirts, scarves, table cloths, table mats, bedspreads, dressmaterial, kurthas and Maxi dresses. The society also produces block

printed items; table cloths, table mats, bedspreads, T-shirts and Maxi dresses etc.

The Cooperative society is also helping a group of physically handicapped woodcarvers. They have a workshop in the Society's house and the society is taking care of the marketing of their goods. Later they might be incorporated as members of the Society.

Most of the products are sold for export, mainly to Scandinavia and West Germany. The customers are mainly non-profit organisations, engaged in solidarity work with the poor people of the third world countries.



KIDNEY BOOSTS FOR TRANS-PLANTS

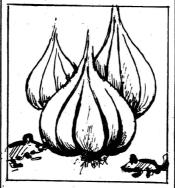
A NEW METHOD of revitalising kidneys that were previously considered too damaged for transplant operations could boost the supply of donor kidneys by up to 25 per cent.

The technique, developed at Addenbrooke's Hospital in eastern England, means that surgeons will be able to use many kidneys from road accident victims instead of having to rely on kidneys taken from braindead patients on life support machines.

Previously, surgeons had been reluctant to use kidneys from accident victims because they deteriorate rapidly following cardiac standstill and after 30 minutes the risk of irreversible renal damage is unacceptable. With the new method, kidneys can be revitalised for up to an hour after their blood supply has been cut off, and used for a transplant upto 24 hours later.

The technique, which can be carried out at any hospital with an active kidney transplant programme, involves passing gaseous oxygen across a kidney during the time it is being preserved on ice. The oxygen 18pumped through the donated kidney and is allowed to escape through minute holes made in its surface.

Keith Roles, consultant surgeon in charge of the project, says that the method has been successfully used to resuscitate four kidneys which have been damaged for up to an hour by lack of blood supply, and confirms that they are all functioning well.



SLIMMING WITH GARLIC

It seems to work on rats. Garlic oil prevented the body from stockpiling fats in rates which were put on exceptionally fatty diets. The controls, however, showed increased levels of cholesterol in the blood, the kidney and the liver. The garlic oil was added to the same fatty diets given to the control.

Nigerian scientists, Sodiumy, P. Joseph, and K. Augusti, think that the garlic oil interferes in the cholesterol making process of the body or heads off some enzyme involved in making fats.

Could garlic be the answer to fat people's expanding problems ?

growth



TELEPHONE DIALS THE CALL FOR YOU

The latest telephone innovation is a voice-activated computerized device that allows its users to place calls merely by making an oral request.

Developed by TTC, a California electronics firm, the telephone, called Dialless IV, "hears" voices from more than one meter away. The phone can recognize the voices of four family members, and stores 80 telephone numbers for instant dialling. If the user wishes to call another number, the digits can be orally communicated to the machine and the phone does the dialling.

The device, say its developers, will be particularly handy in emergency situations in which a homeowner cannot reach the phone. By merely yelling, "Call the doctor," the telephone will do the rest. When the doctor answers, the conversation can be conducted from the position of the caller.



HAMMEET - 85

Listeners of AIR, Madras, had a rare exposure to the advances made in radio communications when amateur radio operators (Hams) from different parts of the country converged on AIR on a particular band, in a novel programme called "HAMMEET-85" to celebrate the world Telecommunications Day.

The Programme, which began with pleasantries being exchanged on the descriptions of the weather and the places where the participating hams live, developed into a lively educational broadcast as questions and answers were traded in a quiz on the Ham hobby.

The AIR Compere Selvi. Revathi Srinivasan, announced that Thiru R. G. Deodhar, adviser (Wireless Planning and Coordination), Union Ministry of Communications, would be the moderator for the programme.

Thiru K.Mahalingam, the ham compere, and President of the Madras Radio Amateurs Society, sat with his handset and requested the participantation hams to be brief in their introductory remarks as it was a 'live' programme for listeners in millions.

Talking of weather: It was Thiru V.P.Sandlas, mission director of the last two SLV-3 lights, a top ISRO scientist and ham himself, who came on first, followed by Thiru K. Santhanam, SPIC manager in Turicorin, Thiru Mahabala Hegde in Mangalore, who announced that Thiru Chalapathi Rao, Station Director of AIR Mangalore, was present with him in

his house, and Thiru Krishna from Nagapattinam. murthi Then came others like Selvi Bharathi in Hyderabad, Babu from Pondichery, Thiru Chakravarthi a blind ham from Pavathambai village near Villupuram, who announced that Akila Sivaram, Station Director, AIR, Pondicherry, present in his house. Then Thiru R.Ravikrishnan from Madras and Selvi Grace from Bombay came on the air. All of them described the weather in their places as "sunny and bright" and cheerilly wished good morning to the listeners.

How to become a ham: After the introductory remarks by Thiru R.N.Nair, Station Director, AIR, Madras, Thiru Deodhar, the moderator, who himself is a ham, posed the question, "How does one become a ham?" and answered it himself. He said that anyone wishing to become a ham should be above particular age. learn the international Morse code, appear for an examination at anyone of the 21 wireless monitoring stations in the country, obtain a radio amateur licence and then build a small wireless set or buy one. There were also international radio regulations governing the radio frequencies on which the hams could operate and exchange information. In India. rules enabled the hams to offer their help to the civil authorities during natural calamities like floods and cyclones.

With Thiru Deodhar shooting the questions, the answers came in rapid-fire succession; Thiru Santhanam, the ham from Tuticorin, replying to the first question, said that in learning the international Morse code, it was worthwhile to learn to receiving the code longenough first so that sending it would be much easier later. Answering the next question on how

the hams could help the civil authorities during natural calamities, Selvi Bharathi from Hyderabad explained how the hams had beamed communications during the cyclones in Andhra Pradesh in 1982 and 1984 and during the Morvi dam disaster in Gujarat.

Initial cost: Thiru.Ravikrishnan, replying to another question, said the hobby could be started with a minimum of Rs.200 or Rs.300 and if one wanted to expand the hobby to radio reply, it would cost Rs. 2,000 to Rs. 5,000. Equipment costing Rs.10,000 could also be imported.

Answering questions from hams, Thiru M.V.Chauhan, President of the Federation of Amateur Radio Societies of India, said be looked to a bright-future and lot of developments in the next five years for this hobby. Geostationary satelli-



tes would soon be available for amateur radio users, who could communicate all over the world round the clock and hams could also see the pictures of the people they were conversing with by a slow-scan TV, he said.

'Young lady and old man':-The "HAMMEET" drew to a close with the remarts of Thiru Deodhar, who pointed out in a lighter vein that while a woman ham was called a "Young Lady" (YL) a male ham was called an "Old Man" (OM) and added "as we say in amateur language 73' (which means warm regards) and goodbye.

METRO WATERS APPEAL TO PUBLIC

Public co-operation absolutely necessary for conmuch as serving water as possible. Water supply received through Metrowater mains may be used only domestic needs like drinking and cooking. For all other washing and bathing purposes public are requested to utilise ground water and well water. The used wash water need not be wasted. They can be collected and used for gardening purposes. Wherever hand flusing is possible, this wash water can be utilised effectively so that even ground water extraction is limited. While selecting the type of plants and trees to be raised in the domestic gardening, public can be select plants such as Bouganvilla which consumes lesser water. Such varieties of plants are available locally.

COMPLAINT CELL is functioning at Metrowater from 7.30 AM to 7 PM to

cater to the needs of public. The phone No. is 847176.

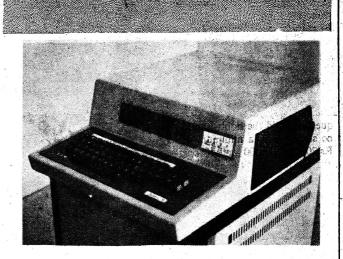
The public are requested to bring to the notice of METRO WATER COMPLAINT CELL information regarding any cases of direct suctioning of water so that prompt action will be taken for disconnecting such services. Such informants will help equitable supply of protected water for the domestic use of all the citizens of Madras City.

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With the sincere and earnest aim to educate a wide range of children, CSI Madras Diocese have decided to install a very powerful, High Precision, Scientific, Business, Fourth Generation, 16 bit, Multi-Terminal Computer Systems in three of their selected schools in the city of Madras. They are as follows:

- 1.Bain School, Kilpauk, Madras-600 010
- Bain School, Annanagar, Madras-600 040
- 3. Ewart School, Vepery, Madras-600 084

Latest Fourth Generation 16bit High Precision Scientific, Business Multi-Terminal, Muti



Multi Terminal Computer at School

tasking, Multi programming computer system manufactured by Messrs. WIPRO INFORMATION TECHNOLOGY LIMITED, Bangalore was selected to be installed at the three schools for the first time in India. The total cost of these three computer systems is about Rs.20,00,000- (Twenty lakhs)

The Installation was designed in a ver sophisticated manner



"I must frankly confess that I am a socialist and a republican...we must realise that the philosophy of socialism has gradually permeated the entire structure of society the world over....India will have to go that way too."

fully air-conditioned with a special flooring and roofing and the entire Computer Centre was designed in a single package with facilities to run theory classes. The atomosphere and the computer centre design will challenge any college school environment even in advanced countries, This is achieved with an additional cost of 2 (Two) Lakhs per installation.

The computer installation which is complete in all aspects has started functioning successfully from April 6, 1985, at Bain School, Kilpauk, Madras-600 010.

Periodical ,Full Time, Part-Time, Correspondence Courses sequentially developed and structured covering all related topics starting from the fundamentals of Data Processing to the Management of Computer-Centres will also be organised,

for Students, House-wives, and working women.

There will be courses specially designed for Executives, Managers and Heads of Institutions also.

After having graduated or pas-2 examination creditably, may be there are thousands of young women ,who are at the cross roads of having to decide upon the fiture career, in a most meaningful way. These unique facilities offered by the church of South India Schools in the field of computers will be of very great help. In the present day world persons can aspire to secure lucrative jobs only with high professional competance achieved through intensive study and also as a result of indepth compreshensive training. Bain School and Ewart provide an answer to this pressing need for the first time in India.

Contraception is a subject, the details of which few people are familiar. Being considered a "delicate" subject even educated and married couples hesitate to make the necessary enquiries, or even purchase the books containing the relevant Moreover for information. some there are also religious and social prejudices which appear to even forbid acquisition of such knowledge. The utilisation of any contraception technique involves anything from a sensation of vague uneasiness, requires mental restraint (as for "Natural Family Planning"), reduction of sensitivity (Nirodh), back pain and or bleeding (for the loop), hospitalisation, pain and incon venience (for sterilisaton) etc.,

To overcome the factors of ignorance about contraception, the inconvenience of using any

acceptor's family may have to go without work. Unfortunately there is a tendency for a number of people to sug gest converting this money incentive, as the primary motivational strategy to bribe more acceptors into sterilisation. Admittedly any increase in cash incentives does temporarily raise the inflow of acceptors. as is evident during the "camp season". It is experience that this strategy also suffers from severe disadvantages. First, after the initial spurt. a plateau is reached in the inflow of acceptors, who thereafter expect still higher monetary incentives. When money incentives are raised too high, the wrong type of acceptors are attracted-for instance those who are too old-who will even demand the operation as a right, for the sake of the money. Again a certain amount of callousness develops

towards "after care" problems, as the acceptor after receiving the money is often told to look after himself once the operation is completed, the "target" achieved, and the money handed over. Worse, large money incentives are known to stimulate bogus figures as regards the number sterilised, as the collaboration of just a few persons of the "sterilisation team" can lead to easy money being made by unscrupulous people, particularly in a "camp" atmosphere. To my mind instead of wasting money on high cash incentives, far beyond the actual needs for recuperation of the acceptor, better to spend it on better communication strategies. and much better facilities to the acceptors of sterilisation (e.g. clean beds, hygenic surroundings and personalised treatment).

MOTIVATIONAL STRATEGY FOR

THE FAMILY PLANNING PROGRAMME

T. V. ANTONY, I.A.S., Chief Secretary

technique, and the general lethargy against using any contraceptive at all, requires tested, well tuned and audience specific messages of motivation and education of the 'eligible couples'. This is a field in which there still are large shortcomings. As at present in a programme of 'Voluntary' Family Planning the best understood motivational, gadget is still the incentive - mainly money. At present a certain amount of money is paid to the acceptor of sterilisation, and in some States of the loop also, primarily to make up for loss of wages for the days the



Verv often at family planning publicity meetings hours are taken up by speakers, either expounding figures relating to the consequences of the "population explosion" or on the achievement of "sterilisation targets" while the captive audience we create for such occasions are forced to sit and endure. The Press does occasionally play up these figures. However, it is a matter of doubt whether all the effort, time and money would have induced even one member of the audience, to adopt a single method of contraception. The reasons are

obvious. To most of the audience it is a matter of consequence whether "Population of India goes up by one or more Australia's" every year. Figures of sterilisation do not make the decision to undergo the necessary medical procedures very much easier. What is needed is to ensure that at every opening ceremony, wedding, funeral, press interview, in every film, etc., a small piece about the need to plan the family is injected, by well through tutored speakers "audience specific" messages. It is my experience that salaried employees, Government vants, etc., who are already by and large tuned to the "Planned Family" concept, can be further persuaded towards this goal by quoting the actual cost of raising each child, the many humiliations they have to face to get a child admitted into schools, colleges, into jobs, to get married, etc., and to the need to settle the last child before they retire. What is needed is to quantify these feelings and project them in terms they understand in Tamil Nadu, Associations of Government staff, particularly at the lowest level have been made aware of the need to stop child 'birth at 33, so that they can look forward to a fairly peaceful retirement at 58 after settling the last child in 25 years. Hopefully if the male employee has his last child at 33, his wife who would be abut 25, would not have had more than about 2 children. This would be a considerable improvement from the present average of Female sterilisation at about 29 with the number of children at 3 to 4. Stoppage of child production at this age would also have the added advantage of enabling women to seek stable employment by about 30 (when her last child goes to school)

thereby enabling her to supplement her husband's income.

Couples with low income and low social status are also by and large motivated now to having small families, but to propel them to seek contraception, requires much more efforts. In a recent publication of the ICMR the dietary requirements for an average Indian has been worked out for various age groups. Based on these figures and the actual cost of the recommended food products in the open market as worked out by the Commissioner of Statistics-Tamil Nadu, the dietary costs for one month for a child of age 1-3 would be about Rs. 120/-, for the age 4--6 child Rs. 162/-. and for the age 10-12 child Rs. 233/- (boys) and Rs. 211/-(girls). Taking into account all other expenses and without any frills, the essential requirements for a child upto 14 vears are estimated to cost about Rs. 165.52 per month. Over a 20 year span, the minimum expenditure for a child may be expected to be of the order of Rs. 50.000/-. No doubt to "cost a child' may sound heartless. but such figures have to be arrived at to advise a couple as to whether they can really budget for another child. Surprisingly despite the many items of research that must have been done in the field of family planning motivation, the figure of the average cost of raising a child is not readily available, and so I have resorted to ICMR Dietary standards, and Kothwal Chavadi Market prices! Of course, apart from the financial outlay there are also many emotional and social costs. e. g., problem of accommodation, education, employment. marriage etc. I find people of this category if asked to explain as to who benefitted, by their bringing into existence 4.5.6 or more unwanted children and having had to undergo the travails of bringing them up, get confused, and point to the Almighty, rather than blame their own thoughtlessness. It is necessary to face married couples at a sufficiently early stage with well thought out figures and concepts about the problems of improvident paternity.

Agriculturists as a class react better with figures, relating to land, cultivation and harvests. Thanks to our agricultural scientists, extension workers and enthusiastic farmers. Tamil Nadu's agricultural production has been going up steadily every decade. sad fact is however that the 'Per capita production foodgrains' has been relentlessly falling every decade from 180.3 Kg. 1921, to 160.2 Kg. in 1971, to 152.5 Kg. 1981. What is more of interest to the average farmer is the fact that due to fragmentation of land, caused largely by the functioning of the principles of inheritance, the average land holding in Tamil Nadu has diminished from 1.45 hectares in 1970-71 to 1.08 hectares in 1979-80. Considering that this includes both wet and dry land, many holdings are already at the economically sub-standard Understanding level. this problem very well, some communities, notably the Vellala Gounders of this State have been taking conscious efforts to restrict the number of heirs. In the village of Ayyampudur in Periyar District, for instance, which is almost wholly populated by this caste effective steps have been taken for over ten years, to ensure that child birth stops when a son is born. As the daughter gets married away from the village, the holdings have descended to the single heir, thereby avoiding the need for



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bifurcation of land, and farm houses. The economic standard of the average villager in this village is of a high order. Certainly man other such villages should exist particularly in the Coimbatore -Salem-Periyar belt. It may be worthwhile to identify atleast one such village in every district and hold it up as a model to others as to what is already happening. I would invite Collectors to make a determined search for one such village, and where such village. is not available, persuade atleast a few villages to adopt the 'Ayyampudur Model" of "One Family" "One Heir".

Agricultural and industrial labourer would perhaps respond to the concept that if one labour unit gets replaced in the next generation with two or more labour units, without proportionate creation of employment opportunities, either employment slots will diminish or wages offered may fall. Ideally the net labour replacement in every generation should be equal to or less than one

As between men and women. it is obvious that women bear the burden and anxieties of child birth and rearing much more than men. While few women estimate the number of sleepless nights she has undergone for every child, the rough estimate is about 300 nights/child. Particularly in the lowest economic levels. malnutrition of the women becomes more and acute with every added child, as her instinct is to feed first her husband, then the children and then herself. As emaciation builds up, she also undergoes the further humiliation of her husband straying occasionto greener pastures to satisfy his physical needs. Recent

RECORD PRODUCTION OF

The area under objects in Tamil Nadu reached a record high in 1984-85, and so did production, Commissioner and Secretary of the Agriculture department Thiru A Venkata raman IAS told newsmen.

Against a targeted area of 14.67 lakh hectares, the achievement was 15.37 lakh hectares. Production was an all time high of 14.06 lakh tonnes.

The Agriculture Secretary said the new JL 24 variety of groundnut introduced by the department of oilseeds had performed better than local varieties.

There was a slight shortfall in the area under groundnut (1984-85) in the Khariff season (7-15 lakh hectares against targeted 8 lakh hectares) but under the irrigated crop in

reports also indicate that the incidence of cervical cancer is much more evident in multipara mothers than with those with just one or two. Admittedly the lack of adequate social security measures motivates a woman in the slums to ensure that she has atleast one surviving son, but lack of education and facilities ensures that far more are born and survive than just one. Perhaps if we can modulate our messages to the women, ultimately they may even raise the banner of "Freedom from pregnancy" and unwanted demand more Contraceptive facilities.

The common argument heard occasionally is that in a poor family every child brings in an additional rupee. What has not been clearly brought out is that for every child who can on good days earn a rupee or two, the family

the rabi season the acreage wentup to 5.27 lakh hectares against the normal area of 3.65 lakh hectares. "This is not only an achievement in Tamil Nadu but for all India as far as irrigated groundout is concerned."

The Secretary said the Tamil Nadu Co-operative Oilspeds Growers Federation(TANCOF will integrate production, procurement, processing and marketing of groundout and ground nut oil in the districts of North Arcot, South Arcot and Chengalpattu. It would take over the two oil complexes at Thiruyannamalai and Vriddhachalam A 300 acre farm was being established at Nevveli to produce breeder seeds for distributtion to oilseeds growers. The processed groundnut oil, both ex peller and refined from TANCOF would be marketed in Madras in June next.

looses the steady income earning capacity of the mother for months which is of the order of atleast Rs. 6/- to 10/-per day. Unfortunately, the exact earnings of a child, the outgo on the child, and the earnings of the mother lost during the pregnancy period and due to deteriorating health conditions of the mother, have not been quantified.

I have only touched on a few aspects of newer motivational strategies which must be evolved if we are really to persuade people not only to accept the concept of the "Planned Family", but also adopt an effective contraceptive technique. I would request Collectors to give greater thought to this aspect and come up with even more effective messages, based on their own personal experiences, and in discussion with their colleagues.

What Mankind Can Dream... Technology Can Ac

From March 17 to September 16, 1985. Japanese government and industry will host Japan's third international exposition. In addition, nations and organizations from around the globe have brought their own most advanced science and technology to Tsukuba, Japan's new Science City, 32 miles outside Tokyo.

Expo '85, based on the theme "Dwellings and Surroundings — Science and Technology for Man at Home," will provide its attendees with a view of their lifestyles in the 21st century, and will uncover new developments in science and technology that have never been seen before. At Expo '85, many Japanese companies will also try to help the visitor understand the pasic philosophy behind Japan's cience and technology developments

is stroll over to the Hitachi Pavilion and walk in - no lines, no waiting.

After

exploring the mysteries of the universe and life, the visitor can ride a computer-controlled passenger vehicle, the Mitsubishi 21, into the year 2030. Mitsubishi has designed its pavilion with fun and enjoyment in mind; multi-screen techniques include a liquid nitrogen, seven-color "mist screen" which the Mitsubishi 21 actually passes through.



and will attract viewers by its dynamic presentation. In the computer corner, approximately 60 of the latest image display terminals will be available for the visitors to operate. The visitor will be able to ask the computer questions, and the computer, while answering the question, may ask why it was asked in the first place. The computer will try to make its questioner consider the thought processes behind asking the question, and thus consider some of the basic facets of the question/answer process.

Not to be missed at Expo '85 is Fujitsu's three-dimensional presentation entitled "We Are Born of Stars" This film — although the word "film" is almost a misnomer for what Fujitsu has achieved - is one of the most breathtaking presentations you will

One can see a process robot programmed to artistically carve ice blocks to shapes suggested by the audience; in another corner visitors can have photographs taken of themselves in front of any background they may wish - just tell the computer and it will be electronically simulated behind you. Another corner will examine the journalism media of the future, displaying electronic information formats which may soon become a part of your home.

At Expo '85, Hitachi has introduced a unique ticketing system to facilitate entrance to its pavilion. As you enter the Expo grounds, your Hitachi entrance ticket will be automatically issued with a predetermined entry time stamped on it. At the time indicated on your ticket, all you need to do universe involving life and matter,

The primary theme of the IBM Pavilion is its attempt to answer the question "What is Creativity in Science?" The pavilion has been planned under the overall supervision of Nobel Prize winner Dr. Leona Ezaki, and incorporates aspects of scientific history, mechanical engineering, biology, architecture and many other fields of science.

The pavilion itself consists of three levels, including a Computer Corner, Science Mall, and Science Plaza. In the Science Plaza, IBM will present a unique movie, projecting on a dome-shaped screen 90 ft. in diameter and a globe-shaped screen 15 ft. in diameter centrally placed on the floor below. The film concerns itself with central themes of the

have ever experienced. Seemingly screenless, you are surrounded by threedimensional images of inner and outer space (planets and molecules), images so real that you do reach out to touch them. The presentation was developed using Fujitsu's very-largescale computers to develop the simulation — at a cost of millions of dollars. The images presented by the computer are accurate to the smallest detail both in chemical and physical properties.

In the rest of the Fujitsu Pavilion, will see FANUC MAN, the world's largest humanoid robot, standing approximately 15 feet high, and weighing in at 20 tons. This robot is one of the first examples of a device that can work with both hands at the same time. In addition to the robot, Fujitsu's COMMUNILAB will display, among

Ibaraki P efecture, 27 private organizations. From Overseas — 47 countries, 37 international organizations. 🔳 Headquarters Japan Association for the International Exposition, Tsukuba, 1985, Tsukuba Expo '85 site, Tsukuba Science City, Ibaraki-ken 300-51, Japan, Tel. 0298-60-1985

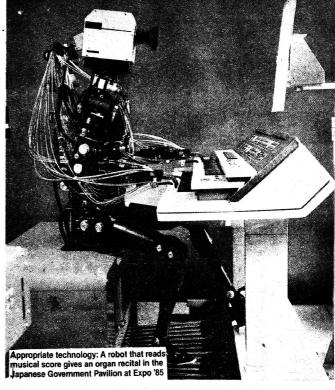
other things, the world's first practical translation system — one that can work in English, French, German and Japanese. The machine is capable of translating news stories into these languages simultaneously, and will also translate rambling sorts of sentences into clear counterparts in the language chosen.

In the show, Robot Fantasy 2001, to be staged at the pavilion, robots that think, judge and act will present a skit for the audience's enjoyment. The robots at the Fuvo Robot Theater will be able to hold conversations with the audience, independently play games in the arena, and will be able to recognize one another.

One of the most spectacular sights at Expo '85 is sure to be Sony's Jumbotron, a huge outdoor display TV screen that measures 40 by 25 meters (approximately 130 ft. by 83 ft.) and that is best viewed from across the Expo site nearly one-third of a mile away.

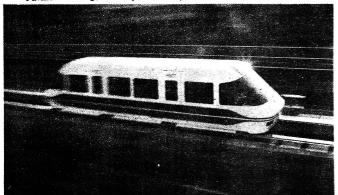
The technology incorporated in the Jumbotron is awesome. The screen will be comprised of 6,300 units, each containing 24 tri-color light emitting cells — which means that the screen will be composed of 450,000 picture elements (pixels). This is well within the range of current color TVs (300,000 to 700,000) so the definition of the picture should be dramatically clear.

The entire Jumbotron system will be fully digitized for absolutely accurate reproduction. Brightness of picture will be achieved by supplying 10 kilowatts of energy to each cell. "In Ouest of Mohty" is the appra priate theme of Japan's Automobile Pavilion. Throughout the pavilion,



What are the technologies of interest to Japan in this drive for scientific know-how? Typically, Japanese industry imported from the West, and the develhas chosen to concentrate its efforts in the high technology/consumer electronics fields. Lacking a "big science" capability (i.e. nuclear research, space programs, military development efforts), Japanese industrialists have singlemindedly devoted their efforts to winning market share in those appli-

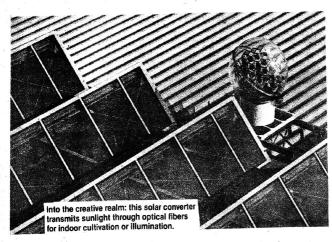
cations-oriented industries, wherein basic scientific concepts could be opment of those concepts to meet application or product needs could best be accomplished by Japanese know-how. Thus, in consumer goods. Japan continues to hold strong market shares in television sets, video cassette recorders, calculators, watches, automobiles, and so forth.

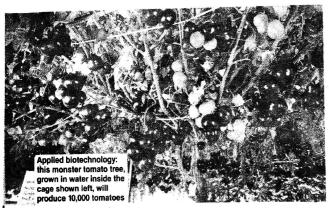


Tomorrow's transport: Japan Air Lines has adopted the spirit of challenge in the development of a high speed surface transport system (HSST). Capable of more than 300 miles per hour, the magnetically levitated system will glide at more moderate speeds

examples of technological advances in automobiles will be seen. Future traffic control systems, highway systems, and traffic interchanges will also be illustrated. The highlight of the pavilion will be a ride on the Space Highway in Space Rider vehicles. The ride will wind to the top of the cylindrical pavilion, passing through zones illustrating the manufacture of automobiles, passing through a clear zone that overlooks the Expo grounds. and then into a zone where arctic and desert scenes are projected around the vehicle to give a total impression of free mobility.







Fun for All the Family

Expo '85 is full of energy — it involves you and your family completely whether you're spiralling down through a space cinema, sitting for the world's first robot artist, or dedging asteroids at the controls of a computer cockpit.

There's so much for children to enjoy. They will love the Science Park, an enormous science playground in the center of the Expo site where a tube-tunnel winds round for 270 meters of surprises. Another big hit with the children will be the tree-climbing robot at the Mecha Zoo, where a special machine also gives a fish's-eye, a dog's-eye or a snake's-eye



The Jumbotron: Its1,857-inch screen is visible across the Expo site

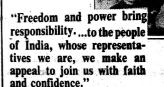
view of the world.

The competition is hot to be enumber one in fun. Most pavilions are offering souvenirs, T-shirts, and all sorts of novelties to add to the joyful mood created by a kaleidoscope of fun-filled exhibits — exhibits like the world's largest Ferris wheel towering 85 meters over the Technocosmos Pavilion, where you can try real space food as you take in the view of the Expo site.

Talking of food, one of the best places to introduce yourself to Japanese cooking is the Expo site itself, with its 60 restaurants, and 100 food stalls. Japanese food appeals to nearly everyone thanks to its natural simplicity. Restaurants often specialize in one dish such as sushi (raw fish on vinegared rice),

tempura (batter-fried seafood and vegetables), soba (noodles), or unagi (eel). Many foreign pavilions are serving their own local delicacies too.

Day trips will make your Expo holiday complete — the splendid Toshogu Shrine and breathtaking natural scenery of Nikko, the spring cherry blossoms and view of Mt. Fuji at Hakone, and the historic city of Kamakura are all less than two hours train ride from Tokyo.



Family Welfare Programme in Tamil Nadu

The need for successful implementation of the Family Welfare Programme in a developing country like ours can never be over emphasized. Tamil Nadu is a pioneer in implementing ithe Family Welfare Programme successfully and effectively.

MOTIVATIONAL STRATEGY 1985-86

The Family Welfare Programme for 1985-86 is based on a new motivational strategy which lays emphasis on motivating various target groups like women, agriculturists, Government employees, industrial labourers, etc., audience specific messages which are meaningful and convincing.

As a first step about 10 films on the new approach are in the making. All the Departments including Agriculture, Transport etc., are now getting personally involved in displaying the messages of Family Welfare.

EXTENSION

For Extension Workers a book is being prepared on the methods of contraception and various Family Welfare measures and this will be issued as a guide line for all the Extension workers. Attempts will also be made to make the eligible couple register upto date this year.

INTEGRATION OF FAMILY WELFARE PROGRAMME WITH THE MATERNAL AND CHILD HEALTH PROGRA-MME

A detailed programme is being drawn up to integrate the various child welfare programmes with the Family Welfare Programme so as to give the entire programme a welfare approach. The emphasis given on I.U.D. programme in 1985-86. is also based on this, because this programme helps couples, to space their children properly so that all children born are given good health care and other facilities. Steps will be taken to give complete immunization and other health care programmes for mothers and children.

PROVISION OF BETTER FACILITIES IN THE FAMILY

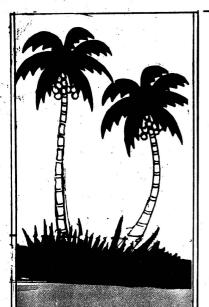
A comprehensive plan of action is also being drawn to provide better facilities to hospitals both in rural and urban areas. These include provision of all the equipment required like furniture, linen etc., Private Organisations are coming forward to donate recreational equipment such as Video and T.V. sets for the centres. This programme will be implemented in a phased manner. As the first step, in this direction we are planning to give one



DAI'S TRAINNING

Another step in this direction is the Dai's Trainning programme. Even today, the Dai's plays an important role, especially in rural areas. Hence it is programmed to train these Dai's properly. So for, 31,744 Dai's have been trained in Tamil Nadu. This year, it is proposed to train 1000Dai's and they will be provided with kits.





BUMPER COCONUTCROP IN TAMIL NADU

Coconut in thousands are being received in markets in Kerala and Karnataka daily from Tamil-Nadu where the coconut production this season is stated to be a bumper one.

Coconuts reach along with large quantities of fresh vegetables in forries daily from Pollachi, Nagercoil, Tiruchirapalli and Titicorin in Tamil Nadu.

According to vegetables wholesale dealers, vegetable production this season in TamilNadu was also a bumper one.

There is also large-scale flow of bananas and mangoes from Tiruchi and other centres in Tamil Nadu in the last few days so much so that the price of a kilo of tanana is only Rs. 2 and of mangees Rs. 5 or 6 depending on variety. laproscope to each Taluk Hospital and other Government Hospitals which are not having a set now, so that operations could be carried out throughout the year, rather than doing it only at the time of campaign periods. We have already distributed 96 laproscopes to Government Hospitals in different places of the State. Today, we are distributing another 140 laproscopes including 50 sets provided by the Government of India to several institutions throughout State. Each laproscope costs around Rs. 57,000 and the total cost of equipments now being supplied works out to Rs.70 lakhs. A laproscopic operation takes only a few minutes and the acceptor can leave immediately after the operation, if she is sure of adequate medical 'after care'

SCHEME FOR REORGANI-SING FAMILY WELFARE AND PRIMARY HEALTH CARE SERVICES IN URBAN TAMIL NADU

Another major step in this direction is the scheme revamping the Family Welfare and Primary Health Services in the urban areas of Tamil nadu. To begin with, the scheme will be introduced in 15 municipalities and the Corporation where the population exeeds 1 lakhs each .The aim of this scheme is to extend basic health facilities to the slum dwellers and also in congested areas in towns and cities. This has been sanctioned in six and a portion of Madras city Municipalities at present. When the scheme is implemented in full in the above areas, there will be 236 Health posts employing 1665 different categories of persons besides about 3280 voluntary women health

workers ,who will be local residents. They will render a package programme of Family Welfare, maternal and child health. The scheme is expected to benefit about 68 lakhs of people in Tamil Nadu.

TARGETS FOR 1985-86

The targets for 1985-86 fixed by Government of India is as follows:—

 Programme
 Target

 1. Sterilisation
 4,75,000

 2. I.U.D.
 1,68,000

 3. Conventional
 1,68,000

Contraceptive 2,00,000
4. Oral Pills users 76,000

However, in view of the better performance in the methods of contraception in Tamil Nadu, all these years and with the increased aware-

ness of the need for a planned family among the eligible couples, it is hoped that Tamil Nadu's performance in the field of contraception during 1985-86 will be far higher than the target fixed by the Government of India.

IMPACT OF THE CONTRA-CEPTIVE STRATEGY IN TAMILNADU

The birth rate which was 29.3 % in 1977 in Tamil Nadu has come down to 26.4 % in 1982.

Similarly the couple protection rate for Tamil Nadu which was 22.4% in 1971 has come up to over 38% in 1984. The All India couple protection rate in 1984 is 29.4%.

The Infant Mortality Rate has come down from 1143.5% in 1977 to 77.2% in 1980 per 1000 live births.



CORPORATION OF MADRAS

BUDGET - 1985-86

Income and Expenditure Budget (1985-86)

The Budget Estimate 1985-86 shows an income of Rs. 38.12 Crores as against Revised Estimate for 1984-85 fixed at Rs. 34.72 Crores and actuals of Rs. 30.70 Crores for 1983-84. The expenditure for 1985-86 is estimated at Rs. 38.69 Crores as against the Revised Estimate of Rs. 37.06 Crores for 1984-85 and actuals of Rs. 31.02 Crores in 1983-84.

Capital Budget (1985-86)

The Budget Estimate for 1985-86 has been fixed at Rs. 17.17 Crores as against Revised Estimate of Rs. 18.09 Crores in 1984-85.

Elementary Education Budget (1985-86)

The income in Budget Estimate for 1985-86 is estimated at Rs. 7.96 Crores as against Rs. 7.23 Crores in Revised Estimate 1984-85 and actuals of Rs. 6.27 Crores in 1983-84. The expenditure for 1985-86 is estimated at Rs. 9.45 Crores as against Rs. 8.81 Crores in Revised Estimate 1984-85 and actuals of Rs. 6.99 Crores in 1983-84.

Performance - 1984-85

- 1. The quantum of improvement works undertaken by Corporation continues to be bound by Financial Resources available. However within the financial resources available steady progress has been made during the year 1984-85 in all domains of activities. Collection of Property Tax continues to be on upward trend by additional number of assessees and enhancement of existing assessments in respect of additions to the property.
- 2. As a result of enhancement in rates of Licenses namely, Trade Licences Fee and Building Licence Fee, the income of both are estimated to be doubled in 1984-85. In the cases of Profession Tax and Company Tax by extensive collection efforts the tax collection has again been enhanced. However increase achieved in the revenue mainly enable the Corporation to meet maintenance services.
- 3. For Capital Works Corporation continues to depend totally on Government's assistance. During the year 1984-85, 113 Nos. of Bus route roads and 928 Interior roads have been relaid.

- 4. 1587 numbers of Lights had been added, which include 486 Sodium Vapour Lamps. Almost entire length of the major Bus Route Roads lighted with S.V. Lamps.
- 5. To improve Conservancy services 34 Lorries have been replaced with the new ones.
- 6. Work has begun on improvement of existing Public Conveniences. For 200 Public Conveniences steps have been taken for provision of continuous water supply and electrifying them and deep bore well pumps have been provided for 150 Public Conveniences.
- 7. Traffic bottlenecks are being tackled by provision of laybyes and medians and provision of S. V. Lamps. at important traffic junctions have been taken up.
- 8. A Consultancy is on for the Maintence of Municipal Services and Solid Waste Management. Consultants have also been engaged for rationalisation of Property Tax for improved and better tax collection. Preliminary stage on these consultancies is already over and is expected to be finalised in 1985-86.



M. D. YATHEENDHARAN



DEEPA HARIHARAN



ALAGUSUNDARAM

TOP RANKERS OF TAMILNADU HIGHER SECONDARY EXAMS '85.

- 9. Government have also accepted the need for Computerisation of Property Tax Financial Accounting and Pay Roll System. Design on Financial Accounting and Property Tax is already in progress.
- 10. Government have constituted an 'Empowered Committee' under the Chairmanship of the Chief Secretary to Government to review the problems of the Madras Corporation and to recommend to Government proposals for sanction of assistance for Capital Works of Corporation of Madras. First meeting was also held 21-3-1985.

- Highlights on Budget Estimate 1985-86.
- i) 37 Bus Route Roads and 654 Interior Roads are proposed to be relaid.
- ii) 700 numbers of S. V. Lamps are proposed to be installed.
- iii) To augment removal of garbage in the city, 30 numbers of new lorries are proposed to be added.
- iv) Children Public Conveniences are going to be constructed in every division.
- v) Construction of eight Public Conveniences on a turn key basis is being entrusted to Sulabh International. a

Gandhian Organisation, based in Patna. This Organisation will also undertake the maintenance of the Public Conveniences for 30 years.

- vi) Work on major repairs on the Sub-way near R.B.I., and construction of a bridge at Mundakkanniamman Koil Street will be completed during this year.
- vii) Construction of bridge at Otteri Nullah connecting Anna Nagar II Main Road and New Avadi Road and construction of a suby-way in Monegar Choultry Road are proposed to be begun during the year 1985-86.

State Transport Corporations to build 60 motels.

The Hon'ble Transport Minister, Thiru S. Muthusamy said that 60 motels would be built within the next five months by various transport corporations in Tamil Nadu to cater to the needs of bus passengers and crew. A Rs. 20. lakh motel, constructed by the Thanthai Periyar Transport Corporation, was com-

ing up at Mamandur off Chingleput. Other motels would cost between Rs. 1 lakh and Rs. 5 lakhs.

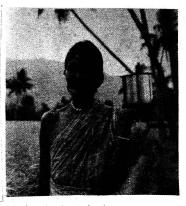
Presiding over the Inauguration of flats for PTC employees at Okkiyam Thorappakkam on the old Mahabelipura Road on 6th May, the Minister said that motels would be

situated every 100 km. initially but later would be built every 50 km.

The cost of a flat for the PTC employees was Rs.30,400. He appealed to the employees to cooperate with the State Government in implementing the schemes.







Dairying as an Instrument for Socio

-Economic Change

INTRODUCTION:

Milk has traditionally flowed from the rural milk sheds to the urban demand centres. Opera tion Flood channelises flow of milk in a manner that ensures increased income to a very large number of smallmarginal farmers and Agricultural labourers. The traditional sector does not pay adequate price to the rural milk producers and their other source of income are not uniform. Operation Flood provides a regular market and better price, undertakes processing and provides market support to the rural producers throughout the year.

Under the scheme, the Milk Producers' Cooperatives and the District-Co-operative Union provide much needed support to extension services like Animal Health Cover, Artificial Insemination and distribution of fodder and balanced Cattle Feed. They also transport process, package market milk in an organisedmanner.

OPERATION FLOOD-II 1982-88

The Operation Flood-II provides the basis of the integrated Dairy Development in Tamil-Nadu. The project also assist for setting up a three tier orgatisation-Producers' Societies at Village level, Producers' Union at District level and a Federation at State level to undertake Production, procurement, pro-

cessing and marketing of milk and milk products on 'Anand' pattern. Operation Flood-II is implemented for a period of six years commencing from April 1982 to March 1988 with an outlay of Rs. 42.87 crores. The project has completed first three years of implementation and the progress is impressive as may be seen below:

PROJECT COMPLETED:

Feeder Balancing Dairy at Salem planned under Operation Flood-II and another Feeder Balancing Dairy at Krishnagiri under DPAP were commissioned during October 1983. Also the expansion of the Chilling centres at Attur in













PROJECT TO BE COMPLETED IN 1985-86

The following Dairy Projects, Chilling Centres taken up will be completed during the year.

PROCUREMENT:

At present, the Federation is procureing about 6,41,611 litres per day as against 3.65 lakhs lits. per day in 1982 through 4,010 Milk Producers' Societies covering 6,55,547 animals and benefitting 5,67,399 Farmer members. An average of Rs. 18.60 lakhs are paid towards the procurement of milk per day in 1985 as against Rs. 7.80 lakhs in 1982.

IMPACT OF OPERATION FLOOD-II

- (a) The per capita availability of milk has been increased from 68 gms. in 1970s to 108 gms.
- (b) i The milk procurement has been increased from 1325 lakhs litres per annum to 2343 lakh litres per annum.



OPERATION FLOOD-II HIGH LIGHTS OF PROGRESS

Item	Base 1981-82		Target for OF-II 1988
	1901-02	1984-85	<i>O1-11</i> 1988
Formation of Societies	2548	4010	4550
Farmers enrolment	387000	567339	884000
Animals covered	490480	654547	1175000
Societies under Animal			
Health cover	1948	2759	4290
Societies under Artificial			*
Insemination	1305	1423	3810
Artificial Insemination			
cover	151833	636625	1064800
Procurement Milk per day	302477	642000	1090000
Procurement price	Rs.33-	Rs.44-	
_	per Kg.	per kg.	
	of Fat	of Fat.	
Procurement per Society	122 lits.	160 lits.	8.0
	per day	per day	-
Average income per	Rs.670-	Rs.1,190-	
Farmer	per	per	· .— ·
	farmer	farmer	2
Supply to Madras			
city per day	3 lakhs	4.4 lakhs	6.80 lakh
		5 lakhs	

ii The amount paid to Farmer has increased from Rs. 2847 lakhs per annum to Rs. 6789 lakhs per annum between 1981-82 to 1984-85.

- (c) The Milk Powder production has been increased from 984 tonnes per year in 1981 to 3460 tonnes in 1984.
- (d) A large milk market securing assured return from





the sale of milk and remunerative price for the milk enables the Milk Producers' to invest in increasing the milk productivity of their animal. The regular market and the better price has also increased the purchasing power of the rura poor.

Procurement price which was at Rs. 33- per kg. of Fat in 1982 has increased to Rs.44-per kg in April '85.

ii. In view of periodical increase of price, the prodeurement per society was increased from 122 litres per society in 1982 to 160 litres per society in 1985.

iii. The average income of a dairy farmer was increased from Rs. 650 -to Rs. 1190per annum.

(e) The awareness of the benefits of Artificial Insemination in animals was almost complete. The Farmers are believed that the Artificial Insemination was not harmful and helped farmers in increasing their economic condition.

(f) The usage of balanced Cattle Feed and green fodder by the farmers have helped them for gradual increase in per annual productivity.

(g) MADRAS CITY SUPPLY Milk supply which was at 3 lakh litres per day in 1982 was increased to 4.35 lakh litres per day in April '85 which will stepped up to 5 lakhs litres per day by the end of the year.





Details	Capacity (litres.	cos	-	col	gte of mple
1.	per day) 2.	(Rs.	in lakhs 3.) tio	
Ooty Dairy	50,000)	330.00	May	1985
Tiruvellore Chilling centre	50,000)	62.00	June	1985
Expansion of Ambattur					
Dairy	2,00,000)	258.00	June	1985
	3,00,000)			
Expansion of Paramakkudi					
Chilling centre	6,00	0	12.00	Jun	e1985
	10,00	0			
Tirunelveli Dairy	50,00	0	160.00	July	1985
Anakkavoor Chilling centre	30,00	0	35.60	July	1985
Pudukottai Chilling centre	10,00	0	14.00	July	1985
Erode Dairy	1.5 t	0	286.5		Oct
	3.00 lakh	18			1985
Villupuram Chilling centre	30,00	00	, ,		
	to 50,00	00	62.08		Oct
ű.					1985
Coimbatore Dairy	1.00 lak	ch.	352,20		Dec
•			=2		1985
Karaikudi Dairy	50,00	00	150.00	May	1986
Pattukottai Chilling Centre	10,00	00	19.00	•	Dec
				7	1985
Myladuthurai Chilling					
centre	10,00	00	19.00	May	1986
Salem Dairy	1 to	2	201.40		
-	laki	18		_	
4 \\					



Tamilnadu Cooperative Milk Producers' Federation Limited is well ahead of implementation of projects and programme under Operation Flood-II during the first half of the project period.

EXPANSION OPERATION FLOOD-II

In view of the successful imlementation of Operation
Flood II in Tamil Nadu, the
Indian Dairy Corporation,
National Dairy Development
Board has agreed to include
Thiruchirappalli, Thanjavur
and Pudukkottai district at a
total cost of Rs. 14.4 crores.
The project is implemented
with effect from 1st April 1985

Only elderly people suffer strokes, right?

Wrong. Although the death rate from strokes is declining throughout much of the world more people in their 40s and 50s are falling victim to them. The average age or stroke victims, in fact, is 56.

Says Dr.Alvin A.Bakst of Palm Desert, California, U.S.A. "We are seeing an increasing number of people in mid-life crippled by strokes. The repercussions on family and career are usually quite serious."

Stroke is the third leading cause of death in the U.S. and Great Britain (after heart disease and cancer), killing about 165,000 people each year in the U.S. alone. The death rate is highest in Japan, lowest in Mexico and the Philippines. On the average, one out of every three persons eventually develops cerebrovascular disease and the probability of dying from a stroke cripple more than they kill-nearly five times as many more, in fact, causing loss of speech, sight, movement and other functions.

More scientifically known as cerebrovascular accidents, strokes - whether major or minor-fall into three categories:

Thromobolic stroke, caused by plaque (fat deposits) that clogs the arteries and prevents blood from reaching the brain.

Embolic stroke, the result of plaque building that blocks a blood vessel in the brain.

Hemorrhagic stroke, stemming from a burst artery (usually caused by high blood pressure).

According to Dr. Bakst, strokes are most often caused by a narrowing of the major neck arteries, called carotidsthat channel blood to the brain.

Heading off A Stroke

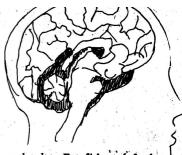
But all strokes, whatever the cause, have one thing in common: they cut off the flow of blood to areas of the brain, leaving cells in those areas-and the functions they control-dead or inactive.

Strokes are also expensive. Long-term rehabilitation and treatment costs an average of Dollars 35.000 (U.S.) per victim - and there is noguarantee of total or even partial recovery. In fact more often than not one stroke means more are likely in the future. This is especially true of slight strokes, called transient ischemic attacks, which cause temporary blindness or numb-

Clearly the best way to deal with stroke is to prevent one from happening. "A person needs to know that not just his or her body, muscles and heart need attention, but the head and brain as well," says Dr. Bakst. "There are practical steps a person can take to avoid becoming a stroke victim."

1. Stop smoking. Most midlife stroke victims are heavy smokers. A study in Finland shows men with high blood pressure, high cholesterol levels, and who smoke are 15 times more likely to suffer a stroke than those who don't and have neither of these conditions. Medical experts believe smoking reduces the elasticity of the blood vessels, gradually constriciting the flow of blood to the brain.

2. After your diet to cut out or significantly reduce eating beef, fats, diary products, sugar,



and salt. Eat fish and fowl, fresh green vegetables, salads, fruits, whole grains, lentils and potatoes. Giving up caffeine also helps, some sources say.

Why is diet so important?

Nearly half of all people with heart disease-to which poor diet is a prime contributor-also have other circulatory problems often in the arteries of the neck. Moreover, three out of four stroke victims have high blood pressure. Men with blood pressure higher than 160-95 are substantially more at risk. Eating sensibly helps keep blood pressure down where it belongs. Have yours checked regularly.

3. Exercise regularly. People who do stand a 60 percentless chance of having a stroke compared to those who don't.

4. Be alert to a stroke's early warning signs, such as spells of slight weakness and lapses in bodily functions. Examples are slurred speech, blurred vision or perhaps seeing only half of a stop sign or movie screen, loss of control while writing, and dizziness.

5. Have a yearly, non-invasive arterial checkup. Major medical facilities offer quick and painless scans of the neck arteries, using ultrasound and other sophisticated computerized instruments.

Concludes Dr.Bakst, "Being good to your head, like your body, means preventing problems...It's a good deal easier than rehabilitation.

—(Information Courtesy of the Phillips Group, Beverly Hills, California, USA)

