be started only from February 1999 due to delay in appointment of counsellors. The counsellors were appointed by the KSACS on contract for a period of one year and later on, the appointment was to be made by the concerned institutions. However, due to non-appointment of counsellors after expiry of the contract period 17 STD clinics were functioning without counselling service for periods ranging from 2 to 19 months as of May 2001.

3.2C.10 Idling of equipment

Medical College Hospital, Thiruvananthapuram purchased and installed one incinerator costing Rs 11.76 lakh in March 2000, but the same could not be commissioned as of October 2001.

3.2C.11 Non-submission of accounts and utilisation certificates by NGOs

Though Rs 23.29 lakh was provided to 22 NGOs during 1998-99, the utilisation certificates and accounts were not furnished by them till May 2001. This indicated lack of proper monitoring of the programmes by the State AIDS Cell. Appointment of NGO advisor to monitor the programmes implemented through NGOs was made only in March 1999.

3.2C.12 Monitoring and evaluation

According to the programme (Phase II), each AIDS Control Society should have a Monitoring and Evaluation (M&E) Officer and monitoring and evaluation would be conducted by outside agencies at baseline, interim and final years. However, no M&E Officer was appointed and no baseline survey conducted as of May 2001. The SAPO attributed this to paucity of funds. Thus there was little monitoring of the programme.

The KSACS was registered in November 1998 for the speedy and effective implementation of the programme. According to the Draft Memorandum of Association of the Society, the governing body shall meet at least twice in a year. However, the governing body met only two times till March 2001 since its formation. The State AIDS Programme Officer stated that Chief Secretary who was the Chairperson of the Governing body could not spare much time due to his pressing official commitments.

3.2D National Leprosy Eradication Programme

Highlights

The National Leprosy Eradication Programme (NLEP) introduced in 1982 envisaged a specialised form of treatment for leprosy known as Multi Drug Therapy (MDT). The review revealed that the NLEP activities introduced with a view to wiping out leprosy could not achieve the expected results despite the fact that the programme has been under implementation for more than 15 years mainly due to non-creation of required infrastructure facilities, lack of man power in critical cadres and lack of supervision and monitoring at all levels (Central, State, District and Unit level). The classification of district was wrongly made based on unrealistic Prevalence Rate (PR) calculated with

reference to inadequate coverage of population and defective method of calculation of PR.

- **Excess expenditure of Rs 1.29 crore against funds released by Government of India during 1996-99 has not been reimbursed.**

[Paragraph 3.2D.4]

- **Target fixed by GOI was low due to defective classification of districts based on wrong PR. As a result, achievement shown in 3 out of 5 years from 1996 to 2001 appeared to be high.**

[Paragraph 3.2D.5]

- **The prevalence rate reported by DHS was not reliable due to over-reporting of coverage of population, low percentage of coverage of population and defective method adopted for calculation of PR. Hence classification of districts based on this defective PR was not reliable.**

[Paragraph 3.2D.6]

- **Only 3 to 17 schools were surveyed annually in Thrissur urban area. Leprosy units were not properly located for optimum coverage. Four Reconstructive Surgery Units sanctioned by Government of India were yet to be started due to lack of manpower. Survey unit to assess extent of shortfall in detection of new cases was not sanctioned by the State.**

[Paragraph 3.2D.7]

- **Infrastructure created was not adequate to cover the whole State under MDT.**

[Paragraph 3.2D.8]

3.2D.1 Introduction

The National Leprosy Control Programme (NLCP) was redesignated as National Leprosy Eradication Programme (NLEP) in 1982, by introducing a specialised form of treatment for leprosy known as Multi Drug Therapy (MDT) in a phased manner with 100 per cent Central assistance. The MDT aimed at early detection and treatment to prevent deformities, preventing the spread of leprosy by rendering all infectious cases as non-infectious and disseminating correct information about the disease to remove social stigma through systematic health education. The MDT was first introduced in Alappuzha district in Kerala in 1987. The introduction of MDT in five hyper

endemic districts[*], five endemic districts [@] and remaining four low endemic districts[$] in Kerala was completed by 1995.

3.2D.2 Organisational set up

The Director of Health Services (DHS) was the nodal officer for implementation of the Scheme in the State. The Deputy Director of Health (Leprosy) was the State Leprosy Officer (SLO). The NLEP was being implemented through 14 District Leprosy Societies (DLS) with the District Leprosy Officer (DLO) as Member Secretary and District Collector as Chairman. Under the 14 DLSs, there were 11 District Leprosy units (DLU), 26 Leprosy Control Units (LCU) / Modified Leprosy Control Units (MLCU), 50 Urban Leprosy Centres (ULC), 162 Survey Education Treatment centres (SET), 1 Reconstructive Surgery Unit, 3 Hospitals and 17 voluntary agencies. The programme was carried out through Leprosy Inspectors (LI)/Non-Medical Supervisors (NMS) / Medical Officers (MO).

3.2D.3 Audit coverage

A review was conducted (January – May 2001) by test-check of the records in the Directorate, 6 DLO[**] offices and 53 field units, 5 voluntary organisations and one hospital. The results of audit are discussed below:

3.2D.4 Budget provision and expenditure

The budget provision, amount released by Government of India (GOI) in cash and kind and expenditure during 1996-2001[$] are given below:

(Rupees in lakh)

Year	Central grant received			Budget Provision	Expenditure incurred and certified by AG(Audit)	Excess (+) Savings (-) with reference to release & certified expenditure
	Cash	Kind	Total			
1996-97	95.00	-	95.00	153.71	160.52	(+) 65.52
1997-98	77.50	10.00	87.50	155.48	174.92	(+) 87.42
1998-99	115.65		115.65	90.92	91.90	(-) 23.75
1999-2000	12.50	-	12.50	10.00	67.03[@]	[@]
Total	300.65	10.00	310.65	410.11	494.37	(+) 129.19

Reimbursement of Rs 1.29 crore for 1996-99 not claimed from GOI

During 1996-99, there was excess expenditure over the Central release to the tune of Rs 1.29 crore. No step was taken by DHS or Government to get the amount reimbursed as of March 2001. Reason for not claiming the amount was not furnished by DHS/Government.

[*] Alappuzha, Kollam, Palakkad, Thiruvananthapuram & Thrissur.
[@] Ernakulam, Kannur, Kasargod, Kozhikode & Malappuram.
[$] Idukki, Kottayam, Pathanamthitta and Wayanad.
[**] Ernakulam, Kannur, Kottayam, Pathanamthitta, Thiruvananthapuram and Thrissur.
[$] As no Central grant was received during 2000-01, there was no provision and expenditure.
[@] Expenditure not certified by Accountant General (Audit).

3.2D.5 Fixation of low target

The target fixed by GOI vis-a-vis achievement of the State for the last five years are shown below:

Year	Case detection			Treatment			Case deletion		
	Target	Achieve-ment	Perce-ntage	Target	Achieve-ment	Perce-ntage	Target	Achiev-ement	Perce-ntage
1996-97	4000	5795	145	4000	5720	143	5500	7903	144
1997-98	5000	4699	94	5000	4695	94	7500	6606	88
1998-99	6650	5692	86	6650	5689	86	8000	6038	76
1999-2000	3000	4809	160	3000	4809	160	6000	5094	85
2000- 01	2500	3209	128	2500	3209	128	4000	4225	106

The reason for fixing low target by Government of India was due to the defective classification of the districts based on wrong PR as a result of which achievement exceeded the target set for three out of 5 years from 1996-2001.

3.2D.6 Unreliable figure of Prevalence Rate

The strategy of NLEP was early case detection, prompt treatment with MDT and prevention of disability among patients thereby reducing the PR of leprosy to less than 1 per ten thousand population. For detecting all the leprosy cases, the entire population was to be covered by intensive survey. But it was noticed that the actual coverage of population during 1995-2000 ranged between 92.40 lakh and 1.25 crore against the total population[*] of 3.07 crore to 3.28 crore during 1995-2000. The PR per ten thousand population reported to GOI by the DHS in October 2000 was between 0.34 and 1.39 for 14 districts. Thus PR calculated on such inflated report was not reliable due to the following reasons:

(a) Inflated figure/low percentage of coverage of population

The jurisdiction prescribed for a LI was 20-25 thousand population in plain areas and 5 thousand population in hilly areas and he has to cover atleast 5 thousand population in a year. In urban area, for every 50 thousand population there should be an Urban Leprosy Centre (ULC) under the control of an NMS. However, with the available manpower (LIs at Government level: 396, PMW at Contract level: 204, NMS in 50 ULCs-50), the department could not have covered more than 55 lakh[**] population per annum. Similarly, in 7 test-checked districts the possible coverage of population for the period 1996-97 to 2000-01 was in the range of 4.45 lakh to 8.95 lakh while the population reported as covered ranged between 7.36 lakh and 19 lakh. The population covered in Kottayam, Wayanad and Pathanamthittha districts during 1996-2001 was in the range of 2.27 to 8.2 *per cent*, 11.74 to 23.69 *per cent* and 5 to 11 *per cent* respectively. The annual reports on coverage of population prepared by DHS was thus highly inflated and the assessment of PR of leprosy based on inflated/nominal coverage of population could not provide the realistic instance of leprosy in the State.

[*] Projected population as per 1991 Census.
[**] 600 LIs/PMWs (600 x 5000) + 50 NMS (50 x 50,000) = 55,00,000.

(b) Defective calculation of prevalence rate

Method of calculation of PR was defective

The PR was to be worked out, based on the incidence of disease per 10 thousand population with reference to the population actually covered and new cases detected in a year. It was, however, noticed that the PR was calculated by the department by adopting the incidence as at the close of the year (number of new cases detected less the number of cases in which treatment was completed) for the whole population of the district and projecting this incidence to 10 thousand population resulting in unrealistic projection of PR. The classification[#] of districts as hyper endemic (5 districts), endemic (5 districts) and low endemic (4 districts) based on this unrealistic data was also incorrect. The PR worked out as per incorrect procedure and that calculated by department in respect of six districts test-checked indicated unrealistic projection of PR by the Department as shown below:

Classification of districts was defective

Sl. No.	District	Period	Range of PR as per department	Range of PR as per correct calculation
			PR per ten thousand	
1	Kottayam	1996-97 to 2000-01	0.40 to 2.59	10.90 to 57.78
2	Pathanamthitta	,,	0.51 to 2	4.58 to 22.43
3	Kannur	,,	0.5 to 2.4	2 to 4
4	Ernakulam	,,	1.1 to 1.6	2.16 to 4.86
5	Trivandrum	,,	2.42 to 3.77	6.52 to 10.70
6	Thrissur	,,	0.51 to 2	1.55 to 2.99

The SLO stated that the PR worked out by the department was realistic. The reply is not tenable as the PR was worked out based on inflated coverage of population and incorrect method of calculation.

3.2D.7 Functioning of Centres/Units

Improper functioning of ULCs/Centres

(a) On a test check of Schools and Centres under 6 districts, it was noticed that 4 ULCs and 2 SET centres were not functioning properly. The Non-Medical Supervisors were idling and did not produce any records relating to their activities (ULC Vaikom, Aluva, Muvattupuzha and ULC MCH[*], Thrissur). This indicated lack of supervision by DLO. The consultant appointed by Government of India who visited the ULC, Muvattupuzha had also criticised its functioning. Admitting the fact, DLO, Ernakulam stated that as the ULC was far away, frequent supervision was quite difficult and oral warning was given to the NMS for dereliction of duty. In ULC Vaikom, no clinic day[@] was observed. As the ULC, MCH Thrissur was functioning in rural area, only 3, 8,11 and 17 schools were surveyed during 1997-2001 out of the 25 schools allotted in urban area. Health education was not at all carried out in SET Parassala and Venpakal as only one day per month was utilised for health education in these centres.

Only 3 to 17 schools were surveyed annually in Thrissur urban area

Leprosy units not properly located for optimum coverage

(b) Even the available units were not properly located to have the maximum coverage. For the implementation of the programme, Kottayam district was divided into Kottayam zone and Kanjirappally zone. All the

[#] Hyper endemic if PR is greater than 5 per 1000 population, Endemic if PR is 3 to 5 per 1000 population and Low endemic if PR is less than 2 per 1000 population.
[*] Medical College Hospital.
[@] 2 days a week.

5 units (2 ULCs and 3 SET centres) were established in Kottayam zone only and no centre was functioning in Kanjirappally zone. Both the MLT units established in the district were functioning in the District Hospital, Kottayam in violation of GOI directions that each MLT unit should have separate headquarters so as to cover maximum Drug Distribution (DD) points. In Pathanamthitta district, one MLTU, which started functioning at Thumpamon was shifted to District Hospital, Kozhenchery where one ULC was already functioning, resulting in overlapping of coverage areas. No reason was furnished for such shifting of MLTU. In Kannur district, ULC Thalassery and LCU Thalassery were attached to Government Hospital, Thalassery and LCU Payyannur and ULC Payyannur were attached to Government Hospital, Payyannur resulting in overlapping of coverage areas. LCUs should have been located in rural areas only.

Four Reconstructive Surgery Units not established due to lack of manpower

(c) Four Reconstructive Surgery Units sanctioned by GOI were yet to be established (March 2001), as the required manpower has not yet been provided by the State Government. GOI accorded sanction to set up one Reconstructive Surgery Unit each in the NGO Sector. Though two voluntary organisations[#] came forward to set up the units, no proposal was sent to Government by the department for sanction of the units till date (March 2001). Non-establishment of the units has affected the treatment of deformity cases in the State.

Survey units to assess under-detection of new leprosy cases not sanctioned by the State

(d) GOI accorded sanction for the establishment of a Sample Survey Assessment unit in March 1997 for evaluating the work at various districts and to assess the extent of under-detection of new Leprosy cases. The matter was awaiting sanction of the State Government as of March 2001. The reason for not sanctioning the unit was not furnished by Government.

3.2D.8 Lack of infrastructure facilities

As per the norm fixed by GOI guidelines and considering the districts as endemic, the various units required and sanctioned by GOI and established by the State were the following:

Sl. No.	Name of unit/centre	Requirement	Target upto 2000-01 fixed by GOI	Achievement by the State
1.	DLU	14	12	11
2.	LCU/MLCU	64	26	26
3.	Supervisory Medical Urban Control Leprosy Units (SMUCL)	2	2	2
4.	ULC	67	51	50
5.	SET centres	1330	164	162
6.	Maintenance of voluntary beds	1500	1500	Nil[@]
7.	Sample Survey cum Assessment unit	1	1	Nil
8.	Reconstruction Surgery Units at Govt. level NGO level	 4 2	 4 2	 Nil Nil[&]
9.	Training Centres	1	1	1

[#] St.Johns Leprosy Eradication Centre & Rehabilitation Centre, Pirappancode, Thiruvananthapuram and German Leprosy Relief Society, Ranni.

[@] Not implemented.

[&] Commented in para 3.2.D7 (c).

Infrastructure created to cover the whole State under MDT was inadequate

Though the DHS/Government claimed that the whole State was brought under MDT* by the year 1995 the infrastructure sanctioned by GOI and created by the State Government was quite inadequate to cater to the needs of the whole State. The available number of LIs could cover only 31 *per cent* of population. The reasons for not sanctioning the required infrastructure by GOI was not furnished to Audit.

In Pathanamthitta, Kottayam and Wayanad districts, posts of Laboratory Technician were not sanctioned and this had resulted in non-conduct of bacteriological examination of skin smear. Such examination was also not carried out during 1998-99 to 2000-01 in SMUCL unit, General Hospital, Thiruvananthapuram due to non-availability of microscope. The duty of the Laboratory Technician attached to DL unit was to cross check 10 *per cent* of the skin smears examined by the other LC units on a random basis. Even though one Laboratory technician each was posted in Kannur and Ernakulam DLUs, no laboratory facilities were available in both the units and also there were no Laboratory technicians posted in control units in both the districts. The laboratory technicians in Kannur and Ernakulam DLUs were attending to other duties in PH laboratory, DMO, Kannur and PH laboratory, General Hospital, Ernakulam respectively.

3.2D.9 Lack of supervision and monitoring

For effective implementation of the programme, State level supervision, monitoring and evaluation were essential. However, no records were available in the office of the SLO about the field visits and other activities of SLO like conduct of half yearly review meetings to study the problems in the field, etc. Hence, the effectiveness of the functioning of the SLO could not be assessed by Audit.

The number of Relief From Treatment (RFT) cases deleted for reasons other than 'cured' were 3363 during 1996-2000. The department did not keep track of such cases though they might become a source of infection to others. This aspect was not considered by the Government and necessary instructions issued to carry out vigorous follow up in all such cases.

At the district level and unit level, the supervision was not effective. Three (Vaikom, Aluva, Moovattupuzha) out of 18 ULCs test-checked did not produce the necessary records for the assessment of their activities.

At Central level also, monitoring was ineffective as no explanation was called for, for non-furnishing of utilisation certificates by the DLS, Kannur to Government of India for the period 1996-97 to 1999-2000.

3.2D.10 Other points of interest

(a) A committee headed by SLO was to administer the Rehabilitation Fund for assisting the cured patients through self-employment venture. As of March 2001, applications for assistance from 232 cured patients were

* Multi Drug Therapy.

pending. Since 1995 no money was remitted to the Rehabilitation Fund. Thus, the rehabilitation of the cured patients had been adversely affected.

(b) As a measure of welfare activity GOI provided Rs 18000 per annum for endemic districts and Rs 42000 per annum for non-endemic districts to be utilised for the welfare of needy patients. Test-check revealed that six[&] DLOs did not take any action to utilise the amount and as a result Rs 8.42 lakh out of Rs 9.36 lakh received during 1995-96 to 2000-01, had remained in the bank account, resulting in non-accrual of benefits to the patients.

(c) Annual/periodical indents for medicines were not obtained by SLO from DLOs and no annual indents were placed by SLO to Director General of Health Services (DGHS) of Government of India and hence, medicines were supplied by DGHS without reference to the actual requirement resulting in excess supply of medicines. Test-check of the records of 10 offices revealed that medicines were supplied by DGHS to the State in excess of requirement resulting in retention of time expired medicines costing Rs 4.63 lakh in district offices and control units during the period January 1998 to February 2001. SLO stated that the medicines (ROM) were received without placing indent and only on opening the parcel, the short shelf life of the medicine came to notice.

(d) Though an amount of Rs 1.05 lakh was received by SLO in March 1995 from the DGHS for training on disability care to develop a team of officials at the district level, no training was conducted as of March 2001. The amount remained in Treasury Public account with District Treasury, Thiruvananthapuram in the name of SLO. The SLO stated that the matter was referred to DGHS for clarification.

(e) As per the report of Health Transport Officer (HTO), seven vehicles were allotted to DLO, Thiruvananthapuram. But DLO, Thiruvananthapuram stated that only one vehicle was under his charge and HTO could not produce the details of deployment of other 6 vehicles and due to non-production of relevant records, Audit could not verify whether they were used for the programme itself.

A vehicle procured for SLO in November 1984 had not been allotted to SLO as of March 2001. SLO stated that supervision and monitoring could not be made due to non-availability of vehicle.

The matter was referred to the State Tuberculosis Officer/Deputy Director of Health Services/Project Director (in-charge), Kerala State AIDS Control Society/State Leprosy Officer in July 2001. The matter was also demi-officially forwarded to the Secretary to Government. Replies have not been received (October 2001).

[&] Ernakulam, Kannur, Kottayam, Pathanamthitta, Thiruvananthapuram, Thrissur.