

Report of the Health Officer, Corporation of Madras Health Department.

Contributors

Madras (India). Health Department.

Publication/Creation

Madras : [Health Dept.], [1963]

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ANNUAL REPORT
OF
HEALTH DEPARTMENT
FOR
1963

PRESENTED BY
Dr. A. RAMACHANDRA RAO, M.B.B.S., B.S.Sc.
HEALTH OFFICER, CORPORATION OF MADRAS.

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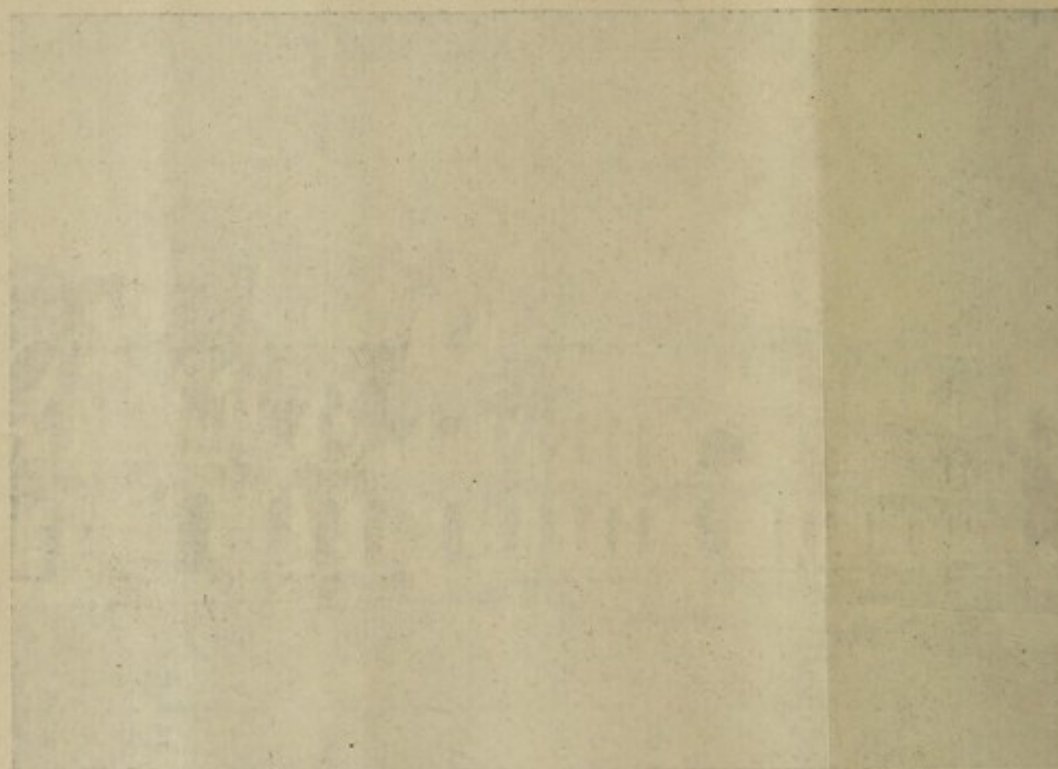


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ANNUAL REPORT **OF** **THE HEALTH OFFICER** **FOR** **1963**

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FORWARDED

The Civic Administration of the City as a whole again underwent a course of further decentralisation during the year by amalgamating Conservancy with Health and forming 10 Circle Offices in the City. Each circle consists of 10 Municipal Divisions and was under the charge of an Assistant Health Officer for the better and quick maintenances of Sanitation and Conservancy.

During the year the Health Administration launched National Small-pox Eradication Programme in the City from the 2nd October 1963 with a view to eradicate the disease once for all.

The citizens were provided more amenities in the year 1963 by opening two new Dispensaries, by constructing additional Community Centre at Bogipalayam, by providing 6 beds at Royapuram Child Welfare Centre and a new Creche opened and attached to the C.W.C., Perumalpet for the benefit of working class mothers, besides continuing the old schemes of Midday Meals Supply, Free Milk Distributing Programme for the children attending Corporation Schools and Medical and Non-medical Institutions under Health administration.

Cholera was prevalent in the City till the end of February 1963 and some sporadic cases reported in the last quarter of the year. 343 cases from the City and 52 from outside the City limits were admitted and treated at Infectious Diseases Hospital, Tondiarpet. The mortality rate was reduced to 5.8% as against 6.3% of the last year.

Small-pox prevailed continuously throughout the year in the City but was in an endemic form in the first half and an epidemic form in the second half of the year. The total cases of 2,339 from the City and 166 from the moffussil were admitted and treated as against 1,463 and 108 respectively in the previous year.

The Infant mortality had shown a slight increase from 97.19 per 1,000 live births to 107.66 during the year. The total number of Infants under the age of one year died during the year was 7,944 as against 7,350 recorded during 1962.

During the year under review the Maternal mortality was considerably decreased to 13 cases from 22 of last year. The rate of Maternal Mortality was 0.49 per mille against 0.77 per mille in the previous year.

The percentage of Malaria cases treated in the Corporation Dispensaries during the year 1963 showed a considerable decline from 0.0007% of 0.0001%. The National Malaria Eradication Programme was continued in the City with Surveillance wing.

Under Free Medical aid Programme to the citizens of the City the Health Administration continued to maintain 52 General Dispensaries, 7 Special Clinics and one Infectious Diseases. Hospital with modern equipment and latest drugs and medicines.

The only I. D. Hospital maintained by the Corporation at Tondiarpet had rendered a remarkable service during epidemic periods during the year. In addition to treatment of Infectious Diseases, the hospital continued to train Medical Officers of Health from different countries. The Bacterology-cum-virus Research Laboratory had started preparation of Intravenous Infusions of various compositions and concentrations which are the life saving fluids in Cholera and other Gastro intestinal diarrhoeas. During the year an exhibition on small-pox was organised with photos, charts, graphs, etc., in connection with the National Small-pox Eradication Programme.

As usual the children attending various Corporation Schools in the City were medically examined and the defective children were treated and followed up till they improve in health.

The four laboratories (Public Health Laboratory, Food Analyst Laboratory, Water Analyst Laboratory and Malaria, Laboratory) under Health administration carried out its regular useful services for the benefit of the children.

The Corporation Zoological Gardens at Peoples Park continued to attract, 1,850 on-lookers at an average per day. During the year 609 Mammals, birds and Reptiles were maintained. A children's section with playground equipment was provided at the frontage of institution especially for young children visiting the zoo and it is gaining popularity among them.

Towards Child Welfare and Maternity Services the Corporation continued to maintain 45 Child Welfare Centres out of which 21 centres were provided with maternity ward. with total bed strength of 307. Besides the above services, out-patient Clinics and Creches were also maintained and Cow's Milk distributed daily to ill-nourished infants and toddlers free of cost. During the year 26,237 labour cases were conducted out of the total number of 73,787 city births.

The children attending the Corporation Schools in the City are continued to be supplied with Free Midday Meals besides re-constituted milk supplied from the donated Milk powder received from the Catholic Relief Services, New Delhi. The total number of 34,027 Midday Meals were supplied to 312 schools and creches on all working days.

After abolition of the Father Information Centres of the Family Planning Scheme in the City, from 7th November 1962, the Mother Information Centres continued to serve the citizens. During the year 45 Mother Information Centres attached to Child Welfare Centres were maintained and 1,04,244 women were contacted and educated in the better planning of their families.

Side by side the task of educating the citizens on Preventive and curative aspects of infectious diseases, domestic and environmental hygiene and general sanitation through propaganda and exhibition of charts, posters, pictures, models, etc., at important public places, was carried out.

The Socio-Medical Urban Health Centre-Ashok Vihar-continued to play its worthy part to provide Medical, Recreational and Training facilities in addition to propagation during the year.

In spite of the virld epidemic of Cholera and endemicity of small-pox and avirld flare up during second half of the year, the health of the City was maintained at a normal level even during the critical periods of the year with the team work and co-operative spirit bestowed by the Health Officer, late Dr. B. V. Sundara Babu, the Circle Health Officers, Lady Superintendent, C.W.S. and their executive and ministerial staff.

GHULAM MAHMOOD BADSHA,

*Commissioner,
Corporation of Madras.*

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CORPORATION OF MADRAS

HEALTH DEPARTMENT

ANNUAL REPORT FOR 1963

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INTRODUCTION

The success of any Civic administration depends primarily on the maintenance of the town or city simultaneously clean and tidy always and free from any diseases, particularly of the epidemic type like Small-pox, Cholera etc., which are of periodical recurrence and by the provision of essential amenities to its citizens. In order to meet the demands of the growing city and its population, this department during the year under report provided additional dispensaries and Community Centre and particularly implementation of the Small-pox Eradication Programme introducing in the whole of the City.

Consequent on the implementation of the white paper, proposals on the Local Administration the City was divided into Two Districts with an Assistant Commissioner and Two District Health Officers to look after Sanitation. From 1st July 1963 the district administration was further decentralised by introducing circle administration under the control of a Circle Health Officer for each circle. The Conservancy Section which was separately under the control of the Mechanical Engineer and Cleansing Officer for nearly a decade was, amalgamated with the Health Department and entrusted to the Circle Health Officers under the direct supervision of the Health Officer. This change over ensured better co-ordination and efficiency in the day to day work of the Department.

The Small-pox Eradication Programme which was launched during 1961 on experimental basis was again organised during the year 1963 with an intensive programme of vaccination of all the citizens in the City in order to eradicate the disease. Under the programme which was inaugurated on 2nd October 1963 the citizens were enumerated division-wise for the purpose of vaccination. Two Special Assistant Health Officers one for the North and one for the South with a team of trained personnel were deputed to implement the programme, under the direct guidance of the Health Officer. Till the end of the year, i.e. 31st December 1963, 55,131 and 50,267 people were vaccinated in the north and south respectively.

I am herewith presenting the Eighth Annual Report of the Health Officer, late Dr. B. V. Sundara Babu, M.B.B.S., D.P.H. (Cal.) on the Health Administration of the City during the course of 1963 explaining the salient features briefly for the guidance of the Hon'ble members and the public.

POPULATION :

The City's population according to 1961 Census stands at 17,29,141 as against the mid-year population of 1963 was 18,02,000 as estimated by the Director General of Health Services. The population calculated on the basis of natural increase (i.e. excess of births over deaths) was 18,15,304.

BIRTHS :

The total number of births recorded by the Corporation during 1963 was 73,787. The birth rate of the year is 40.94 per mille as against last year's rate of 42.69 per mille which had 75,619 total number of recorded births.

DEATHS :

The recorded total number of deaths in the City during 1963 was 30,555 and the death rate 16.83 per mille shows slight increase over the previous year's deaths of 28,763 and the rate of 16.24.

INFANTILE MORTALITY :

During the year, the total number of infantial deaths under one year of age was 7,944 with a death rate of 100.00 per 1,000 live births as against 7,350 and 97.19 during 1962.

MATERNAL MORTALITY :

Maternal deaths and mortality rate during the year rose to 146 and 1.93 from 124 and 1.60 of the last year.

EPIDEMIC AND ENDEMIC DISEASES :

The epidemic of Cholera which started in October 1962 continued till the end of February 1963 but sporadic cases were reported during the last quarter of the year. The total number of cases reported and treated during the year was 395 out of which 343 cases were from the City and 52 from mofussil.

Small-pox prevailed in an endemic form in the first half and in an epidemic form in the second half of the year. Total admissions registered were 2,339 from the City and 166 from the mofussil.

VACCINATION AND INOCULATION :

Protection against small-pox and cholera was organised by conducting mass vaccinations and inoculations in slums, schools, offices and Firms. During the year under review 3,81,22 vaccinations against small-pox 99,347 inoculations against cholera and 52,52 T A B inoculations against Typhoid were performed. Besides this 7,574 (4,265 vaccinations and 3,309 inoculations.) Vaccination and Inoculation Certificates were issued to the International Travellers.

In addition to the above the Special Staff employed for the National Small-pox Eradication Programme which was launched on 2nd October 1963 simultaneously in the North and South Districts and performed 3,123 Primary Vaccinations & 52,008 Revaccinations and 1,853 Primary Vaccinations & 48,414 Revaccinations respectively upto 31st December 1963.

ANTI-MOSQUITO OPERATIONS :

As usual, anti-mosquito operations were carried out in the City under the supervision of the Senior Entomologist (N.M.E.P.) with the help of a Supervisor and a small complement of Thozhilalies allotted for each circle. All the breeding places including the storm water drains, rivers, cesspools, channels, etc., were cleaned and applied with larvicides regularly. Anti-fly measures were also carried out in Public and Private Markets, Dumping grounds, Garbage heaps, etc. by regularly spraying at nights. Besides these, Pilot Filaria Survey and, Control Scheme was taken up during the year as an experimental basis to locate and eradicate the diseases.

NATIONAL MALARIA ERADICATION PROGRAMME :

During the year under review, the National Malaria Eradication Programme was under operation in the City. The destruction of *Anopheles stephensi* which generally breed in cisterns, over-head tanks and other clear water collections was attended by drawing advance programmes. The Passive Surveillance Scheme was enlarged and the organisation detected 4 hidden cases of Malaria. There was a decline in the percentage of Malaria cases during the year from 0.0007% to 0.0001%. The combined operations of Anti-larvel measures and Active and Passive Surveillance achieved satisfactory results during the year and gave hopes of eradicating Malaria within the stipulated period.

CHILD WELFARE AND MATERNITY CENTRES :

Child care and Maternity Services in the City were also continued to be looked after during the year as a part of health administration by 45 Child Welfare Centres with 22 Maternity wards having a bed strength of 307 and 4 Creches. Under the scheme 26,237 labour cases were conducted and 71 children were looked after in the creches daily. In addition to these, Neo-natal vaccination, immunisation with Triple Antigen, Out-patient Clinics and Free Milk Distribution were also conducted in the centres.

MEDICAL RELIEF :

During the year under review, the facilities for free Medical aid to the citizens were increased by opening two New Dispensaries one in the North and the other in the South of the City. Besides this, general improvements to the existing I.D. Hospital, Child Welfare and Maternity Centres which were continued to render medical aid to the people were also done. The children attending Corporation Schools were also provided medical relief by periodical check up of their health. In all one I.D. Hospital, 52 dispensaries, 45 Child Welfare Centres, 7 Special Clinics, 5 Veterinary Dispensaries were functioning during the year 1963.

MIDDAY MEALS SCHEME :

Children attending the Corporation Schools were continued to be given Midday meals on all school working days. They were also provided with reconstituted milk, the milk powder having been kindly donated by the Catholic Relief Services. The Midday Meals Scheme gained more popularity within and outside the State. Steam boiler plant was also installed at the South Centre to quicken the cooking process.

LABORATORY SERVICE :

The Health Administration continued to maintain the 4 Laboratories with considerable improvements during the year. The Public Health Laboratory analysed 50,763 specimens of Blood, Sputum, Urine, Motion, etc., and collected Rs. 34,429-75 nP. The Food Analysis Laboratory analysed 7,961 samples of different varieties of food stuffs. The Water Analysis Laboratory and Malaria Laboratory have also examined number of specimens during the year 1963.

ASHOK VIHAR :

The Ashok Vihar (Socio-Medical Urban Health Centre) under the health administration continued to render very useful service in providing medical, social and recreational facilities to the Member families besides training Medical, Nursing and Social personnel. The Centre continued to provide periodical Health checkup, Immunization, Handicrafts Training, Maternity, Family Planning and Dispensary services besides maintenance of a Creche for the children of working mothers of member families.

SLAUGHTER HOUSES :

The Corporation continued to maintain Slaughter houses at Perambur separately for cattles, Sheep and Pigs and at Saidapet for Sheep and Pigs. During the year 27,744 cattles, 4,93,143 sheep and Goats and 3,572 pigs were slaughtered and meat despatched to the various markets in the City under hygienic condition. The improvement to Slaughter House at Saidapet at an estimated cost of Rs. 1 lakh will be provided with modern facilities and is expected to be completed during 1964.

LETHAL CHAMBER :

The Lethal Chamber at Basin Bridge Road where stray (unclaimed) mangy and rabid dogs were electrocuted continued to be maintained during the year under review. Totally 19,553 dogs and 22,363 bitches were electrocuted during 1963. The raids were conducted both in the mornings and evenings throughout the City with two vans specially provided for the purpose.

FAMILY PLANNING :

The Family Planning Scheme introduced in the City continued to render assistance to mothers as, the father information centres were abolished from 6th November 1962. During the year, the 45 Mother Information Centres attached to the Child Welfare Centres in the City educated 1,04,244 woman by visiting 1,34,926 houses and provided assistance by supplying contraceptives for better planning of their families.

SPECIAL HOME :

The Health Administration continued to maintain a beggar home under the style of Special Home at Krishnampet where diseased, infirm and disabled beggars from the City were housed. The beggars committed to the home by the City Magistrates under the provisions of the City Police Act were provided with food, clothing, medical aid and recreational facilities besides training in handicrafts like weaving and gardening. During the period under review, the number of beggars housed ranged from 192 to 677.

ZOOLOGICAL GARDENS :

During the year under review, the Zoological gardens at People's Park was maintained with livestock of above 600. At an average 1,500 adults and 350 children per day visited the zoo to spend their leisure hours and holiday besides educating their children. In the month of October, State Wild Life

Week was celebrated and procession of Wild Animals was also taken out on 1st October 1963.

MILK DISTRIBUTION SCHEME :

The benefit of milk distribution extended to the children attending corporation Schools in the City continued during 1963 also with the kind donation of 2,000 cases of milk powder by the Catholic Relief Services, New Delhi. The process of reconstitution and distribution under hygienic conditions was entrusted to the respective Head Masters and Supervisors of the schools. During the year 1,335 cases, i.e., 72,090 lbs. of milk powder was issued to various schools for reconstituted of milk and distribution to the children.

COMMUNITY CENTRE :

In addition to the existing community centre at St. Xavier Street at Seven Wells (11th Division) another centre was constructed and opened at Bogipalayam (Pulianthope) to augment the facilities to the public for conducting marriages, religious, cultural and social functions. Besides these, foundation stones were laid for construction of similar centres at Royapuram, Sembiam, Chetput, Chintadripet, Triplicane, Teynampet and T.Nagar. During the year 136 and 22 functions were conducted at St. Xavier Street and Bogipalayam Centres respectively.

OTHER ACTIVITIES :

In order to provide facilities for institutional treatment to the Leper patients of the City and to minimise their nuisance to the citizens, the Health Administration continued to maintain two separate wards for male and female leper patients at the Central Leprosy and Research Institute, Tirumani, Chingleput.

The old and disabled persons were also continued to be maintained at the Monegar and Raja of Venkatagiri Choultry's Poor Home at Monegar Choultry Road, with Corporation Funds.

Besides these, the Health Administration continued to maintain 12 Public Markets, 10 Dhobikhanas, 5 Homes for Homeless, 4 Public Cattle Yards, 9 Cattle Depots 5 Veterinary Dispensaries, 31 Birth and Death Registration Offices and 65 Burial and Burning Grounds in the City.

The Executive Health Personnel took adequate care in maintenance of better Food Sanitation, Market Sanitation, Environmental Sanitation and Industrial Sanitation in the City during the year under review.

HEALTH EDUCATION AND PROPAGANDA :

All the citizens including those residing in slums. Hutting grounds, Kuppams, etc., were continued to be educated on the preventive and curative aspects of infection diseases such as Malaria, Small-pox, Cholera, Typhoid in addition to proper upkeep of domestic and environmental hygiene and general sanitation through propaganda by way of film shows, lectures, exhibitions, display of charts and posters, and distribution of handbills. House

to house propaganda was also conducted through Loud Speaker to propagate the value and benefits of vaccination and inoculation and the ideals of National Small-pox Eradication Programme.

CONCLUSION :

The City with its annexed suburbs expanding day by day with springing up of new colonies, industries, schools, business places, etc., including increased population, warranted considerable increase and immediate attention of Health personnel during year under review for the control of infectious diseases and maintenance of satisfactory sanitation. Despite several odds such as unexpected epidemics, etc., the Health Administration was carried on satisfactorily. Here, I would like to mention that this success in Health Administration is in no small measure due to the untiring efforts of and the keen interest bestowed by the late Dr. B. V. Sundara Babu, the then Health Officer.

Before concluding this report, I express my thanks to the Commissioner for his guidance, valuable advice and suggestions for the conduct of day today Administration of the Department. My thanks are also due to the Assistant Commissioners, North and South the Heads of other Departments, all Assistant Officers and member of staff of Health Department who have extended their full co-operation and assistance to the Health Officer to maintain the City healthy, clean and tidy throughout the year.

RIPON BUILDINGS,
MADRAS-3

*Health Officer,
Corporation of Madras*

1. STATISTICAL SUMMARY

1. Area	...31,90,09,920 acres (or) 49.74 Sq. miles
2. Population as per the Census of 1961	... 17,29,141
3. Population estimated for the Mid-year 1963	... 18,02,000
4. Population calculated on the natural increase method (excess of births over deaths)	... 18,15,304
5. Average density per acre	... 53.04
6. Births excluding Still Births	... 73,787
7. Deaths excluding Still Births	... 30,555
8. Still Births	... 1,651
9. Birth Rate as per estimated mid-year population	... 40.94
10. Birth Rate as per population calculated on the natural in- crease method (excess births over deaths)	... 40.64
11. Death Rate as per estimated mid-year population	... 16.95
12. Death Rate as per population calculated on the natural increase method (excess of births over deaths)	... 16.83
13. Natural increase	... 43,222
14. Rate of natural increase per 1,000 of estimated population	... 23.99
15. Still births per 1,000 births (Live and Still)	... 21.88
16. Infant Deaths	... 7,944
17. Infant Mortality Rate	... 107.66
18. Maternal Deaths	... 146
19. Maternal Mortality Rate	... 1.93
20. Total No. of Small-pox cases reported	... 2,378
21. Total No. of Deaths due to Small-pox	... 577
22. Total No. of cases of Cholera reported	... 350
23. Total No. of deaths due to Cholera	... 19
24. Total No. of Primary Vaccinations done	... 61,427
25. Total No. of Re-Vaccination done	... 3,19,799

II. METEOROLOGY

The Meteorological conditions of the Madras City recorded during the year 1963 is appended to the Statistical Supplement (State No. 1).

Rainfall—The total Rainfall recorded at the Nungambakkam Observatory was 52.18 inches as against 50.63 inches for the year 1962.

The following statement shows the rainfall recorded from 1954 to 1963 monthwise :—

MADRAS NUNGAMBAKKAM RAINFALL (IN INCHES)

Month	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963
January ...	1.06	3.71	2.13	0.00	0.39	0.00	1.70	2.07	0.10	3.82
February.	0.00	1.10	0.00	0.20	0.01	0.87	0.00	0.05	0.10	0.00
March ...	0.00	0.00	0.00	0.00	0.00	0.00	Tr.	0.00	0.00	1.08
April ...	0.00	1.15	1.91	0.00	0.09	0.69	Tr.	0.00	0.12	1.98
May ...	0.15	7.13	0.90	0.40	2.78	0.49	0.32	0.08	4.42	0.29
June ...	0.14	1.89	3.59	1.39	1.79	2.01	1.77	3.09	3.57	2.94
July ...	9.01	3.73	4.47	5.59	1.77	2.60	2.51	8.05	4.11	1.83
August ...	6.08	9.71	6.36	5.48	7.37	1.98	1.28	10.1	6.69	6.31
September	3.63	1.93	8.37	3.59	1.62	3.34	10.82	7.03	5.36	3.44
October. ...	11.33	8.99	6.76	8.59	16.43	13.51	9.19	8.00	20.55	10.01
November.	2.33	7.56	7.22	16.63	18.25	11.98	33.45	6.09	3.15	14.32
December.	10.62	4.74	3.72	0.11	3.61	1.42	5.68	0.04	2.46	6.16
Total ...	44.35	51.64	45.43	41.98	54.11	37.99	66.72	49.01	50.63	52.18

III. VITAL STATISTICS

1. Population

The City population as per Census of 1963 (Approximated) ... 17,29,141

Mid-year population of 1963 as estimated by the Director-General of Health Services ... 18,02,000

The population calculated on the natural method (excess of births over deaths) ... 18,15,304

(Registration of Births and Deaths)

Registration of Births and Deaths is compulsory in the City and is done in 31 Registration Centres, spread all over the City by trained full time Birth and Death Registration Clerks under the immediate supervision of 10 Circle Health Officers in-charge of 10 division each. Births and Deaths occurring in the City are being recorded since 1st April 1868. Births and Deaths occurring in the State Hospitals, Nursing Homes, Clinics and Child Welfare Centres are reported by the respective authorities in the prescribed forms supplied to them. Births and deaths occurring in the residences are reported by the concerned parties. Sanitary Inspectors (in-charge of Vaccination) verify all births registered within 7 days from the date of registration. Persons are prosecuted for not registering births and deaths.

Nursing Homes and Clinics are increasing in the City day by day. The existence of some of the Nursing Homes and Clinics in the City is not even known in this department and vital events occurring in such nursing homes are not promptly and correctly reported with the result, the parties suffer when they apply for extract of such births or deaths. It is therefore quite necessary that all nursing homes and clinics should be registered at the Corporation Office or Health Officer, Madras in the interest of Public Health Administration in General and Vital Statistics in particular.

2. Births.

	1963 as against 1962	
	1963	1962
Total number of Births registered during the year.	73,787	75,619
The birth rate calculated per 1,000 of the mid-year estimated population	40.94	42.69
The birth rate as calculated by natural increase method	40.64	42.67
The total Number of Still Births during the year	1,651	1,688
The rate of Still Births per 1,000 births—(Live or Still)	21.88	21.83

The statement showing the month-wise incidence of births during the year 1963 :—

Quarter	Months	Number of Births	Quarterly total
First	January	1,739	11,757
	February	4,644	
	March	5,374	
Second	April	6,590	18,034
	May	6,663	
	June	4,781	
Third	July	5,586	16,623
	August	5,141	
	September	5,896	
Fourth	October	6,832	27,373
	November	6,549	
	December	13,992	
Total		73,787	73,787

The statement showing the details of births among the principal communities in the City :—

Communities	No. of Births registered		Total
	Males	Females	
Aliens	6	8	14
Anglo-Indians	93	118	211
Indian Christians	1,718	1,712	3,430
Hindus	32,947	31,422	64,369
Muslims	2,926	2,813	5,739
Others	16	8	24
Total	37,706	36,081	73,787

The statement of live births by age of the mother and order of confinement at live births during 1963 is furnished in statistical supplement—Statement No. 14.

3. Deaths

	1963—1962	
	1963 as against 1962	
Total No. of Deaths registered (excluding still-births).	30,555	28,763
Death rate as per estimated mid-year population ...	16.95	16.24
Death rate as per population calculated by the natural increase method (excess births over deaths) ...	16.83	16.23
Natural increase of deaths	43,232	46,856

The Statement of births and deaths, recorded in the City during the period 1954 to 1963 is furnished below with special reference to the natural increase :—

Year	Births	Deaths	Natural increase + or decrease (—)
1954	59,256	33,181	+ 26,075
1955	66,449	34,264	+ 32,185
1956	67,476	33,927	+ 33,549
1957	69,197	36,783	+ 32,414
1958	71,880	36,880	+ 35,000
1959	70,155	33,515	+ 36,640
1960	72,610	33,729	+ 38,881
1961	72,237	32,494	+ 39,743
1962	75,619	28,763	+ 46,856
1963	73,787	30,555	+ 43,232

More number of deaths registered during the last quarter of the year as can be seen from the month war incidence, tabulated hereunder :—

Quarter	Months	Number of death	Quarterly total
First	January	1,764	6,395
	February	2,406	
	March	2,225	
Second	April	2,568	7,383
	May	2,617	
	June	2,198	
Third	July	2,333	7,428
	August	2,503	
	September	2,592	
Fourth	October	2,841	9,349
	November	2,575	
	December	3,933	
Total		30,555	30,555

Deaths amongst the Principal Communities

The occurrence of deaths community-war is as follows :—

Principal Communities	Males	Females	Total
Aliens	3	1	4
Anglo-Indians	36	43	79
Indian Christians	683	657	1,340
Hindus	13,449	12,588	26,037
Muslims	1,583	1,492	3,075
Others	11	9	20
Total	15,765	14,790	30,555

The number of births and deaths registered with respective rates among the principal communities in the City during the year, as compared with the previous years, is furnished in the Statistical Supplement—Statement No. 10.

The statement furnished below gives the age and sex-wise distribution of total deaths :—

Age-Group	Males	Females	Total	Percent- age rate
Under 1 year	4,234	3,710	7,944	26.00
1 to 4 years	3,179	3,604	6,783	22.00
5 to 9 years	553	565	1,118	3.30
10 to 14 years	250	202	452	1.50
15 to 19 years	233	266	499	1.60
20 to 29 years	736	803	1,539	5.00
30 to 39 years	795	762	1,557	5.00
40 to 49 years	1,082	684	1,766	6.00
50 to 59 years	1,366	882	2,248	7.40
60 years and above	3,337	3,312	6,649	22.00
Total	15,765	14,790	30,555	100.00

Principal Causes of Death

	1963 as against 1962	
Deaths due to Small-pox during the year	609*	316
Deaths due to Cholera during the year	21	55
Deaths due to respiratory diseases	6,556	6,269

* Including Mofussil deaths.

The following statement shows the figure under the principal causes of death :—

Causes of death	Males	Females	Total	Rate per 1,000 estimated mid-year population
Plague	...	...	...	...
Cholera	*12	*9	*21	0.01
Small-pox	*295	*314	*609	0.33
Measles	11	5	16	0.01
Malaria	1	3	4	0.00
Enteric Fever	74	39	113	0.06
Other Fevers	733	661	1,394	0.77
Dysentery	1,079	1,138	2,217	1.02
Diarrhoea	634	699	1,333	0.73
Tuberculosis (including T.B. of lungs)	504	298	802	0.44
Other respiratory diseases	3,288	3,268	6,556	3.63
Deaths due to child births	...	146	146	0.08
All other causes	9,134	8,210	17,344	9.62
Total	15,765	14,790	30,555	16.70

* Including Mofussil deaths.

Infant Mortality

		1963 as against 1962	
Infant mortality rate for the year	...	107.66	97.19

The statement showing the number of deaths under different age groups under 1 year :—

Age-Groups	Number of infant of deaths
Under 7 days	2,072
Above 7 days and under 1 month	974
Above 1 month and under 6 months	2,301
Above 6 months and under 1 year	2,597
Total	7,944

Statement showing the infant mortality rate recorded in the City since 1951 :—

Years	Infant mortality rate
1951-55	157.98
1956-60	135.04
1960	121.60
1961	115.79
1962	97.19
1963	107.66

Statement showing the principal causes of Infant deaths.

S. No.	Cause of death	Number of deaths	Age-disease specific death rate
1	Cholera	...	...
2	Small-pox	121	1.52
3	Measles	...	...
4	Diphtheria	10	0.12
5	Enteric Fever	2	0.02
6	Malaria	...	...
7	Other fevers	363	4.60
8	Dysentery	535	6.73
9	Diarrhoea	546	6.87
10	Infantile debility, malnutrition, including premature births	2,415	30.40
11	Diseases of the respiratory system	2,018	25.40
12	Convulsions	24	0.30
13	Other diseases	1,910	24.04
	Total	7,944	100.00

Maternal Mortality

1963 as against 1962

Deaths among the mothers as a result of child bearing ...

146 124

Maternal mortality rate ...

1.93 1.60

Statement showing maternal mortality rate from 1954 to 1963.

Year		Maternal deaths	Maternal Mortality rate
1954	...	150	2.47
1955	...	156	2.34
1956	...	153	2.18
1957	...	150	2.08
1958	...	145	1.94
1959	...	140	1.93
1960	...	119	1.58
1961	...	83	1.12
1962	...	124	1.60
1963	...	146	1.93

EPIDEMIC AND ENDEMIC DISEASE

1. Cholera

		1963 as against 1962	
The incidence of Cholera during the year	...	350	781
Deaths due to Cholera during the year	...	21*	55*

(* Out of 21 deaths 2 relates to mofussil as shown below).

The City of Madras was free from Cholera during the year 1960 and 1961 and there was a sudden outbreak of cholera during the middle of October 1962 in Kodambakkam. This was brought under complete control by about March, 1963. Again stray cases of cholera were reported from Chindatripet as well as the Government General Hospital on 10th September 1963. The source of infection was traced as from Velanganni in Nagapattinam. Some of the people who had gone for festival at Velanganni had brought the infection to Madras City. During the year 1963, 350 attacks and 19 deaths from cholera were reported in the City of Madras.

Number of attacks and deaths from cholera registered during each month in the year 1963 as furnished below :—

Months	City		Mofussil	
	Attacks	Deaths	Attacks	Deaths
January	...	195	14	15
February	...	34	...	18
March	...	10	...	...
April
May
June
July
August
September	...	41	2	5
October
November	...	1	...	...
December	...	69	3	18
Total	...	350	19	56

The usual preventive measures consisting of disinfection of infected premises and areas, Chlorination of water supplies, special attention to general Sanitation and Conservancy, house to house inspection in the infected areas isolation of suspected cases inoculation of contacts and all those exposed to infection was promptly adopted. In all cases of imported infection, intimations were sent to the Health authorities concerned for information and necessary action.

As usual cases of cholera from the adjoining districts of Chingleput were removed to the Infectious Diseases Hospital, Tondiarpet for isolation and treatment. During the year 1963, 56 cases were treated for cholera of which 2 died.

Small-Pox

	1963 as against 1962	
Number of attacks of small-pox during the year ...	2,378	1,476
Death during the year ...	*609	*316

Out of 609 deaths 32 relate to mofussil as shown below :—

Months	City		Mofussil	
	Attacks	Deaths	Attacks	Deaths
January ...	120	33	7	3
February ...	171	33	6	...
March ...	177	36	19	1
April ...	108	32	14	2
May ...	143	36	10	4
June ...	146	41	6	2
July ...	321	63	13	2
August ...	326	85	11	4
September ...	322	68	14	...
October ...	263	73	12	3
November ...	168	37	13	3
December ...	113	40	32	8
Total ...	2,378	577	157	32

The following statement shows the incidence of Small-pox and the vaccinations performed month-wise :—

Months	Small-pox		Primary and secondary vaccinations	Re-vaccinations
	Attacks	Deaths		
January ...	120	33	5,176	22,082
February ...	171	33	8,045	52,387
March ...	177	36	7,035	49,932
April ...	108	32	5,096	23,992
May ...	143	36	3,668	17,347
June ...	146	41	4,754	20,664
July ...	321	63	5,627	27,443
August ...	326	85	5,030	31,514
September ...	322	68	4,838	25,050
October ...	263	73	4,440	20,464
November ...	168	37	3,732	15,396
December ...	113	40	3,986	13,528
Total ...	2,378	577	61,427	3,19,799

2,378 attacks and 577 deaths from Small-pox were recorded in the City against 1,476 and 300 deaths during the previous year. Necessary steps were promptly taken to check the spread of the disease in the City. Intensive house to house inspection was conducted throughout the City for the vaccination and re-vaccination of unprotected children and adults. Vaccinations were performed in hutting grounds, slums, Kuppams, Markets, Lodging houses, Hotels, Bazaars, etc., with a view to protect the incoming and floating population. Vaccinations were also conducted after dusk in slums and other infected areas to get at the labourers, as they usually leave for the workshop very early in the morning and return home late in the evening. Re-vaccinations were conducted in public institutions such as offices, firms, factories, companies, colleges, schools, Mills, etc. As soon as a case was notified or detected the patient was immediately isolated at the Infectious Diseases Hospital. The Sanitary Inspectors examined all the contacts daily till the end of the inoculation period. Intimations were sent to the concerned Health authorities in all the cases of imported infection.

The Health Propaganda Officer conducted Health Education lectures in the infected areas and their surroundings, explaining to the public about the prevalence of the disease and the precautionary measures to be taken to check the spread of the disease.

National Small-pox Eradication Programme was inaugurated on 2nd October 1963. Most of the persons have been protected in the divisions where this is completed. Nearly 90 vaccinators are working in this scheme and there is a proposal to increase the number of vaccinators to speed up the programme. The Government staff have been instructed to concentrate some of the thickly populated areas, so that the spread of the disease could be effectively arrested.

1,02,116 Vaccinations were done by the N.S.E.P. Staff in the North and South Madras since 2nd October 1963. The local divisional staff have intensified their efforts to protect every one in their division and thus lend active support to the N.S.E.P. in the eradication of the disease.

3. Enteric Fever

		1963 as against 1962	
		┌───────────┐	
Number of attacks during the year	...	1,329	1,216
Number of deaths during the year	...	95	86

5292 Typhoid inoculations were done during 1963 in the City of Madras. 1,329 attacks and 95 deaths from Enteric Fever were recorded in the City against 1,216 attacks and 86 deaths during the previous year.

Necessary steps were promptly taken to check the spread of the disease in the City. The Sanitary Inspectors had taken prompt action in all cases notified and detected. Though disinfection of the infected houses and their

surroundings, inoculation of contacts and the neighbours were carried out immediately. Birth and Death Registration Clerks were also instructed to notify deaths due to fever and bowel complaints and verify such attacks at the residences and prompt action was taken in such cases.

The Sanitary Inspectors contacted the heads of institutions, Schools, Colleges, Boarding and Lodging houses, etc. and arranged for inoculations. The notification of cases by the Private Radical Practitioners continues to be poor. The Sanitary Inspectors were circularised to contact the Medical Practitioners to find out cases of Typhoid treated by them and to take prompt preventive measures in each and every case. The Cleansing Department had taken action to keep the areas clean and tidy. The Senior Entomologist, National Malaria Eradication Programme was instructed to intensify the deflying measures in all the infected localities and markets. The wells in the infected areas were chlorinated regularly. Distribution mains of water supply in the infected areas have been chlorinated intensively by extra chlorine infectors. The Sanitary Inspectors had taken steps to seize and destroy unwholesome food stuffs, Ice cream, and fruits exposed to dust and flies in their divisions especially near schools and markets by conducting special raids.

The Health Propaganda Officer conducted lectures and exhibition of slides in the infected areas and their surroundings, explaining to the public about the preventive of the infectious and communicable diseases and the paramount need to take precautionary measures to check the spread of the disease. The Social welfare Organisations in those areas were specially requested to co-operate with the Health authorities in the establishment of a sufficiently high standard of environmental Sanitation and its steady maintenance by appealing to Public to help themselves first and not depend entirely on the Health authorities because no public health programme could be a success without active and willing public co-operation.

4. Measles

		1963 as against 1962	
Number of attacks during the year	...	1,887	1,040
Number of deaths during the year	...	16	5

5. Tuberculosis

		1963 as against 1962	
Number of deaths during the year	...	802	740

Kala-Azar

		1963 as against 1962	
Number of attacks during the year	...	20	4
Number of deaths during the year	...	2	4

Number of attacks and deaths due to Kala-Azar during 1962 and 1963 is appended in the statement.

The State Hospitals have not reported to the Corporation of Madras, cases admitted due to Kala-Azar. Only death reports was received from the State Hospitals, on receipt of which necessary Preventive measures could not be taken soon after admission of cases. The Medical Practitioners also did not report to this department regarding Kala-Azar cases treated by them.

In spite of this, this department took anti-sand fly measures soon after receipt of Hospital Death Reports to Control the spread of infection in the City. Since there are regular squads for spraying insecticides all over the City it would ensure anti-cholera measure also.

Chicken-Pox

		1963 as against 1962	
		<hr/>	
Number of attacks during the year	...	9,677	6,397
Number of deaths during the year	...	3	3

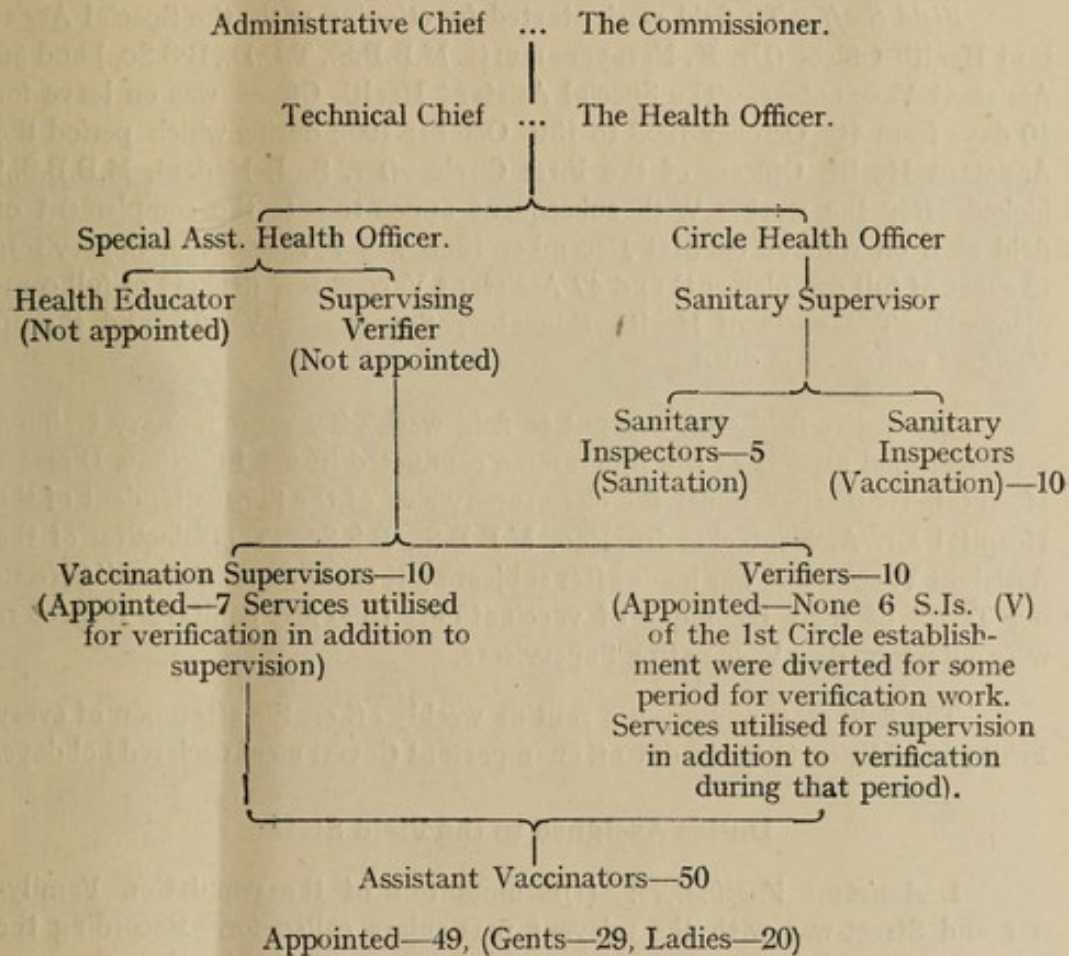
Malaria

Year	Deaths	Death rate per 1,000 of estimated mid-year population
1954	105	0.070
1955	75	0.050
1956	33	0.020
1957	18	0.010
1958	14	0.070
1959	8	0.003
1960	4	0.001
1961	6	0.003
1962	5	0.002
1963	4	0.002

NATIONAL SMALL-POX ERADICATION PROGRAMME

(North District)

ORGANISATIONAL SET-UP



Actual number on rolls as :

On 2-10-63—39 (Gents—20, Ladies—19)

On 31-12-63—47 (Gents—29, Ladies—18)

Inauguration.—The field work in the North District was inaugurated on the forenoon of 2nd October 1963 by the Hon'ble Health Minister of Madras. Thirumathi Jothi Venkatachalam at a preliminary public meeting held in the Corporation play grounds at KARIMODE, New Washermanpet, First Division. The meeting was presided over by the Worshipful Mayor of Madras Thiru G. Kuchelar. The Divisional Councillor Thiru G. Kannan also addressed the gathering. The meeting was followed by enumeration of the family members of the house No. 186, Cherian Nagar by the Hon'ble Health Minister.

Field Staff.—The field work started functioning with the Special Assistant Health Officer (Dr. K. Narayanamurti M.B.B.S., T.D.D., B.S.Sc.) and 39 Assistant Vaccinators. The Special Assistant Health Officer was on leave for 10 days from 4th October 1963 to 13th October 1963 during which period the Assistant Health Officer of the First Circle (Dr. S. I. Madani, M.B.B.S.) looked after the work. With subsequent appointments the complement of field staff on rolls as on 31st December 1963 was 7 Vaccination Supervisors (3 short of full complement) and 47 Assistant Vaccinators (3 short of full complement). The posts of Health Educator, Supervising Verifier and the 10 Verifiers remained unfilled.

The entire field staff was put to field work after a preliminary training on the special aspects of the programme conducted in the Infectious Diseases Hospital, Tondiarpet, under the close supervision of the Superintendent of the Hospital Dr. A. Ramachandra Rao, M.B.B.S., B.S.Sc. The selection of the Assistant Vaccinators was made after subjecting them to a satisfactory "Screening Test" of their technique of vaccination. Qualified Sanitary Inspectors were entertained as Vaccination Supervisors.

The field staff was given a routine weekly off on the afternoon of every Friday in addition to half a day off on important Government declared holidays.

Duties Assigned to the Field Staff

I. Assistant Vaccinators:—(1) Enumeration of the population Family-war and Street-war with the relevant particulars called for. Recording the information in duplicate in the field family registers provided for the purpose.

(2) Vaccination of the enumerated population.

(3) Submission of daily out-turn of work to the Field Centre duly checked and attested by their respective field vaccination supervisor.

(4) Indexing of the out-turn of work in each register after completion of work in the division concerned.

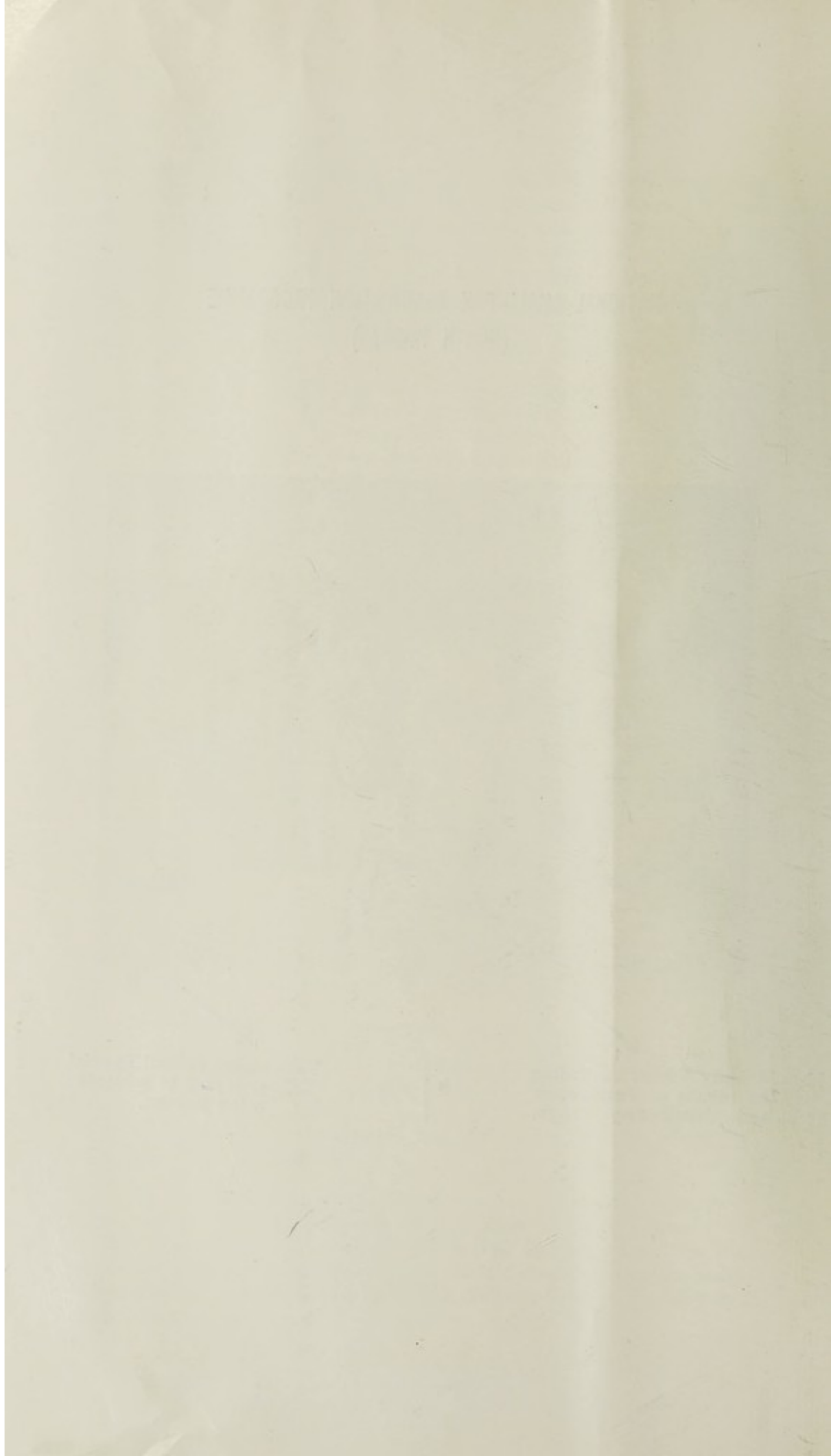
II. Vaccination Supervisors:—The services of 2 out of the 7 vaccination Supervisors were utilised exclusively for supervision at the field centre while the rest of the 5 were entrusted with the work of field supervision. In the absence of regular appointments of verifiers, the field supervisors were entrusted with the work of verification also in addition to their normal duties of supervision. Their respective duties were as hereunder :

NATIONAL SMALL-POX ERADICATION PROGRAMME
(NORTH MADRAS)



↙
A Lady Visitor recording
the results of Verification
and distributing drugs.

↘
Vaccination refusal Special
Officer trying to educate
the person.



(1) *Field—Centre Supervisor—I:—*(Thiru A. Serinivasa Gopalan).

(i) Maintenance of attendance, leave etc., of the field staff Taking the Roll-call of the Assistant Vaccinators and marching them out in time and with adequate material for each session of field work in the day.

(ii) Maintenance of general discipline of the Assistant Vaccinators at the Field Centre.

(iii) Preparation of monthly salary statement of the subordinate field staff and identification and supervision of salary payment at the Head Office, Ripon Buildings.

(iv) Collecting, recording and maintenance of registers of daily out-turn of work of the field staff.

(v) Compilation of daily, weekly, monthly statements of work, quarterly statement of expenditure and any other statement called for from time to time by the Central and State Governments.

(vi) Drawing up of programme of work in each division and allocation of the same to the field staff.

(vii) Drawing up of daily Health Education and Propaganda Programme and to accompany the Health Propaganda unit for field propaganda work.

(viii) Drafting notes relating to official correspondence.

(2) *Field—Centre Supervisor II:—*(Thiru E. Krishnamurthi)

(i) Reconstitution and storage of adequate vaccine material for the day's work and distribution of the same to the individual vaccinator for field work.

(ii) Indenting, receiving, accounting and distribution of other material for field work.

(iii) Maintenance of contingent account and preparation of monthly contingent bill for payment.

(iv) Vaccination of persons who were not available in their houses but who report at the Centre for vaccination after issue of notice.

(v) Responsible for safe transport of materials from Centre to Centre.

(vi) Safe guarding the field registers and other materials at the Field Centre.

(3) *Field Supervisors:—*(1) Thiru D. K. Srinivasan, (2) Thiru K. Kumaravelu
(3) Thiru J. Dorai Raj, (4) Thiru N. Loknath Singh (5) Thiru MK. Kunhi Anandan Nambiar.

(i) Supervision of the "Qualitative and Quantitative" work of the Assistant Vaccinators and to correct irregularities on the spot and to submit reports of work and irregularities to the Special Assistant Health Officer.

(ii) Checking and attesting the daily out turn of work of the Assistant Vaccinators.

(iii) Propagation of the programme to the public by local propaganda and supplying information on Health Education.

(iv) To attend to complaints received from the public.

(v) To supply drugs to the vaccinated persons in their houses.

(vi) Maintenance of general discipline of the Assistant Vaccinators in the field.

III. *Verifiers*:—(i) A 100% verification of the Vaccinations performed, recording the results in the field registers and submission of daily out turn of work to the field centre.

(ii) To perform Second Vaccinations in cases of failure and to verify the results.

(iii) To supply drugs to the vaccinated persons in their houses.

IV. *Supervising Verifier*:—(i) Supervision of the work of the Vaccination Supervisors and the verifiers.

(ii) A 75% verification of the Vaccinations verified by the verifiers.

(iii) Submission of daily report of work to the field centre.

(iv) Supply of drugs to the vaccinated persons in their houses.

V. *Special Assistant Health Officer*:—(i) Over all administrative and technical supervision of work of the field subordinate staff.

(ii) A 50% verification of the vaccinations verified by the subordinate staff.

(iii) Submission of notes, reports and statements to the Health Officer

VI. *Circle Health Officer*:—(i) Supervision of residual mopping up work and protection of fresh immigrants and unprotected children by the Divisional Staff.

(ii) A 25% verification of the vaccinations performed during the mopping stage.

(iii) Transmission of daily reports of mopping work to the Special Assistant Health Officer.

Procedure of Work

Location of Field Centre:—A field centre was established at a convenient place for each area of work. The field centre was located in the Corporation Dispensary building at 9, Avoor Muthial Maistry Street, New Washermanpet for the work in the First Division and in the Corporation Dispensary building at 22, Kappalapolu Chetty Street, Sanjeevaroyanpet for the work in the 2nd, 3rd and 4th Divisions.

Divisions Covered:—The 4 Divisions that were covered during the period from 2nd October 1963 to 31st December 1963 were (1) New Washermanpet, (2) Tondiarpet, (3) Old Washermanpet (Grace Garden) and (4) Old Washermanpet (Sanjeevaroyanpet.)

Allocation of Work.—On the basis of 1961 Census population and from particulars available in the Street-war register, an advance survey of each division was conducted by the Special Assistant Health Officer and the Field Center Supervisor I before the work started in the division concerned. Allocation of work with time limit was then made to the field staff. Reasonable extension of time was allowed in "Slack Areas" to ensure at least a 75% street-war vaccination coverage in addition to an over all divisional coverage of at least 75%.

Working Hours:—The field work was carried out as a routine in two sessions in the day from 7 a.m. to 10-30 a.m. and from 4 p.m. to 7 p.m. Deviation from the routine working hours avoiding the hot-part of the day was, accommodated to suit the convenience and availability of certain sections of the population and to oblige prior appointments. Any deviation of the programme of work for the day was drawn up on the previous night and the field staff was marched out in time after roll-call.

Sequence of the Phases of work :

- I. Enumeration of the population.
- II. Vaccination of the enumerated population.
- III. Verification of the performed vaccinations and performing second vaccinations.
- IV. Mopping up work.

I. *Enumeration:*—Enumeration was confined only to residential houses and eating establishments excluding entirely the places of trade, offices, institutions etc. This procedure was adopted to facilitate a proper verification. (vide Statement "A" for details and appended graph).

II. *Vaccination.*—The Vaccinators were marched out for field work in single file in all the divisions except in the 1st Division where two vaccinators were clubbed together. The assessment of work was made individually.

An out turn of 75 Vaccinations per day per vaccinator was fixed up in the original programme but as that target was not practical, it was reduced to 50 vaccinations per day per vaccinator.

Technique adopted for Vaccination and Re-constitution of vaccine:— Freeze-dried vaccine was used as the vaccine material and the Rotary-lancet for vaccination.

The vaccine was reconstituted at the field centre by a Vaccination Supervisor. The reconstitution was made in the previous night for the following morning's work and in the forenoon for the following afternoon work, and preserved in an ice-box till it is issued for field work.

Actual reconstitution was carried out by breaking open the extreme tip end of the vaccine ampoule by means of a file and the solvent introduced into it by means of a previously sterilised all-glass injection syringe and the open end of the ampoule capped with a sterile polythene cap. The reconstituted ampoules were carried to the field in the vaccine container provided in each vaccination kit.

The lancets were sterilised in boiling water in an Electric sterilizer the field centre before they were issued for each session of field work. The sterilisation of the lancets in the field was carried out by dipping the tooth end of the lancet in spirit, then flaming the dipped end over a spirit lamp flame and then allowing it to cool sufficiently by keeping the lancet over a grooved wooden stand. Any soot or muk collecting in between the teeth of the lancet was brushed out by means of a tooth brush provided in each kit. Four lancets were supplied to each vaccinator to keep up continuity of work.

The volar aspect of the right forearm was selected as a routine for re-vaccinations and the lateral aspect of the arm for Primary Vaccinations. The skin surface for the insertions was cleansed by moist cotton dipped in soap water. The reconstituted vaccine ampoule was then inverted perpendicularly on to the surface for insertion and the bottom base of the ampoule gently tapped to allow a drop of the vaccine for each insertion.

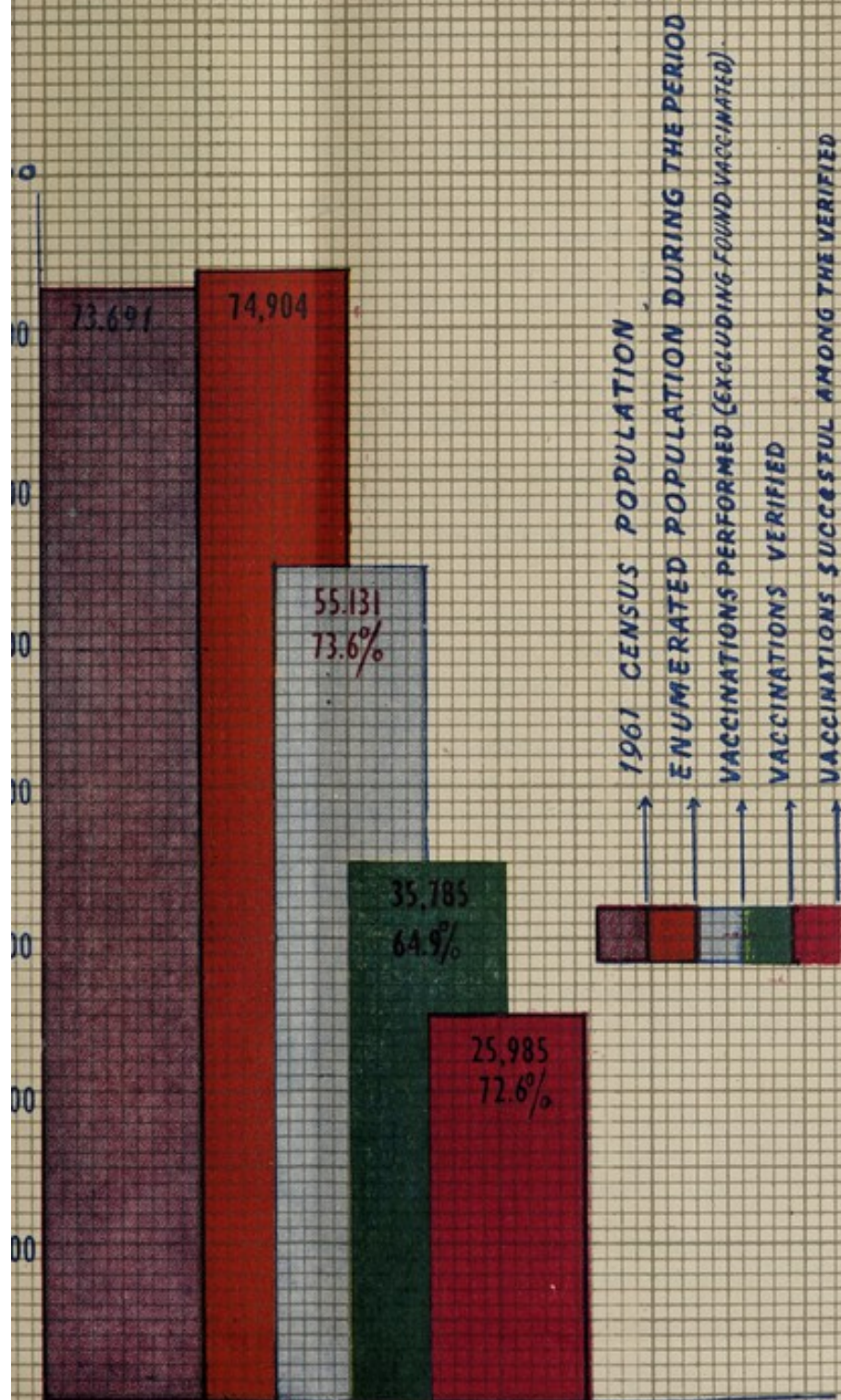
Two insertions were given in the case of re-vaccinations. In the case of Primary Vaccinations two insertions for children above 6 months age, one insertion for children below 6 months age and elderly adults above 40 years age were made (*vide* Statement "A" and graph appended for details of vaccination work.)

III. *Verification and Second Vaccinations:—*Six Sanitary Inspector (V) of the First Circle establishment who were diverted to the programme as Verifiers worked for a period of just a month from 15th October 1963 to 14th November 1963 when they were withdrawn for cholera work in the Circle. On account of the shortage of the complement of Vaccination Supervisors and the absence of regular appointments of verifiers the work of vaccination supervision and verification was shared equally between the Supervisors and Sanitary Inspectors (V).

N.S.E.P. (North District)

Vaccination Work

1 to 4 Divisions



N.E.P. (North District)
Vaccination Work
1 to 4 Divisions

North District
Vaccination Work
1 to 4 Divisions
1911

1911

1911

1911

1911

1911

1911

Verification of re-vaccinations was done on the 4th day of vaccination and that of the primary vaccinations on the 7th day of vaccination.

Recording of Verification results :

Failure was recorded as " F ".

Success was recorded as :

- " + " indicating an Immunity reaction.
- " + + " indicating an Accelerated reaction.
- " + + + " indicating a primary reaction.

The " Found Vaccinated " were recorded as " F.V. " Some entries of " Found Vaccinated " were recorded as " S1 or S2 " in the initial stages of the programme indicating the success and the number of successful marks.

The Vaccination Supervisors and the Verifiers supplied drugs to the vaccinated persons in their houses as a measure of treatment for the local and general reactions. Persons who could attend the regional dispensary and those who needed dispensary attention were attended to by the Medical Officers of the dispensaries.

Second vaccinations were performed in cases of failure. Response to a second vaccination from the public was far from satisfactory.

IV. Mopping up Work.—As a measure of consolidating the work done by the Eradication staff, the residual pendings were left over to the Circle establishment for coverage (*vide* Statement " B " for details of Division-war pendings.)

Health Education.—In the absence of a regular Health Educator and a planned Health Education Programme, the field staff had to shoulder the additional responsibility of Health Education in the interests of a time scheduled programme of work. The following concurrent Health Educational activities were gone through to overcome public resistance to vaccination and to win their spontaneous co-operation as much as possible. Enforcement of legal provisions was reserved to extreme cases of resistance.

Mass Programme.—(1) Regular daily street to street Health Propaganda relating to Small-pox disease, its prevention and the objectives of the programme by the Propaganda Unit of Ashok Vihar, Corporation of Madras.

(2) Films were projected in the three slum areas of Tondiarpet (Vinayapuram, Abaranjipuram and Kasimode) by the Health Education Bureau of Government of Madras.

Group Programme.—(1) Display of posters in the local sangham premises and distribution of relevant literature to the leaders of the sanghams for propagation of the programme to the local public.

(2) Talks with the local prominent persons, the respective divisional Councillors and seeking their own help and the assistance of volunteers.

3. Talks with the Health Visitors, Social Workers of the Corporation Child Welfare Centres for educating the mothers in their houses. Talks with the Medical Officers of the Corporation Dispensaries and Registered Medical Practitioners of the locality to educate persons attending their dispensaries. Talks with the school teachers to educate the school children.

III. *House to House Programmes.*—(1) Personal talk to the heads of the families by the field staff.

(2) Assistance of the local leaders and their volunteers for house to house propaganda.

(3) The services of the students of the Madras School of Social Work which were available for a short period were utilised from 25th October 1963 to 2nd November 1963 during the fag end of work in the 1st Division. The students were given a preliminary orientation training by the H.E.B. Unit of Government of Madras and the Health Officials of the Corporation before they were sent to field work. 127 vaccinations were performed at the instance of the students.

IV. *Meetings.*—(1) Three meetings were convened by the Health Officer during this period to review the work in stages and to formulate suitable Health Educational Programmes from time to time. The following personnel participated in the discussions.

- (i) A.D.P.H.S. (N.S.E.P. AND H.E.B.), Government of Madras.
- (ii) Members of Orientation Training Centre, Poonamallee.
- (iii) Research Analyst, Research-cum-Action Project, Poonamallee.
- (iv) Principal, The Madras School of Social Work.
- (v) Representative of City Women Welfare Front.
- (vi) Officer-in-charge, Home Guards, Chintadripet.
- (vii) Health Officials, of the Corporation of Madras connected with the Programme.

(2) The Deputy Director General of Health Services Government of India addressed a meeting of the Field Staff on 14th November 1963 at Ashok Vihar. He exhorted the Field Staff on the responsibility of the task and stressed in particular on the technical quality of work.

(3) The presence of the Director of All India Institute of Communicable diseases, (Health Education), Government of India in the City was availed of by the Health Officer to discuss measures for stepping up Health Education activities.

Notified Cases of Small-pox in the Divisions covered.—Five cases of Small-pox were notified in the covered areas during that period. Two persons out of that number were not available for vaccination although the rest of the members of the respective families were covered by vaccination. One child was not vaccinated as she was in a debilitating condition after an attack of

infantile paralysis. The remaining 2 cases were vaccinated by the eradication staff during the fag end of work in the respective divisions and verification of results was therefore not possible. Subsequent verification at the time of admission to the Infectious Diseases Hospital revealed failure of vaccination. No mortality of the 5 cases was reported.

Conclusion.—(1) The time schedule of the programme and the targets envisaged in the original programme could not be kept up on account of under staff on the one hand and lack of spontaneous co-operation and resistance on the part of the public on the other hand.

(2) No untoward post vaccinal complications have been reported during the period. A case of post vaccinal generalised vaccinia in an infant of 3 months age was recorded. The rash subsided in due course and the infant recovered fully uneventfully.

(3) The Sanitary Supervisor of the First Circle and the divisional Sanitary Inspectors co-operated well with the work of Eradication Field Staff.

NATIONAL SMALL-POX ERADICATION PROGRAMME

SOUTH DISTRICT

Organisational Set Up

<i>Administrative Chief</i>	...	The Commissioner, Corporation of Madras.
<i>Technical Chief</i>	...	The Health Officer, Corporation of Madras.
<i>Special Assistant Health Officer</i>	...	The Circle Health Officer (X).

Health Educator (not appointed).	Supervising—Verifier, (not appointed).
-------------------------------------	---

Vaccination Supervisors	... 10	Verifiers	... 10
		Appointed	... Nil

Appointed—9-Services utilised for verification in addition to Supervision. 8 Sanitary Inspectors (V)'s of X Circle Establishment were utilised for verification and field officer work.

Assistant Vaccinators	... 50
Gents.	... 27
Ladies	... 23

Appointed on 2nd October 1963—37 Vaccinators.

During November 1963—13 Assistant Vaccinators were appointed.

Eight Assistant Vaccinators were sent to the Divisional Vaccination work in the X Circle in the place of 8 permanent Sanitary Inspector (V)'s deputed for Eradication work. Full compliment of fifty Assistant Vaccinators were working from November 1963.

Inaguration.—The Field work in the South District was inaugurated on 2nd October 1963 by the Hon'ble Chairman of the 10 Circle Committee and Councillor 100th Division Thiru P. Annamalai at a Priliminary Public Meeting held at Car Street, Saidapet 100th Division. The meeting was presided over by Thiru P. Annamalai and was attended by Hon'ble Deputy Mayor and Hon'ble Councillors of 10th Circle. The Commissioner, the Health Officer, the Special Assistant Health Officer (South) District of Eradication Campaign and the officials of the Health Eradication Campaign and the rate payers of the division.

The meeting was followed by the enumeration of the family members at No. 4, Car Street by Dr. N. Dakshinamoorthy, the Special Assistant Health Officer in charge. A film show of Small-pox was shown at 8 p.m. at this place.

The Field Staff.—The field work was started functioning with the special Assistant Health Officer Dr. N. Dakshinamoorthy, M.B.B.S., B.S.Sc. and 37

NATIONAL SMALL-POX ERADICATION PROGRAMME
(SOUTH MADRAS)



Door to Door Vaccination in Progress

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1215 Broadway, New York, N. Y.

Assistant Vaccinators. With subsequent appointments the compliment of field staff on rolls as on 31st December 1963 was 9 Vaccination Supervisors (one short of full compliment) and 50 Assistant Vaccinators. The post of Health Educator, Supervising Verifier and the ten Verifiers, remained unfilled.

The entire field staff was put to field work after a preliminary training on the special aspects for the programme conducted in the I.D.H.T. under the close supervision of the Superintendent of I.D.H.T., Dr. A. Ramachandra Rao, M.B.B.S., B.S.Sc. The selection of Assistant Vaccinators was made after subjecting them to a satisfactory screening test of the Technic of vaccination. Qualified Sanitary Inspectors were entertained as vaccination supervisors.

The field staff was given a routine weekly holiday in afternoon of every Monday in addition to half-a-day in the afternoon on important Government declared holidays.

Duties Assigned to the Field Staff

1. *Assistant Vaccinators*.—(1) Enumeration of population, family-war and street-war with the relevant particulars called for and recording the information in duplicate in the field family registers provided for the purpose.

2. Vaccination of the enumerated population.

3. Submission of daily out-turn of work in the field centre.

Vaccination Supervisors.—The services of the eight out of 9 Supervisors were utilised exclusively for supervision of the vaccinators while one was entrusted with the field office work in maintaining the attendance of the staff, drawing up the programme of work for the vaccinators and compilation of statement for the out-turn of work etc. In the absence of regular appointments of verifiers the services of the 5 out of 8 Sanitary Inspectors (V)s. were utilised for the verification work and 3 diverted for field office work, i.e., for reconstitution of lymph in-charge of stores, preparation of monthly salary statements, etc.

Field Supervisors :

- (1) Thiru P. Ramuduiyah.
- (2) Thiru P. J. Thomas.
- (3) Thiru T. V. Achuthawarior.
- (4) Thiru N. Nakirhussain.
- (5) Thiru Vijayan.
- (6) Thiru Kunhiraman.
- (7) Thiru Dhinadhayalu Naidu.
- (8) Thiru Narayanaswamy Iyer.
- (9) Thirumathi Therisa.

Special Assistant Health Officer.—Overall administrative and technical supervision of the field workers. Submission of notes, reports, and statements to the Health Officer.

Circle Health Officer (X).—Assisting in all respects the Special Assistant Health Officer, N.S.E.P. in his Circle (X).

Location of Field Centre.—A field centre was established at a convenient place for each division preferably Corporation Buildings. In places where Corporation Buildings are not available private buildings of the leading local men were made use of with their consent Dr. Thilakam, a leading Medical Practitioner had kindly allotted a portion of her premises in 96th and 97 divisions during the period of work.

The Divisions Covered.—The four divisions that were covered during the period 2nd October 1963 to 1st January 1964 were :

- 100 Saidapet (South).
- 99 Guindy.
- 98 Periapet.
- 97 Saidapet (North).

Allocation of Work.—An advance survey of each division was conducted by the Special Assistant Health Officer and Field Centre Supervisor before the work was started in the concerned division.

Working Hours.—The field work was carried out as a routine in two sessions in the day from 7 a.m. to 10-30 a.m. and 3-30 p.m. to 6-30 p.m. Any deviation of the programme of work for the day was drawn up on the previous night and the field staff were marched out in time. Deviation from the routine working hours was accommodated to suit the convenience and the availability of certain sections of the population and to oblige prior appointments.

Enumeration.—Enumeration was confined only to residential houses and eating establishments, excluding entirely the places of trade offices, institutions, etc. This procedure was adopted to facilitate a proper verification.

Vaccinations.—Vaccinators were marched out in groups of two each in slums and difficult areas and in single file where the public co-operated. In groups the assessment of work was made individually. An out turn of 75 vaccinations per day per vaccinator was fixed in the original programme, but as that target was not practical it was reduced to 50 vaccinations per day per vaccinator.

Technique adopted for Vaccination and Reconstitution Vaccine.—‘FREEZE DRIED VACCINE’ was used as the vaccine material and the rotary lancet for vaccination.

The vaccine was reconstituted at the field centre by a Sanitary Inspector (V). The reconstitution was made in the previous night for the following morning work and in the forenoon for the following afternoon work, and preserved in an ice box till it was used for field work. The reconstituted ampoules were carried to the field in the vaccine container provided in each vaccination kit. The sterilization of the lancet in the field was carried out by dipping

NATIONAL SMALL-POX ERADICATION PROGRAMME
(SOUTH MADRAS)



Verification in the houses and distribution of drugs



the tooth end of the lancet in the spirit, then flaming the dipped end over the spirit lamp flame and allowing it to cool sufficiently by keeping the lancet over a grooved wooden stand. Any soot or muck collecting it between the teeth of the lancet was brushed out by means of a tooth brush provided in each kit. Four lancets were supplied to each vaccinator to keep up the continuity of work.

The volar aspect of the right forearm was selected as a routine for revaccinations and the lateral aspect of the arm for primary vaccinations. The skin surface for the insertions was cleansed by moist cotton dipped in soap water. The reconstituted vaccine ampoule was then inverted perpendicularly on to the surface for insertions and bottom base of the ampule gently tapped to allow a drop of the vaccine for each insertion. Two insertions were given in the case of vaccinations. In the case of primary vaccinations two insertions for children above six months age and one insertion for children below six months age were made.

Verification and Secondary Vaccination.—Five Sanitary Inspectors (V) of the tenth Circle establishment who were diverted for verification work used to verify the results of vaccinations and record them in the field registers. The Vaccination Supervisors were also entrusted with the verification work wherever necessary. Verification of revaccination work was done on the 4th day of revaccination and that of the primary vaccinations on the seventh day of vaccination.

Recording of Verification Result :

Failure was recorded as N.T.

Successful as recorded as

“ + ” indicating an immunity reaction.

“ + + ” indicating an accelerated reaction.

“ + + + ” indicating a primary reaction.

The “ Found Vaccinated ” were recorded as F.V.

The vaccination supervisors and verifiers supplied drugs to the vaccinated persons in their houses as a measure of treatment for the local and general reactions. Second vaccinations were performed in cases of failures. Response to a second vaccination from the public for revaccinations was far from satisfactory.

Health Education.—In the absence of regular educator and a planned Health education Programme the Field Staff has to shoulder the additional responsibility of Health Education by contacting the public in houses and advising them for vaccination. The Health Propaganda Van visited the street every day as per programme, either in the mornings or in the evenings, and the propaganda work was made by loud speaker about small-pox and the need for vaccination.

Meetings.—Three meetings were convened during this period to review the work in stages and to formulate suitable health education Programme from time to time. The following personnel participated in the discussions.

- (1) A.D.P.H. (S) N.S.E.P. and H.E.B. Government of Madras.
- (2) Members of Orientation Cleaning Centre, Poonamalle.
- (3) Research Analyst, Research cum-Action Project, Poonamalle.
- (4) Principal, Madras School of Social Work.
- (5) Representative of City Women Welfare Front.
- (6) Officer in charge, Home Guards, Chintadripet.
- (7) Health Officials of the Corporation of Madras connected with the Programme.

The Deputy Director-General of Health Services, Government of India addressed a meeting of the field Staff on 14th November 1963 at Ashok Vihar. He exhorted the field Staff on the responsibility of the task and stressed in particular on the technical quality of work.

3. The presence of the Director of All-India Institute of Communicable diseases, Health Education, Government of India in the City was availed of by the Health Officer to discuss measures for stepping up the health education activity.

Notified cases of Small-pox in the Divisions Covered.—There was a solitary cases of small-pox reported from 99th division during the project period. There were a few cases of small-pox reported from the 99th Division even before the team visited the divisions and during the project period 8 more cases of small-pox were reported. The vaccination work was intensified by the eradication and the permanent staff and the epidemic was brought under control. The divisions covered, comprised of mostly weavers who are daily labourers and could not be easily accessible for vaccination. In spite of several handicaps and the resistance from the public on one hand and the under staff on the other, the time scheduled for the programme and the target envisaged could not be kept up. No untoward post vaccinal complications has been reported during the period. The details of enumerations, vaccinations and verifications done in four divisions 100, 99, 98 and 97 during the calendar year 1963 from 2nd October 1963 to 31st December 1963 are appended in the attached statement.

NATIONAL SMALL-POX ERADICATION PROGRAMME
(SOUTH MADRAS)



Mass Propoganda with Mega Mike.

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GENERAL MALARIA
ANTI-MOSQUITO, ANTI-FILARIASIS
and
ANTI-FLY MEASURES

General Malaria Section of the Health Department covers the anti-mosquito, anti-filariasis and anti-fly measures carried out.

The Senior Entomologist who was placed directly in-charge of General Malaria Section in addition to his duties of implementing the National Malaria Eradication Programme from 1962, continued to be in-charge of the same during 1963 also.

One post of Entomological Assistant has been created and action is being taken to fill up the same. One Store-Keeper was appointed to look after the entire Malaria Stores. The total strength of Malaria Supervisors was increased to 10 by creating 4 additional posts, each Malaria Supervisor to be in-charge of one Circle.

The strength of staff employed during the year 1963 are furnished below :—

Malaria Supervisors :	...	10
Store-Keeper:	...	1
Maistries:	...	78
Thozhilalies :—		
Main Drain, Malaria, Special Gang and Anti-fly:	...	493

Apart from the above, 8 Stegomia Overseers and 8 thozhilalies continued to work during the year for control of stegomia in and around the Harbor as required under the International Sanitary Conventions.

Anti-Mosquito Measures.—The anti-mosquito measures aimed at the control of the breeding, mainly of Culicine mosquitoes was intensively carried out in the City. Culicine mosquitoes are not only responsible for the transmission of Filariasis, but they are responsible for 'mosquito nuisance' in many parts of the City.

A large number and variety of water collections are available for breeding of Culicine mosquitoes throughout Madras City which is spread over an area of about 50 square miles. The main breeding places for breeding in the City are, the Storm Water Drains, Cutcha Drains, the Rivers Cooum and Adyar, Buckingham Canal, Cesspools in the Slums and in unsewered areas, the large drains like Anti-Malaria drain, Ottery Nullah, Sun Theatre Nullah and Railway Channel and rain water stagnations etc. Breeding places within the premises of private buildings and offices also constitute a problem. The effective control of breeding of Culicines in all these situations is really a tough problem. During the year under review, the Anti-mosquito measures were intensified and strengthened.

All the drains were weekly cleaned and applied with larvicides regularly. The cesspools and other water stagnations were removed of their floating matter and applied with larvicide to kill the aquatic stages of the mosquitoes. All the tanks and ponds in the City were regularly cleaned and kept free from Algae and moss and breedings in them controlled.

Whenever complaints of mosquito nuisances were received, the same were investigated immediately and the breeding if any noticed destroyed and action taken to avoid such breedings in future.

Wells, cisterns, overhead tanks and other similar clear water collections which breed the malaria carrier, *A. stephensi* were regularly attended to and kept free of breeding by the Staff under the National Malaria Eradication Programme and by special House Inspection Squads.

Pilot Filaria Control Projects.—It has been felt for some time that Madras City is becoming endemic for Filariasis. In order to assess the quantum of Filarial endemicity and to draw up a scheme of control, two Pilot Control Projects were commenced in two ends of the City. Dr. Vijayaraghavalu Nagar (Division 23) in North and Adyar (Division 90) in South were taken for Pilot's studies. The Projects were inaugurated by Smt. Jothi Venkatachalam, Hon'ble Minister for Health on 9th July 1963 at Korukkupet.

Night Surveys were immediately commenced. Every effort was made to take night blood from every individual. While there was better co-operation from the poorer sections of the public, the rich and the middle class were not willing to subject themselves to the examination of their blood. About 52% of the population were examined. This itself could be achieved only by re-visits to the same area. The upper middle class area of Gandhinagar in Adyar was the least co-operative and night blood smears collected from them were very few.

A total of 8,116 night blood smears were collected in Division 23 of which 1,258 were positive for microfilariae. 8,708 blood smears were collected in Division 90 of which 897 were positive for microfilariae. 75 persons were found to have manifestation of the disease in Division 23 and 40 in Division 90. The microfilariae rate in Division 23 worked out to 15.5% and disease rate 0.92%. In Division 90 the microfilariae rate was 10.3% and the disease rate 0.45%. Thus the endemicity rate in Division 23 is 16.42% and in 90th Division 10.75%.

The relevant details are furnished below :

		Division 23	Division 90
Number of night blood smears examined	...	8,116	8,708
Number of positive for microfilariae	...	1,258	897
Microfilariae rate	...	15.5%	10.3%
Number of people with external manifestations.		75	40
Disease rate	...	0.92%	0.45%
Endemicity rate	...	16.42%	10.75%

PILOT FILARIA CONTROL PROJECT

(Filariasis Survey)



Taking blood-smears at night to asses endemicity of Filaria
in the city.

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PILOT FILARIA CONTROL PROJECT

(Filariasis Survey)



Cases Proved micro-filariae are treated at the nearest Corporation Dispensary with Hetrazen.

PILOT FINANCIAL CONTROL SYSTEM

1964-1965



Report of the Pilot Financial Control System
1964-1965

The persons positive for microfilariae are split up into age-groups and sex and shown below :

Age Groups Year	Division 23			Division 90		
	Male	Female	Total	Male	Female	Total
Below 5	17	12	29	18	20	38
6 to 10	54	46	100	77	73	150
11 to 20	199	107	206	124	90	214
21 to 30	292	115	407	133	107	240
31 to 40	167	85	252	92	43	135
41 to 50	78	36	114	40	38	78
51 and above	36	14	50	30	12	42
Total	843	415	1,258	514	383	897

Treatment of all the persons positive for microfilariae were taken up immediately and are being continued. The short course treatment with Hetrazan for 5 days was administered. This treatment was carried out in the nearest Corporation Dispensary by the Filaria Staff. The Filaria Staff contacted each and every patient and took them to the nearest Corporation Dispensary for treatment. A total of 1,100 cases have already been treated in Division 23 and 890 in Division 90.

Along with treatment of the positive cases, intensive anti-larval measures were taken up to control the breeding of Culicine mosquitoes. Further surveys and studies in the two Pilot Filaria Control areas would give us sufficient data to enunciate a method of control in the fight against the further spread of this loathsome disease.

The following staff were sanctioned on requisition basis to carry out the surveys and treatment :

1. Clerk-cum-Typist	...	1
2. Clerical Attenders	...	2
3. Lady Workers (Assistant Vaccinators)	...	8
4. Maistries	...	18
5. Thozhilalies	...	12
6. Driver	...	1
7. Cleaner	...	1

Anti-fly Measures :—

During the year 1963, intensive anti-fly measures were carried out. During the season when the flies increase, all the markets were regularly sprayed during nights against flies. Spraying was carried out in the dumping grounds and garbage heaps. Street by street control of the flies was also carried out. These intensive measures kept the density of flies at the very minimum.

PILOT FILARIA CONTROL PROJECT

(Filariasis Survey)



Typical cases of Elephantiasis

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NATIONAL MALARIA ERADICATION PROGRAMME MADRAS CITY

Introduction:—

The National Malaria Eradication Programme is a National Scheme, planned to cover the entire Country as per pattern laid down. The Scheme is aimed at eradicating malaria. The Corporation of Madras has been participating in the above Scheme from its inception.

Malaria is transmitted in Madras City by the species of Anopheles by name Anopheles stephensi. These mosquitoes breed mainly in wells. They may also breed in cisterns, overhead tanks and other clear water collections. The main plank of control in the City is the destruction of the larval and pupa stages of the Anopheles in the above cited contained water collections. The Surveillance wing of the National Malaria Eradication Programme is also under effective implementation from the year 1960. The Surveillance Staff detect all fever cases and treat them with 4-aminoquinoline tablets after taking blood smears. The blood smears are examined for Malaria Parasites and positive cases found are radically treated with 8-aminoquinolines.

STAFF :

During the year 1963, Thiru V. Sivasubramania Pillai, Senior Entomologist continued to be directly in-charge of the National Malaria Eradication Programme Scheme in the City.

The following are the staff sanctioned for the National Malaria Eradication Programme under the Corporation of Madras :—

1. Senior Entomologist	...	1
2. Entomological Assistant	...	1
3. Malaria Supervisors	...	6
4. Laboratory Technicians	...	3
5. Assistant Malaria Supervisors	...	8
6. Upper Division Clerk	...	1
7. Typist	...	1
8. Attenders	...	27
9. Mechanic	...	1
10. Peon	...	1
11. Watchman	...	1
12. Drivers	...	2
13. Cleaner	...	1
14. Thozhilalies	...	105

Staff diverted from General Malaria Section :

1. Stegomia Overseer	...	1
2. Maistries	...	5
3. Literate Thozhilalies	...	2
4. Fish Gang Thozhilalies	...	8

Evaluation of the Programme :

The progress of the programme is evaluated from the morbidity statistics on malaria collected from the hospitals and dispensaries, by the number of malaria cases detected under Active and Passive Surveillance and by investigations on the effectiveness of the larvicidal operations.

Morbidity Statistics :—

The number of cases clinically diagnosed as Malaria continued to show decline year after year. During 1963, four cases were clinically diagnosed as malaria from the various Corporation Dispensaries and from blood smears collected under active and passive surveillance. The total number of all cases treated in the Corporation Dispensaries during 1963 was 36,97,701. This gives a percentage of 0.0001 as against 0.0007 during 1962. During 1955, the percentage of Malaria cases clinically diagnosed as malaria was 0.362 and this has shown a steady decline to 0.0001 during 1963. The number of cases clinically diagnosed as Malaria during 1955 was 5,050 against 4 during 1963. This graphically illustrates the very good progress maintained towards eradication of Malaria in the City.

The following table gives the number of Malaria cases with percentages, treated in the various Corporation Dispensaries :—

Year	No. of Hospitals and Dispensaries	Total out-patients in Hospitals and Dispensaries	Malaria cases	% of Malaria cases treated to total cases of out-patients treated
1955	40	13,96,381	5,050	0.362
1956	40	16,36,269	2,650	0.16
1957	43	16,75,037	2,821	0.16
1958	45	13,27,883	2,701	0.2
1959	50	15,54,187	1,077	0.06
1960	50	14,65,330	129	0.009
1961	50	17,96,163	139	0.0008
1962	50	32,91,211	24	0.0007
1963	50	36,97,701	4	0.0001

NATIONAL MALARIA ERADICATION PROGRAMME (DISPENSARY)



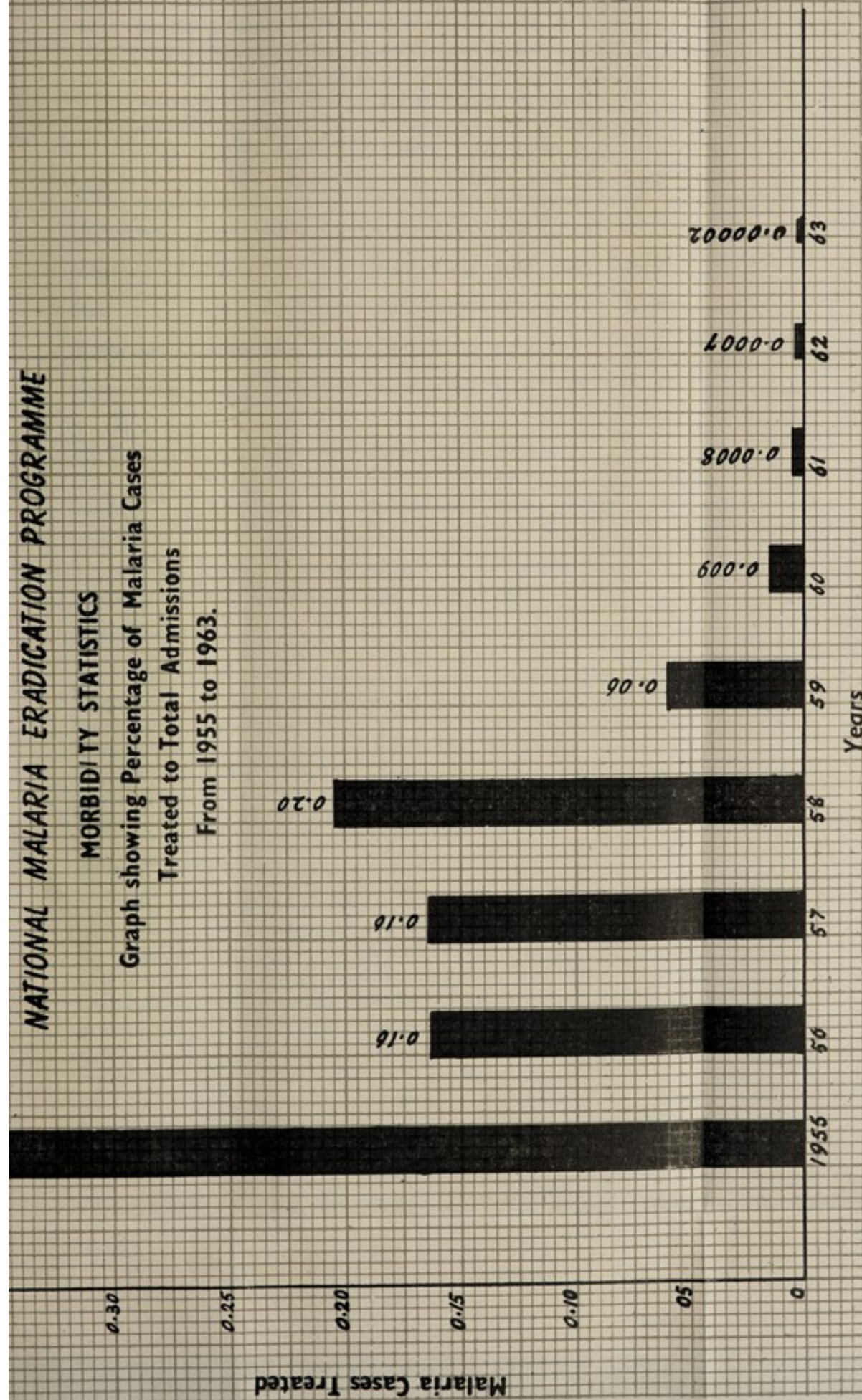
Surveillance Field worker taking blood-smears from fever cases.



NATIONAL MALARIA ERADICATION PROGRAMME

MORBIDITY STATISTICS

Graph showing Percentage of Malaria Cases Treated to Total Admissions From 1955 to 1963.



ANNUAL REPORT OF THE BUREAU OF THE INDIAN AFFAIRS

1903

Showing the Progress of the
Work of the Bureau during the Year

Presented to the Senate and House of Representatives
of the United States of America

1903

0.30

0.10

0.10

0.00

The percentage of Malaria cases treated in the six Corporation Dispensaries which are situated in the endemic areas in the City are furnished below:—

Dispensaries in endemic areas	Malaria Morbidity Rates								
	1955	1956	1957	1958	1959	1960	1961	1962	1963
	%	%	%	%	%	%	%	%	%
Mofuskhan.	0.01	0.001	0.001	0.00	0.002	0.01	0.03	0.00	0.01
Mannady ...	1.40	2.2	0.001	0.07	0.032	0.00	0.00	0.00	0.00
Mint ...	0.55	0.3	0.01	0.07	0.007	0.00	0.00	0.00	0.00
Muthialpet...	0.005	0.48	0.00	0.00	0.000	0.00	0.00	0.02	0.00
Seven Wells.	...	0.57	0.32	0.08	0.06	0.002	0.00	0.00	0.00
Trevelyn Basin ...	...	0.45	0.18	0.03	0.002	0.000	0.00	0.00	0.00
Average ...	0.51	0.35	0.09	0.004	0.047	0.005	0.0005	0.0002	0.0001

Graph I gives the annual morbidity rate for Malaria from all the dispensaries under the Corporation from the year 1955:—

Surveillance :

The Surveillance Organisation of the National Malaria Eradication Programme consists of two wings; (1) Active Surveillance and (2) Passive Surveillance. Active Surveillance is the detection and treatment of all fever cases by the Surveillance Organisation in the areas allotted by houses to house enquiries once every fortnight. Passive Surveillance envisages the detection and treatment of suspected cases of Malaria from the dispensaries and hospitals aided by the Surveillance Staff.

Active Surveillance :

There were 25 Surveillance Inspectors and 100 Surveillance Field Workers under the National Malaria Eradication Programme to carry out Active Surveillance during 1963. Each Surveillance Inspector was in-charge of one sub-circle having 4 Surveillance Field Workers under him. Once every fortnight, the Surveillance Field Workers visited each and every house in the areas allotted to them and enquired for fever cases and took blood smears from all such fever cases. All the fever cases were treated with 4-aminoquinoline tablets. The blood smears collected were examined at the Malaria Laboratory. The Malaria cases detected were immediately investigated to find out how and when the transmission took place to determine whether it was in imported or relapse case. All the cases were thoroughly investigated and classified. The house where the Malaria cases were detected and the nearby houses were immediately given one round of spray with DDT to see that no further transmission took place.

During the year under review, 30,748 fever cases were detected under Active Surveillance. 30,442 blood smears were taken and 19,008 patients initially treated with 4-aminoquinoline tablets. Under active surveillance 2 Malaria cases were detected and both of them were imported cases.

The following table furnishes the particulars of the active surveillance for each month with species of parasites.

Month		No. of fever cases detected	No. of blood smears taken	No. Positive for Malaria			Per-cent	No. of cases treated with 4-aminoquinoline
				v.	f.	mixed		
January	...	2,735	2,704	...	...	...	...	1,944
February	...	2,764	2,722	...	...	...	...	1,714
March	...	2,535	2,509	...	...	...	...	1,652
April	...	2,942	2,909	...	...	...	...	1,897
May	...	3,017	2,974	...	...	...	...	2,001
June	...	2,711	2,702	...	...	...	...	1,559
July	...	2,934	2,904	...	...	...	...	1,719
August	...	2,861	2,829	...	...	...	...	1,687
September	...	2,496	2,472	...	...	...	...	1,527
October	...	2,305	2,288	...	...	...	...	1,337
November	...	1,826	1,818	...	...	...	...	1,131
December	...	1,622	1,611	...	...	...	...	840
Total	...	30,748	30,442	...	2	...	...	19,008

Graph II gives the percentages of Malaria cases detected month-wise under Active Surveillance.

Graph III shows the data of imported and relapse cases under active and passive surveillance.

Passive Surveillance :—

In an effort to detect all the malaria cases in the City Surveillance Staff were deputed to each and every Corporation Dispensary. These staff took blood smears from all fever cases who attended the Dispensaries. They attended every Corporation Dispensary every forenoon and afternoon and collected the blood smears from all fever cases. Also, 25 Private Practitioners whose co-operation have been obtained also gave blood smears of suspected cases to our Surveillance Staff who were posted to their dispensaries. 53,453 blood

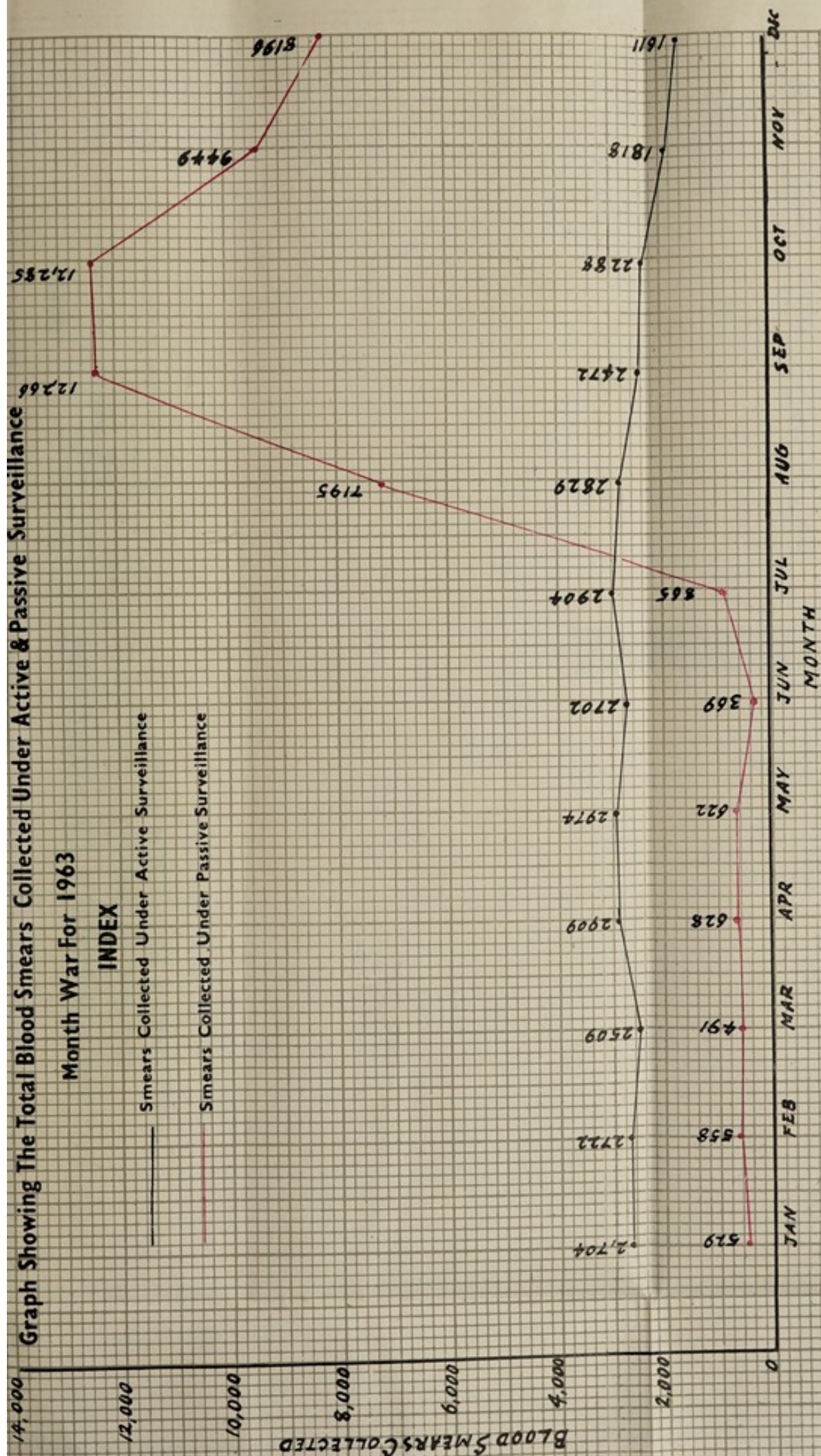
Graph Showing The Total Blood Smears Collected Under Active & Passive Surveillance

Month War For 1963

INDEX

Smears Collected Under Active Surveillance

Smears Collected Under Passive Surveillance



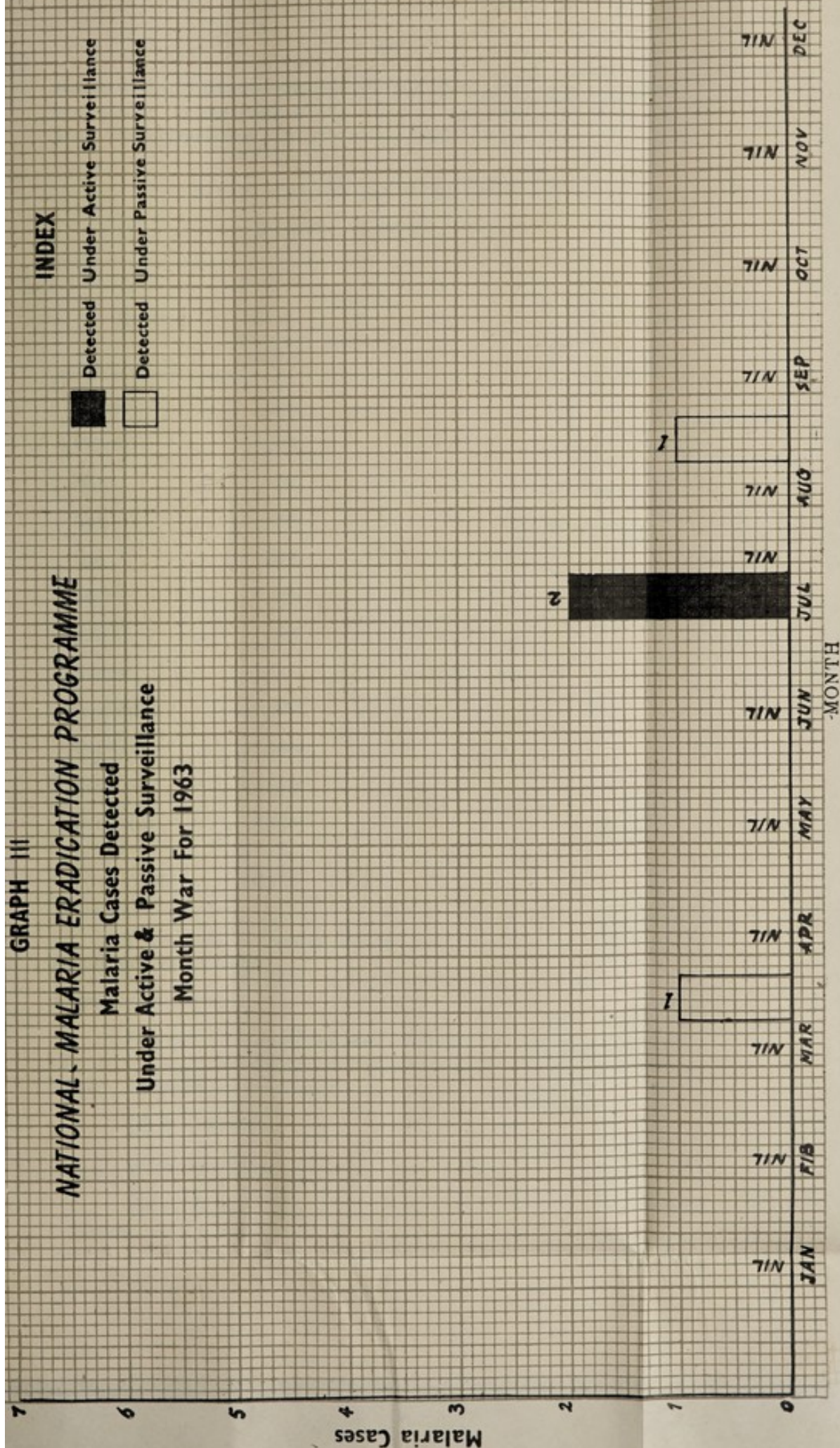
GRAPH III

NATIONAL MALARIA ERADICATION PROGRAMME

Malaria Cases Detected
Under Active & Passive Surveillance
Month War For 1963

INDEX

- Detected Under Active Surveillance
- Detected Under Passive Surveillance



1901 JUL 12 W. 10000

1901 JUL 12 W. 10000

1901 JUL 12 W. 10000

1901 JUL 12 W. 10000



1901

smears were thus collected through the Surveillance Staff under passive surveillance during the year 1963, of which 2 cases were found positive for Malaria. Their classifications and other particulars are furnished below :

BLOOD SMEARS FROM DISPENSARIES

(PASSIVE SURVEILLANCE)

Month		Number of blood smears received	Number of positive	Percent	Species			Remarks
					v.	f.	m.	
January	...	529	...	...	...	...	...
February	...	558	...	...	...	...	...
March	...	491	1	...	...	1	...	
April	...	628	...	...	...	...	...
May	...	622	...	...	...	...	...
June	...	369	...	...	...	...	...
July	...	865	...	...	...	...	...
August	...	7,195	1	...	1	...	...
September	...	12,266	...	...	...	...	...
October	...	12,285	...	...	...	...	...
November	...	9,449	...	...	...	...	...
December	...	8,196	...	...	...	...	...
Total	...	53,453	2		1	1	...	

All the cases of Malaria detected were given rational treatment with 8-aminoquinoline tablets.

Entomological Survey :

Collections for mosquitoes from fixed stations spread throughout the City as well as random collections were made during the year. The following species of Anopheles were recorded.

(1) *A. stephensi*.

(2) *A. subpictus*.

(3) *A. vagus*.

The density of all *Anopheles* and *Anopheles stephensi* per man hour are furnished below :—

Month	Time spent		No. of non-vectors	Per-man-hour of non-vectors	No. of vectors collected	Per-man-hour vectors
	Hrs.	Min.				
January	...	52 20	98	1.87	...	...
February	...	56	95	1.70	...	...
March	...	58	125	2.16	...	...
April	...	51 20	82	1.60	...	...
May	...	53 50	42	0.78	...	...
June	...	11 30	13	1.13	...	...
July	...	20 30	34	1.66	...	...
August	...	48 50	152	3.11	...	...
September	...	25 30	86	3.37	...	...
October	...	57 30	146	2.54	...	...
November	...	74	272	3.67	...	...
December	...	70	213	3.04	...	...
Total	...	57,920	1,358	2.34	...	...

The density of *Anophels* has been very low. *A. stephensi* was not collected during the year. This was directly due the intensive anti-larval measures.

Graph IV gives the density of non-vectors and vector species month-wise for the year 1963.

Anti-Larval Measures :

The breeding places for *A. stephensi* in the City are the wells cisterns, ornamental tanks, overhead tanks and any other clear water collection. All these contained water collections were fully under control during the year. The wells are classified as 'used' and 'unused,' and the used wells stocked with gambusia fish and the unused wells treated with Aromex emulsion once a week. Wells were systematically stocked with gambusia fish and wells were treated with larvicides during the year 1963. The quantity of Aromex spent during the year with particulars are furnished below :

- 1 Total quantity of Aromex spent during the year 1963 ... 14,040 Lts.
2. Average number of wells covered every week with Aromes ... 2,622
3. No. of wells stocked with gambusia fish ... 36,031

NATIONAL MALARIA ERADICATION PROGRAMME

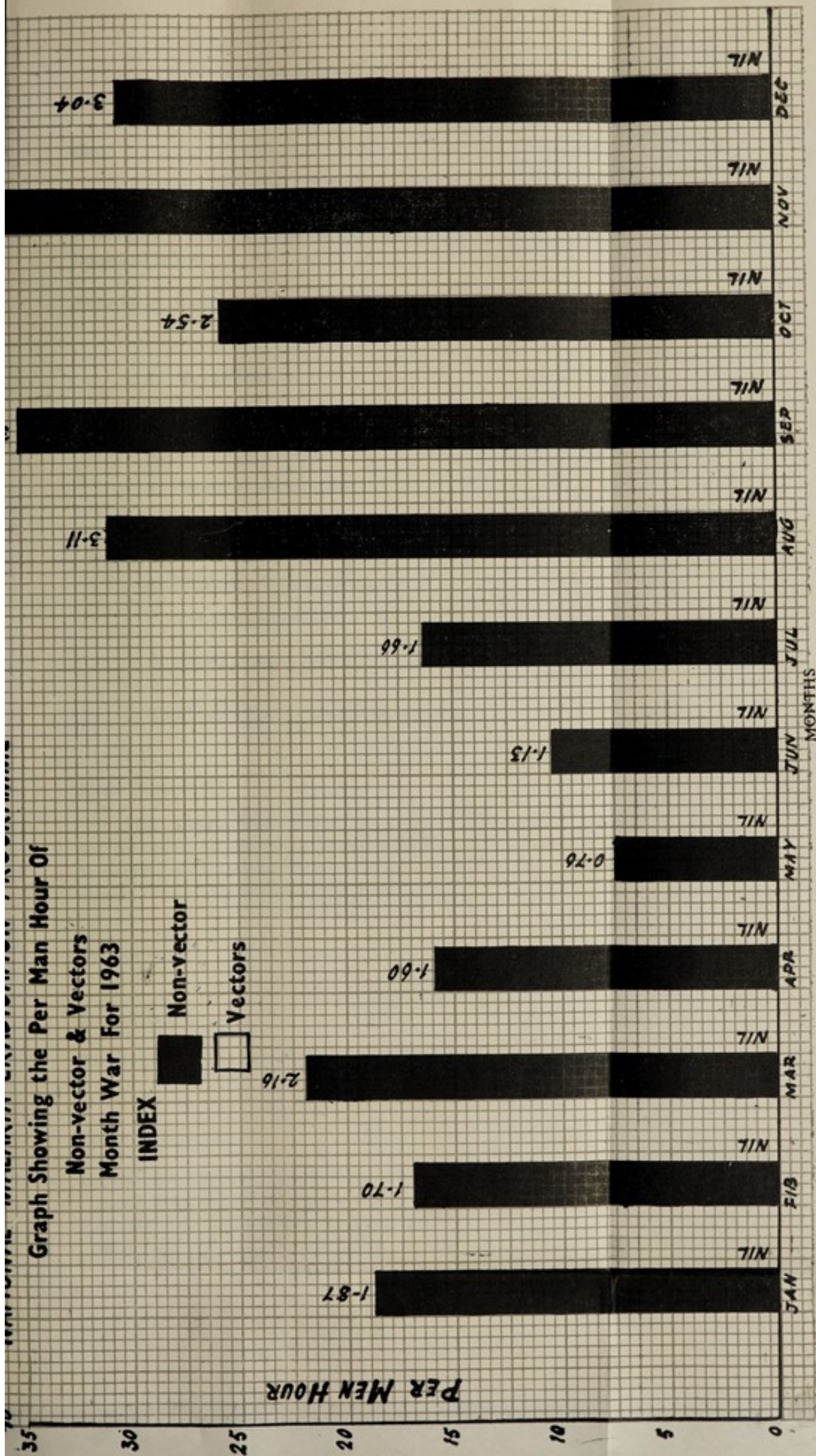
(Laboratory)



Examining susceptibility of vector species to DDT,
BHC etc. and other research aspects.



Graph Showing the Per Man Hour Of
Non-vector & Vectors
Month War For 1963



[REDACTED]

3-0+

[REDACTED]

[REDACTED]

3-2+

[REDACTED]

[REDACTED]

11-3

[REDACTED]

1-90

[REDACTED]

1-12

10

[REDACTED]

1-90

[REDACTED]

5-10

[REDACTED]

1-10

Acetone

Non-Acetone

INDEX

March 1991 for 1993

Non-Acetone & Acetone

Index showing the per cent non-acetone

Cost :

A total sum of Rs. 1,75,737-58 nP. was spent during the year under the National Malaria Eradication Programme. This excludes the pay and allowances of staff diverted from General Malaria Section. The details are furnished below :

Expenditure details :—

		Rs.	nP.
1. Pay of Officers	...	5,220	50
2. Pay of Establishment	...	31,285	99
3. Dearness Allowances	...	6,887	16
4. House Rent Allowances	...	4,985	10
5. Travelling Allowances and other compensatory Allowances	...	988	50
6. Fixed Travelling Allowances	...	1,333	74
7. Office Contingencies	...	46,977	21
8. Other charges (Labour Salary)	...	78,059	38
Total expenditure incurred during the year.		1,75,737	58

Motor Transport :—

Two Dodge Power Wagons supplied in 1955 under the Indo-American Aid continued to serve the National Malaria Eradication Programme. The particulars of the expenditure of Petrol, Oil and Lubricants along with the number of miles run are furnished below :—

	MSY—1399	MSY—1407
Type of vehicle	... Dodge Power Wagon	Dodge Power Wagon
Date of supply	... 5—3—1955	5—3—1955
No. of miles run for the year	... 8,278	5,608
	Rs. nP.	Rs. nP.
Cost of fuel and oil	... 3,174 09	2,184 84
Expenditure incurred on other items of maintenance such as servicing, repairs, replacements of tyres and tubes purchase of spare parts etc.	... 191 84	157 26

Supplies :

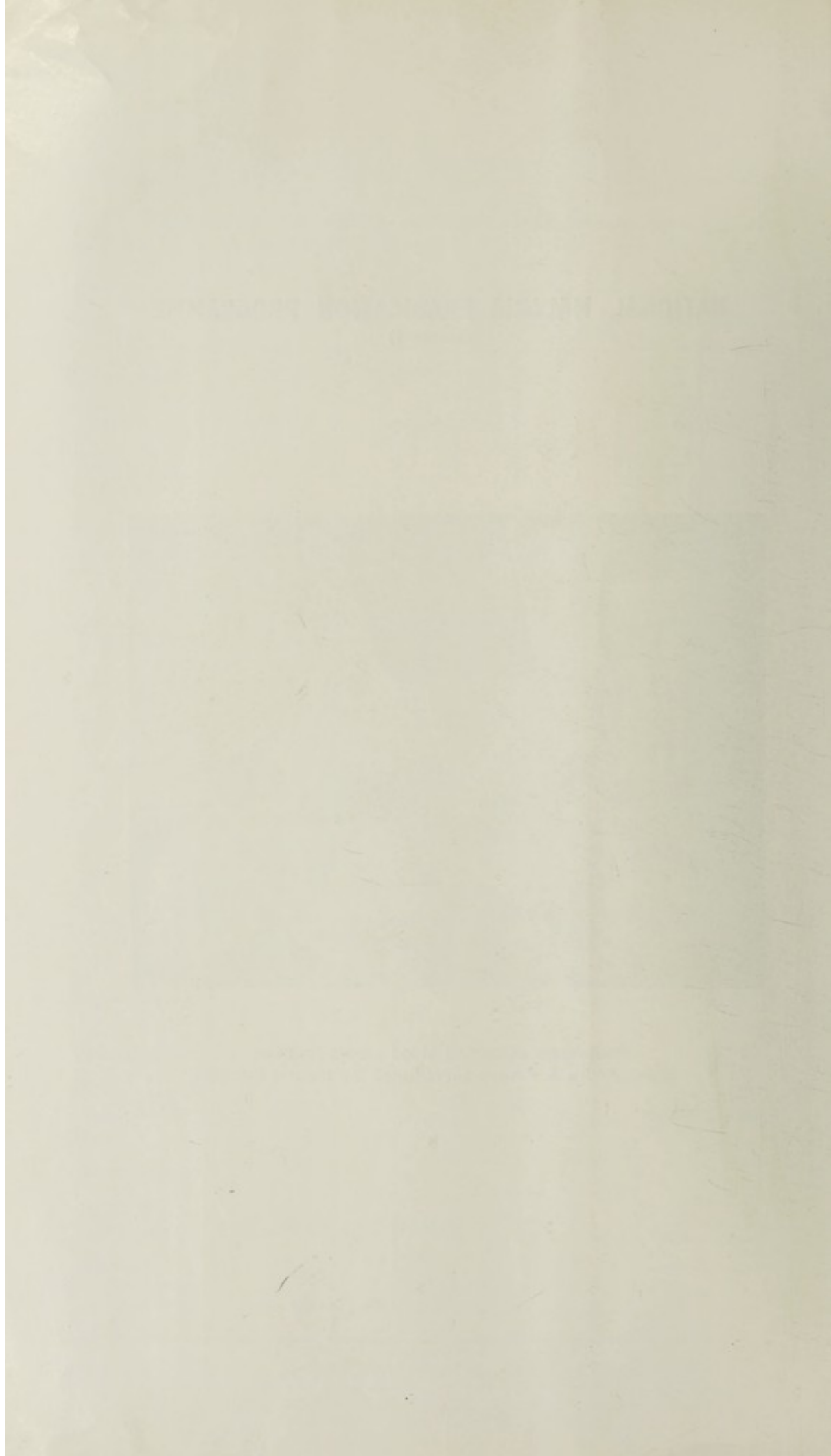
The following table gives the particulars of supplies received as Central Aid during the period of 1955 to 1963 :—

	1955	1956	1957	1958	1959	1960	1961	1962	1963
<i>Equipments :</i>									
Trucks ...	2	...	...	...	...	...	...	...	...
Power Sprayers	1	...	...	...	...	...	...	...	...
Hand Compression sprayers.	12	...	...	...	...	...	...	...	...
Stirrup Pumps.	30	...	...	21	...	...	...	...	...
<i>Drugs :</i>									
Resochin	740	...	...	...	...	...	...	...	...
Nivaquine	1,000	...	...	...	...	13,000	14,000	...	...
Avlochloro	...	...	10,000	...	...	...	...	...	...
Chloroquine	...	...	...	...	...	21,500	30,000	2,000	...
Amodiaquine	...	...	...	...	...	...	40,000	49,000	35,000
Primaquine	...	...	...	...	...	3,000	50,000	...	...
Aralen	...	...	...	...	...	...	...	30,000	25,000
<i>Insecticides :</i>									
DDT 75% wettable.	139000	75,422	30,099	20,500	...	...	...	...	...
Dieldrin 50% wettable	600	1,000	400	...	...	...	...	...	...

NATIONAL MALARIA ERADICATION PROGRAMME (Laboratory)



Technicians examining blood-smears received
under Active & Passive Surveillance for Malaria Parasites.



Issues of the items received as above are shown below :

	1955	1956	1957	1958	1959	1960	1961	1962	1963
<i>Drugs :</i>									
Resochin	...	740	...	...	...	...	...	...	...
Nivaquine	793	207	...	...	...	13,000	14,000	...	...
Avlochlor	...	...	925	806	759	7,200	...	...	...
Chloroquine	...	...	...	...	...	21,500	30,000	1,000	...
Amodia- quine	...	...	...	...	...	...	36,000	49,000	35,000
Primaquine	...	...	...	...	...	135	1,058	2,000	...
Aralen ...	...	...	...	...	...	...	...	21,000	31,000

Other Activities :

Laboratory studies were regularly carried out to find out the mortality rate of mosquitoes caught from different parts of the City.

Conclusion :

The National Malaria Eradication Programme was carried out in an intensive scale during the year as per pattern laid down in the All-India Programme. The entire population of City was afforded protection by covering all the breeding places under Anti-larval measures. The passive Surveillance was very much enlarged. The Surveillance Organisation detected 4 hidden cases of Malaria under Active and Passive Surveillance. The percentage of Malaria cases seen showed a steep decline from 0.0007% in the 1962 to 0.0001% in 1963. All these reservoirs of infection were liquidated by radical treatment. By a combination of Anti-larval measures and active and passive surveillance a long step has been taken towards achieving complete eradication of Malaria.

The Eradication of Malaria will be achieved within the stipulated period.

SANITATION

The essence of Public Health Administration lies in the recognition of the importance of sanitation and conservancy identically and create healthy surroundings to enrich human life and make civilization happy. The above responsibilities were taken up by late Dr. B. V. Sundarababu, M.B.B.S., D.P.H. (Cal.) being the City Health Officer during 1963 also. On account of merging of Conservancy with sanitation and further decentralisation of District Administration and forming of Circle Offices with effect from 1st July 1963 the twin essentialities fell on the shoulders of Health Officer. Prior to the re-organisation of Circles the maintenance of sanitation in the City was entrusted to the 4 District Health Offices under the guidance of the Health Officer. Now, after the above change of administration of 10 Circle Offices each consists of 10 Municipal Divisions with a Circle Health Officer as an Administrative Officer for each the main task of maintenance of Sanitation and Conservancy was entrusted to them who were expected to carry out under immediate guidance and supervision of the City Health Officer.

Besides maintenance of sanitation and conservancy, the Circle Health Officers were entrusted with responsibilities of Registration of Births and Deaths, Control of Infectious Diseases, licensing of offensive and dangerous trades, upkeep of public Institutions and places, provision of Medical Aid and Prevention of Food Adulteration and Infectious diseases within their jurisdiction.

During the year 1963 after 1st July 1963 the following Circle Health Officers were mainly in-charge of Sanitation and Conservancy in addition to the above duties within that particular circle.

Circle No. I :

1. Dr. S. I. Madani, M.B.B.S.

Circle No. II :

2. Dr. I. Prahlad, M.B.B.S.,
(From 1—7—1963 to 10—8—1963, availed study leave from 11—8—1963.)
3. Dr. Gopichandran, M.B.B.S.,
(acted in the place of No. 2 from 12—8—1963 to the end of the year.)

Circle No. III :

4. Dr. K. Narayanamurthy, M.B.B.S., B.S.Sc., T.D.D.
(Deputed as Special Officer for N.S.E.P. (North) from 1—10—1963.)
5. Dr. Y. R. Ramachandra Rao, M.B.B.S.,
(Acted in the place of No. 4 from 9—12—1963 to the end of the year.)

Circle No. IV :

6. Dr. K. Rajasundaram, M.B.B.S.

Circle No. V :

7. Dr. S. M. Kalbiruddin, M.B.B.S., B.S.Sc.

Circle VI :

8. Dr. N. Dakshinamoorthy, M.B.B.S., B.S.Sc.
(Deputed as Special Officer for N.S.E.P. (South) from 1—10—1963.)
9. Dr. G. V. Ramakrishnan, B.Sc. M.B.B.S.
(acted in the place of No. 8 from 9—12—1963 to the end of the year.)

Circle No. VII :

10. Dr. I. Gopalakrishnan, B.A., M.B.B.S., B.S.Sc.

Circle No. VIII :

11. Dr. B. L. N. Raj, M.B.B.S., B.S.Sc.

Circle No. IX :

12. Dr. P. R. Krishnamoorthy, M.B.B.S., B.S.Sc., T.D.D., F.C.C.P.

Circle No. X :

13. Dr. T. C. Sankaravelayudam, M.B.B.S., B.S.Sc.

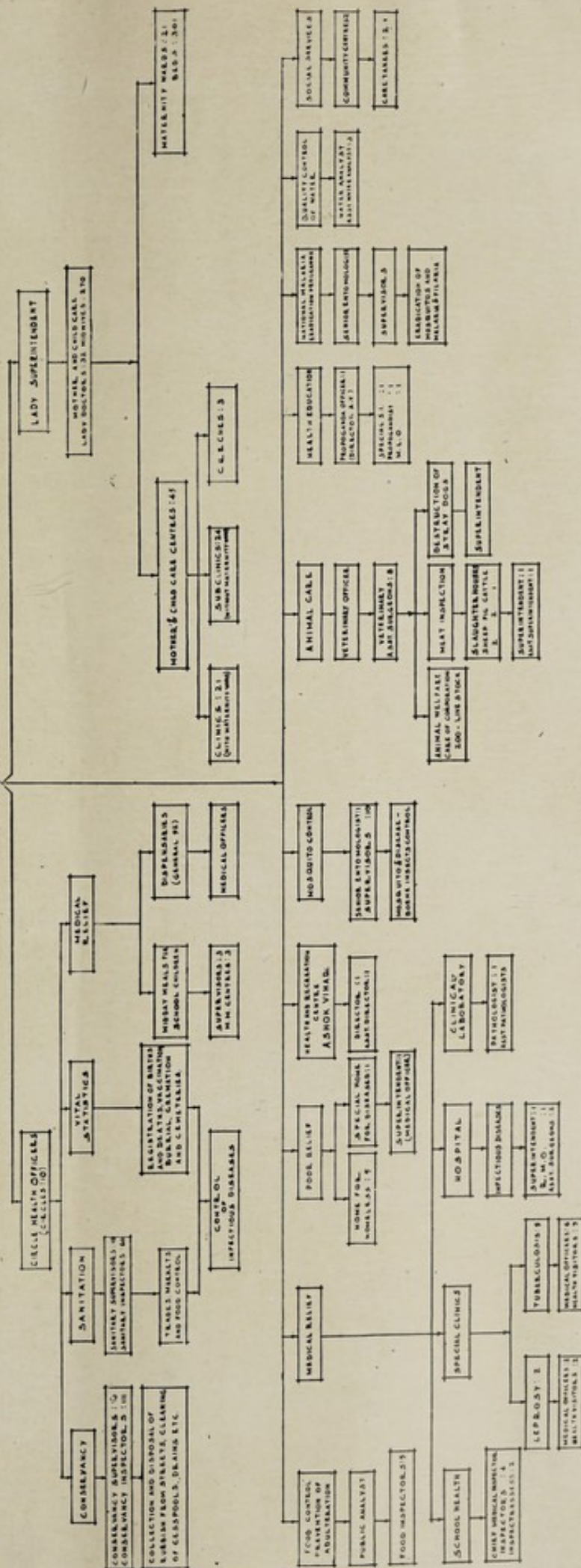
The Circle Health Officers with a team of Sanitary and Conservancy Supervisors, Inspectors, Markets Superintendents and other staff maintained general sanitation and conservancy at a satisfactory level within their circles. Registration of Births and Deaths, Prevention and Control of Infectious Diseases were taken up side by side with Birth and Death Registration Clerks, S.I. (Vs.), A.Vs. and I.A.Vs. The facilities of Medical aid through dispensaries were also rendered as usual.

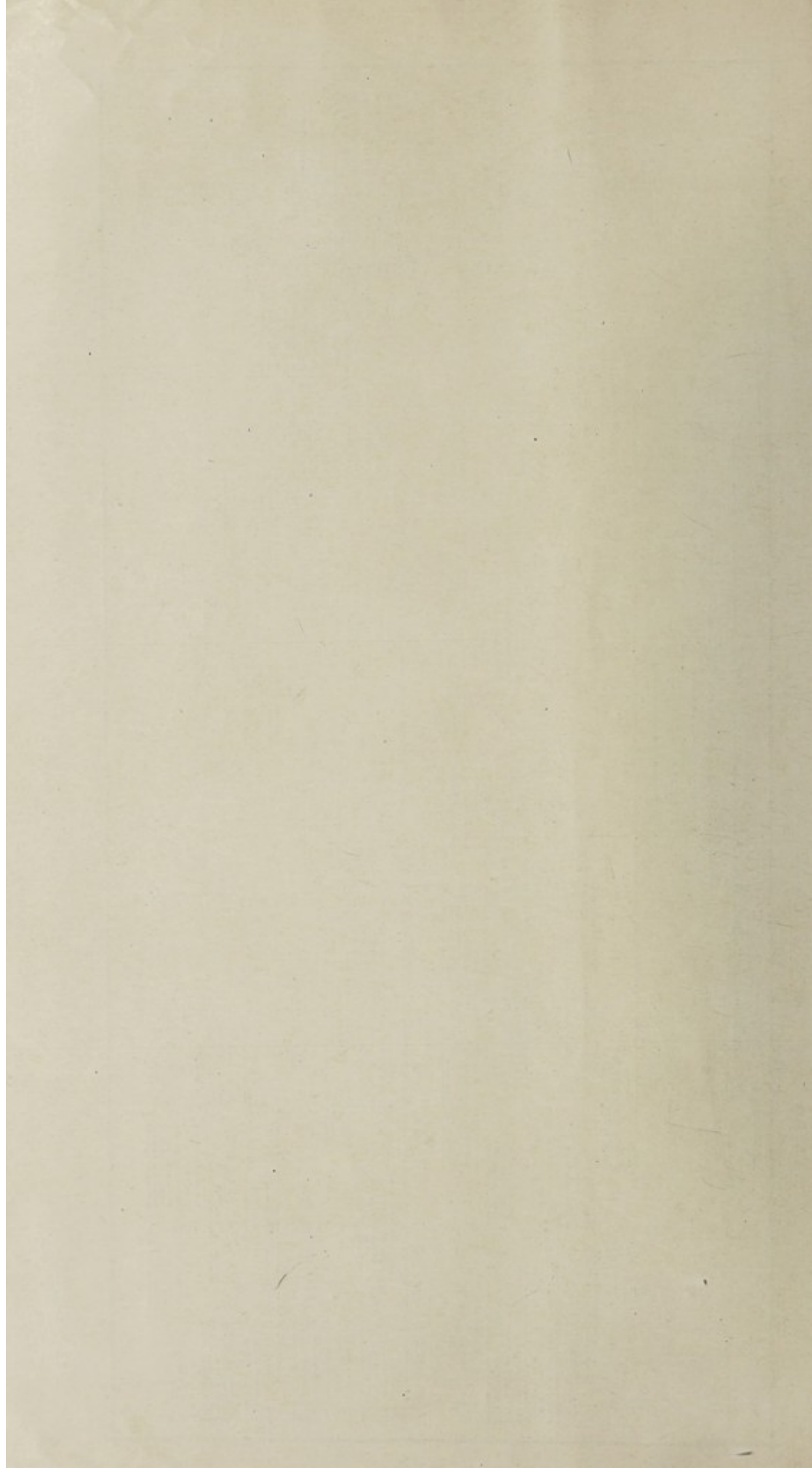
FOOD SANITATION

HOTEL SANITATION

	Circle Offices										
	First	Second	Third	Fourth	Fifth	Sixth	Seventh	Eighth	Ninth	Tenth	Total
1	Number of renewal applications received for licences for Food Handling Establishments under Section 279 of M.C.M. Act.										
2	299	357	315	351	277	473	354	306	246	406	3,384
3	298	355	311	350	269	404	354	292	241	373	3,247
4	1	2	4	1	8	69	...	14	5	33	137
5	...	...	...	...	...	...	...	...	...	...	...
6	11	25	20	8	12	29	16	13	1	8	143
7	11	24	20	7	10	29	16	11	1	5	134
8	...	1	...	1	2	...	...	2	...	3	9
9	...	...	...	...	...	...	...	...	...	...	...
10	7	20	12	8	20	19	43	21	12	30	194
11	7	54	35	9	18	19	57	62	35	55	351
12	64	104	78	125	69	106	74	61	57	107	845
13	...	1	3	32	17	...	26	4	9	44	135
14	177	150	186	120	119	145	136	161	127	119	1,440
15	7	14	1	4	3	21	24	14	4	9	101
16	...	5	...	...	...	...	...	...	...	...	5
17	2	31	7	1	3	9	55	18	6	2	134
	...	11	1	1	1	6	17	3	3	3	46

CHIEF HEALTH OFFICER





Prevention of Food Adulteration :

The day to day shooting up of the prices of the essential commodities of daily use is stimulating the dealers handling food stuffs in adulterating at various stages till it reaches the consumer. Especially in Big Cities like Madras the activities of Food dealers indulging in adulteration could not be successfully eradicated in spite of combined efforts of executive and administrative staff. Sampling of food stuffs is being increased in sampling milk brought and sold in the City from various sources in order to put an end to the practice to adulteration which is at the increase. Eventhough the percentage of adulteration came down to 23.2 during the year from 54.8 of 1952, no slackening of efforts in deducting adulteration and getting the offenders punished in the courts is made.

To enforce the Central Prevention of Food Adulteration Act, 1954 strictly in the City, the powers were delegated to the Health Officer, 10 Circle Health Officers, 50 Sanitary Inspectors in addition to the 5 whole time Food Inspectors under the act to do duties of the Food Inspectors. During the year under report 7,669 samples were taken under the provisions of Prevention of Food Adulteration Act, 1954. Besides usual items of Milk, Butter, Ghee, Oils, Coffee and Tea number of samples of other items such as Dhall, Turmeric, Mida, Chillies powder, Asafoetida, Honey, Food colours, Wheat (Samba), Arrowroot, Ravai, Sweetcake (prepared food), Kesari powder, Jaggery, Masoor and Aerated waters were also taken for analysis.

The Food Analysis Laboratory which is equipped with latest apparatus and manned by efficient Public Analyst and Assistant Analysts was fully utilised in getting the samples analysed in quick time to satisfy the courts for successful prosecution of the offenders.

MILK SANITATION

S. No.		Circle offices																												
		First	Second	Third	Fourth	Fifth	Sixth	Seventh	Eighth	Ninth	Tenth																			
		P. A. M.	P. A. M.	P. A. M.	P. A. M.	P. A. M.	P. A. M.	P. A. M.	P. A. M.	P. A. M.	P. A. M.																			
1	Number of applications received for licences for milk trade under Sec. 299 of the M.C.M. Act	76	1	0	78	4	126	...	...	51	1	...	39	2	...	20	...	44	2	...	56	3	1	42	2	...	2	48	6	2
2	Number recommended	67	1	...	57	4	118	...	...	44	1	...	37	2	...	18	...	35	2	...	45	3	1	41	2	...	2	30	1	2
3	Number refused	9	...	...	21	...	8	...	...	7	...	...	2	...	...	2	...	9	...	...	11	...	...	1	...	...	...	18	5	...
4	Number pending	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
5	Number of licenced milk-men	76	...	...	84	...	44	...	...	70	...	...	55	...	...	18	...	5	...	...	73	...	...	140	...	...	...	68	1	...
6	Number of licences renewed for old depots other than those of Madras Co-operative Milk Supply Union	40	1	...	48	...	61	...	...	19	2	...	35	1	...	14	2	26	...	...	43	3	1	18	1	...	18	...	...	2
7	Number of new milk depots opened by the Union during the year	5	...	...	4	...	11	...	...	3	...	...	2	...	...	2	...	8	...	...	2	...	...	...	...	...	1	...	...	...
8	Number of un-licensed milk depots	7	1	...	33	...	70	...	...	23	...	...	29	1	...	16	...	4	22	1	...	42	3	1	17	1	...	15	...	2
9	Number of notices for effecting improvements issued in respect of item 9	...	...	...	8	...	...	...	...	5	...	...	...	...	...	...	...	3	...	...	5	...	...	...	...	...	...	...	...	...
10	Number prosecuted for non-Compliance	...	...	...	10	...	16	...	...	3	...	...	...	...	...	...	...	3	...	...	7	...	...	...	...	...	...	1	...	...
11	Number improved and made fit for licensing	...	...	...	7	...	23	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...
12	Number closed as a result of action taken	2	...	...	1	...	...	...	...	1	...	...	...	...	...	...	...	2	...	...	2	...	...	...	...	...	...	...	...	...

P=Private

A=Ayanavaram

M=Madhavaram

Market Sanitation

In thickly populated City, the Markets usually become targets of infection and transmission of diseases to its citizens through various sources, such as, sale of rotten and decomposed food stuffs, insanitary conditions, etc. During the year, more care was taken to maintain better sanitation in both public and private markets in the City by intensifying the deflying measures, quick provision of improvements and rectification of defects, etc.

Public Markets

The uproaring public demand for better marketing facilities with improved facilities in order to procure good food stuffs under hygienic conditions compelled the Civic authorities to construct additional markets during the year. The proposals for construction of the following markets were finalised, besides maintenance of the existing 12 markets owned by the Corporation. The construction work at Egmore was almost completed and expected to be thrown open for the public use during next year.

<i>S. No.</i>	<i>Division No.</i>	<i>Circle No.</i>	<i>Location</i>
1	2	I	Devaraja Gramani Fisherman Colony, Tondiarpet. (Fish Market will be constructed with the aid of Government).
2	23	III	Parthasarathy Pillai Street, Washermanpet.
3	54	VI	Vaidyanatha Mudali Street, Chetput.
4	67	VII*	Egmore High Road, Egmore.
5	87	IX	Raja Annamalaipuram.

The undermentioned 12 existing markets are under Supervisory Control of a Market Superintendents or the Divisional Sanitary Inspectors who are responsible for the upkeep of the markets.

<i>S. No.</i>	<i>Division No.</i>	<i>Circle No.</i>	<i>Location</i>
1	29	3	Dr. Malliah Market, 96, Walltax Road.
2	40	4	Smith Field Market, Kalathiappa Mudali Street and Rotler Street, Choolai.
3	45	5	Ayanavaram Market, Market Street, Ayanavaram.
4	51	6	Shenoy Nagar Market, Shenoy Nagar.
5	52	6	Market at the junction of Mc Nicholl's Road and Taylors Road.
6	53	6	Jaganathapuram Market, Jaganathapuram, 3rd Street, Chetput.

<i>S. No.</i>	<i>Division No.</i>	<i>Circle No.</i>	<i>Location</i>
7	64	7	Fruit Market, N.S.C. Bose Road.
8	64	7	Moore Market, Poonamallee High Road.
9	80	8	Nadukuppam Market, Madukuppam, Triplicane.
10	93	10	T.Nagar Vegetable Market, 61-A, Theagaraya Road.
11	93	10	T.Nagar, Mutton Market, 39, Theagaraya Road.
12	98	10	Razaack Market, 14/6, Bazaar Road, Periapet, Saidapet.

(In addition to these there is a pavement vegetable market on the western side of Panagal Park, T.Nagar, Division No. 93.)

Private Markets

To augment the marketing facilities to its citizens, the Corporation had allowed 50 markets owned by Private persons to cater to the needs of the public in addition to the public markets. A license, is being issued to run such a market under the M.C.M. Act after satisfying the conditions laid down therein. During the year, before licenses were granted or renewed, the Corporation Health Officers and Sanitary Inspectors in-charge inspected the markets and suggested improvements and provision of essential amenities and got them carried out by the owner.

Besides annual inspection of these markets, the divisional Sanitary Inspectors visited them by surprise periodically and insisted upon the contractors or owners as the case may be to rectify the defects noticed then and there.

The Private Markets functioned during the year 1963 in the City are given below :—

<i>S. No.</i>	<i>Division No.</i>	<i>Circle No.</i>	<i>Name and Location of Market</i>
1	1	1	New Washermanpet Market, 322, T.H. Road.
2	1	1	Tondiarpet Market, 11, Thandavaraya Gramany Street.
3	3	1	Kalmandapam Market, 13/12, Kalmandapam Road, Royapuram.
4	5	1	Old Washermanpet Market, 5/6, Venkatakrishna Street, Old Washermanpet.
5	6	1	Pichandi Nadar Market, 82/83, Narasier Street.
6	8	1	Royapuram Market, 16, Mannarswamy Koil Street.

<i>S. No.</i>	<i>Division No.</i>	<i>Circle No.</i>	<i>Name and Location of Market</i>
7	13	2	Macdonald Market, 67, Sengalaneer Pilliar Koil Street, Muthialpet.
8	14	2	Olakadai Market, 180, Angappa Naicken Street.
9	15	2	Mannady Market, 89/90, Mannady Street.
10	17	2	Seven Wells Market, 111, Govindappa Naicken Street.
11	18	2	Chengam Bazaar Market, 84/85, Nattu Pilliar Koil Street.
12	19	2	Kothawal Market, 1, Audiappa Naicken Street.
13	25	3	Kondithope Market, 32, Peddu Naicken Street.
14	44	3	Othavadai Market, 22/2, Toll Gate, Othavadai Street.
15	31	4	Lakshmi Market, 5, Selvavinayagar Koil Street.
16	32	4	Vyasarpadi Market, 15-E, Erukancheri High Road.
17	34	4	Otteri Market, 120-B, Strahans Road.
18	36	4	Demellows Market, 124, Demellows Road, Pattalam.
19	39	4	Choolai Market, 37, Vijayavigneswarar Koil Street.
20	41	5	Jamal Mohideen Market, 115, Market Street, Sembiam.
21	41	5	Balachandra Chetty Market, 49, Market Street, Sembiam.
22	42	5	Abdul Khader Market, 17/125, Madavaram High Road, Perambur.
23	48	5	Kandaswamy Koil Trust Market, 3, Pudu Street, Kosapet.
24	51	6	Aminjikari Market, 329, Poonamallee High Road.
25	54	6	Nungambakkam Market, 17, Village Road.
26	55	6	Kodambakkam Market, 54, Kodambakkam High Road
27	57	6	Thousand Light Market, 47, Mount Road.
28	62	7	Purasawalkam Market, 27, Purasawalkam High Road.
29	64	7	K.A.C. Market, 314, Wall Tax Road.
30	64	7	Ellamman Devasthanam Market, Narayana Chetti Street, Periamet.
31	66	7	Chintadripet Market, 17, Arunachala Naicken Street.

<i>S. No.</i>	<i>Division No.</i>	<i>Circle No.</i>	<i>Name and Location of Market</i>
32	67	7	Egmore Market, 92, Egmore High Road.
33	68	7	Connemara Market, 32, Harris Road.
34	71	8	Moulana Market, 730, Triplicane High Road.
35	72	8	Moosa Sait Market, 90, Venkatesa Naicken Street.
36	76	8	New Janda Market, 291, Triplicane High Road.
37	76	8	Zam Bazaar Market, 439/441, Pycrafts Road.
38	78	8	Mirsahibpet Market, 184, Venkatachala Mudali Street.
39	78	8	"Sultan" Market, 15, Royapettah High Road.
40	81	9	Azeez Market, 71, Mount Road. Teynampet
41	82	9	Thannithorai Market, 75, Royapettah High Road.
42	84	9	Mylapore Market, 80, Mylapore Bazaar Road.
43	86	9	Mandavalli Market, 65, Mandavalli Street.
44	88	9	Balasubramaniam Market, 11-A, Eldoms Road.
45	89	9	City Improvement Trust Market, Foreshore, Shore Estate, Santhome High Road, Raja Annamalai-puram.
46	90	9	Arunachalapuram Market, Arunachalapuram, Adyar.
47	92	10	Vadapalani Andavar Market, 141, Arcot Road.
48	92	10	Trustpuram Market, Trustpuram, Kodambakkam.
49	96	10	Kasiviswanathar Devasthanam Market, 40-L, Eswaran Koil Street.
50	98	10	Karneeswarer Devasthanam Market, 5/6, Jeenis Road.

Destruction of Unwholesome Food Stuffs

During the year under review periodical drives against the vendors found offering for sale unwholesome and rotten foodstuffs exposed to dust and flies were organised by the Divisional Sanitary Inspectors within their jurisdiction. During their daily rounds the Sanitary Inspectors used to clear these vendors when found in front of Markets, Schools, Pavements and important junctions by destroying the foodstuffs sold by them. In addition to this regular raids by drawing advanced programmes were also conducted during the year.

The various foodstuffs, seized and destroyed by the Sanitary Staff during the year in each Circle are furnished.

S. No.	Particulars of Foodstuffs	Circle Offices										Total	
		First	Second	Third	Fourth	Fifth	Sixth	Seventh	Eighth	Ninth	Tenth		
1	Vegetables	...	425	626	1,082	7	340	708	306	2,080	312	605	6,491
2	Fruits	...	420	484½	909	1,329	73	843	309	545	70	900	5,882
3	Meat	...	17½	...	178	165	...	200	24	75	60	120	899
4	Fish Dried	...	15½	...	5	2	20	600	...	295	12	...	949
5	Fish	...	106½	15	475	245	121	98	71	555	105	230	2,021
6	Iddlies, Vadai, etc.	...	115	165	325	1,176	119	10	420	...	65	563	2,958
7	Syrup	...	...	185	205	7	10	224	...	310	...	30	971
8	Carcasses	...	...	...	20	...	...	...	...	...	...	...	20
9	Tea and Coffee (in kettles)	...	...	101	...	...	15	...	...	...	...	...	116
10	Other articles	...	164	605	389	1,288	336	431	478	862	328	1,192	6 073

Slaughter Houses and Meat Hygiene

The Slaughter houses are important institutions in the Public Health Organisation. Meat Hygiene is one of the important aspects of Veterinary Public Health. The Primary object of meat hygiene is to prevent transmission of diseases from animals to human beings through meat and to provide save and wholesome meat and its products for human consumption.

At present with the limited facilities provided at the existing Slaughter Houses, efficient meat inspection is maintained with great difficulty.

In order to provide greatest modern facilities for more efficient inspection, a scheme for modernisation of the Slaughter Houses as advised by F.A.O. expert on Slaughter Houses was prepared and sent to State Government. They recognised the necessity for such modernisation and recommend the same to the Union Government for necessary financial aid. Orders and further instructions from the Government are still awaited.

The under mentioned five existing Slaughter Houses maintained by the Corporation continued to function under the supervision of the Veterinary Surgeons.

1. Cattle Slaughter House ... 1 at Perambur.
2. Sheep Slaughter House ... 1 at Perambur and 1 at Saidapet.
3. Pig Slaughter House ... 1 at Perambur and 1 at Saidapet.

The Superintendent, Slaughter Houses was assisted by one Veterinary Assistant Surgeon and one Conservancy Inspector during the year. The Meat Inspection was carried out only by the Superintendent or his Assistant. After ante-mortem and post-mortem examinations, the inspected carcasses were stamped with indelible ink before passing out as fit for human consumption.

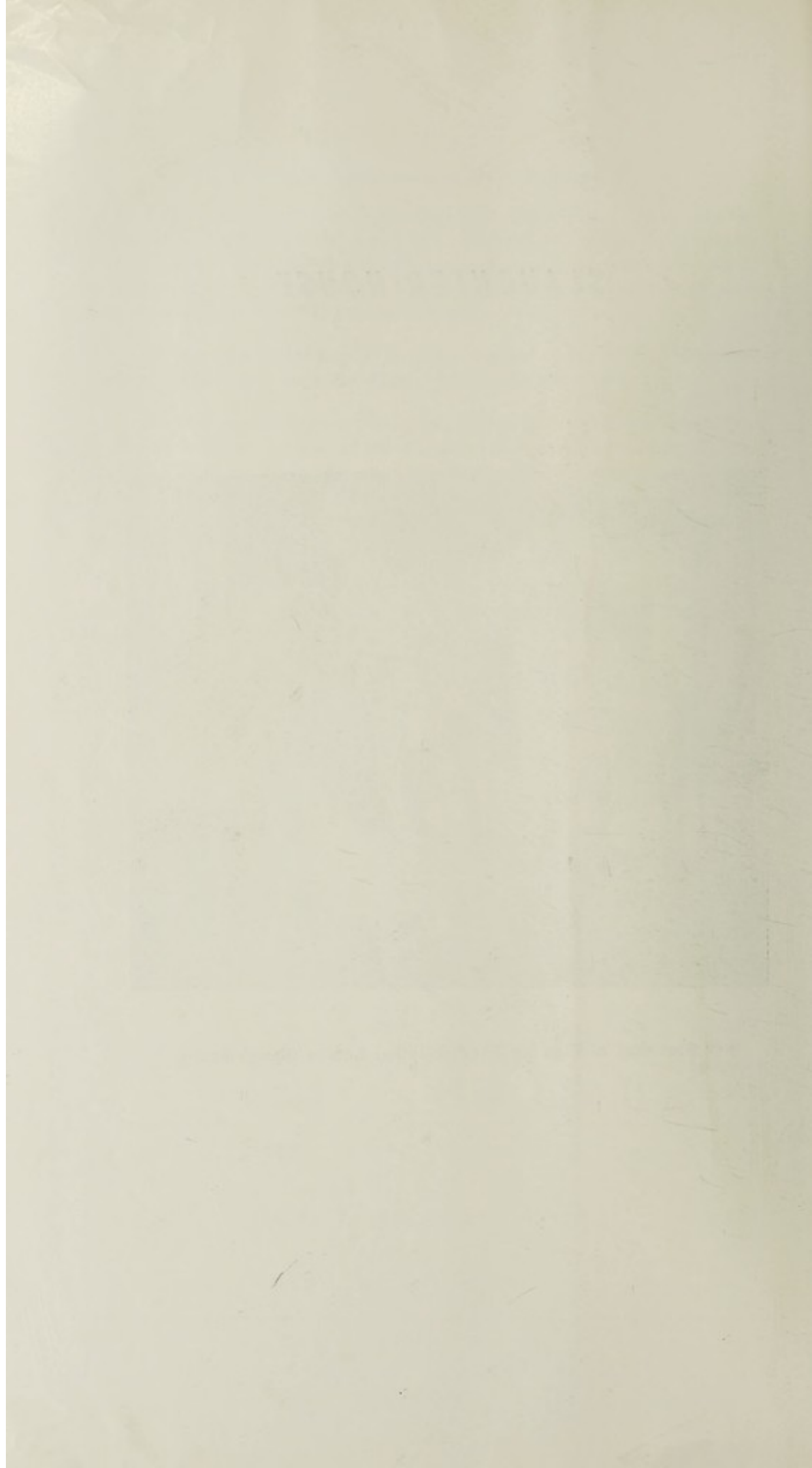
The details of Meat Inspection done in all the Slaughter houses during the year 1963 are as follows :—

Kind of animals slaughtered	No. of animals brought for slaughtering for inspection	No. of dis-allowed on ante-mortem	Number of animals actually slaughtered	No. of carcasses rejected after Post-mortem		No. of organs condemned
				Whole carcasses	Portions	
Cattle	... 30,501	2,757	27,774	...	362	6,807
Sheep & Goats.	... 4,94,327	1,184	4,93,143	27	...	7,965
Pigs	... 3,572	...	3,572	...	...	581

SLAUGHTER HOUSE



" Stunning of Pigs by Electro-lethal before Slaughtering.



The fees collected towards Meat Inspection Certificates for the Export of Beef during the year was only Rs. 5 (Five only) as the export was stopped.

As in the previous years, during this year also students from Medical Colleges and other Institution in the City and outside also visited the Slaughter Houses. They were given all facilities to study the working of Slaughter houses and short lectures were given to them on meat hygiene with practical demonstrations in "Meat Inspection".

During the year the students from the Veterinary College were regularly attending the slaughter houses in the evenings in batches accompanied by the concerned lecturers for classes in Meat Hygiene and genetics Flaying classes, for butcher boys, Live-Stock Inspectors and Block Development Officers from the Districts, were also conducted by the State Animal Husbandry Department.

Blood Meal

Blood meal manufacturing Centre at Kodungaiyur was working as in the previous years. Dried Blood Meal was sold during the year for Rs. 2,000 and the balance stock of 25 tons was kept ready for disposal. The collection of fresh blood by some of the Pharmaceutical firms was permitted on payment of charges and thus during this year an amount of Rs. 11,200 was realised.

Pig raids were conducted in the City and 20 pigs were caught. They were slaughtered and pork auctioned. The amount realised during 1963 was Rs. 235.

Raids were also conducted for detecting unstamped mutton in the stalls and also at unwholesome food stuffs sold in the road side bazaars in the various parts of the City which were removed in the Raid van and destroyed.

The Slaughter houses at Saidapet was reconstructed at a cost of one lakh as a model slaughter house with more facilities and modernisations for efficient meat inspection. The work is nearing completion and the same will be put in use in a short time.

During the year a scheme for the fallen animals in the City, i.e., intensive flaying of dead animals in the City was approved and arrangements for the necessary construction of buildings at Kodungaiyur Blood Meal Centre were in progress. The scheme is financed by the State Khadi Village Cottage Industries Board. It is hoped that the scheme will start functioning during 1964.

MEAT INSPECTION

S. No.		Circle Offices										Total
		First	Second	Third	Fourth	Fifth	Sixth	Seventh	Eighth	Ninth	Tenth	
1	Number of Private Mutton Stalls at the beginning of the year ...	7	11	16	15	22	23	14	11	17	18	154
2	Number of Mutton Stalls opened during the year ...	...	...	3	3	2	3	1	1	...	2	15
3	Number of Beef Stalls at the beginning of the year ...	2	6	3	14	4	9	4	5	7	8	62
4	Number of Beef Stalls opened during the year ...	...	...	1	2	...	...	1	...	...	...	4
5	Number of Pork Stalls at the beginning of the year ...	...	...	...	...	...	...	...	...	...	...	...
6	Number of Pork Stalls opened during the year ...	...	...	...	...	...	...	...	...	...	...	...
7	Number of unstamped carcasses seized ...	...	...	...	1	...	...	...	...	...	50	51
8	Number of cases of illicit slaughter detected ...	...	...	...	...	...	...	...	...	...	...	...

HOUSE INSPECTION

S. No.		Circle Offices										Total
		First	Second	Third	Fourth	Fifth	Sixth	Seventh	Eighth	Ninth	Tenth	
1	Number of houses inspected as a routine measure.	3,073	2,766	2,128	1,348	2,142	3,983	2,160	3,174	2,590	4,420	27,784
2	Number of houses inspected on complaints made.	105	171	62	57	133	116	135	110	228	171	1,288
3	Average Number of houses inspected per mensem.	262	239	176	114	184	320	174	278	224	363	2,334
4	Number of houses found untenanted ...	1	9	12	54	132	...	...	48	...	12	268
5	Number of houses found defective for want of protected water supply.	...	25	25	6	33	5	...	57	...	22	173
6	Number of houses found defective for want of ventilation	48	38	67	37	44	27	...	15	8	9	283
7	Number of houses found defective for want of proper drainage arrangements.	54	39	76	139	195	44	4	70	19	64	704
8	Number of houses found defective otherwise.	406	197	71	118	146	117	109	53	88	140	1,445
9	Number of notices issued for rectification of defects.	508	327	214	178	151	220	112	181	92	220	2,203
10	Number prosecuted for non-compliance.	36	17	9	36	41	5	9	7	13	11	184
11	Number of houses repaired as a result of action taken.	340	224	164	169	153	215	103	152	69	201	1,790

LATRINE ACCOMMODATION

S. No.		Circle Offices										Total
		First	Second	Third	Fourth	Fifth	Sixth	Seventh	Eighth	Ninth	Tenth	
1	Number of houses found without any latrine.	...	...	61	153	38	41	...	20	22	153	488
2	Number of notices issued in respect of item No. 1.	...	...	61	8	31	41	...	20	22	153	336
3	Number of houses provided with latrine accommodation as a result of action taken.	...	...	56	5	16	30	...	12	22	153	294
4	Number of houses found defective for want of adequate latrine accommodation.	28	5	22	10	42	...	...	13	9	6	135
5	Number of notices issued in respect of item 4.	28	5	22	10	42	...	...	12	19	6	144
6	Number of houses provided with additional latrine accommodation as a result of action taken.	28	5	18	6	40	1	...	6	4	4	112
7	Number of houses in sewerred areas without F.O.Ls.	...	...	29	102	103	...	7	35	31	5	312
8	Number of notices issued for conversion of masonry latrines into F.O.L.	...	...	29	2	42	10	7	36	16	5	147
9	Number of houses wherein the masonry latrines were converted into F.O.Ls. as a result of action taken.	...	...	27	2	30	6	7	30	15	5	122

CESSPOOLS

S. No.		Circle Offices										Total
		First	Second	Third	Fourth	Fifth	Sixth	Seventh	Eighth	Ninth	Tenth	
1	Number of houses with cesspools	1,799	...	137	1,670	1,103	92	...	337	91	9,941	15,170
2	Number of houses without cesspools	...	...	34	268	160	...	...	435	2	781	1,680
3	Number of notices issued in respect of item No. 2.	...	...	34	2	26	...	...	26	2	23	113
4	Number of houses provided with cesspools as a result of action taken.	...	...	34	2	26	...	...	24	2	23	111
5	Number of notices issued in respect of inadequate cesspools.	...	...	11	...	11	...	...	3	...	4	29
6	Number of houses provided with enlarged cesspools as a result of action taken.	...	...	11	...	11	...	...	3	...	14	39

Home for Homeless

The 5 Model Homes for homeless people provided by the Corporation in different localities of the City are continued to be supervised by the Health personnel to ensure Sanitary conditions. The above homes are intended to accommodate persons coming from Rural areas in search of jobs or livelihood in the City and that too, for a few days.

The detail information of these homes are given below :—

S. No.	Dn. No.	Circle No.	Location of the time	Accommodation available	Strength maintained
1	13	2	Ebrahimjee Sahib Street ...	50	142
2	27	3	131, Wall Tax Road ...	26	26
3	52	6	Halls Road ...	260	200
4	63	7	Peoples Park behind Zoo ...	100	100
5	70	7	Ritchie Street ...	54	88
6	80	8	Gajapathi Lala Street.	50	76

Dhobikhanas

The need for provision of more Dhobikhanas in the City was felt in the recent years due to enormous increase of population year by year and lack of facilities and water supply. During the year, the newly constructed Dhobikhanas at Pudu Nagar, Ayanavaram and Abdul Razack Street, Saidapet were completed and thrown open for the use of the Dhobies, but the Dhobikhanas at Saidapet could not be used for want of water supply. Besides these, the eight existing dhobikhanas were also improved. In all, the dhobikhanas facilities for washing, drying, storing and ironing were provided in addition to other amenities such as lighting, F.O.Ls. drinking water taps, etc.

The Dhobikhanas were placed under the supervision of the concerned Divisional Sanitary Inspectors except those in Chetput where a Superintendent was appointed and entrusted with the work of collection of rents as well as maintenance of sanitation.

The particulars of location and number of stones provided in each Dhobikhana in the City are furnished below :—

S. No.	Dn. No.	Circle No.	Location	Number of stones provided
1	1	1	Buchiammal Street	40
2	1	1	Irusappa Maistry Street	42
3	9	1	Robinson Park, Cemetery Road	42
4	35	4	Ekangipuram 1st Street	6
5	44	5	Pudu Nagar, Ayanavaram	16
6	48	5	Conronsmith Nagar	52
7	54	6	McNichols Road, Chetput	122
8	54	6	Pilliar Koil Street, Chetput	36
9	82	9	Apparsamy Koil Street, Mylapore.	22
10	98	10	*Abdul Razaack Street.	...

* Not functioning due to lack of water supply.

Protected Water Supply

As usual the supply of protected water to the citizens continued during 1963 also. The newly constructed filtering and distribution centre at Robinson Park to increase the water supply especially to areas in the North could not be commissioned for want of overhead storage tank which is under construction.

The supplies of protected water was checked at various stages of distribution by taking and analysing samples at water Analysis Laboratory at Kilpauk. The people residing in slums and extended areas were also supplied with protected water with the help of lorries and storage steel and machinery tanks provided for the purpose.

Public Fountains

Circle No.	Public Fountains	Bathing Fountains	Cattle Troughs	Overhead Tanks	Public Conveyances
I	434	3	1	2	39
II	187	...	3	2	15
III	312	13	2	2	27
IV	452	18	5	10	55
V	668	3	...	1	41
VI	274	19	1	2	30
VII	262	14	10	10	36
VIII	127	62	...	5	22
IX	52	10	1	2	23
X	659	6	2	20	42
Total ...	3,427	148	25	56	330

Swimming Pools

The two Swimming Pools situated at Marina Beach and People's Park continued to facilitate the young in learning swimming with the help of the instructors posted there for the purpose. In order to meet the demand, proposals for construction of another swimming pool at Shenoy Nagar was also approved and construction was taken up during the year.

Sewers and F.O.Ls.

The construction and maintenance of sewers and F.O.Ls. in the City continued to be under the control of the Special Engineer, Corporation of Madras. During the year under review 19.91 miles of additional sewers were laid as against 13.08 miles of last year. Totally 1,05,136'—0" miles of City roads were sewered till the end of the year 1963.

The particulars of places and length of additional sewers laid during the year are given below :—

S. No.	Dn. No.	Circle No.	Name of Drainage Centre	Length of Sewers laid (in feet)
1	Tondiarpet	7,558—0
2	Law College	719—0
3	Cochrane Basin	622 0
4	Purasawalkam	5,018—0
5	Sembiam	6,894—0
6	Ayanavaram	1,182—0
7	Chetput	3,016—0
8	Kilpauk	2,040—0
9	Shenoy Nagar	4,274—0
10	Napier Park	265—0
11	Ice House	2,565—0
12	Greames Road	1,230—0
13	North Mylapore	1,658—0
14	South Mylapore	12,396—0
15	Thyagaraya Nagar	1,109—0
16	Kodambakkam	43,973—0
17	Saidapet	10,617—0
Total				1,05,136—0

HEALTH EDUCATION AND PROPAGANDA

Health Education and Propaganda work in the City continued to be under the Health Propaganda Officer Dr. P. S. Sambandam, Director, Ashok Vihar.

Staff:

1. Technician.
2. Propagandist.
3. Assistant.
4. Van Driver and
5. Van Cleaner.

During the year under review, monthly advance programme of Health Education and Propaganda were sent to the Hon'ble Divisional Councillors. About 30 to 40 divisions were covered each month. The health propaganda was done both in the mornings and evenings. Film shows were also exhibited in such of those divisions where A.C. electric current was available.

The talks on health Propaganda was given to the public through microphone on the following subjects: Malaria, Small-pox, Cholera, Typhoid, Domestic and environmental Hygiene and general sanitation. The tape recorder was also used in the propaganda work.

Many of the Hon'ble Councillors of the divisions took part in the propaganda work and film shows and helped the propaganda staff in their work.

The van which was sent to the lorry station for brake test on 1st January 1963 was returned only on 4th March 1963. In addition to the regular work in the divisions Special propaganda was arranged in connection with the following celebrations :—

- (1) Ashok Vihar Anniversary Celebrations from 10th to 12th July, 1963.
- (2) Anti-fly Week Celebration from 9th to 15th July, 1963.
- (3) W.H.O. Day Celebration from 29th July 1963 to 10th August 1963.
- (4) Small-pox Eradication Scheme from 30th August 1963 up to 31st December 1963.
- (5) Wild Life Week Celebration on 2nd October 1963.

S. No.	Month	Total Number of Division visited	Approximate Number of persons attended the health talks	Remarks	
		DIVISIONS	PERSONS		
1	January 1963	...	...	Van on break test.	
2	February 1963	...	...	Do.	
3	March 1963	...	26	1,000	...
4	April 1963	...	44	14,000	...
5	May 1963	...	47	16,000	...
6	June 1963	...	45	13,500	...
7	July 1963	...	28	9,000	...
8	August 1963	...	...	...	W.H.O. Day Celebration and Small-pox Eradication Programme.
9	September 1963	...	...	...	...
10	October 1963	...	...	...	W.H.O. Day Celebration and Wild Life Week on 2nd October 1963.
11	November 1963	...	...	...	Small-pox Eradication Programme.
12	December 1963	...	...	...	Do.

Film shows during the above period.

It was found that one van and one set of staff were very inadequate to perform the health propaganda work satisfactorily in all the 100 divisions of the City.

Each Circle should be provided with a van and a set of equipment and staff to organize street to street propaganda in each division.

It is becoming more and more important to educate the public especially the people residing in slums and hutting grounds, in Health and Social matters, in order to put an end to the spread of diseases. Under the guidance of the Hon'ble members and the authorities the propaganda work was carried out for the benefit of the citizens during the year.

Circle Offices

	First	Second	Third	Fourth	Fifth	Sixth	Seventh	Eighth	Ninth	Tenth	Total
1 Number of renewal applications received for old offensive trades (Section 287 of M.C.M. Act.)	643	795	900	707	478	...	679	622	675	1,161	7,494
2 Number of applications recommended	501	701	785	600	349	...	588	485	508	965	6,000
3 Number of applications refused	142	94	115	107	129	...	91	137	167	196	1,494
4 Number of applications pending	...	...	...	...	...	...	...	...	...	...	...
5 Number of new applications received for offensive trades (Section 287).	165	786	253	121	23	29	59	116	30	74	1,715
6 Number of new applications recommended.	95	634	138	54	18	16	41	56	10	52	1,148
7 Number refused for sanitary reasons other than the prohibition under the Public Health Act.	54	139	40	48	4	...	15	50	17	18	403
8 Number refused in view of the Prohibition under the Public Health Act.	16	13	75	19	1	13	3	10	3	4	164
9 Number of appeals preferred by the parties to the Standing Committee.	14	18	8	6	4	...	12	4	3	3	72
10 Number of appeals allowed by the Standing Committee.	5	7	5	2	2	...	9	2	2	3	38
a Number of appeals rejected by the Standing Committee.	8	11	3	4	2	...	3	2	1	...	34
11 Number of references made to the Council.	...	...	2	...	...	...	1	...	1	...	6
12 Number of cases in which the Council reversed the decision of the Standing Committee.	...	...	...	...	...	...	...	...	...	...	...
13 Number of cases in which the Council upheld the decisions of the Standing Committee.	...	...	2	...	...	...	3	...	1	...	6
14 Number in which the Council's decision was given effect to.	...	...	...	...	...	...	1	...	1	...	2
15 Number in which Government instructions or orders were sought in respect of Council's decision.	...	...	2	...	1	...	1	1	1	...	6
16 Number in which Government Orders were received.	...	...	...	...	...	...	...	...	1	...	1

The particulars of Prosecutions launched during 1963 under the Madras City Municipal Corporation Act,
Public Health Act and Prevention of Food Adulteration Act.

PROSECUTIONS LAUNCHED

S. No.	Dn. No.	Circle No.	Number of Prosecutions launched		Number of persons convicted					Number of persons Acquired		Number of Persons Admoished			Number of cases were Proceedings were stayed		
			M.C.M. P.H.A. P.F.A.	M.C.M. P.H.A. P.F.A.	Fine	M.C.M. P.H.A. P.F.A.	Imprisonment	M.C.M. P.H.A. P.F.A.	M.C.M. P.H.A. P.F.A.	M.C.M. P.H.A. P.F.A.	M.C.M. P.H.A. P.F.A.	M.C.M. P.H.A. P.F.A.	M.C.M. P.H.A. P.F.A.				
1	1—10	1	285	11	32	264	11	29	...	...	3	...	3	...	15	...	3
2	11—20	2	277	15	46	222	14	38	...	...	5	...	4	...	46	1	8
3	21—30	3	301	35	64	293	34	55	...	...	...	...	...	1	8	...	9
4	31—40	4	155	...	13	126	...	13	...	...	6	...	13	1	10	...	...
5	41—50	5	363	...	24	285	...	21	...	...	15	...	39	...	24	...	1
6	51—60	6	178	...	32	175	...	31	...	...	...	...	2	...	1	...	...
7	61—70	7	285	9	65	269	7	62	...	...	1	...	7	2	8	...	2
8	71—80	8	197	11	61	172	10	48	...	...	...	...	11	1	14	...	9
9	81—90	9	146	9	51	130	9	37	...	...	...	...	2	...	16	...	12
10	91—100	10	402	10	9	369	7	7	...	...	2	...	3	...	28	3	...
	Total	...	2,589	100	397	2,305	92	341	...	...	32	...	82	5	170	4	44

MISCELLANEOUS

S. No.		Circle Offices										
		First	Second	Third	Fourth	Fifth	Sixth	Seventh	Eighth	Ninth	Tenth	Total
1	Number of Laundries	78	73	80	84	95	112	113	99	101	161	996
2	Number of Hair Dressing Saloons	97	118	117	150	137	131	102	106	99	156	1,213
3	Number of Sweet Meat Stalls	16	25	29	18	8	9	23	17	9	10	164
4	Number of Firewood Depots	46	29	61	57	52	62	43	26	73	73	517
5	Number of Charcoal Depots	6	*36	26	20	18	26	39	14	26	14	225
6	Number of Charcoal and Firewood Depots.	23	10	8	14	58	36	18	26	62	67	322
7	Number of Aerated Water Factories	6	7	6	6	9	7	9	7	1	12	70

PORT SANITATION

As usual the maintenance of sanitation and water supply within the Port area was looked after by the Port Health Officer. Medical check up of passengers and crew was also conducted by him to detect and isolate infectious cases landed from vessels arrived at the Port during the year.

A brief report on the Sanitary work and Public Health precaution taken within the Port Area during the year by the Port Health Officer is also furnished below :—

(1) Out of 1,121 vessels arrived at this port during the year under review only 40 vessels with 3,335 crew and 5,141 passengers were inspected on arrival during the year. 10 cases of Chicken-pox and 1 case of mumps and two cases of measles were landed ex. 11 vessels and on arrival suitable measures were taken to prevent the spread of the disease.

(2) Out of 1,126 vessels leaving this port during the year under review only 396 vessels with 23,380 crew and 34,247 passengers were inspected at the time of departure for foreign countries.

(3) The personal effects of the infected crew and passengers and their contacts as well as 12 Bales, 43 Boxes, 82 cases, 20 packages, 19 drums and of imported second hand clothing intended for distribution were disinfected before release.

Bedding and clothing, etc., of 498 new crew were inspected and disinfected before articles were taken on board.

(4) Seamen's Provision of 42 vessels were inspected.

(5) 45 vessels were examined with regard to the Medical Stores kept on board, they were maintained according to the prescribed scales and wherever necessary suggestions were made to make good the shortage, if any.

(6) Imported food stuffs were inspected at the Port of Madras under the Prevention of Food Adulteration Act, 1954 and on request from the Traffic Manager, Madras Port Trust, in connection with unclaimed articles of food lying in their godowns before auctioning them for sale.

During the year, the following articles were inspected all of which were declared fit for human consumption :

	LBS.
1. Milk Powder	... 3,09,833
2. Cassia	... 7,720
3. Glucose	... 4,640
4. Chicory Powder	... 8,06,000
5. Horlicks	... 3,790
6. Raw Cashewnuts	... 2,15,760
7. Cloves	... 51,993
8. Ovaltine	... 2,742

		LBS.
9.	Olive Oil	2,314
10.	Nutmegs	3,173
11.	Lactogen	29,892
12.	Food Colours	11,719
13.	Agar Agar	146
14.	Gelatine Powder	36,487
15.	Maco	1,042
16.	Butter Milk Powder	15,558
17.	Condensed Milk	2,478
18.	Canned Food	168
19.	Milk Food (Baby)	8,578
20.	Sauce	624
21.	Yeast	2,240
22.	Asparagus	160
23.	Foreign Fish	156
24.	Cheese	1,542
25.	Cow & Gate Milk Food	41,418
26.	Nespray	6,337
27.	Extract Malt	6,11,320
28.	Acid Butter Milk Powder	7,606
29.	Bubble Gum Base	3,400
30.	Cinnamon Bark	47
31.	Sclatione Powder	418
32.	Milk Cose	676
33.	Eledon Butter Milk Powder	8,448
34.	Betel Nuts	6,08,034

However the following items were declared unfit for human consumption either after physical examination or after receiving analysis reports to that effect from the King Institute, Guindy :—

		LBS.
1.	Cloves (exhausted)	480
2.	Vegetable Oil	168
3.	Dried Grapes	24
4.	Milk Powder	5
5.	Cornmeal	12,500
6.	Wheat (Shed Sweeping)	10,820
7.	Wheat Flour	720
8.	Bulgar Wheat	10,000

		KGS.
9.	Malt Extract	150
10.	Dates	12
11.	Wheat Flour	9
12.	Mutton	245

(7) 265 Seamen trainees, seamen for continuous Certificates of discharge and other candidates for employment as seamen were medically examined and certificates of fitness or otherwise issued.

(8) On receipts of radio message from the Masters of 6 vessels at sea seeking medical advice in connection with sickness on board the vessels, necessary advices were sent immediately to the Masters concerned.

(9) Sanitation of the Port area was looked after by the Madras Port Trust and maintained satisfactorily. Storage tanks of water supply of the Port area, were cleaned regularly and water from these sources was analysed at regular intervals. Measures were taken to rectify the defects when noticed.

(10) 9 Deratisation exemption certificates and 11 Permits were issued at this Port.

(11) 187 vessels seeking Radio Pratique were granted the same on furnishing the requisite message.

CONSERVANCY

Introduction :

The City Council after careful examination of the question of separating the Conservancy from Sanitation in order to relieve the strain on Health Department, agreed to the proposals of entrusting the work to the Mechanical Engineer after it is freed from the control of the Health Officer on 1st August 1953. Accordingly the work of Conservancy in the City was taken up by the Mechanical Engineer and Cleansing Officer from 1st October 1953 till 30th June 1963. When further decentralising the district-war administration into Circles with a Circle Health Officer in the grade of Assistant Health Officer at its helm, the Council again gave its consent to merge the Conservancy with Sanitation and to place the same under the control of Circle Health Officers under the direct supervision of the City Health Officer.

Constitution :

A group of 10 Municipal divisions were clubbed together serialwar and formed them into 10 Circles in the City to facilitate to render quick civic service to the citizens. The above Circle Offices were housed in combined divisional Offices within the limits of that particular circle jurisdiction.

Management :

The complete conservancy work in the circle was placed under the charge of a Circle Health Officer in addition to his usual sanitation work. He was assisted by One Conservancy Supervisor, 10 Conservancy Inspectors and a complement of Maistries and Thozhilalies. Besides these, sufficient number of lorries, bullock carts, etc., were also allotted to each for collection, removal and disposal of rubbish and sullage from the streets within that circle.

Collection, Removal and Disposal of Rubbish :

During the year, all the city roads, streets, lanes and slums were conserved besides Public Markets, Public Resorts, Fairs and Festivals. The entire complement of thozhilalies were deputed to various spots after the muster for sweeping and accumulation of rubbish. For collection of the rubbish, gathered by the sweepers, bullock carts were marched to narrow streets and canes and lorries to main roads for quick and easy movement. The rubbish thus collected was then transported to the nearest tipping platforms and dumping grounds. Provision of additional dumping grounds by acquisition of suitable sites was till under consideration of the Government.

Disposal of Rubbish and Filth :

The collection of rubbish was diverted for dumping at the three existing dumping grounds at Korukkupet, Otteri and Saidapet besides using for reclamation of low lying land belong to the Corporation, State Housing Board and Private parties. A part of the rubbish was also utilised for manufacture of compost. The night soil collected from the unsewered areas was also used or making compost.

Incinerators :

Incinerators were used for burning the collected rubbish so as to have quick disposal instead of taking it to dumping grounds. Only 2 Incinerators were at use. One at Basin Road and another at Krishnampet. Krishnampet Incinerator was not working due to major repairs.

Reclamation of Low Lying Lands :

Filling of low lying areas was done during the year under the requisition of the public. The low lying land at 2/5, Ellayya Mudali Street in 21st Division owned by the Indian Oil Company was filled up with street rubbish.

The low lying land in 88th division owned by Corporation was filled during the year. One pond at Corporation low paid income Group Housing Colony at 1st division, Corporation play ground and pond attached to sewage pumping station at cross road were reclaimed during the year 1963. There was a low-lying land in Mettu Street, 44th division which was also attended by the Corporation.

Mobile Conservancy Squad :

Three Mobile Conservancy Squads were organised during the year for quick removal of rubbish at emergencies. During the year under review, the 2 Mobile Conservancy Squads were deputed for service at Circle III and one at Circle I respectively. These squads used to work, out of conservancy hours, i.e., 10-30 a.m. to 2 p.m. and 5 p.m. to 7 p.m., daily for the removal of rubbish from the busiest streets and important high ways in the City.

Dust-Bins :

Public dust-bins were provided at the junction of important places in the City. Tar-dust bins were also provided for slums. Apart from these, the

house owners were issued notices to construct dust-bins individually in front of their houses. Besides these at Markets and shopping areas big dust-bins were provided which were cleared both in the mornings and evenings.

Fly Nuisance, Disinfection Work and Antifly Measures :

Periodical deflying spraying work was done in the divisions by Malarial Squad. Disinfectants such as slaked lime, ezeol bleaching powder were heavily used to abate fly nuisance. Intensive measures were also undertaken in dumping grounds and pyrethram sprayed by mechanical sprayers.

Private Scavenging in Extended Areas :

Private scavenging work was done in certain extended areas such as Saidapet, West Mambalam, Kodambakkam and Sembiam on payment of necessary charges by the parties.

Private Conservancy :

At the under mentioned places private conservancy services was undertaken on payment of Conservancy Charges :—

(1) Kothawal Market. (2) Madras Beach Station. (3) K.I. Police Station, Sembiam. (4) Government House. (5) Jail. (6) Guindy Race Club.

In Fairs and Festivals Conservancy was done on estimated charges. Removal of rubbish from Government Institutions, Railway Offices, Private Companies and Industries was continued during the year on contract basis. The total amount collected towards charges for Private Conservancy amount to Rs. 66,546-91 as against Rs. 72,048-05 nP. of last year.

Removal of Cesspool Contents in Extended Areas :

During the year, the sullage collections from the cesspools of private houses in extended areas was removed with the help of sewage barrel carts and sewage lorries. The removal of cesspool contents was done free of cost except from the hotels and industrial places where the capacity exceeds 170 gallons who were charged Re. 1 per trip.

Removal of Obstructions and Cleaning of Syphons :

Syphons were attended by the Syphon Thozhilalies daily. Major obstructions, if any had been attended to by the Engineering Staff.

Public Latrines and Urinals :

There were 410 latrines and 126 Urinals in the City. Latrines and Urinals were cleaned both in the mornings and the evenings. Latrines and Urinals were white washed once a year and disinfected daily.

Livestock :

The main conservancy work in the City of Madras was done by bullock drawn vehicles. The total number of bullocks used for the conservancy work

was 1,024 on 1st January 1963. During the year 156 bullocks were purchased from the Shandies of Ranipet and Thiruvannamalai. 79 bullocks became unserviceable due to old age and were sold in public auction to *bonafide* agriculturists after obtaining an undertaking that these bullocks would not be slaughtered. 42 bullocks died during the year due to old age and other diseases. The total number of bullocks in service at the end of the year, i.e., on 31st December 1963 was 1,059.

Cattle Depots :

The nine conservancy cattle depots where the conservancy bullocks were housed and looked after continued to function satisfactorily during the year. Animals brought by public were also treated in the Veterinary Dispensaries maintained at B, D, F, G and H Depots besides attending to conservancy live stock. One Conservancy Inspector was posted to each cattle depot to assist the Veterinary Assistant Surgeon-in-Charge of the depots, in the administration of the depots.

The Veterinary Officer of the Corporation was in overall supervision of the nine conservancy cattle depots and the five veterinary dispensaries attached to five cattle depots.

Shoeing of Bullocks :

Generally, bulls were shod twice in a month. All the required articles were supplied by the Corporation and the shoeing was done by the farrieos employed on daily wages.

Veterinary Dispensaries :

Five Veterinary Dispensaries are run by the Corporation of Madras. These institutions continued to cater to the needs of public as in previous year. The Veterinary Dispensaries were housed at Cattle Depots B, D, F, G and H respectively.

Department Growing of Grass :

Gunia Grass, Napier Grass and Water Grass were continued to be grown departmentally at the Korukupet Grass Farm and supplied to the cattle depots. The total quantity of grass grown and supplied to the depots was 97,609 lbs.

Labour :

The Conservancy thozhilalies (Labourers) continued to occupy the 457 tenements provided at different places in the City and 311 plinths in the Corporation hutting grounds bonus and gratuity was paid to the thozhilalies in case of retirement and death.

Manufacture and Sale of Compost :

Compost manure was continued to be manufactured and sold at the three compost yards at Korukupet, Otteri and Saidapet. 10,706 tons of compost were manufactured during the calendar year. 9,299 tons of compost were sold at a total cost of Rs. 26,037-20 nP. at the rate of Rs. 2-80 nP. per Metric Ton.

Subsidy from Government in respect of the Sale of Compost :

Action was taken to claim subsidy from Government for the loss incurred due to the sale of compost at the reduced rate of Rs. 2-80 nP. per metric ton. Sanction of Government is awaited.

Fairs and Festivals :

There were fairly a large number of annual festivals in the City, during the year and proper conservancy arrangements were made in respect of all of them. For the Brahmotsvam Festivals at Mylapore, Triplicane, Saidapet, Vadapalani and the festival at Little Mount, and other festivals which attracted large crowds, all conservancy arrangements including provision of temporary urinals and latrines at convenient sites were made under proper supervision. Special labour was engaged for some of these festivals. Special conservancy arrangements were also made during the Test Match between England Vs. India, Wrestling match at Teynampet Grounds and Park Fair Exhibition at S.I.A.A. Grounds after collecting necessary charges from them.

Supervision of Conservancy Work :

The whole City was divided into 10 Circles, under the control of 10 Circle Health Officers. The following steps were continued to be taken to have a proper check over the work of the out-door staff. Beat books and Signature books were supplied to the divisional peons to note down the places where the conservancy gang worked daily and to obtain signatures of the residents as proof for having carried out conservancy work regularly on all days.

The Conservancy Supervisors were directed to be in the divisions throughout the conservancy hours both in the forenoons and after-noons and to make surprise inspections. The Circle Health Officers were also frequently checking the muster rolls and made surprise inspections.

Mobile Court :

The resolution of the Council for starting a mobile court to try, municipal cases and to attend to all the offences relating to licensable trade under the Madras City Municipal Corporation Act was communicated to Government and it was decided not to start a Mobile court.

National Cleanliness Day Celebrations :

National Cleanliness Day Celebrations were conducted during the year for one week from 25th September 1962 to 2nd October 1962. An appeal was sent by the Worshipful Mayor to all the Councillors, to co-operate in this connection and Civic Associations were also addressed to co-operate in keeping the City Clean.

2,00,000 hand-bills and 3,700 posters were printed and distributed in the divisions during the week. All the conservancy staff devoted their special attention in keeping all their respective divisions including market and slum area clean. Intensive cleansing was carried out in all the divisions. 30 slides were exhibited at some of the prominent City theatres during the above week. Disinfectants were liberally used wherever necessary.

Conclusion :

Unless the cleansing services are mechanised it will not be possible to provide effective and quick service in big cities like Madras, which are expanding with day to day expansion programmes. Even if it is not possible to replace the present system immediately, it is advisable to atleast implement mechanization gradually. The above question is under consideration of the authorities in consultation with the foreign experts. During the year the fleet of lorries was increased to 88 as against 84 in the last year.

MEDICAL RELIEF

1. HOSPITALS

Infectious Diseases Hospital, Tondiarpet

INTRODUCTION

Ending with 31st December 1963 the Hospital has completed the 39th year of its service to the Citizens of Madras and also the suburban population in regard to isolation and treatment of cases of various Infectious Diseases. On the whole, 10,845 cases were admitted to the Hospital during the year of which 1,020 were from outside City limits. The mortality rate for the year was in the neighbourhood of 7%. Small Pox was endemic throughout the year. The Epidemic of Cholera which started in October 1962 extended into 1963 and subsided by the end of February. But a few cases were reported during the last quarter of the year. There was no addition in the permanent accommodation and there was no increase made in the strength of permanent staff during the year. Of course temporary staff under Section 11 was sanctioned; to cope with the increasing work load during the epidemic periods.

It is absolutely necessary and most essential that the permanent accommodation and the permanent staff should be suitably increased in view of the increasing population of the City and in the best interest of the Hospital administration.

As in the previous years the Hospital has served as a training centre for the Medical Officers of Health from different countries in regard to diagnosis and treatment of various Infectious Disease cases, particularly Small-pox. One of the most important features that needs to be mentioned in the report is that on the inauguration of the National Small-pox Eradication which celebrated by the Madras Corporation from the 25th September 1963 an exhibition was organised where Graphs, Charts, Photograph of Small-pox patients were displayed to the public.

BUILDINGS

Ward Nos. 5 and 6 of the Hospital, 24 bedded wards have been provided with Mosaic Flooring during the year. Ward No. 4 a 12 bedded wards has been declared as a second class paying ward by the City Council with effect from September 1963.

For the construction of a suitable Administrative Block in the appropriate place, the foundation stone was laid by the Honourable Chief Minister of Madras on the 15th November 1963, and the construction work was given a start towards the closure of the year.

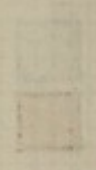
PATIENTS AND THEIR CARE

On the whole, the hospital admitted 10,845 New cases of various Infectious Diseases in the year and in all 11,160 cases were treated including those remained on 31st December 1962. Out of this 10,266 were discharged cured, 737 died and 157 remained in the Hospital at the closure of the year.

INFECTIONOUS DISEASES HOSPITAL
(Tondorp, Netherland)

ALL CASES 1903
Admissions and Deaths

ADMISSIONS
LEAVE

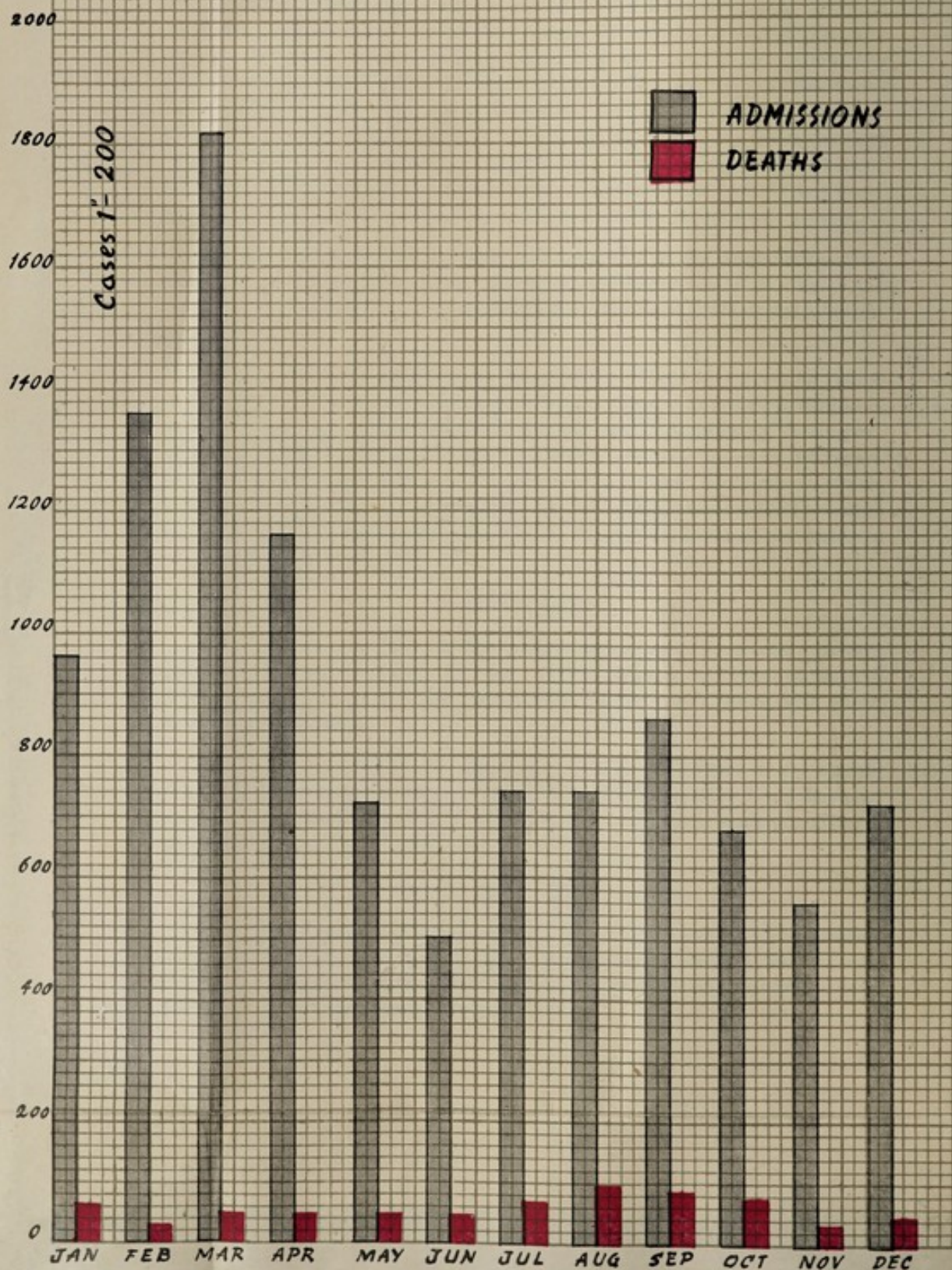


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INFECTIOUS DISEASES HOSPITAL
(Tondiarpet, Madras. 21)

ALL CASES 1963.

ADMISSIONS AND DEATHS



Statement No. I.—Shows the total number of cases admitted and treated for various diseases during the year 1963.

Particulars	Number of cases	Number of contracts
Number remained at 00.00 hours on 1—1—1963 ...	315	86
Number admitted during 1963 (1—1—1963 to 31—12—1963) ...	10,845	4,035
Total treated during the year ...	11,160	4,120
Total discharged cured during the year ...	10,266	4,069
Total died during the year ...	737	...
Total remaining at 24.00 hours on 31—12—1963 ...	151	51

The over all case fatality rate was 6.8% as against 4.05% in the previous year. This slight increase in the Mortality rate was purely due to the fact more cases of Small-pox particularly unprotected children were admitted during the year than the previous year.

The total number of admissions month war and also the deaths for the year are shown in Graph No. 1.

Statement No. II.—Shows the admissions and deaths disease war both for City as well as Mofussil cases seperately.

Diseases	City			Mofussil			Total Attacks	Total Deaths	Mortality rate%
	Attacks	Deaths	Mortality rate%	Attacks	Deaths	Mortality rate %			
Small-pox ...	2,399	563	24.07	166	35	21.08	2,505	598	23.87
Chicken-pox ...	3,619	3	.08	301	...	...	3,920	3	0.07
Measles ...	1,679	12	.71	179	2	1.7	1,858	14	.75
Mumps ...	154	...	...	12	...	...	166	...	...
Cholera ...	343	20	5.83	52	4	5.77	395	24	5.82
Gastro Entrities	973	22	2.25	237	9	3.89	1,210	31	2.56
Other diseases ...	718	63	8.77	73	4	6.85	791	67	8.59
Total...	9,825	683	6.9	1,020	54	5.3	10,845	737	6.8

SMALL-POX

Small-pox prevailed in an Endemic form in the first-half and in an epidemic form in the second-half of the year. There were 2,339 cases admitted from the City and 166 from the mofussil as against 1,463 and 108 respectively in the previous year.

Statement No. 3.—Shows the admissions and deaths due to Small-pox month-war (City and Mofussil).

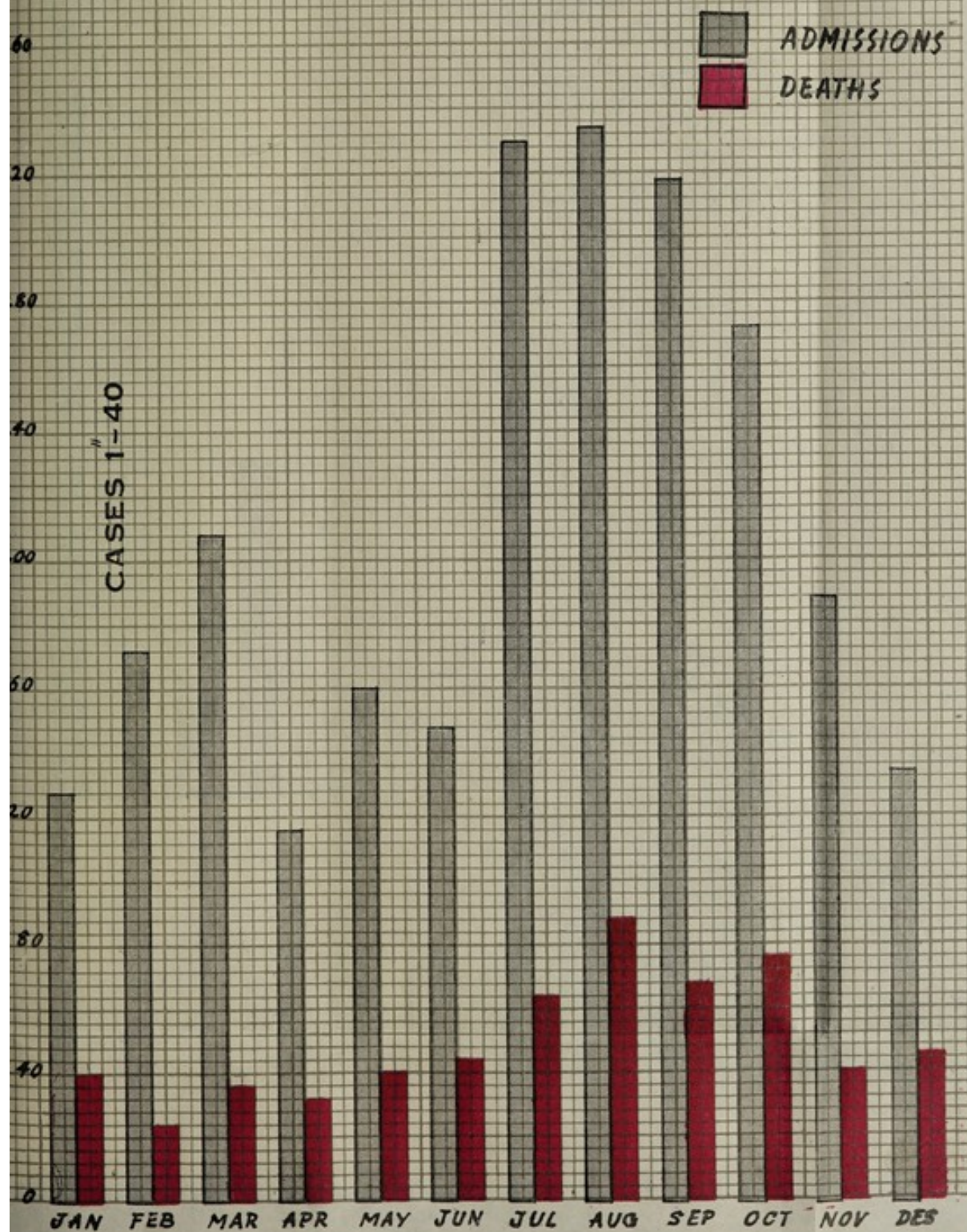
Months	City		Mofussil	
	Admissions	Deaths	Admissions	Deaths
January	119	36	8	3
February	166	24	6	...
March	187	36	20	1
April	104	31	13	2
May	143	36	16	4
June	140	41	7	2
July	318	63	12	2
August	320	82	14	5
September	306	68	12	1
October	261	73	12	3
November	172	36	15	3
December	103	37	31	9
Total	2,339	563	166	35

Statement No. IV.—Showing the age and sex-war distribution of cases of Small-pox

Age Groups	Males		Females		Total Males	Total Females	Grand Total
	City	Mofussil	City	Mofussil			
0 to 5 years	464	22	452	23	486	475	961
6 to 10 years	123	3	138	12	126	150	276
11 to 20 years	189	11	195	15	200	210	410
21 to 30 years	298	30	234	17	328	251	579
31 to 40 years	89	15	63	6	104	69	173
41 to 50 years	23	3	35	5	26	40	66
51 and above	16	2	20	2	18	22	40
Total	1,202	86	1,137	80	1,288	1,217	2,505

INFECTIOUS DISEASES HOSPITAL
(Tondiarpet, Madras. 21)

SMALL POX 1963.
ADMISSIONS AND DEATHS

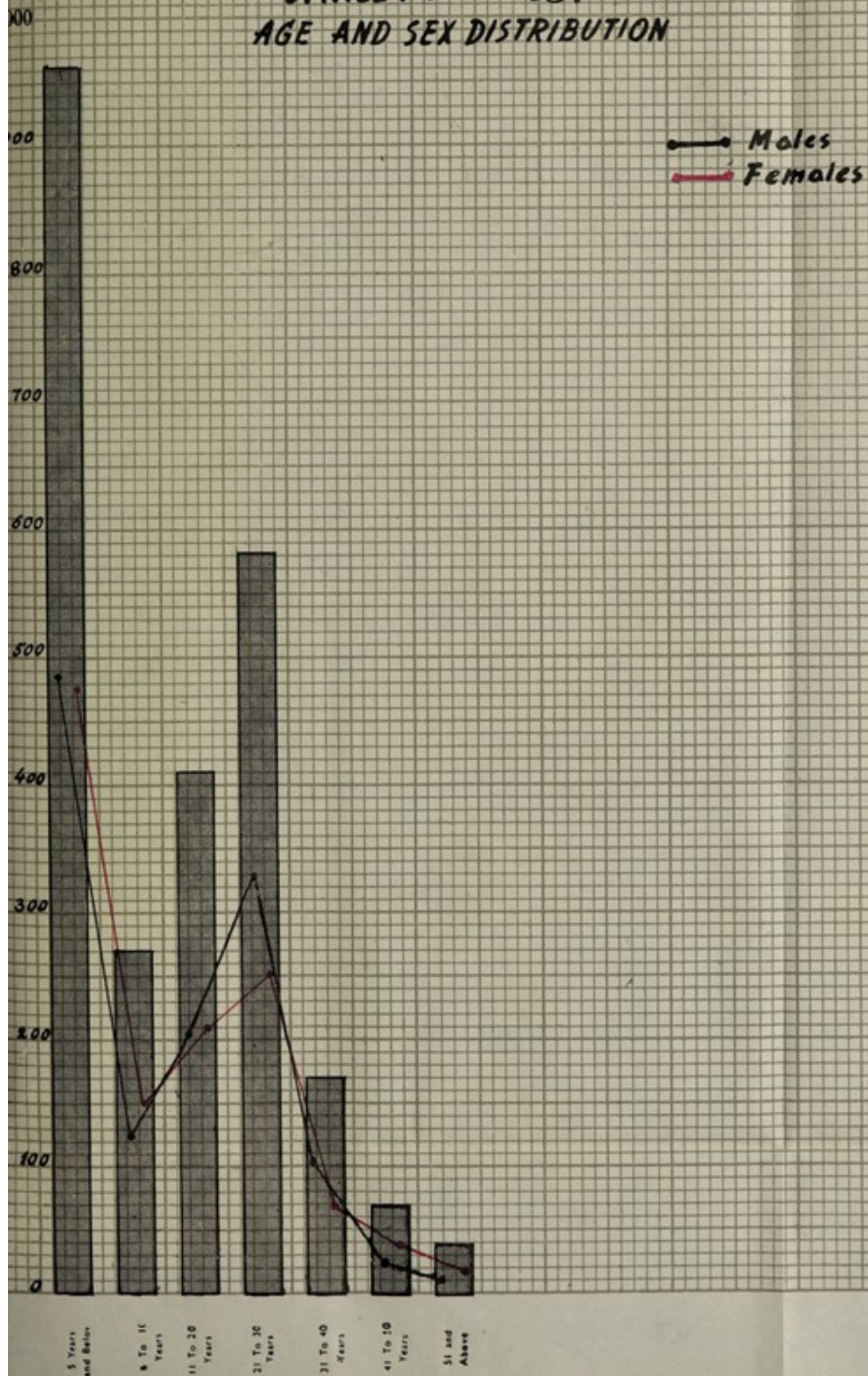


INFECTIOUS DISEASES HOSPITAL
(Tondiarpet Madras, S)

SMALL POX - 1963
ADMISSIONS AND DEATHS

INFECTIOUS DISEASES HOSPITAL
(Tondiarpet, Madras. 21)

SMALL POX 1963.
AGE AND SEX DISTRIBUTION



INFECTIOUS DISEASES HOSPITAL
(Tondiarpet, Madras 21)

SMALL POX 1963.
AGE AND SEX DISTRIBUTION

CHOLERA

Cholera which broke into an epidemic form in the year 1962 had extended into 1963 and subsided by February 1963. Some sporadic cases of Cholera were reported in the months of September, November and December, and source of Infection being imported from Nagapattanam. There were in all 343 cases admitted from City and 52 from outside the City limit. The mortality rate with reference to the total treated was 5.8% as against 6.3% in the previous year.

Statement No. V.—Showing the attacks and deaths month-wise
(City and Mofussil)

Months	City		Mofussil	
	Admissions	Deaths	Admission	Deaths
January	193	14	15	...
February	30	...	16	1
March	10	1	...	1
April	...	...	...	...
May	...	...	...	...
June	...	...	...	...
July	...	...	...	...
August	39	2	4	...
September	39	2	4	...
October	...	...	...	...
November	1	...	...	...
December	70	3	17	2
Total	343	20	52	4

Statement No. VI.—Showing the attacks of Cholera with reference to age group and sex

Age Group		Males		Females		Total	
		City	Mofussil	City	Mofussil	Males	Females
Below 1 year	...	5	1	5	...	6	5
1 year to below 2 years	...	3	1	6	...	4	6
2 years to below 3 years	...	6	...	4	...	6	4
3 years to below 4 years	..	13	..	12	..	13	12
4 years to below 5 years	..	8	1	7	1	9	8
5 years to below 6 years	..	11	3	6	1	14	7
6 years to 10 years	..	17	2	19	2	19	21
11 years to 20 years	..	18	6	27	7	24	34
21 years to 30 years	..	34	7	50	9	41	59
31 years to 40 years	..	31	5	18	1	36	19
41 years to 50 years	..	13	1	8	4	14	12
51 and above	...	13	...	9	...	13	9
Total	...	172	27	171	25	199	196

LABORATORY SERVICES

The Bacteriology cum Virus Research Laboratory has started functioning actively from 23rd November 1962 and it has seen through one year and four months in its active life. It has rendered its utmost service during the Cholera Epidemic of 1962-63 where in one thousand two hundred and twenty stools were examined bacteriologically for *Vibrio Cholera*. Routine analysis of urine and stools are being examined every day for all the patients that are admitted into the hospital.

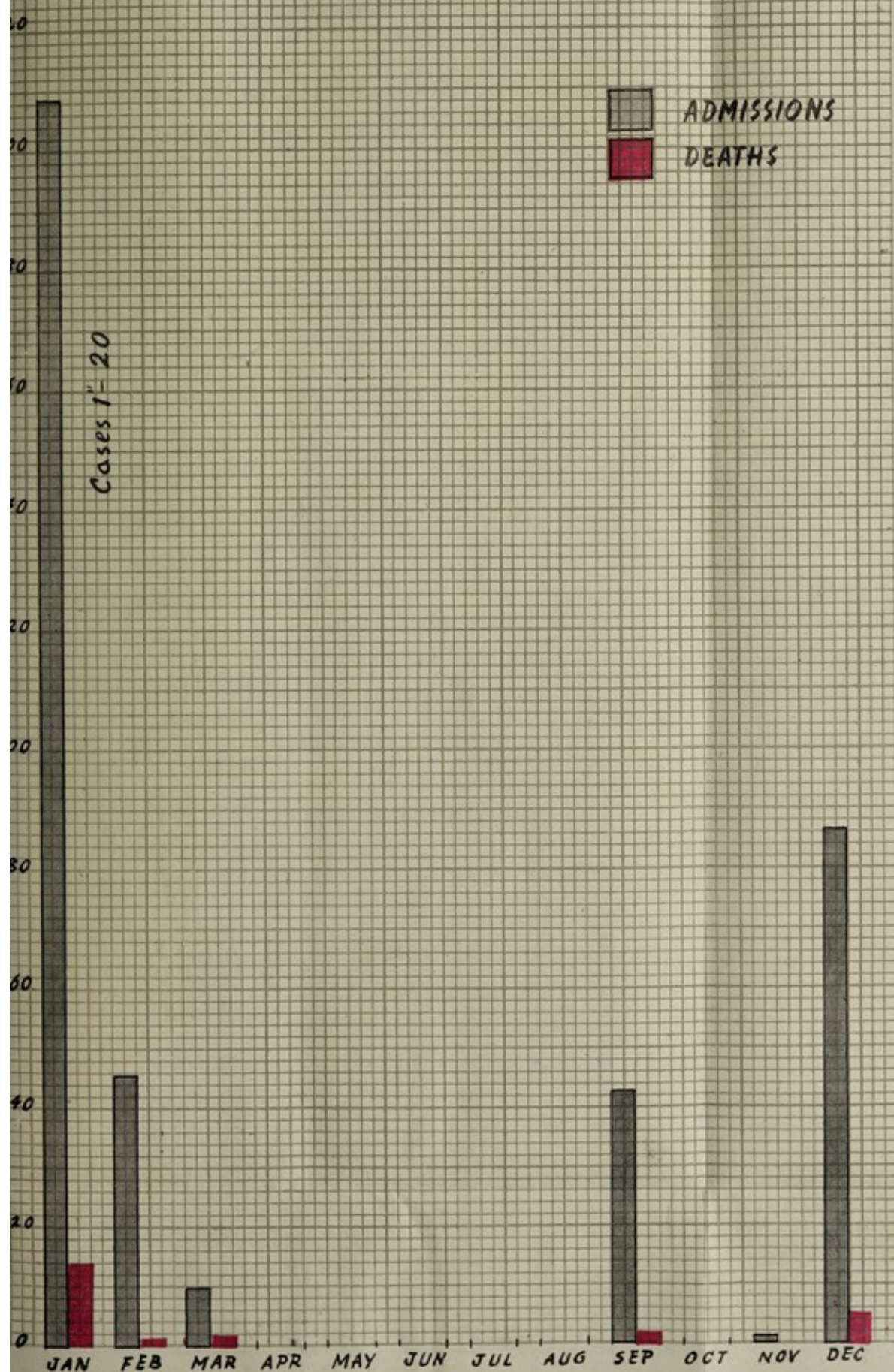
Extensive Research work is being done by the W.H.O. Unit in the Virus Section, which includes Virological and Biochemical studies of various aspects of small-pox with special reference to Haemorrhagic Variety.

One of the important items of the Laboratory is the preparation of Intravenous Infusions of various compositions and concentrations, which are the life saving fluids in Cholera and other Gastro intestinal diarrhoeas. During the year 1963, three thousand seven hundred and fifty pints of Glucose Hyper-tonic Saline, four hundred and fifty pints of normal saline, and 50 pints of 5% glucose saline were prepared in the laboratory for the hospital use. The

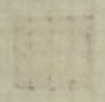
INFECTIOUS DISEASES HOSPITAL
(Tondiarpet, Madras. 21)

CHOLERA 1963.

ADMISSIONS AND DEATHS

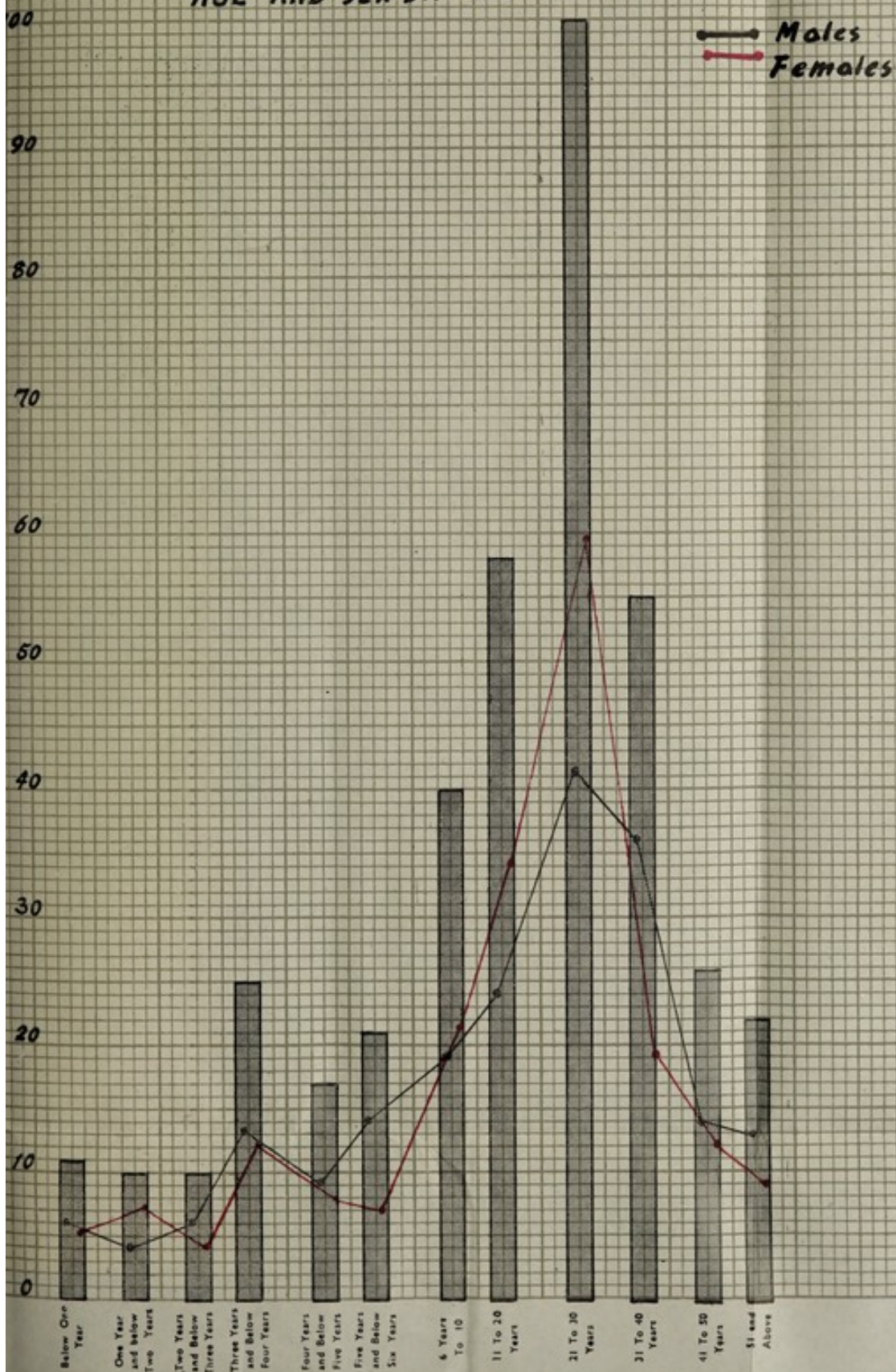


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INFECTIOUS DISEASES HOSPITAL
(Tondiarpet, Madras. 21)

CHOLERA 1963.
AGE AND SEX DISTRIBUTION



INFECTION DISEASES HOSPITAL
(Tondiarpet, Madras. 21)

CHOLERA 1963.
AGE AND SEX DISTRIBUTION



Laboratory has been fully equipped for the preparation of these fluids under strict aseptic precautions, and it is functioning satisfactorily. It has rendered its essential services in the diagnosis and treatment of Infectious Diseases that are admitted into the hospital.

AMBULANCE SERVICE

As in the previous year the hospital possessed 6 Ambulances in the year under report. For the removal of cases from the City and suburbs.

MEDICAL TRAINING

As usual the under graduate students from Madras Stanley and Kilpauk Medical Colleges of Madras and Mission Medical College, Vellore attended lecture of Infectious Diseases in the Hospital.

MISCELLANEOUS

The hospital was inspected by the Union Health Minister on the 18th April 1963 with the Director General of Health Services, New Delhi.

With a view to upgrading the Hospital the Government of India have deputed Professor Thomas Anderson, a W.H.O. consultant on Small-pox to inspect the hospital and report with his suggestions for upgrading the hospital. This inspection took place in the month of November 1963.

The Superintendent, Dr. A. Ramachandra Rao, was deputed by Corporation of Madras to take part as a delegate in the Cholera Seminar held in New Delhi in the month of December 1963. This proved to be of great use in the study of prevention of Cholera in the City.

The following Medical Officers from different nations of the World either have had their training in the diagnosis and treatment of Small-pox for visit this hospital.

Dr. Kunt Berger	...	Vienna.
Dr. Kunt Alin	...	Stockholm.
Dr. R. R. Bull	...	Sydney.
Dr. L. C. Rowar	...	Australia.
Dr. V. Jsybalsky	...	U.S.S.R.
Dr. W. C. Cockburn	...	Geneva.
Dr. Rolf Lundstrum	...	Sweden.
Dr. Thomas Anderson	...	Glasgow.

DISPENSARIES

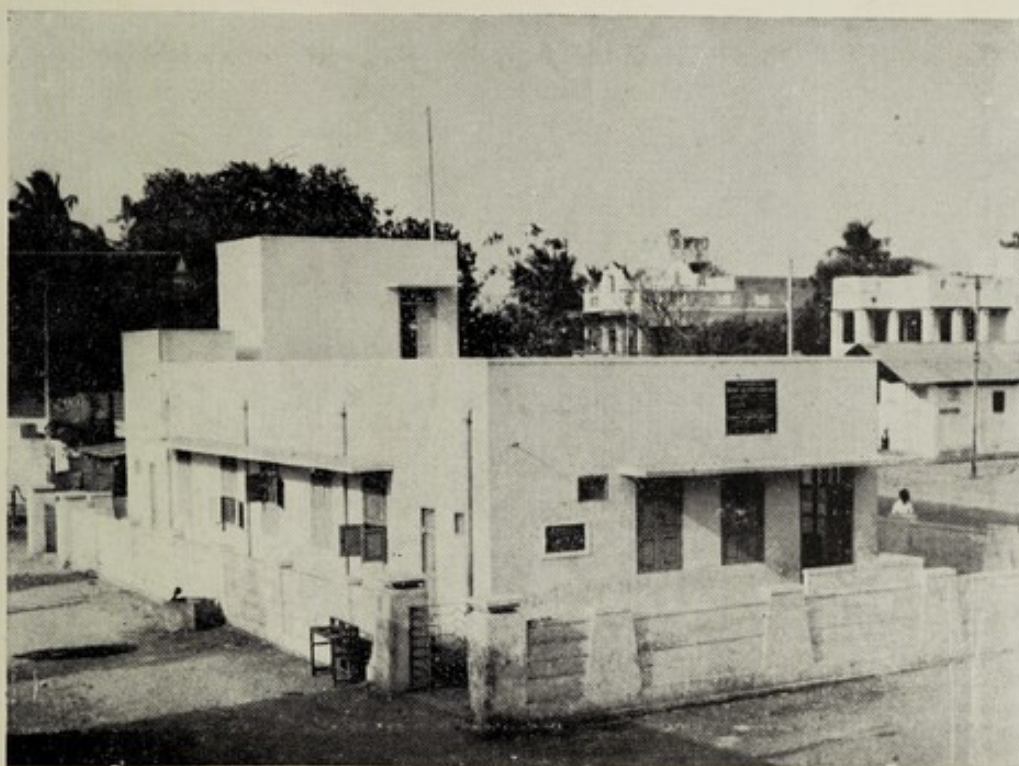
Provision of Free Medical Aid to the Citizens forms a part of Civic administration but is one of the essential duties of Health Authorities for keeping the City always free from diseases. Year after year the Corporation is increasing the Medical Aid by opening new dispensaries wherever they are essential and possible. During the year 1963, two new dispensaries were added to the existing 50 maintained in various parts of the City. One of the new dispensaries was opened in the North, i.e., 21st Division, Thiruvathiyoore High Road, Tondiarpet and the other in the South, i.e., 81st Division Muthia-Mudali Street, Teynampet. All the above dispensaries were equipped with latest equipment drugs and medicines to facilitate quick and successful treatment. Besides the above 52 General Dispensaries, Seven Clinics to render specialized treatment in Venereal, Leprosy and T.B. disease, 45 Child Welfare Centres with 21 of them with Maternity wards and one Hospital for Infectious diseases were also maintained in the City. These medical institutions were regularly supplied with drugs and medicines through the Central Medical Stores maintained at Chintadripet. The specimens of blood, smears, urine etc., of patients attending the dispensaries were analysed at the Public Health Laboratory and advised for correct diagnosis and treatment.

Out of the eight Special Clinics one is specialised for Venereal diseases two for Leprosy and the remaining five for T.B. Clinics. At the Venereal Clinic at 82/83, Strahans Road, Perambur Allopathic treatment was also rendered besides special treatment for venereal patients. Four T.B. Clinics were attached to the State Hospitals and were placed under the supervision of the Director, Madras T.B. Institute and Clinics. As usual, drugs, medicines, equipment and accommodation for the clinics were provided by the State whereas the establishment charges were met from the Corporation Funds. The location of the special Clinics in the City is furnished below :—

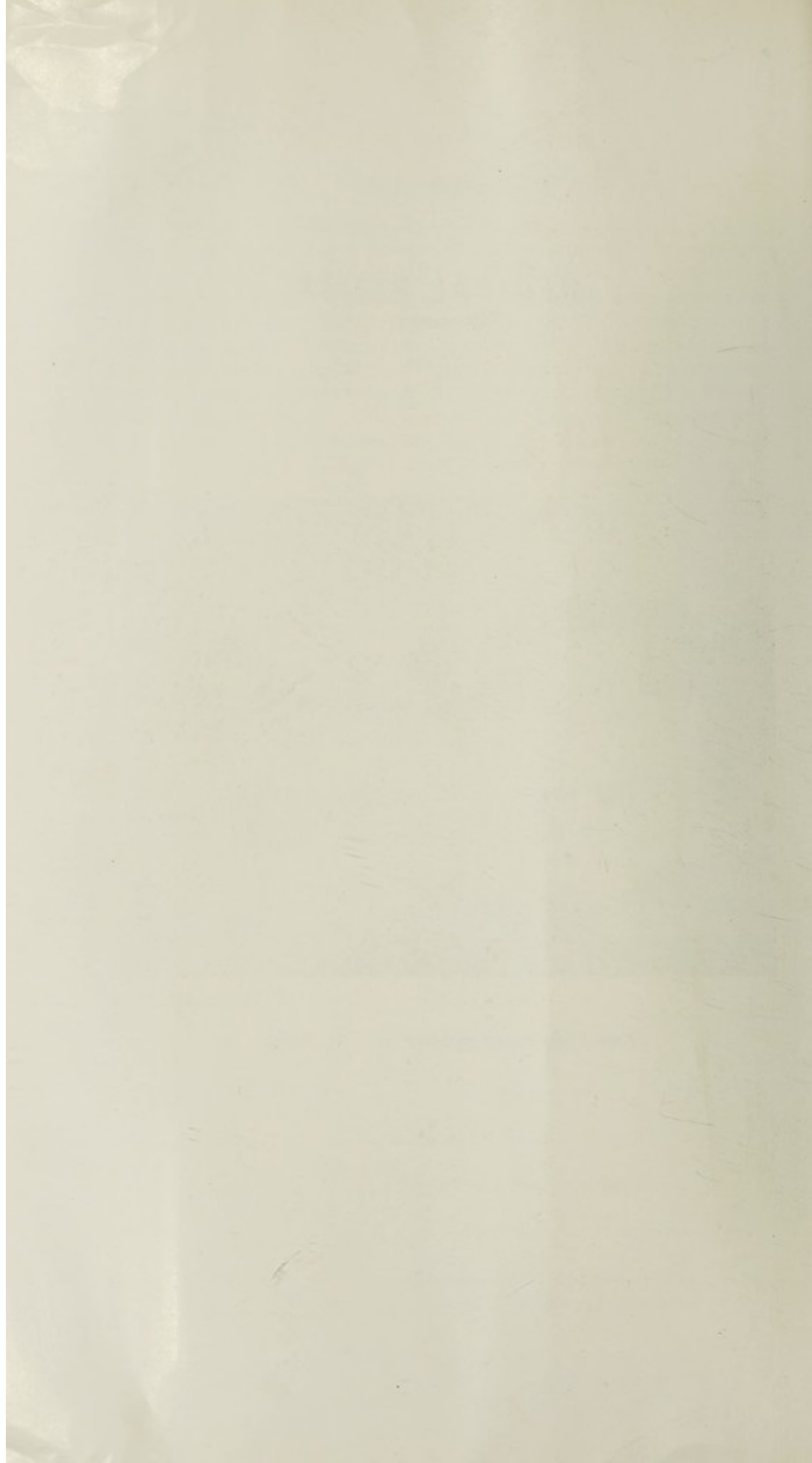
<i>S.No.</i>	<i>Name of the Clinic</i>	<i>Location</i>
1	Venereal Clinic	... 82/83, Strahans Road, Perambur.
2	Leprosy and Skin Clinic	... Ice House Road.
3	Do.	... Vyasarpady.
4	Tuberculosis Clinic	... Pulianthope High Road.
5	Do.	... Government General Hospital.
6	Do.	... Government Stanley Hospital.
7	Do.	... Government Royapettah Hospital.
8	Do.	... Government Kasturba Gandhi-Hospital for Women & Children, Triplicane.

MEDICAL RELIEF

(Dispensary)



New Dispensary opened at T. H. Road.



Mobile Dispensary Service

The Mobile Dispensary Service rendered to the Citizens of the extended areas and to those residing far away from the permanent dispensaries could not be continued during 1963 for want of substitute vans as both the Mobile Dispensary Vans are condemned unfit for further service.

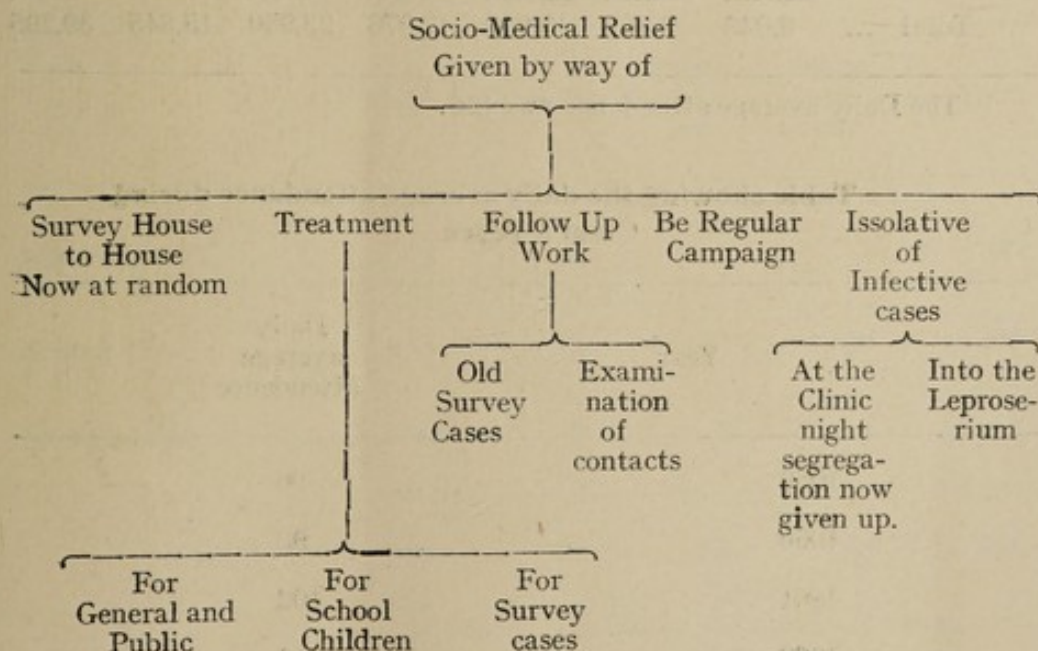
SKIN AND LEPROSY CLINIC

Ice House Road, Triplicane

Situated at No. 1, Dr. Besant Road, Ice House, Triplicane, the Clinic continued to do its useful service to the public. The fact that it enjoyed the confidence and good will of the public could be seen from the list of patients that attended the clinic during the year. Apart from patients that attended the clinic during the year. Apart From patients from the surrounding divisions, patients from far away divisions like Royapuram, Washermanpet, Perambur, Adyar, Kodambakkam, to mention a few and moffusil areas like Ennore, Trivellore, Trivottiyoor, Avadi, Kaladipet, etc. attended the Clinic regularly for treatment.

Dr. K. Venkataramana Rao, M.B., B.S., Medical Officer, continued to be in charge of this Clinic. He was assisted ably by Mrs. K. Vimala Devi, qualified Health Visitor, a Pharmasist and other ancillary staff.

The nature of work done at the Clinic is rather Complex and strenuous. The exact Socio-Medical Relief rendered by the Clinic could be summed up as stated below :—



During the year the clinic recorded a total attendance of 39,295. Out of this total 5,391 were new cases of Skin and Hansens. Number of repeated cases during the year including Hansen and Skin cases was 33,904.

Total Number of Patients who attended the clinic including old cases during 1963.

Months	Number of cases Treated		Number of old cases treated		Total Number Treated		
	Men	Women	Men	Women	Men	Women	
January	341	304	1,688	1,073	2,029	1,377	3,406
February	265	198	1,733	1,054	1,998	1,252	3,250
March	292	197	2,022	1,208	2,314	1,405	3,719
April	250	163	1,723	1,046	1,973	1,209	3,182
May	214	156	1,445	1,994	1,659	1,150	2,809
June	183	156	1,697	1,989	1,880	1,145	3,025
July	260	227	1,769	1,067	2,029	1,294	3,323
August	238	187	1,767	1,098	2,005	1,285	3,290
September	242	184	1,860	1,118	2,102	1,302	3,404
October	255	232	1,888	1,218	2,143	1,450	3,593
November	221	174	1,638	1,036	1,859	1,210	3,069
December	261	191	1,698	1,075	1,959	1,266	3,225
Total	3,022	2,369	10,928	12,976	23,950	15,345	39,295

The Daily average attendance was 126.

Table showing the daily average attendance during last 5 Years

Year	Daily average attendance
1959	96
1960	93
1961	102
1962	119
1963	126

5,391 New Cases were examined at the clinic and 414 of these were diagnosed as suffering from Hansens Disease.

Statement showing the classification of new Hansen cases registered during the year 1963

Lepro- matour Leprosy	Neu- ral Leprosy	Intermediate type of Leprosy	Total
96	305	13	414

Statement showing Hansen Cases with complications

Deformities of hands or feet	Tropic Ulcers	Eye Comptica- tions	Total
23	37	...	60

Statement showing New Hansen cases Sex-wise

	Males	Females	Male child- ren	Female child- ren	Total
Infective	73	18	1	4	96
Neural	113	56	82	54	305
Intermediate	6	5	2	...	13
Total	192	79	85	58	414

In addition to the 414 new Hansen cases registered during the year, 484, Hansen cases registered during the previous years also continued the treatment giving a grand total of 898 Hansen cases for the year.

Total Number of Hansen Cases attended during 1963

Year of Registra- tion	Male	Female	Children	Total
1956	85	30	1	116
1957	47	20	6	73
1958	37	6	3	46
1959	29	13	5	47
1960	29	16	11	56
1961	45	9	5	59
1962	59	16	12	87
1963	192	79	143	414
Total ...	523	189	186	898

Prevention and control activities :

New patients attending the clinics were explained the nature of the illness and its hazards to them and to their environment. They were instructed to observe certain practical preventive measures as follows. Infective cases were advised to avoid close contact with young children by not sleeping in the same bed with such children and keeping their dress and utensils beyond their reach.

The hazard and danger of ulceration and deformity from being careless in carrying out manual work and involving contact with fire and hot objects has been brought home to patients. The importance of massaging hands and feet and attending promptly to minor injuries in these situations have been impressed on non-infective cases of Leprosy who are likely to suffer from disabilities due to deformity and ulcerations.

Isolation of Infective Cases :

The Central Leprosy Teaching and Research Institute at Thirumani in the Chingleput District has 36 beds reserved for the patients from the City. Cases examined in the Corporation Clinics and requiring institutional treatment were recommended for admission into the Institute. The Corporation paid a capitation grant of Rs. 50 per bed per month for the beds utilized. Six cases were recommended for admission into the Leprosorium by this Clinic during the year under review.

Treatment of Corporation School Children :

The School Medical Inspection Staff directed cases of Hansen and suspected cases of Hansen, to the clinic for diagnosis and for treatment. In this respect close co-operation was maintained between the clinical staff and the School Medical Inspection Staff.

*Statement showing New Cases sent from Corporation Schools***Diagnosed**

As Hansen			under observation			sa others			Grand Total		
Male Children	Female Children	Total	Male Children	Female Children	Total	Male Children	Female Children	Total	Male Children	Female Children	Total
41	15	56	40	29	69	143	72	215	224	116	340

Investigations :

Routine examination for skin smears was done in the clinic itself. The services of the Corporation Public Health Laboratory were utilised whenever special investigations were done for the patients.

LEPROSY CLINIC, VYASARPADI*Location :*

This clinic is located in Hope Lidge, No. 22, Gantz Road, Vyasarpadi, Madras-12, Municipal Division No. 32.

Working Hours :

The Clinic worked from 7-30 a.m. to 1 p.m. on all days except on Mondays.

Staff :

The staff consisted of a Medical Officer, one Health Visitor, Two Pharmacists, one Female and a Male Ward Attendants besides a peon and a Sweeper.

Object :

Although this clinic is mainly for the service of the population residing in North Madras City areas, patients attending it from adjoining divisions of South Madras, and Mofussil and suburban areas have also been served during the period of this report.

**Particulars of the Patients treated during the year 1963 in this clinic
are as follows :**

1. Statement of the attendance at the Clinic during the year 1963.

(1) Number of cases newly registered during the year 1963	..	5,815
(2) Number of Hansen cases among newly registered cases.		326
(3) Number of Skin and other cases among newly registered cases	..	5,489
(4) Number of old Hansen cases treated	..	11,390
(5) Number of old Skin cases treated	..	7,430
(6) Total number of old skin and Leprosy cases	...	18,680
(7) Number of daily average attendance of old and new cases together	...	79

2. Statement showing the Hansen cases registered and treated during the year 1963.

	<i>New</i>	<i>Old</i>
(i) Men	... 186	6,840
(ii) Women	... 88	3,035
(iii) Children	... 52	1,515
Total	... 326	11,390

3. Statement showing the skin cases registered and treated during the year 1963 :

	<i>New</i>	<i>Old</i>
(i) Men	... 920	1,240
(ii) Women	... 1,050	1,382
(iii) Children	... 3,519	4,808
Total	... 5,489	7,430

4. Statement showing the classification of new Hansen cases registered during the year 1963 :

<i>Lepromatous Leprosy</i>			<i>Neural Leprosy</i>		
(i) Macular	... 32		(i) Maculo Anesthetic	... 80	
(ii) Infiltrative	... 23		(ii) Tuber cutoid	... 100	
(iii) Nodular	... ..		(iii) Anesthetic	... 7	
			(iv) Muscular paralysis	... 27	
			(v) Perforating Ulcers	... 40	
			(vi) Necrosis and absorption of bone	... 17	
Total	... 55		Total	... 271	
Grand total ... 326					

5. *Statement showing the classification of new skin cases registered during the year 1963 :*

(i) Vitamin Difficiency	...	785
(ii) Allergic disorders	...	625
(iii) Scabies	...	817
(iv) Infectious of skin	...	2,295
(v) Other general conditions	...	967
Total		5,489

Treatment :

The main treatment during this period had been administration of oral sulphone tablets with "DAPSONE" brand of D.D.S. tablets. Subcutaneous injections of Hydnocarpus remedies which had to be suspended during the months of July and August 1963 for want of availability of the medicine was resumed from 20th September 1963.

A limited supply of sulphetrone solution for injection being made available a selected number of cases (9 only) were placed on this treatment from 4th October 1963 on one day each week (Thursdays.)

Survey :

During the year of 1963 survey was carried out by the Health Visitor attached to this clinic in the following localities as per particulars notified below :—

Locality	Total Population Enumerated				Total	Total Population Examined				Total	Leprosy Cases Detected				Total	Infective	Non-Infective
	M	F	MC	FC		M	F	MC	FC		M	F	MC	FC			
Kutti Thambiran Street ...	562	514	347	309	1,732	484	473	335	285	1,577	1	2	2	...	5	...	5
Poloo Naicken Street ...	352	298	176	188	1,014	285	262	169	181	897	2	...	3	...	5	...	5
Lal Singh Street.	102	101	62	64	329	82	88	56	60	286	1	...	...	...	1	...	1
Govind Singh Street ...	249	269	133	123	774	196	232	130	115	673	...	1	...	...	1	...	1
Total ...	1,265	1,182	718	684	3,849	1,047	1,055	690	641	3,433	4	3	5	...	12	...	12

Preventive Measures :

New cases registered for treatment during this period of report were explained the nature of the illness, its progress and method of propagation. They were given practical advice regarding avoiding intimate contact with young children regular attendance for treatment and avoiding of injuries to hands and feet during routine performance of daily duties by being careful in their performance.

Exercises for minimising the hazard of deformity and disability were demonstrated to them for their observance. 4,400 dressings were made during the year for ulcers of leprosy patients.

TUBERCULOSIS CLINIC, PULIANTHOPE

Tuberculosis Clinic, Pulianthope situated at No. 13, Pulianthope High Road, Madras-12, completes its 19th year of service by November 1963.

This institution run by the Corporation of Madras serves the need of the people from the following areas :—

(1) Pulianthope, (2) Choolai, (3) Perambur, (4) Sembiam, (5) Kosapet, (6) Vyasarbady, (7) Otteri and (8) Ayanavaram.

The clinic is fully equipped both for diagnosis and treatment of Tuberculosis patients.

Patients under the clinic's preventive control area are treated as out-patients till the time they get admission to Government T.T. Hospital, Otteri and their treatment and follow up are continued after discharge from the hospital.

The clinic works with close co-operation of Tuberculosis Chemotherapy Centre. Fresh cases are referred to this Centre for research work and domiciliary treatment.

Necessary funds were allotted to expand the clinic building on the eastern side. This will have an O.P. counter a large waiting hall, and injection room, a room for A.M.O. and a Laboratory room, Necessary steps are being taken to implement the proposal early.

Table "A"

Showing the number of cases examined and the non-P.T. cases among them during the year 1963.

No. of cases examined	...	9,301
No. of cases diagnosed as P.T.	...	943
No. of cases diagnosed as Tuberculosis of other systems	...	55
Total. Diagnosed as Tuberculosis	...	998

Table " B "

Showing the daily average attendance during the year 1963.

Year	Daily average
1961	... 124
1962	... 131
1963	... 131

Table " C "

Number of sputum examined	...	4,867
No. of Injections given	...	12,796
No. of Aspirations	...	9
No. of P.P.	...	Nil
Contacts examination done	...	1,469
Remarks on contacts		
P.T. I	...	37
P.T. II	...	1
P.T. III	...	5
Normal	...	1,426
Visits of Health Visitors: New	...	744
Old	...	812
Hospital discharged cases	...	851
Total		... 2,407
Radiography	...	1,291
Fluroscopy	...	10,202

Number of patients who had Chemotherapy at Clinic.

Year	New Cases	Old Cases followed.
1961	... 340	263
1962	... 429	380
1963	... 502	297

Total number of patients who had chemoprophylaxis for the year 1963—

Table " D "

Attendance at the clinic in the year 1963.

Male

New	...	3,787
Old	..	17,516

Female

New	..	3,313
Old	...	15,829

Male child

New	...	1,203
Old	...	3,524

Female child

New	...	998
Old	...	2,478

 Total, New ... 9,301

 Total, Old ... 39,347

Grand Total ... 48,648

Daily average. 131

Table " E "

P.T. I	...	122
P.T. II	...	92
P.T. III	...	729

 Total P.T. ... 943

Tuberculosis of other system	...	55
Coryza	...	9
Influenza	...	331
Pneumonia	...	18
Heart Disease	...	17
Bronchitis	...	4,023
Br. Asthma	...	287
Bronchiectasis	...	56
Eosinophilic Lung.	...	80
Tonsillitis	...	3
Pleurisy	...	31
wh. cough	...	11
Myalgia	...	191
N.Y.D.	...	1,882
N.A.D.	...	779
Other Diseases	...	585

 Total ... 9,301

Table " F "

Positive cases according to places for the year 1963.

Pulianthope	...	170
Choolai	...	134
Kosapet	...	135
Perambur	...	109
Vyasarpady	...	43
Sembiam	...	20
Ayanavaram	...	69
Total	...	<hr/> 680
Cases referred to T.B. Institute, Egmore	...	147
Cases referred to T.B.C. General Hospital	...	23
Cases referred to T.B.C. Stanley Hospital	...	81
Cases referred to Royapettah Hospital	...	8
Cases referred to T.B.C.K.G. Hospital, Triplicane	...	4
Grand Total	...	<hr/> 943

Table " G "

Positive cases according to ages for the year 1963.

Years 0- 5	34
6-10	34
11-15	41
16-20	95
21-25	171
26-30	145
31-35	116
36-40	97
41-45	67
46-50	66
51-55	40
56-60	22
60 and above	15
Total	<hr/> 943

Table " H "

Nationality and sex of the positive case for the year 1963.

Hindus	...	808
Muslims	...	87
Christians	...	48
Total	...	<hr/> 943

Male	...	538
Female	...	299
Children	...	106
Total	...	<u>943</u>

Table "I"

Classification of positive cases according to occupation for 1963.

1. Attender	...	15	20. M.F.S.	...	...
2. Peon	...	10	21. Fisherman	...	7
3. Watchman	...	9	22. Weaver	...	7
4. Time-keeper	...	4	23. Goldsmith	...	14
5. Barber	...	7	24. Teacher	...	8
6. Beedi worker	...	33	25. Priest	...	5
7. Businessman	...	9	26. Tailor	...	2
8. Electrician	...	7	27. Merchant	...	14
9. Mechanic	...	18	28. Milkman	...	20
10. Butler Baker	...	6	29. Painter	...	7
11. Printing	...	7	30. Plumber	...	4
12. Clerk	...	23	31. Cobbler	...	10
13. Conductor	...	2	32. Student	...	11
14. Cooly	...	125	33. Sweeper	...	13
15. Ryot	...	26	34. Doctor	...	...
16. Millworker	...	10	35. Destitute	...	20
17. Driver	...	6	36. House wife	...	278
18. Dhoby	...	7	37. Unemployed	...	199
19. Police	...	...	Total	...	<u>943</u>

Table "J"

Returns and Statement for the year 1963.

1. Number of new cases	...	9,301
2. Number of open cases	...	943
3. Number of non-P.T.	...	55
4. Old cases	...	39,347
5. A.P. Initials	...	...
6. A.P. Refills	...	...
7. Patients attending for A.P. Refills	...	...
8. Number of P.P. Initials	...	...
9. Number of P.P. Refills	...	...
10. Patients attending for P.P. Refills	...	...
11. Injections	...	12,796
12. Number of aspiration	...	9
13. Number of cases visited in their houses by Health Visitor	...	2,407
14. Number of cases visited in the clinic	...	1,469

Table ' K '

Types of Tuberculosis Diseases treated for the year 1963.

Pulmonary Tuberculosis	...	943
Tuberculosis of glands	...	55
Tuberculosis Bones and Joints	...	1
Abdominal Tuberculosis	...	1
Meningeal Tuberculosis	...	1
Tuberculosis of skin	...	...
Pleurisy Dry	...	3
Pleurisy with effusion	...	28
Total	...	1,032

Table " L "

Classification of patients according to income for 1963.

RS.	NOS.
Rupees 5-10	8
11-15	25
16-20	40
21-25	35
26-30	95
31-35	100
36-40	110
41-45	140
46-50	105
51-55	50
56-60	45
61-65	35
66-70	25
71-75	18
76-80	20
81-85	18
86-90	25
91-95	26
96-100	13
100 and above	10
Total	943

Number of Pulmonary Tuberculosis cases in the above.

<i>P.T. I.</i>	Males	...	11
	Females	...	4
	Children

Total	...	15
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<i>P.T. II.</i>	Males	...	10
	Females	...	3
	Children

Total	...	13
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<i>P.T. III.</i>	Males	...	1,385
	Females	...	510
	Children	...	6

Total	...	1,901
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Number of open cases in the above 1,901

Number of non-Pulmonary Tuberculosis cases :—

Cervical adenitis	...	...
Tuberculosis hip	...	...
Tuberculosis spine	...	...
Tuberculosis knees	...	...
Tuberculosis adenitis	...	10
Lupus	...	...

Number of non-Tuberculosis cases :—

Not yet diagnosed	...	147
Fluresys with effusion	...	11
Eosinophilis	...	...
V.D.H.	...	...
T.B. Larynx	...	2
N.Y.D.	...	147
Pneumonia	...	...
Asthma	...	...
Lung Abscess	...	...
Bronchietasis	...	...
Bronchitis	...	...

Total number of old cases attended as out-patients :—

Males	...	11,861
Females	...	6,447
Children	...	186
Total		18,494

Daily average attendance ... 51

Number of in-patients treated :—

Males	...	...
Females	...	...

Treatment :

All new cases were physically examined and screened in addition to sputum and blood examination. X-Ray chest was taken for diagnostic and treatment purpose. All acute cases got streptomycin 1 gm. I.M. daily with I. N. H. 200 mgms. daily for a month and re-X-rayed to assess improvement. Suitable cases were put on the waiting list for admission to Tambaram Sanatorium. Collapse Therapy was almost abandoned and only suitable cases were sometimes tried for A.P. Some cases returned to the Clinic for P.P. after discharge for Sanatorium for continuance of P.P. Latest Treatment of Special medicine bi-weekly with I.N.H. 650 gms. stratum have been tried from May 1963. Defaulter controls are also checked and given treatment regularly.

Emergency admissions into the Tuberculosis ward were done by Casualty Medical Officer and also some cases were transferred from Medical units if sputum is positive and their conditions did not permit for discharge to attend out-patient clinic. As soon as the emergencies were over they were advised to attend to their respective clinics where they were living.

All most all patients belonging to the area of the clinic were given free antibiotics daily and some chronic patients got tablets every week.

Check up for in-patients :

All patients discharged from Tuberculosis Sanatorium residing in the surrounding area reported to the clinic for periodical check up which consisted of sputum and blood examination, X-Ray chest and physical examination, etc. The period of check up varied from 3 to 6 months depending on individuals cases. This had helped in early detection of relapses and immediate institution of treatment.

Streptomycin.

Para Amino Salicylic acid (P.A.S.)

Isoticotine hydroxide (I.N.H.)

Teabfen.

The drugs are widely used and were given free to poor patients as out-patient.

<i>Collapse Therapy :</i>	A.P. and P.P.	
A.P.	Nil	
	A.P.	Nil
	A.P. refills	Nil
	No. of patients attended for A.P. refills.	

Pneumoperitoncum :

Number of P.P. initial	...	Nil
Number of P.R. refills	...	56
Number of patients attended P.P. refills.		14

Contact Examination :

Health Visitors and Medical Officers visited the houses of patients in the surrounding areas of the Clinic noted below :

1. Chintadripet.
2. Periamet.
3. Park Town.
4. Edapalayam.
5. Traveyan Basin.
6. Sowcarpet.
7. Kothaval Bazaar.
8. Kachaleeswarar Agraharam.
9. Napier Park.

Advices were given regarding isolation of patients and disposal of sputum in the houses. All contacts were examined screened and X-rayed if necessary. Some of the contacts were advised to have Montoux Test for ruling out Tuberculosis.

Advice in Family Planning was also given.

Total number of houses visited by Medical Officer. 480

Total number of houses visited by Health Visitors :

First visit	...	500
Re-visit	...	910
		—————
Total	...	1,410
		—————

Number of contacts examined in the Clinic :—

Males	...	124
Females	...	116
Children	...	116
Total		356

Number of P.T. Cases found among contacts :—

		P.T. I.	P.T. II.	P.T. III.	Total
Males	...	1	3	6	
Females	...	1	1	8	
Children	...	1	1	3	
Total		3	5	17	

1. Area covered by 23,572 square miles :

Number of divisions catered ...

2. Population catered to ... 184,712

3. (A) Number of new cases registered.

Males ... 2,649

Females ... 1,090

Children ... 139

Total ... 3,878

(B) Daily average attendance of new cases. 11

4. Number of Pulmonary Tuberculosis cases :—

Positive ... 1,901

Negative ... 28

		P.T. I.	P.T. II.	P.T. III.	Total.
Males	...	11	10	1,385	1,929
Females	...	4	3	510	
Children	...	...	...	6	
Total		15	13	1,901	

5. Number of non-Pulmonary Tuberculosis	...	23
6. Number of non-Tuberculosis cases	...	1,779
7. Number of old cases attended to the Clinic...	...	
Males	...	11,861
Females	...	6,447
Children	...	186
		<hr/>
Total	...	18,494
		<hr/>
8. Daily average attendance, old cases	...	51
9. Total daily average attendance	...	62

Tuberculosis Clinic, Government Stanley Hospital, Madras

Tuberculosis Clinic, Stanley Hospital functioned between 1-30 p.m. to 5 p.m. on all days except Sundays. The staff consisted of a Medical Officer, two House Surgeons, two Health Visitors, a Clerk, a Staff Nurse and a Female Nursing Orderly and a Male Nursing Orderly.

Daily about 20 new cases registered, examined, screened and treated the same day. Sputum Examinations were done. All Pulmonary Tuberculosis cases suitable for Sanatorium treatment were put in the waiting list for admission to the T.B. Sanatorium, Tambaram by the Director, Government Chest Institute, Egmore on every Mondays and register maintained. Government servants were placed in separate waiting list and are given priority for admission. Bilateral Pulmonary Tuberculosis cases given, do micilliary treatment. As far as possible, they were isolated in their homes and are visited by the two Health Visitors and Medical Officer periodically.

On every working day between 8 to 11 a.m. the Medical Officer and the Health Visitors visited the houses of patients and advice the patients regarding isolation of patients, disposal of sputum, general hygienes, etc., contact of the patients are brought to the Clinic for examination and were screened.

Anti-tubercular drugs like Streptomycine, P.A.S. and I.N.H. are administered to all poor patients in two conditions. (1) Streptomycin and I.N.H. and (2) P.A.S. and I.N.H. were given.

Emergency cases of Pulmonary T.B. like Haemoptysis, spontaneous Pnenmothoax, etc., were admitted in the emergency wards attached to the Clinic, six (6) beds are provided, three of males, and three for female cases, suitable for sursery were admitted direct to T.B. Sanatorium, Tambaram, Pregnant Female patients were also admitted direct.

B.C.G. Vaccination is not done in this hospital.

CURATIVE SIDE

	Maes P.T. I.	Females P.T. II.	Children P.T. III.	Total
1. Number of new cases (including contacts)	... 2,899	1,849	484	5,232
2. No. of Pulmonary	... 337	...	1,641	1,978
3. No. of open cases in the above	1,641
4. No. of non-Pulmonary Tuberculosis	134
5. No. of non-Tuberculosis cases	3,120
6. No. of old cases :				
Men	34,588	} 61,576
Women	22,466	
Children	10,522	
7. No. of A.P. initials
8. No. of A.P. Refills
9. No. of P.P. Initials
10. No. of patient attending for A.P. Refills.
11. No. of P.P. Refills
12. No. of patients attending
13. No. of injections given (Streptomycin, etc.	43,092
14. No. of screenings done	3,492
15. No. of aspirations done
16. No. of cases referred from other clinics.	258

Age, Sex Group of cases diagnosed to be suffering from Tuberculosis
(including Contracts 196 .)

Age	P.T. I.		P.T. II.		P.T. III.	
	Male	Female	Male	Female	Male	Female
1 - 6	... 25	21	...	...	22	20
7 - 10	... 32	31	...	...	40	29
11 - 15	... 24	24	...	...	61	49
16 - 25	... 21	28	...	...	181	175
26 - 35	... 30	22	...	...	253	167
36 - 45	... 23	15	...	...	201	139
16 and above	... 23	18	...	...	146	158
No Income.						
Total	... 178	+ 159 = 337	904	+ 737 = 1,641		

Income Group

Rupees		Number of cases
10 to 20	...	246
21 to 40	...	723
41 to 75	...	192
75 to 100	...	88
100 and above	...	85
No income	...	307
Total	...	<hr/> 1,641 <hr/>

Occupation Group

Occupation		Number of cases
Cooly	...	504
Ryot	...	150
Beedy Roller	...	189
Clerical	...	93
Mechanic	...	68
Business	...	95
Tailors	...	122
Weaver, etc.	...	72
N.G.O.	...	55
C.G.O.	...	21
Department	...	272
Total	...	<hr/> 1,641 <hr/>

Preventive Side

	Last visit	Re-visit	Total	
1. Number of Houses Visited—				
By Health Visitor ...	1,410	884	2,294	
By Medical Officer ...	...	...	652	
2. Number of contracts examined in the Clinic—				
Men ...	...	...	307	} 1,029
Women ...	...	...	368	
Children ...	...	...	354	
	P.T. I.	P.T. II	P.T. III	Total
3. Number of P.I. cases found among the contracts ...	47	...	48	95
4. Number of cases Tuberculin treated—				
Tuberculin positive ...	...	...	...	...
Tuberculin negative ...	...	...	...	...
B.C.G. given ...	...	...	...	...
5. Coverage so far in the current year—				
Coverage so far from 1950 ...	...	...	...	...
6. Family Planning ...	...	...	...	207

Tuberculosis Clinic, Government Royapettah Hospital, Madras.

Chest (T.B.) Clinic Work	... 15.2494 sq. miles.
Covers on area of	... 9 Divisions.
Population catered to	... 223,489 (old Census).

Staff attached to the Clinic :

1. Medical Officer ... One.
2. Qualified Health Visitor ... Two.
3. Registration Clerk (part-time) ... One.
4. The Chest (T.B.) Clinic takes the services of the Staff attached to the Government Royapettah Hospital, X-ray Department and Clinical Laboratory for X-raying and Laboratory examination respectively.

5. The Staff Nurse posted to the T.B. ward is also posted to work in the Clinic in the after-noon.
6. The Male Nursing Orderly and Female Nursing Orderly posted to the Clinic are part-time workers who have other duties in the other departments of the Government Royapettah Hospital.

The work done by the Chest (T.B.) Clinic Staff may be summed up as follows :

Main Items :

- (1) Contact work.
- (2) Tuberculosis Ward Work (In-patient).
- (3) Chest (T.B.) Clinic Work (Out-patient).

- (1) *Contact Work.*—Between 8 a.m. to 11 a.m. All contacts of open cases are queried at their houses and a thorough check up is given at the Clinic. For the year ending 1963 the number of new cases picked up (i.e. open cases) is 355 and the details of contact coverage are mentioned in the attached sheets.

Further the homes of P.T. Cases who fail to turn up at the Clinic for regular Chemotherapy, are also visited. This helps to keep a check on the defaulters.

- (2) *Tuberculosis Ward Work.*—(In-patient)—P.T. Cases grouped under emergency cases (i.e. having Haemoptysis, Dyspnoea from causes like spontaneous pneumothorax, Hydro-Pneumothorax, Pleurisy with massive effusion, Empyema, Ascites, extensive Bilateral lesion with dyspnoea and cases in a moribund state) are admitted in the T.B. Ward attached to the Clinic and treated till the emergency is over. On discharge the patients are advised to attend their nearest Chest (T.B.) Clinic.

Patients admitted in the T.B. Ward come through :

- (1) The Government Chest Institute, Madras-31.
- (2) The Government Royapettah Hospital, Chest (T.B.) Clinic Madras-14.
- (3) The Government Royapettah Hospital, Casualty Department and
- (4) From other Units of Government Royapettah Hospital by way of transfers.

Bed Strength :

18 beds (sanctioned) and 6 extra.

(Admission is only for men, as there is no provision for women and children.

Working Hours : 12 a.m. to 1 p.m.

Number of emergency cases with P.T. admitted for the year 1963	...	529
---	-----	-----

Deaths	...	45
--------	-----	----

3. *Chest (T.B.) Clinic* (Out-patient Department).

Working Hours : 12 a.m. to 5 p.m.

Though this Clinic is intended to cater to the divisions mentioned above, men patients from Triplicane (i.e. K.-G. Hospital) area are also examined and treated at this Clinic.

New patients coming by mistake or otherwise from areas other than that pertaining to this Clinic are also examined and referred to the respective Clinics in the City.

Only patients referred from the other Units of Government Royapettah Hospital are taken in at the Clinic for registration and further investigation, etc.

Hence the number of cases registered at the Clinic is less.

1. Number of cases registered in the year 1963	...	1,444
2. Number of P.T. cases among the new cases registered in the year 1963	...	599
3. Number of non-Pulmonary T.B. Cases for the year 1963	...	73
4. Total number of T.B. Cases	...	672
5. Number of old T.B. cases in the year 1963	...	373
6. Number of non-Tuberculosis cases in the year 1963.	...	676
7. Attendance—Number of old cases in the year 1963	...	25,681
8. Daily average attendance of old cases	...	84
9. Daily average (old and new cases)	...	89

For the year 1963:

(a) A.P. Initials	...	Nil
(b) A.P. Refills	...	Nil
(c) Number of Patients attending for A.P. Refills	...	Nil
(d) P.P. Initials	...	Nil
(e) P.P. Refills	...	46
(f) Number of Patients who attended for P.P. Refills	...	3

(g) Number of aspiration done	...	6
(h) Number of deflation done	...	3
(i) Number of Screenings done	...	1,303
(j) Number of Injection (Streptomycine)	...	12,059
(k) Number of cases put on the writing list for admission into Sanatorium 1963	...	176
(l) Number of cases referred from other T.B. Clinic	...	22

From the statistics for the year 1963, it is seen that the incidence of Pulmonary Tuberculosis is at its zenith in the age group between 16 and 45, and in the same group the incidence is highest in the male sex.

In the occupation group, the incidence is high in coolies.

Tailors.

Beedi-Rollers.

Ryots.

Weavers.

Masons and the unemployed.

Further details are mentioned in separate sheets attached.

Remarks :

In considering the problems of control of tuberculosis, three main things are to be borne in mind.

- (a) the patients.
- (b) their environmental factors ; and
- (c) facilities for early detection and therapy.

The Association between adverse social conditions with regard to nutrition, living standards, and working conditions is well known.

Improved housing conditions, leading to a reduction in the number, dosage and closeness of contact is an important factor in improving social conditions.

The Tuberculosis control movement revolves round the patient.

He is the victim on whom the real burden of the disease falls. It is the improvement of his plight and trying to keep others from undergoing his ordeal, that give meaning to control efforts.

Treatment cannot be said to be complete until the patient is ready to return to useful and satisfying living.

Raising the standard of living results in improved well-being, improved housing, nutrition, cleanliness and sanitary conditions and the raising of the standard of education and general social security are factors which contribute to a decline in Tuberculosis.

The general measures help to a certain point. But a regular Anti-Tuberculosis Campaign including the measure of protection of the uninfected population by inoculation with B.C.G., that contributes to help the decline in the incidence of Tuberculosis.

To divorce specific measures from general measures, will add to the difficulty in the control of Tuberculosis.

The patients attending this clinic are really poor who fail in the occupation groups, viz. :

Coolies,
House-wives,
Beedi Rollers,
Tailors,
Ryots,
Weavers,
Street Hawkers,

Hotel servants, and the large group of unemployed whose standard of living is far below the average.

Drug Supply.—The Drug Supply to the patients attending this Clinic is drawn from the Medical Stores attached to the Government Royapettah Hospital.

Sheets attached :

- (a) Clinical coverage in detail for the year 1963.
- (b) Age, Sex, Income Occupation-war of cases diagnosed as P.T. for the year 1963.
- (c) Contact coverage for the year 1963.

Government Royapettah Hospital Chest (T.B.) Clinic, Madras-14 1963

- | | | |
|-----------------------|-----|--|
| 1. Area covered | ... | 15.2494 sq. miles. |
| 2. Number of Division | ... | 9 Divisions : |
| | | Royapettah, Mylapore North, Mylapore South, Vellala. Teynampet, Vannia Teynampet, T.Nagar South, T. Nagar North, Guindy and Adyar. |

3.	Population catered to	...	...	2,23,489 (old Census).
4.	Number of new cases registered.	Men	...	987
		Women.		353
		Children.		104
		Total	...	1,444
5.	Daily average attendance of new cases	...		5
6.	Number of Pulmonary Tuberculosis cases (New) :			
	Sputum Positives	...		355
	Sputum Negative	...		244
	Total	...		599

Men	Women	Children	Men	Women	Children	Men	Women	Children
20	13	13	154	42	2	282	73	Nil =
						Total	...	599

7.	Number of non-Pulmonary Tuberculosis Cases	...	73
8.	Number of non-Tuberculosis cases	...	676
9.	Number of old cases attended the Clinic :		
	Men	...	17,182
	Women	...	7,129
	Children	...	1,280
	Total	...	25,681
10.	Daily average attendance of old cases	...	84
11.	Total daily average (new and old cases)	...	89

**Government Royapettah Hospital, Madras Chest (Tuberculosis)
Clinic, Madras-14**

(Age and Income Groups of cases diagnosed to be suffering from Pulmonary Tuberculosis for the year 1963.)

Age Group			P.T. I		P.T. II		P.T. III	
			Men	Women	Men	Women	Men	Women
1	—	5	9	...	1	1	1	...
6	—	10	6	...	1	3	...	...
11	—	15	4	...	1	6	4	1
16	—	25	2	7	38	13	71	29
26	—	35	6	5	40	14	94	25
36	—	45	3	...	26	7	58	12
Above		45	4	...	47	...	54	6
Total ...			34+	12+	154+	44+	282+	73
								= 599

Income-Group of cases diagnosed to be suffering from Pulmonary Tuberculosis.

<i>Income</i>	<i>No. of cases</i>	<i>Total</i>
1 to 9	...	4
10 to 20	...	35
21 to 40	...	167
41 to 75	...	159
76 to 100	...	40
Above 100	...	20
Unemployed	...	74

Occupation Groups

Sweetmakers	3	Watchmen	7	Compositors	5
Assistant Secretary	1	Fruit Seller	5	Provision Store-keepers	9
Postman	1	Editor	1	Barbers	6
Cobblers	6	Attenders	7	Businessmen	6
Telephone Operators	3	Milkmen	4	Gardeners	10
Temple Priest	1	Pensioners	6	Beedi-rollers	17
Street Hawkers	1	Painters	8	Coolies	197
Rickshaw-pullers	1	Clerks	10	Ryots	41
House Servants	5	Carpenters	7	Peons	13
M.N.O.	1	Tailors	23	Teachers	8
Packers	4	Sweepers	10	Sales-men	13
Tinker	1	Goldsmiths	5	Mechanics	9
Stamp Vendor	1	Fishermen	9	Drivers	15
Mid-wife	1	Dhobies	1	Weavers	15
Electricians	2	Cooks	3	Masons	20
Binders	2	Policeman	1	Unemployed	74
					Total ... 599

" G "

Government Royapettah Hospital Chest (T.B.) Clinic Contact coverage for the year 1963

1. Patients picked up (open cases)	...	355
2. House visited	...	482
3. Number queried at Home	...	649
4. Number of contacts totally examined at the Clinic	...	250
5. Number found at the Clinic :		
P.T. I	...	10
P.T. II	...	6
P.T. III	...	4
6. Total Number of P.T. cases among contacts	...	20

**Tuberculosis Clinic, Kasturba Gandhi Hospital for Women and Children
Triplicane, Madras**

The T.B. Clinic attached to the above hospital functions on all days except Sunday from 2 p.m. to 5 p.m. Triplicane, Zambazaar, Pudupakkam, Tiruvateeswaranpet, Mount Road, Chepauk, Mirsapat and Krishnampet are under the jurisdiction of this Clinic. Only women and children are treated and contact cases are examined. Male contacts are screened, and if found positive are referred to General or Royapettah Hospital.

The Director, Tuberculosis Institute supervises the clinic once in a week and puts deserving patients suffering from Pulmonary Tuberculosis on waiting list for admission into the Government Tuberculosis and the Medical Officer attends to the patients and also examines the in-patients when requested by the Ward Doctor and gives necessary advice. The Doctor and a Health Visitor visit the patients in their homes and give them necessary advice regarding the disposal of sputum, contact examination, attending the hospital regularly, health, etc. When patients of this area happen to visit other clinics they are referred back to this clinic. The health visitor visits them and advises them to visit their clinic. The clinic functions only as an out-patient department

The year under review 2,463 new patients attended the clinic. 326 cases were diagnosed to be suffering from Pulmonary Tuberculosis, out of which 94 cases were put on waiting list for admission into the Sanatorium, Tambaram. All clinical examinations are being done in the hospital, clinical laboratory, screening and X-ray apparatus is made use of. Most of the patients are P.T. III cases, majority of them being between the ages of 16 and 25 years, their income being between Rs. 21 to Rs. 40 and their occupation housewife.

Deserving patients are receiving money from the Bhavanagar Fund. They are paid Rs. 10 per month for a period of six months.

Curative :

	Men	Women	Children	Total
1. No. of new cases (including contacts) ...	17	1,759	687	2,463
	<i>P.T. I</i>	<i>P.T. II</i>	<i>P.T. III</i>	Total
2. (i) No. of Pulmonary Tuberculosis cases :				
Women ...	28	31	213	326
Children ...	22	6	26	
No. of cases belonging to this area ...	217			
No. of cases belonging to other areas ...	101			
No. of cases from mofussil ...	8			

(ii) Pleurisy :									
	Dry	...	2						
	With effusion	...	17						
(iii) Others									
	T.B. Larynx	...	1						
3.	No. of open cases in the above	...	101						
4.	No. of non-Pulmonary Tuberculosis cases	121							
	(i) Glands (Lymphatic)	...	102						
	(ii) Osteoarticular (excluding late affection)	...	7						
	(iii) Meningeal (including C.N.S.)	...	1						
	(iv) Abdominal	...	11						
	(v) Skin (including subcutaneous cellular tissue)						
	(vi) Of genito urinary system						
	(vii) Others						
	Total	...	121						
5.	No. of non-Tuberculosis cases	...	1,996						
6.	No. of old cases	...	<table><tr><th>Women</th><th>Children</th><th>Total</th></tr><tr><td>16,410</td><td>2,509</td><td>18,919</td></tr></table>	Women	Children	Total	16,410	2,509	18,919
Women	Children	Total							
16,410	2,509	18,919							
7 to 12. A.P. and P.P.—Nil.									
13.	No. of injections given—								
	Streptomycin	...	18,000						
	Other injections	...	9,000						
14.	No. of screenings done	...	2,420						
15.	No. of aspirations done	...	1						
No. of non-Tuberculosis cases :									

Respiratory System

Influenza	...	3	Eosinophilia	...	26
Upper respiratory catarrh	...	140	Bronchiectasis	...	33
Laryngitis	...	2	Cystic lung	...	7
Tonsillitis	...	33	Broncho Pneumonia	...	...
Bronchitis	...	517	Lung Abscess	...	...
Bronchial asthma	...	191	Pneumonia	...	8
			Whooping cough	...	2

Cardiovascular System

Valvular disease of the heart. ...	34	Anaemia	...	59	
Hypertension	...	4	Lymphatic	...	1

Digestive System

Dysentery	...	1	Nutritional oedema	...	6
Diarrhoea	...	20	Dyspepsia	...	67

Other Diseases

P.U.O.	...	66	Fibrositis	...	1
Debility	...	85	Neuritis	...	...
Myalgia	...	135	Diabetis	...	1
Surgical	...	22	Amoebic hepatics	...	1
Gynaec	...	28			

					1,493
		Contact		...	503
					1,996

Preventive :

16. No. of cases referred from other clinics	...	103		
17. No. of houses visited—		1st Visit	Re-visit	Total
By the Health Visitor	...	251	805	1,056
By the Medical Officer	...	480	...	280
18. No. of contacts examined in the clinics—				
Men	...	17		
Women	...	194		
Children	...	292		
Total	...	503		
19. Family Planning	...	86		

Contact Work :

1. Patients picked-up	...	753
2. Houses visited	...	753
3. No. queried at their homes	...	2,259
4. No. of contacts totally examined in the clinic	...	503
5. Number found P.T. among the contacts	...	...

		P.T. I	P.T. II	P.T. III
Women	...	3	1	9
Children	...	16	3	7
6. Total Number of P.T. Cases found among the contacts	...	39		

Age, Sex, Income and Occupation groups among patients suffering from Pulmonary Tuberculosis for the year 1963.

Age and Sex Group

Age		Females			Total
		P.T. I	P.T. II	P.T. III	
1 to 5	...	17	5	16	38
6 to 10	...	5	2	10	17
11 to 15	...	1	...	5	6
16 to 25	...	12	13	83	108
26 to 35	...	11	9	82	102
36 to 45	...	3	5	21	29
45 and above	...	1	3	22	25
Total	...	50	37	239	326

Income and Occupation Group.

Income		Occupation	
Rupees	No. of cases	Type	No. of cases
10 to 20	... 20	Housewife	... 254
21 to 40	... 175	Nil Occupation	... 44
41 to 75	... 79	Student	... 22
76 to 100	... 25	Health Visitor	... 1
100 and above	... 16	Nurse	... 3
Nil Income	... 11	Sweeper	... 1
		Typist	... 1
Total	... 326	Total	... 326

1963

1. Area covered by 6 divisions ... 2,885 sq. miles.
2. Population catered to ... 1,79,303
3. No. of new cases registered—

Women	... 1,759
Children	... 687
Men	... 17
Total	... 2,463

(a) Daily average attendance of new case—8.

4. No. of P. T. cases

		<i>P.T. I.</i>	<i>P.T. II</i>	<i>P.T. III</i>	<i>Total</i>
Women	...	28	31	213	} 326
Children	...	22	6	26	

Sputum positive Cases—109.

5. No. of non-Pulmonary Tuberculosis cases ... 121

6. No. of non-Tuberculosis cases ... 1,996

7. No. of old cases—

<i>Women</i>	<i>Children</i>	<i>Total</i>
16,410	2,509	18,919

(b) Daily average attendance of old cases ... 56

8. Total daily average attendance ... 64

Area covered by the clinic, showing the number, names of the divisions population of each division and total population.

<i>Division</i>		<i>Area in sq. miles</i>	<i>Population</i>
1. Pudupakkam	...	.2238	28,672
2. Tiruvateeswaranpet	...	1.0499	30,363
3. Chepauk	...	.2997	24,267
4. Triplicane	...	.1760	26,777
5. Zambazaar	...	.1391	25,044
6. Mirsapat	...	.7000	44,180
Total	...	2.5885	1,79,303

Medical Inspection

During the year 1963 school inspection was carried out by two Medical Inspectors. Out of these two Inspectors, only one worked for a short time, i.e., from January to April and subsequently retired. But this place remained unfilled owing to shortage of medical officers. The inspection of girls schools was carried out three Medical Inspectresses during the whole year. Dr. B. L. N. Raj was succeeded by Dr. A. S. Ramamurthy as Chief Medical Inspector in July 1963. As usual the complement was insufficient to cope with the increased work for the following reasons. (1) The number of schools and children had increased. (2) Medical Inspectors and Inspectresses were posted frequently in the dispensaries on relieving duties as and when the dispensary doctor proceeded on leave. (3) The vacancy caused by retirement of one of the Medical Inspectors remained unfilled.

The number of schools was 311 but only 44 schools were inspected. The types and number of Corporation Schools are given below :—

1. Higher Elementary Schools	...	89
2. Elementary Schools	...	173
3. Basic Schools	...	6
4. Urudu Boys Schools	...	25
5. Urudu Girls Schools	...	18
Total ...		311

In addition to these schools the Medical Inspector and Inspectresses examined the students of two High Schools maintained by the Corporation of Madras one at 277, T.H. Road, Tondiarpet, and the other at Nungambakkam High School.

Only one school Medical Ambulance van was under the charge of the Chief Medical Inspector during the year for taking the children of the schools of South Madras to Skin Clinic for examination and treatment and to attend to other functions. No van was available for attending to the same work in North Madras as the present condemned one had not been replaced and consequently the children of North Madras schools could not be given the benefit of such medical treatment.

The treatment given below shows in detail the number of Regular and Entrants both Boys and Girls medically examined and the number defective found during routine Medical Inspection.

Groups	Boys			Girls			
	Number exami- ned.	Number found defective.	Percen- tage.	Number Exami- ned.	Number found defective.	Percen- tage.	
Entrants	...	856	350	40.09	3,186	1,581	49.62
Regulars	...	2,074	853	41.14	3,724	1,592	42.75
Total	...	2,930	1,203	41.06	6,910	3,173	45.92

Malnutrition.—152 boys (5.19%) and 755 girls (10.93%) were found undernourished against 621 boys (5.42%) and 1,608 girls (15.38%) respectively in the previous year. 1,412 children were given shark liver oil and calcium lactate for malnutrition and rickety chest and 1,017 children were given yeast tablets, Vitamin 'C' tablets and Iron Tonic for various forms of stomatitis and border case anemias of Mal-nutritional origin and other forms of 'B' complex and Vitamin 'B' deficiency diseases.

Medical Treatment.—652 boys and 2,221 girls were treated at their schools. 17 boys and 262 girls were sent to Corporation dispensaries for attention and treatment as they could not be attended to at the schools. 100 boys and 536 girls were sent to Government Hospital for various ailments such as pharyngitis, tonsillitis, discharge from the ear and other ailments for further investigations and treatment.

Re-Inspection.—46 re-visits were made to the various schools and 2,930 boys and 6,910 girls were examined and 184 parents met and given necessary advice.

Personal Hygiene.—583 boys and 658 girls were found unhygienic in respect of their clothes head, nails and body. Instructions were given to the children and also to the parents of the children to pay more attention to the above defects.

Diseases of Bones and Joints.—71 boys and 69 girls with bone disease were suitably advised.

Infectious and Contagious Diseases.—116 boys (3.96%) 663 girls (9.53%) had infectious and contagious diseases. They were suitably segregated and isolated by giving separate seats and others sent to infectious diseases hospital and Corporation dispensaries for treatment and a few were advised to have complete treatment at home. 76 boys and 475 girls having scabies were, suitably treated at the schools, by issuing sufficient amount of ungutum sulphuris. 114 cases of Hansen and other skin diseases were suitably treated at the skin and leprosy clinic at Ice House Road, Triplicane. The school ambulance van was used for the purpose.

Other Diseases and Defects.—78 boys (2.66%) 185 Girls (2.65%) having defects not mentioned under the above categories were suitably treated.

Circulatory System.—94 boys (3.21%) 174 girls (2.52%) were advised proper treatment. Anemic children were given Iron Tonic.

Co-operation of Teachers.—There was good co-operation of the staff of various schools inspected towards identification of defects and treatment. First aid was administered by teachers with medicine supplied from the medical stores.

School Sanitation.—Defects of schools noted with special reference to sanitation. Water supply, play ground facilities, etc., were pointed out and suggestions made for remedy of the defects.

MIDDAY MEALS SCHEME

The Midday Meals Scheme is the one in its kind implemented in India by the Corporation of Madras in the year 1925. The main aim of the scheme is to supply free meal at midday to the poor and undernourished children, attending the Corporation Schools in the City. The scheme not only improved the health of the children gradually but also gave encouragement and scope to poor parents to educate their children. Year by year, the scheme became more popular and greater number of pupils especially from slums rush at the schools for admission. Consequently it is increasing the percentage of literates, improving the health of the undernourished children instigating the poor and illiterate parents to send their children to schools and lastly gaining international fame day by day.

At the initial stage in the year 1925, the scheme was designed to provide free meal at midday to only 500 under nourished children among those attending the Corporation Schools in the City. In order to improve the quality, increase the supply to more number of children and to prepare the food under hygienic conditions, the whole scheme of preparation and supply was entrusted to the City Health Officer in the year 1947. The scheme was reorganised by opening 3 Midday Meal Centres, one each in the North, Centre and South for preparation of meals in hygienic condition under the guidance of the Supervisors appointed for each centre and under the Supervision of Assistant Health Officers. The supply of number of meals was also increased to 8,000 on every school working day under covered vans to ensure quick delivery. Again, in 1957, to increase the nutritive value and to make the dishes palatable to children, change of menu in preparation and supply was introduced. The following menu for a week was prescribed after careful study and consultation.

S. No.	On Days	Nature of Menu
1	Mondays ...	Rice and Sambar.
2	Tuesdays ...	Curd Rice.
3	Wednesdays ...	Tamarind Rice.
4	Thursdays ...	Curd Rice.
5	Fridays ...	Rice and Sambar.
6	Saturdays ...	Rice and Sambar.

The supply of Midday Meals was gradually increased from 8,000 in 1947 to 34,027 in 1963. The increase of supply in various years is shown below :—

Years	Number of Meals Supplied	Years	Number of Meals Supplied
From 1947 to 1952 ...	8,000	From 1958 to 1960 ...	28,730
1953 ...	10,000	1961 ...	33,895
1954 ...	11,000	1962 ...	33,953
1955 ...	12,000	1963 ...	34,027
1956 ...	13,000		
1957 ...	18,000		

During the year the supply 34,027 meals to various schools was made through the 3 Midday Meals Centres as follows :—

M.M. Centre	Total No. of Schools and Creches	No. of Meals
North Range ...	110	11,953
Central Range ...	103	10,319
South Range ...	99	11,755
Total ...	312	34,027

The services of the 3 Midday Meal Centres, besides preparing meals and supplying them to schools for distribution to the children, were also utilised for supply food temporarily to the victims of flood and fire disasters. In the year 1963 the Centres supplied 2,930 meals to the above victims as follows :—

Centre	Number of meals supplied to victims of	
	Flood	Fire
North Range ...	500	100
Central Range ...	...	380
South Range ...	...	1,950
Total ...	500	2,430

With a view of quicken the process of preparation of meals on a large scale and to save considerable waste of time and labour a steam boiler plant was installed in the South Range by constructing a masonry roofing, etc.,. Eventhough the plant was opened on 8th October 1963 by Thiru K. A. Madi-alagan, B.A., M.L.A. under presidentship of the Deputy Mayor Thiru M. Veda-challam, the actual work could not be commenced due to some technical diffi-culties and is expected to go into operation in near future.

The Midday Meals Scheme which has its own value in the fields of Educa-tion and Health roused the enthusiasm of not only the other States of India but also the other foreign countries. Number of Foreigners, Statesmen and Officials of other States visited the Midday Meals Centre, South Range to study the working of the scheme.

During the year under report the following Distinguished Visitors from various parts of the world visited and expressed their views on the scheme.

- (1) Mrs. Neera Dogra, Chairman, Assam Social Welfare Advisory Board.
- (2) Shri H. Sharma Shastry, Deputy Director of Public Health, Mysore State.
- (3) Shri D. Krishna, Director of Social Welfare, Mysore State.
- (4) Shri B. H. Kudubi, D.E.O., Bangalore.
- (5) Shri A. Surendranath, Superintendent of Physical Education, Mysore State, Bangalore.
- (6) Thirumathi Maggie Lim, Sr. H.O.I./C.M.O.H. Services, Singapore.
- (7) Thirumathi Paula Ecbeverria, Ford Foundation, Consultant, Calcutta Metropolitan Organization.
- (8) Shri N. Ramlal, Non-Official Delegate from Andhra Pradesh and Retired, D.P.I., Andhra Pradesh.
- (9) Shri Srivatsava, Deputy Director of Social Education, Rajasthan.
- (10) Shri B. N. Chaturvedi, Assistant Director of Education, Delhi.
- (11) Shri D. P. Nayyar, Director (Education), Planning Commission Government of India, New Delhi.
- (12) Dr. P. D. Kapur, Mayor of Lucknow.
- (13) Shri V. Moses, Special Officer for Midday Meals, Andhra Pradesh, Hyderabad.
- (14) Shri M. B. Noorudeen, Assistant Director of Education, Ceylon.
- (15) Shri Siesien, H. O., Surabaia (Indonesia).
- (16) Shri Manubhai Patel, Deputy Minister (Education), Gujarat.
- (17) Shri S. R. Venkataramani, Secretary, Servants of India Society.
- (18) Shri David A. Wice, Experiment in International Living, Group Leader, Madras Group.
- (19) Shri Belfield Smith, F.A.O., Expert Advisor to the Government of India, Catering Technology.
- (20) Dr. Khin Nwe Aung (Burma).
- (21) Dr. Majid (Indonesia).

A few extracts here and there from the visitor's book maintained at the Midday Meals Centre (South) were narrated below to show the working and success of the scheme.

" I visited Midday Meal Centre, South Range. It is kept very clean and run efficiently. I congratulate the Superintendent and the Madras Corporation for taking care of the needy children".

4th July 1962.

(Sd) NEERA DOGRA,
Chairman, Assam Social Welfare
Advisory Board.

(True copy)

" This is as good as complete mechanism of school feeding. I have fortunately met in this City, suggests me to propose the use of it for nutrition education as first goal. As such this institution will likely give a tremendous support in the uprising of the country. The ability of the workers is beyond any doubt."

Date : 13—2—1963.

(Sd) SIESIENHO,
SURABAIA (INDONESIA)

" Visited Midday Meals Cooking Centre of the Corporation. It is a very useful scheme helping the idea of equal opportunities to all. Very efficiently managed and nicely looked after by the cooking staff and Supervisor. Congratulations to the Corporation for such a bold Programme. I wish other Corporations in the country will also be inspired by the Madras Corporation to introduce the Midday Meals Scheme in their respective areas.

I thank the Education Department Staff for kindly making these arrangements to show me round."

Date : 5—4—1963.

(Sd.) MANUBHAI PATEL,
Deputy Minister (Education),
Gujarat.

(True copy).

" We were impressed with the purpose, scope and success of the Midday Meals Scheme. It satisfied our democratic instincts and confirms our belief that the optimism of the socially conscious Indian public can-and does-produce positive results." .

23—7—1963.

(Sd.) DAVID A. WICE,
Experiment in International
Living, Group Leader,
Madras Group

Conclusion :

The Midday Meals Scheme maintained by the Corporation of Madras under Health Administration besides gaining popularity creating interest to other States and Countries to study and introduce the scheme at their places for the benefit of the children.

MILK DISTRIBUTION SCHEME

Distribution of reconstituted milk to the undernourished children, attending the Corporation Schools in the City in addition to Midday Meals continued during 1963 also. The milk powder donated by the Catholic Relief Services, New Delhi, was distributed to the respective schools as per the quota fixed where the powder is reconstituted into milk under the supervision of the Head Master and Supervisor and distributed to the children in hygienic condition.

During the year 1963, 1,335 cases equivalent to 72,090 lbs. of Milk Powder was distributed to the schools for distribution of reconstituted milk. 485 cases equivalent to 26,190 lbs. of milk powder was used at 3 Midday Meals Centres for preparing curd bath for supply to children with Midday Meals. Besides these, 10 cases equivalent to 540 lbs. of milk powder was supplied to Asnok Vihar where the reconstituted milk was distributed to the poor and undernourished children of its member families. Still at the end of the year 600 cases of 54 lbs. each was held in stock from the donations of 2,000 cases received during 1962. The Catholic Relief Services had again promised to donate 2,000 cases of milk powder for the above feeding programme which is expected during 1964.

PUBLIC HEALTH LABORATORY

The Public Health Laboratory has completed 18 years of its service to the citizens of Madras and suburbs in the year 1963. There has been an appreciable improvement in respect of the buildings, etc., of the Public Health Laboratory during the year under review, but the Public Health Laboratory is in need of much more improvements considering the increased population. Another two Public Health Laboratories are needed, one for South and one for North to meet the demand of the increased population. This is the only one Public Health Laboratory in the big City of Madras which provides laboratory facilities to the Medical Practitioners. This laboratory provides facilities to the Medical Institutions run by the Corporation of Madras as well caters to the needs of the private medical practitioners in the City of Madras and their clients, etc. The fees levied for the investigations on Blood, Urine, Motion, etc., are very nominal, so as to be within the reach of the poor man. This Public Health Laboratory is intended for service to the public and to help such of the patients who cannot afford to pay the higher rates of fee of private laboratories.

This laboratory is under the charge and efficient care of the Pathologist, Kumari Dr. Shantha Arogyadoss, M.D., D.G.O., who has had the post-graduate training in U.S.A. She is ably assisted by Dr. M. Anantaram, M.B.B.S., Senior Assistant, Dr. Mrs. K. Sharada Bai, B.Sc., M.B.B.S., and Mr. M. C. Arunachalam, B.Sc., Bio-Chemist, Sri T. Srinivasan, Senior Technician. The other staff who ably help in the efficient management of the laboratory are

1 Clerk, 3 Technicians, 8 Attenders, 2 Peons and a Sweeper. Pathologist has been improving the laboratory to keep it, up-to-date in equipments, apparatus and in techniques adopted, and she is trying her best to keep the laboratory, on a par, with the foreign laboratories in all respects as far as possible.

Once again I mention for the information of the Public and private practitioners as well Corporation Medical Institutions that Public Health Laboratory under-takes almost all examinations, viz., Clinico-Pathological, Bacteriological, Serological and Bio-Chemical Analysis, etc., etc. The rates charged are cheaper than that charged by private laboratories as well State Government of Madras. The examination of Sputum for acid-fast bacilli and the Throat Swab for C. Diphtheria are done free of cost with a view to encourage the public, as well as, from Public Health point of view. At this juncture I wish to bring to the notice of the public that although State Government Laboratories have enhanced the rates of fee by 50% of the original charge, the Corporation maintain the same fee schedule.

Public Health Laboratory offers a scientific approach to the public as well as to the private practitioners and it is for them to avail themselves of these laboratory facilities provided by the Corporation of Madras.

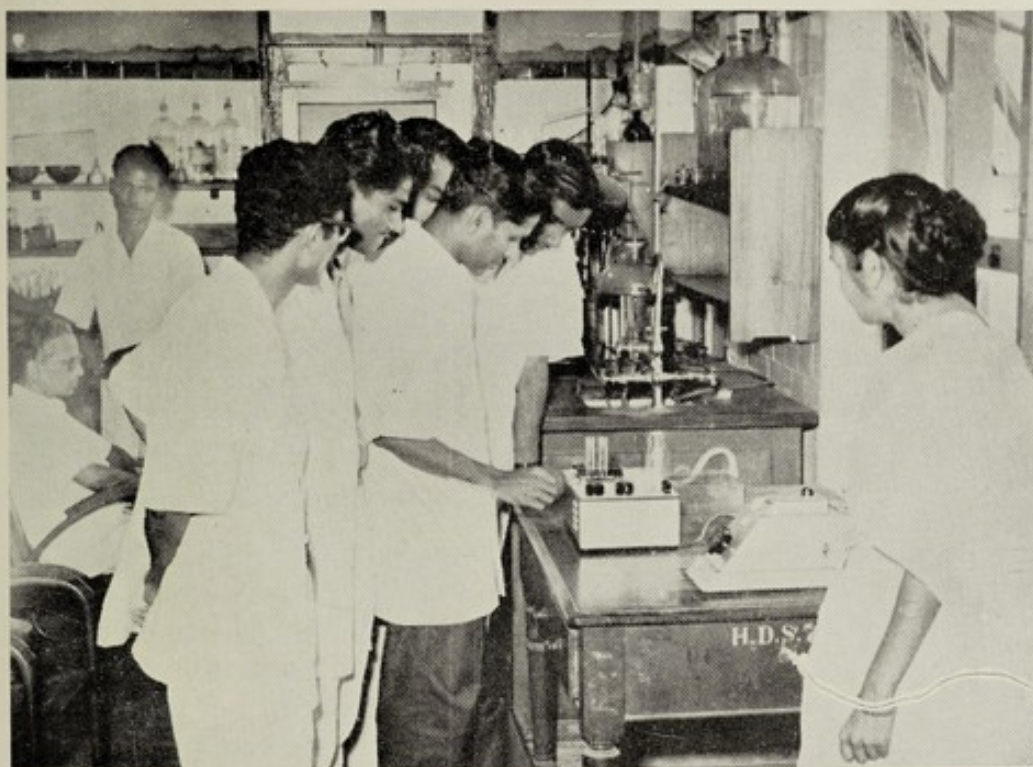
STATEMENT No. I.

Showing the Progress of the Laboratory since the year 1946.

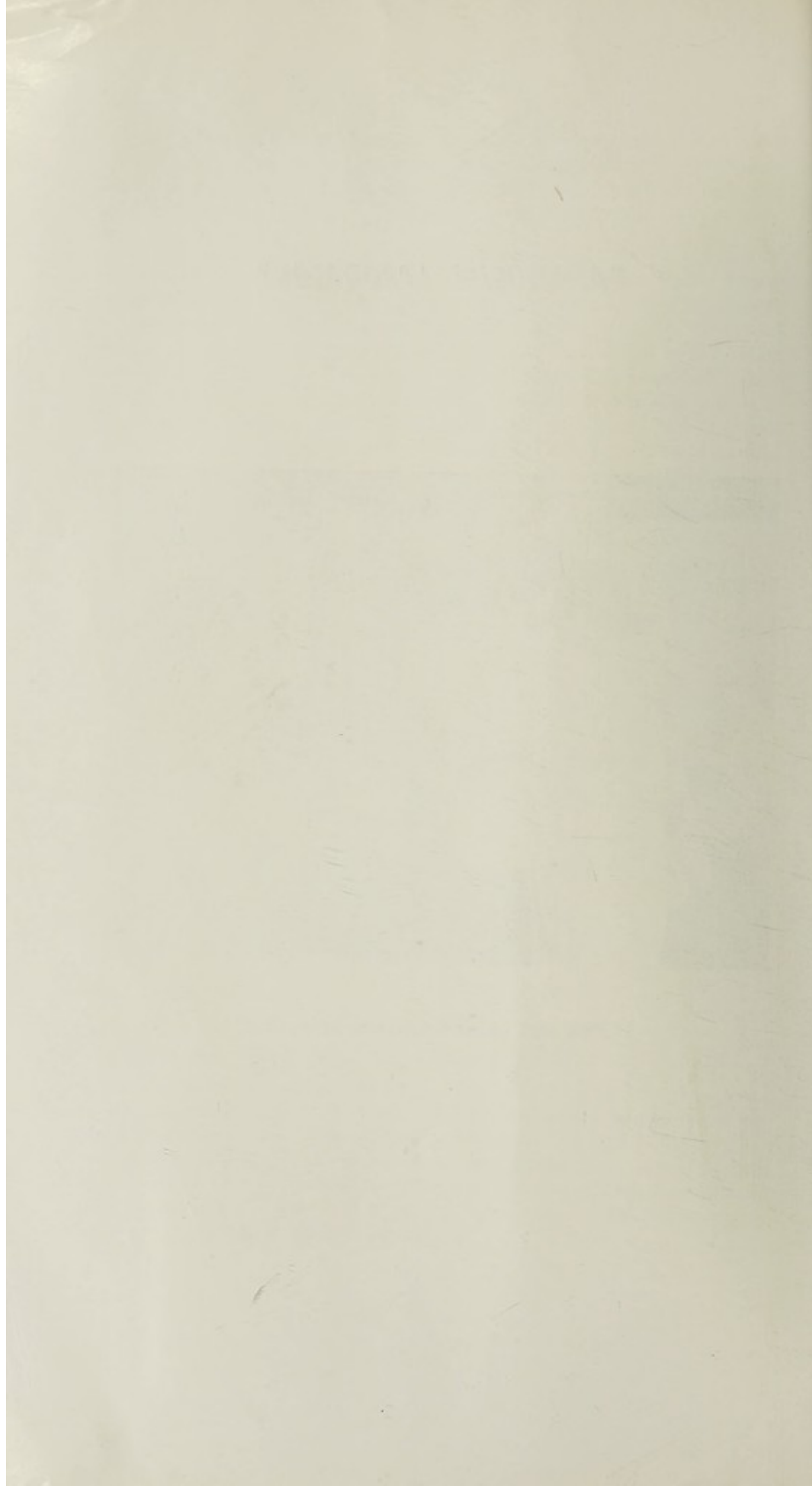
Year	Number of Samples	Receipts	
		Rs.	nP.
1946	311	215	00
1950	16,346	10,939	00
1955	43,955	24,118	50
1960	48,286	31,103	25
1963	50,763	34,429	75

The above statement justifies the fact that year after year the laboratory is becoming increasingly popular and the number of samples tested are steadily on the increase. It is gratifying to note that the staff of the Corporation of Madras, Medical Institutions are evincing great interest and are taking full advantage of the facilities provided and thereby treating their patients more scientifically. About 50% of the specimens tested at the laboratory are from the Corporation Medical Institutions.

PATHOLOGIST LABORATORY



New and Latest equipment at work



STATEMENT NO. II

Statement showing the details of the specimens received from the private practitioners, various Corporation Clinics, Dispensaries, Child Welfare Centres during the year under review.

Private Practitioners	Corporation Medical Institutions				Total
	C.W.C.	Dispensaries	Clinics	Others	
28,859	15,723	3,788	597	1,796	50,763

STATEMENT No. III

Statement showing the total number of various specimens received during the year.

Blood	Sputum	Urine	Motion	Bio-Chemical Analysis	Others	Total
38,624	2,051	3,955	3,635	1,794	704	50,763

In the year 1963 the laboratory handled 50,763 specimens and number of each kind of specimens examined during the year is detailed above.

Public Health Laboratory undertakes routine screening of the pregnant women's blood, who attend the anti-natal clinics of the Child Welfare Centres. This programme was started in the year 1951 with routine screening of anti-natal cases from five centres only when only 543 samples were examined during that year. The rate of positively sample were examined during that year. The rate of positively was 5%. Now the routine screening of the blood is done for 20 centres. During the year under review 15,723 mothers had their blood tested and out of them 419 cases were positive for Venereal Diseases. The rate of positively now is only 2.5%. Syphilis not only affects the termination of pregnancy but the child born of syphilitic parents will congenitally acquire the diseases and it will be a great thing if this is detected, before the child is born and the mother treated, to prevent the child that is born, from acquiring the disease congenitally. With this idea this scheme was put into operation. The laboratory is equipped with a laboratory blood testing unit donated by the UNICEF in the year 1951 which is of great use in working out the scheme with the co-operation of the public. Subsequently the equipments have been supplemented by the apparatus and glass-ware purchased by the Corporation itself.

STATEMENT No. IV

Statement showing the details of pregnant women, examined for V.D. the numbers diagnosed and treated with the *P.A.M. Penidure L.A., etc.* in detail.

Sero-Positive New Cases	Sero-Positive Old Cases	New Cases treated	Old Cases treated	Total treated
419	135	135	127	262
Reactive	Partly Reactive	Non-Reactive	Total	Total Attendance at C.W.C.
357	62	14,578	14,997	16,911
P.A.M. used	Penidure L.A. used	Clinic interviewed	House visits	Letters sent
170	c.c. 944 vials	1,145	383	273

STATEMENT No. V

Statement showing the quantity of Penidure L.A. purchased from the local market and issued to the Centres and the closing balance during the year

Opening Balance	Receipts	Total	Issue	Closing Balance
855 Vials	752 Vials	1,607 Vials	1,073 Vials	534 Vials

STATEMENT No. VI

Statement showing the details of Serological Tests conducted during the year for the Private Practitioners and Child Welfare Centres, Corporation of Madras

Sources	No. of Positive	Partly Reactive	Negative	Total
1. Child Welfare Centres	357	62	14,578	14,997
2. Private Practitioners	168	25	2,569	2,762

STATEMENT No. VII

Statement showing the Progress of the Bio-Chemical Analysis
year after year since 1959

No.	Nature of Examinations	1959	1960	1961	1962	1963	
1.	Acid Phosphatase	...	1	3	3	1	7
2.	Alkaline Phosphatase	...	...	4	19	14	14
3.	Blood Sugar	...	159	235	354	426	508
4.	Blood Cholesterol	...	32	120	205	233	286
5.	Blood Urea	...	68	88	200	246	353
6.	Blood Fibrinogen	...	...	1	...	...	...
7.	Blood Chlorides	...	...	1	2	...	...
8.	Cerebro-Spinal Fluid	...	52	35	102	62	73
9.	Fractional test Meal	...	13	43	41	65	14
10.	Glucose Tolerance test	...	56	97	118	150	173
11.	Icteric Index	...	5	28	33	38	50
12.	Non-Protein Nitrogen	...	...	8	10	3	3
13.	Prothrombin Time	...	9	5	21	32	14
14.	Serum Calcium	...	10	6	9	4	6
15.	Serum Bilirubin	...	...	5	13	14	38
16.	Serum Proteins	...	6	46	81	105	93
17.	Thymol Turbidity	...	2	14	30	26	68
18.	Urea Clearance	...	7	12	6	12	36
19.	Vanden-Bergh test	...	3	16	41	22	38
20.	Serum Phosphorus	...	...	...	6	2	4
Total		...	423	767	1,294	1,455	1,719

The amount collected towards the fees for the Bio-Chemical Analysis done this year is Rs. 8,979-50 nP. against Rs. 6,933.50 nP. for the last year.

Fees at the scheduled rates for the Examination of specimens for the Clinical-Pathological, Serological, Bacteriological Tests are as follows :

	<i>Scheduled Rates</i>	Rs.	nP.
1. Blood Ordinary Examination Counts, etc. each	...	1	00
2. Blood Agglutination test (Widal)	...	2	00
3. Blood Culture for Enteric Group	...	2	00
4. Blood for V.D.R.L. test	...	2	00
5. Blood for Kahn test	...	2	00
6. Blood-quantitative V.D.R.L. test	...	2	00
7. Blood for Sedimentation rate	...	1	00
8. Motion Culture	...	2	00
9. Motion Microscopic Examination	...	1	00
10. Urine for quantitative examination, Sugar or Albumin	...	1	00
11. Urine for qualitative examination	...	1	50
12. Other smears for examination, G.C. etc.	...	1	00
13. Skin smears for Hansen's Bacilli	...	1	00
14. Semen examination for Spermatozoa	...	1	00
15. Semen examination complete	...	4	00
16. Flood for Vandenberg's test	...	1	00
17. Blood for Gel. test	...	1	00
18. Blood for Chopra test	...	1	00
19. Bleeding time	...	1	00
20. Coagulation time	...	1	00
21. Platelet Count	...	1	00
22. Other materials for examination sent by the private doctors (each)	...	1	00

Scheduled Rates for Bio-Chemical Analysis

Analysis—

1. Blood Sugar	...	3	00
2. Glucose Tolerance test	...	12	00

		Rs.	nP.
Analysis—(contd.)			
3. Fractional test Meal Analysis	...	20	00
4. C.S.F. for Proteins	} for all three tests	18	00
5. C.S.F. for Sugar			
6. C.S.F. for Chloride			
7. C.S.F. for Globulin	...	2	00
8. Vandenberg test	...	1	00
9. Icteric Index	...	2	50
10. Serum Bilirubin	...	6	00
11. Serum total Proteins, Albumin, Globulin	...	12	00
12. Serum Alkaline Phosphatase	...	8	00
13. Serum Calcium	...	6	00
14. Serum Phosphorus	...	6	00
15. Serum Acid Phosphatase	...	8	00
16. Thymol Turbidity	...	5	00
17. Prothrombin Time	...	5	00
18. Blood Chloride	...	6	00
19. Urine Chloride	...	6	00
20. Serum Cholesterol	...	6	00
21. Urea Clearance test	...	11	00
22. Blood Urea	...	6	00
23. Non-Protein Nitrogen	...	8	00
24. Blood Fibrinogen	...	8	00
25. Quantitative estimation of any other content not mentioned above except 17 Keto Steroids	...	8	00

The examination of samples for the Corporation Employees drawing a salary of less than Rs. 300 and their dependents is done free of charge.

Specimen received from the Corporation Institutions are charged at the scheduled rate for the Bio-Chemical Analysis only.

The working hours of the Laboratory is from 10.00 a.m. to 5 p.m. at present. We receive enough number of specimens for examination for the day by 10.00 a.m. itself. We are forced to restrict the number of samples tested for the day because of the heavy load of work in the laboratory daily. In case, the number of specimens are too many for the day, the patients are given an appointment for the next day or for a subsequent working day, to go over the laboratory, with a fresh specimen by 10.00 a.m. Now every day the laboratory is over crowded with patients and hence it is suggested that appointment for examination of blood counts, G.T.T. etc., be fixed previously at the laboratory, during working hours (i.e.) between 10 a.m. and 5 p.m. for the convenience of the public. Public Health Laboratory is one of the 'A' Grade Laboratory in the City of Madras maintained by the Madras Corporation since 1946, with up-to-date equipment and apparatus for doing the various kinds of investigations. During the year 1963, also the Public Health Laboratory has been selected as a training centre for B.Sc. Graduates in the laboratory technology, the course being conducted by the Voluntary Health Service, Mylapore, Madras-4 and it continues to be the training centre this year also. The examinations for the Graduate Medical Technologist are conducted at the Public Health Laboratory, Corporation of Madras, Pathologist Dr. Kumari S. Arogyadoss, M.D., D.G.O., was the Chairman of the Board of Examiners. Every year the examination is conducted during the month of January and the new batches of trainees start that training in the middle of January with the necessary sanction of the authorities.

Investigations of specimen from I.D.H.T. are also done at this laboratory, particularly convalescent Cholera motion. The positive stains are referred to the Dr. S. Mukerjee, M.B., D.Phil, Head, Division of Microbiology, Indian Institute for Bio-Chemistry and Experimental Medicine, P-27, Prinsep Street, Calcutta to help him in a Research Programme.

During the year under review the building for housing the Bio-Chemistry Section is almost completely finished. For want of fitting up the work benches, sinks, taps, etc., etc., we are unable to shift the Bio-Chemistry Section into the new buildings. As soon as the amenities like sanitary fittings, etc., are provided and the work completed we will occupy the new premises. We are eagerly looking forward to this occasion as the existing laboratory is cramped for space.

In conclusion, I would again like to stress on the point that we will much appreciate that whenever possible, the person going over to the laboratory make an appointment, by so doing the routine work at laboratory will not be dislocated, where as, if cases, stay into the laboratory as and when they, it entirely dislocates the daily routine work of the laboratory and the concentration on the work, by the laboratory personnel.

PATHOLOGIST LABORATORY



New Building of the Bio-chemical section.



PUBLIC ANALYST LABORATORY

With the prices of food articles gradually increasing keeping pace with the rise in the values of other essential commodities of use in daily life and the demand for them being always in excess of their supply, particularly in a big City like Madras, the temptation for the food dealers to indulge in adulteration is too much to be resisted. Bearing this fact in mind, the efforts of the Public Analyst's Laboratory have been concentrated on this grim task of waging an unrelenting war against the adulterators year after year.

The number of samples analysed has, therefore, been increased since 1957 considerably, and a new arrangement was put into effect for a more intensified drive at sample-taking, especially in milk which has been mainly responsible for keeping up the average value for adulteration at a high level. These attempts coupled with severe penalties prescribed under the Act have not failed to yield the desired result.

The percentage of adulteration which had touched the peak figure of 54.8 per cent in 1952, probably as an aftermath of the Second World War, has been steadily going down year after year, and stands at 23.2 per cent during the current year.

The total number of samples analysed during the year 1963 by the Public Analyst's Laboratory was 7,961 of which 7,669 were taken under the Prevention of Food Adulteration Act 292 were received informally from various departments and private parties for analysis. A few new varieties of food samples were also analysed the details about which are given subsequently under the relevant sections.

Milk.—4,260 milk samples accounted for 55.5 per cent of the total number of samples analysed in 1963.

Description	Number of samples			Adulteration caused			
	Analysed	Genuine	Adulterated	Percentage of adulterated samples	By addition of water	Due to fat deficiency	By both added water and fat deficiency.
Cow's Milk ...	2,067	1,327	740	35.8	604	70	66
Buffalo's Milk ...	1,616	1,163	453	28.0	385	15	53
Mixture of Cow's and Buffalo's Milk ...	571	252	319	55.9	300	1	18
Unclassified ...	6	2	4	66.7	2	...	2
Total ...	4,260	2,744	1,516	35.6	1,291	86	139

For the 1,327 genuine samples of cow's milk, the average values of milk fat was 5.2 per cent and of milk-solids other than milk-fat was 9.0 per cent ; while for the 1,163 samples of buffalo's milk, the corresponding values were 7.4 per cent and 9.9 per cent.

Among the adulterated samples, the average per cent of added water was 21.2 per cent, the minimum and maximum limits being 2 per cent and 84 per cent respectively, while the average value for fat deficiency was 29.5 per cent, the range lying between 10 per cent and 80 per cent.

The remaining 6 milk samples not classified in the statement given above consisted of 2 sold as Pasteurised milk and 4 as " Milk " without any indication as to their source ; the latter four were adulterated.

A large number of samples sold to the Food Inspectors under the popular declaration of " Mixture of Cow's and Buffalo's Milk " by the vendors have invariably been found to be adulterated heavily.

Butter.—592 samples were analysed, 522 being genuine and 70 adulterated. In 51 of the 70 adulterated samples the water content ranged from 19 to 69.2 per cent (average working to 28 per cent) exceeding thus the maximum limit prescribed under the Prevention of Food Adulteration Rules. 7 samples whose water content was below the legal limit, were declared " adulterated " as their milk-fat content was much below the required minimum, namely, 76 per cent.

In the case of 11 adulterated samples while their water-content was higher than 20 per cent (the permissible maximum), their milk-fat content was also not upto the standard.

Prohibited artificial yellow colouring matter has been used in one sample.

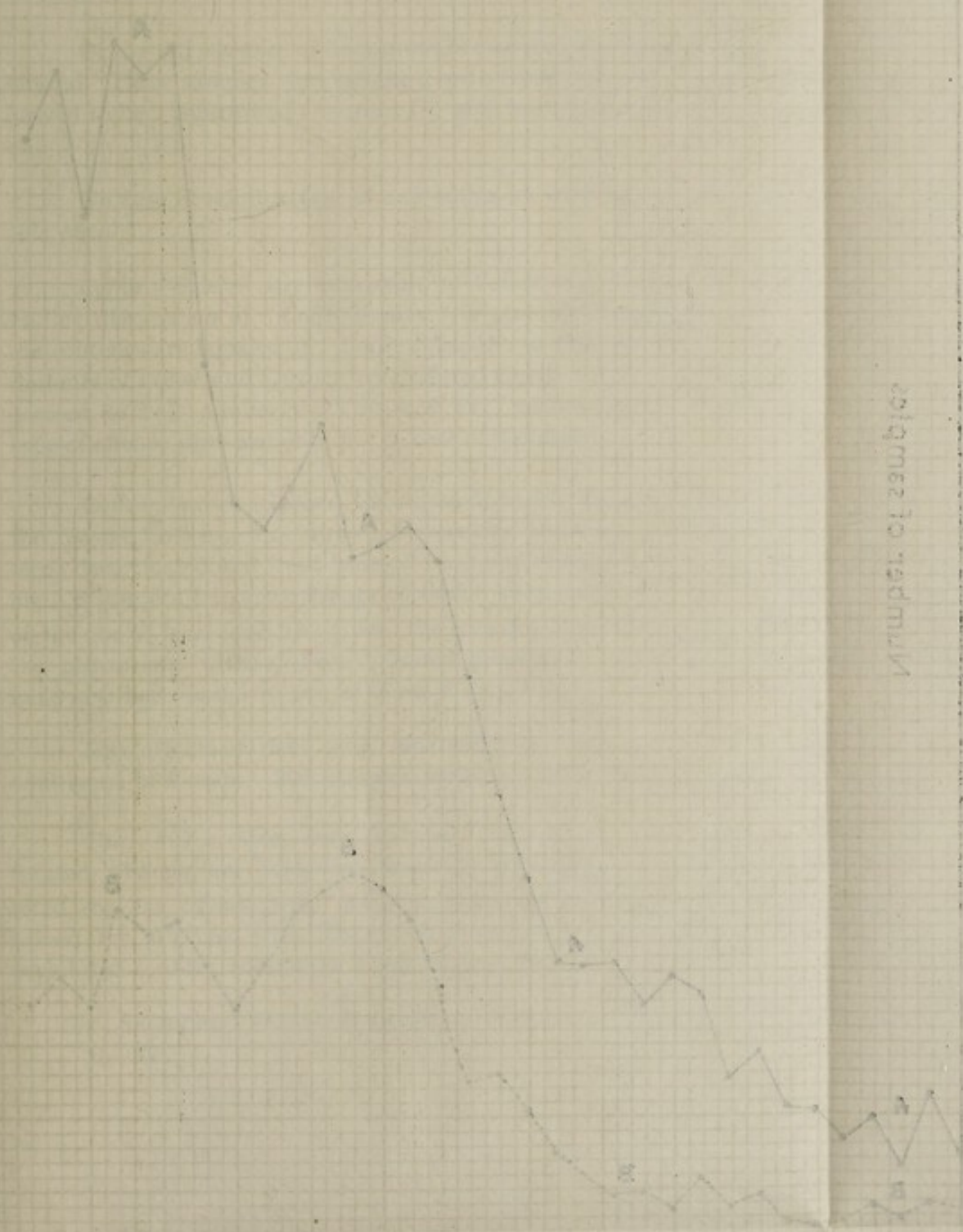
Ghee.—Only 30 samples out of the 950 analysed proved to be adulterated. 22 of these samples proved to be substandard in quality, 14 of which having been admixed with fat other than milk-fat, the most commonly used fat for such adulteration being Vanaspati (hydrogenated Vegetable oils). Adulteration ranged from 7 per cent to 98 per cent, (average 43.3 per cent). 7 samples were condemned as adulterated as they contained free fatty acids exceeding the permissible maximum of 3 per cent (calculated as Oleic Acid). One sample was declared as adulterated as it contained both fat not derived from milk and excess free fatty acids.

Edible oils :

Description		Number of samples analysed	Number of samples declared		Percentage of adulterated samples
			Genuine	Adulterated	
Gingelly Oil	...	790	742	48	6.1
Groundnut Oil	...	227	208	19	8.4
Cocoanut Oil	...	321	317	4	1.2
Total	...	1,338	1,267	71	5.3

A - Number of samples Analyzed

B - Number of Adulterated Samples



PREVENTION OF FOOD ADULTERATION ACT.

PUBLIC ANALYST'S LABORATORY

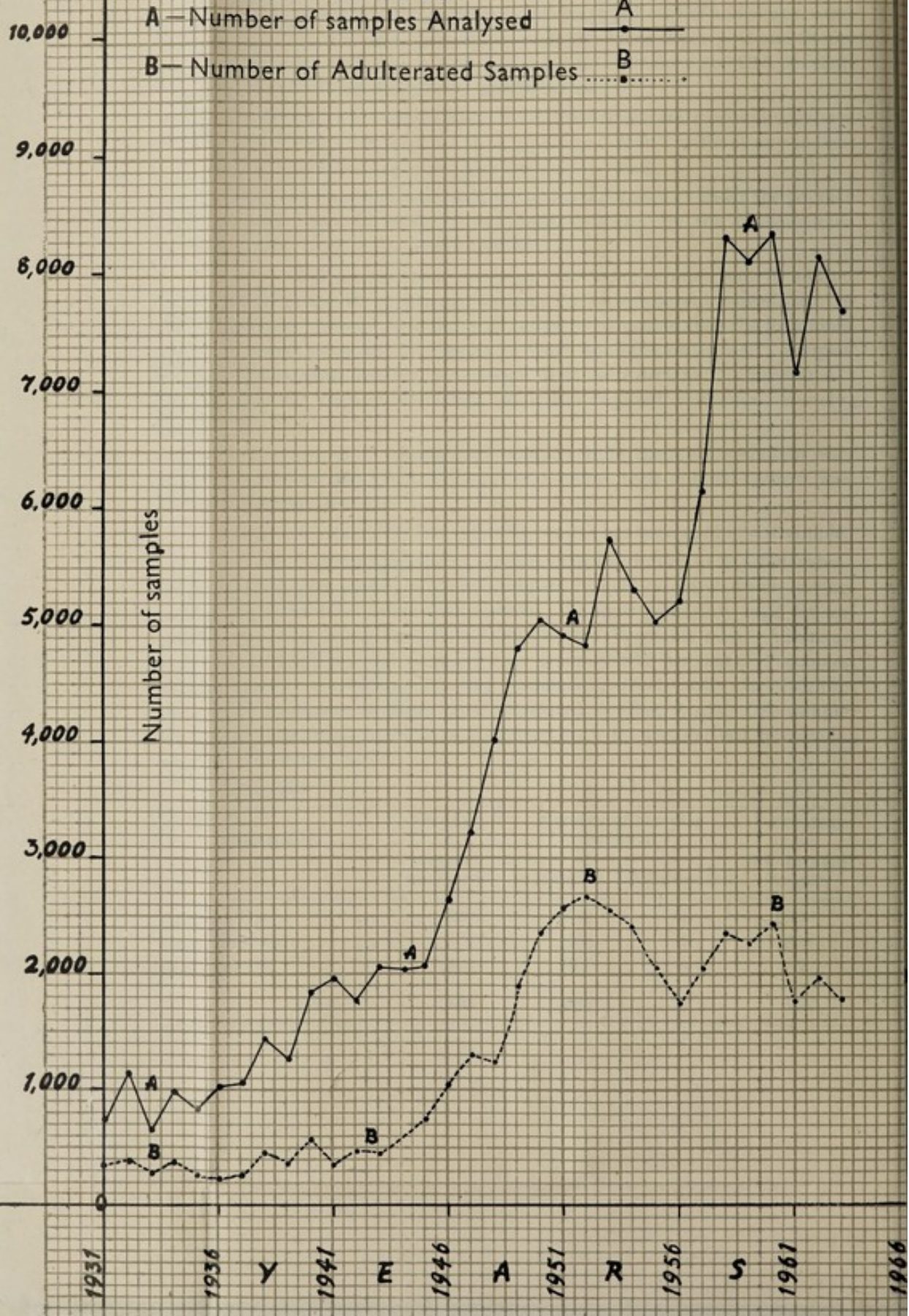
-MADRAS CITY-

1963

Scale

1" Represents 1000. SAMPLE

1" Represents 5 Yea



Amongst the adulterated Gingelly Oil samples, 47 contained Groundnut Oil ranging from 5 per cent to 80 per cent. 7 of these 47 samples contained in addition excess free fatty acids. One sample of Gingelly Oil, not containing any admixture with other oils, was declared adulterated due to the presence of 8 per cent free fatty acids indicative of high deterioration in quality. (The maximum limit for free fatty acidity being 3 per cent calculated as Oleic, Acid).

Out of the 227 samples of groundnut oil 19 were certified to be adulterated. 16 samples contained Gingelly Oil, 2 samples consisted of a mixture of Gingelly and Cocoanut Oils with Groundnut oil and one sample was sold "misbranded" as Gingelly Oil.

Of the 321 samples of Cocoanut Oil analysed 4 were certified to be adulterated. Three samples were admixed with the Groundnut Oil and one sample proved to be a mixture of Cocoanut Oil with both Groundnut Oil and Gingelly oil.

No case of adulteration of any edible oil with mineral oil was reported this year.

Coffee.—Sale of any admixture of Coffee with Chicory under the misleading description of "*Coffee Powder*" is prohibited under the Act. Unless the contents are labelled as "*Coffee Blended with Chicory*" and the percentage contents of Coffee and Chicory are declared clearly thereon, the article shall be deemed to be "adulterated" as well as "misbranded". Instances of this type of offence were met with in the case of 8 samples.

Coffee Powder (Ground Coffee) shall be the pure powdered product of the roasted Coffee be an obtained by roasting properly the sound, dry, green-seeds decorticated and freed from all husk and spermodern by thorough cleaning. 8 samples contained plenty of Coffee husk and sandy matter suggestive of the use of fruit husk along with the enclosed immature seeds gathered from the plantations without being cleaned properly. Chicory and Bengalgram have also been found in two of these 8 samples.

Bengalgram or date seed, separately, or inter-mixed, was a popular adulterant in 9 cases. 205 samples proved to be Genuine on Analysis.

Tea.—107 samples were analysed. 10 samples were found to be adulterated. Blackgram husk was found in 5 samples. In *two* samples prohibited coal-tar colours were detected and the remaining three samples contained Tea admixed with Blackgram husk and starch, suitably treated with prohibited coal-tar colours to simulate good tea.

Ghee Substitutes.—All the 5 samples analysed were found to be Genuine.

187 samples of other varieties of food articles were analysed and 55 were found to be adulterated. The details are given below :—

Thoor Dhall.—27 samples out of the 112 examined were declared adulterated since they had been coloured with an yellowish, orange prohibited coal-tar colouring matter.

Turmeric.—It has been found that out of the 34 samples analysed only 9 were adulterated ; 6 contained lead to the extent of 40 to 1,500 parts per million parts of the sample (Lead content should not exceed 2.5 parts per million). One of the sample contained chillies in addition to excessive lead. One sample contained 25 per cent Bengalgram and other foreign substances. Another sample described as " Halda Powder " consisted of Turmeric powder with a lot of undesirable mineral matter.

Chillies Powder.—7 samples were analysed and 5 were adulterated as they had been admixed with cheap adulterants of various kinds, namely, starch, turmeric powder, and extraneous substances. Under the Rules, the spices sold in any form (whole, partly ground or powdered), e.g., Chillies Powder or Turmeric Powder should consist exclusively of the particular spice namely, chillies or turmeric alone in the specified form free other spices and extraneous matter.

Maida and Ravai.—15 samples of Maida and one sample of Ravai were analysed and all of there found to be genuine.

Arrowroot.—The two samples analysed were found to be genuine Curcuma starch and Maranta starch.

Asafoetida.—All the three samples analysed were declared as adulterated as they yielded too low an alcoholic extract indicative of the overdoing of " Compounding " with too much of the diluents and one of them contained in addition a Coal-tar colour.

Honey.—Of the 3 samples analysed, 2 were adulterated. One sample contained excess water and prohibited coal-tar colour and one sample contained too much of sucrose.

Jaggery.—A sample of Jaggery (Gur) analysed was found to be genuine.

Food Grains.—Two samples of *Wheat Samba* analysed were rejected as adulterated as both of them had been damaged badly on account of insect infestation.

One sample declared "*Masoor*" which contained the prohibited harmful Kesarigram and extraneous matter was certified as adulterated because Kesari (Dhall) is said to be responsible for a disease commonly called " Lathyrism ".

Food Colours.—Two samples of yellow food colours and one of green were analysed. All the three samples were declared to be adulterated as, they contained prohibited Coal-tar colours with diluents.

One sample of *Kesari Powder* sold for use on food was analysed and condemned as adulterated as it contained a prohibited Coal-tar colour, starch, etc.

Prepared Food.—One sample of "*Prepared Food Sweet Cake*" was, analysed and certified to be adulterated as the sample was coloured with prohibited Coal-tar colours.

Aerated Water.—One sample sold as "*Lemon Cloudy Lemon Crush*" (Synthetic) was analysed and found to contain Saccharin, yellow coal-tar colour and a preservative and the label did not conform to the regulations. So it was certified as "adulterated and misbranded".

Complaints similar to those made during 1959 about the admixture of Chunam (lime) with Cooked Rice, were made through the press again this year. Immediately instructions were issued to all the Inspectors to revive the practice of taking such samples of cooked rice after inspection of the boarding houses complained about by their patrons. It may be mentioned here that no such cases have been detected so far in the City.

The analysis of 292 informal samples were undertaken on behalf of the other departments of the Corporation as well as several Co-operative Institutions in the City.

The details regarding these 292 samples are given hereunder :—

Source	Nature of the article	Num-ber	Report of analysis
Madras Co-operative Milk Supply Union, Ayana-varam.	Pasteurised Milk	... 150	4 Samples below standard. 3 adulterated (8 to 10 per cent added water.)
Health Department through the Health Officer, Circle Health Officers, Sanitary Inspectors, Midday Meals Centres, Infectious Diseases Hospital and Child Welfare Centres.	Gingelly Oil	... 2	Adulterated with 8 per cent of Groundnut Oil.
Do.	Chillies	... 3	Contained damaged and bleached pods bad in appearance.
Do.	Chillies Powder	... 5	Four adulterated; and one of poor quality.

<i>Source</i>	<i>Nature of the article</i>	<i>Number</i>	<i>Report of analysis</i>
Health Department through the Health Officer, Circle Health Officers, Sanitary Inspectors, Midday Meals Centres, Infectious Diseases Hospital and Child Welfare Centres.	Bengalgram Dhall ...	2	Satisfactory.
	Do. Blackgram Dhall ...	2	One sample unsatisfactory...
	Do. Thoor Dhall ...	8	3 samples satisfactory; 2 of poor quality; one artificially coloured; and too much of broken, damaged fungal attacked waste grains with dirt and stones in the rest.
	Do. Tamarind ...	2	Too dark in colour and insect-infested; with 35 per cent of damaged seeds' content.
	Do. Potato ...	1	Satisfactory.
	Do. Rice ...	9	Graded according to their quality.
	Do. Turmeric ...	4	
	Do. Wheat Bran ...	2	
	Do. Thoor Dhall ...	4	
	Do. Rice Powder ...	1	Insect infested and stale.
	Do. Rice (Raw and Boiled).	4	Insect infested and contained extraneous matter and damaged broken grains; one was coloured.
	Do. Turmeric Powder ...	2	One adulterated.
	Do. Rice broken for Conjee.	1	Fit for use.
	Do. Turmeric ...	2	Satisfactory.

<i>Source</i>	<i>Nature of the article</i>	<i>Number</i>	<i>Report of analysis</i>
Health Department through the Health Officer, Circle Health Officers, Sanitary Inspectors, Midday Meals Centres, Infectious Diseases Hospital and Child Welfare Centres.	Vendiyam	...	2 Satisfactory.
Do.	Rayai	...	1 Consisted of broken rice particles, highly insect infested and stale.
Do.	Mustard	...	2 Satisfactory.
Do.	Orange crush	...	1 } Free from insecticide.
Do.	Cake	...	
Do.	Coloured cake	...	1 Contained prohibited coal-tar colours.
Do.	Cow's Milk	...	4 One sample contained 5 per cent of added water.
Do.	Milk powder	...	19 Unfit for use.
Do.	Sambar Powder	...	2 Satisfactory.
Do.	Residue from Sambar.	...	1 Over-heated paste of rice flour and dhal.
Do.	Garlic	...	1 A third of the contents spoilt.
Do.	Artificial Colours for Food and Kesari Powder	...	3 Consisted of prohibited Coal-tar colours.
Do.	Jangiri and Boonthi...	1 (each)	Both contained prohibited Coal-tar colour.
Do.	Coffee Dicoction	...	1 No foreign ingredient or adulterant found.
Do.	Coffee Powder	...	3 Genuine.

<i>Source</i>	<i>Nature of the article</i>	<i>Number</i>	<i>Report of analysis</i>
Health Department through the Health Officer, Circle Health Officers, Sanitary Inspectors, Midday Meals Centres, Infectious Diseases Hospital and Child Welfare Centres.	Coffee Seeds	...	2 Genuine ; but immature and not cleaned well.
Do.	Wheat flour	...	1 Unfit for use.
Do.	Chicory	...	2 Genuine.
Do.	Maize starch	...	1 Genuine.
Senior Entomologist, National Malaria Eradication Programme.	Bleaching Powder	...	1 Fit for use.
Revenue Department ...	A brand of writing ink.	1	Spirit content about 1.5 per cent.
Do. ...	Chemical Fertilizers ...	1	Opinion regarding issuing of licence given.
Electrical Department ...	Transformer Oil	...	15 Reported on their, organic and inorganic acidity contents.
Madras Veterinary College.	Milk	...	1 Adulterated 90 per cent added water.
Sub-Inspector of Police, Law College Police Station.	Milk Powder	...	1 Unfit for human consumption.
Deputy Inspector of Police, C.I.D., Mylapore.	Sambar	...	1 Dead insects found.
Superintendent, Seva Samaj Boys' Home, Madras-26.	Wheat flour	...	1 Unfit for use.
Do.	Wheat grain	...	1 Do.
Manager and Correspondent C.S.I. School for the Deaf, Mylapore.	Wheat flour	...	1 Unfit for use.

<i>Source</i>	<i>Nature of the article</i>	<i>Num- ber</i>	<i>Report of analysis</i>
Triplicane Urban Co-operative Society Ltd. (P)	Thoor Dhall	...	5 Genuine.
Do. (P)	Gram Dhall	...	1 Genuine.
Do. (P)	Bengalgram Dhall	...	2 Genuine.
Do. (P)	Gingelly Oil	...	1 Genuine.
Do. (P)	Groundnut Oil	...	1 Genuine.
Do. (P)	Cocoanut Oil	...	1 Genuine.
Dunlop Rubber Factory, Ambattur (P).	Milk	...	3 One sample adulterated (58 per cent Fat Deficiency.)
Warden, Stanley Medical College Hostel (P).	Milk	...	1 Adulterated (51 per cent added water),
Warden, Madras Medical College, Hostel (P).	Ghee	...	1 Genuine.
Total		...	292

(P) = Samples examined on payment of cost of analysis.

Total amount collected from private parties Rs. 105.

During 1963 the Staff of the Laboratory was as follows :

Public Analyst	...	Thiru S. Sundaram, M.A., A.R.I.C.
Senior Assistant	...	(1) Thiru R. Ramalingam, M.Sc.
		(2) Thiru V. Venkataramana Rao, B.Sc. (Hons.), M.Sc.
Junior Assistants	...	(1) Thiru C. Rajaganapathi, B.Sc. (on leave from 16th April 1963 to 24th July 1963).
		(2) Thiru C. Sambandam, B.Sc. (on leave from 8th August 1963 to 5th October 1963.)
		(3) Thiru M. A. Shahul Hameed, B.Sc.
		(4) Thirumathi N. M. Lakshmi Devi, B.Sc. (On leave from 26th December 1962 to 23rd February 1963.)
		(5) Thirumathi Khaleel Unnissa, B.Sc.

It has to be mentioned here that the Courts as well as the vendors prosecuted have been repeatedly insisting on the analysis of the samples being completed almost on the same day, as it were, of their receipt and the certificates issued forthwith. Such a thing is obviously impossible and inadvisable, too, in view of the complex nature of the articles, the numerous elaborate tests involved and the large number of samples received every day for analysis

But no effort is spared to complete the analysis and issue the certificates with the least possible delay, during which interval, it has to be mentioned, the samples are being preserved well under ideal conditions of storage.

Even so, during the year, with considerable strain, it was managed to include a few more varieties of new food articles, like "Aerated Water", "Food Colours", in limited numbers.

With additional accommodation, appointment of some more members to the staff and the availability of equipment to be imported which are under the contemplation of the authorities for being provided, it is expected that more varieties of samples will be included for analysis and the activities of the Laboratory expanded in the coming years.

In addition to the fresh batch of five full-time Food Inspectors who relieved the old set with effect from 4th March 1963, fifty Sanitary Inspectors also continued to do the duties of part-time Food Inspectors in their respective divisions.

Data about the number of samples taken and the percentage found to be adulterated thereof are given in the "Food Analysis Statement No. I" which covers the quinquennial period ended with 1963 (1958-63).

Statement "Food Analysis—No. II" gives the total number of samples taken by each of the five Food Inspectors and by the Sanitary Inspectors in the City with figures about the number of samples found adulterated under each category.

The number of samples certified as adulterated during the year under report was 1,777. In respect of 157 samples which were only very slightly adulterated, no prosecutions were instituted against the vendors. On the remaining 1,620 cases, prosecutions were launched and convictions were obtained in 852 cases; one ended in acquittal, and in 5 cases the parties were admonished by the Court. One prosecution got abated. The year ended with 761 cases still awaiting disposal.

On 1st January 1963, prosecutions for adulteration launched in respect of the 5,725 cases of the previous years were pending disposal at the Courts. 752 of these were convicted, 11 were acquitted, 13 admonished by the Courts and 3 prosecutions got abated leaving 4,946 old cases still pending disposal on 1st January 1964.

The total number of convictions obtained during 1963 was 1,604 as against 1,028 in 1962. The total amount of fines imposed on these cases was Rs. 88,875-50 nP. in 1963 compared to Rs. 55,507 during 1962, the average fine per conviction being Rs. 55 in 1963 against Rs. 54 in 1962. The heaviest fine levied was Rs. 2,000 in 4 milk cases, while the fine was Rs. 5 in 8 cases.

Particulars about the action taken in respect of the samples analysed during 1963 and certified as adulterated by the Public Analyst and of those of the previous years since 1954 pending disposal on 1st January 1963 are given in the "Food Analysis—Statement No. III" in the Appnedix.

Amongst the 1,604 convictions obtained at the various Presidency Magistrates' Courts, 26 were against vendors for second offences, and 3 for third offences. In 3 of these 29 cases the vendors were convicted and fined; in the remaining 26 cases the vendors were sentenced to imprisonment upto One Year's Rigorous Imprisonment addition to fines upto Rs. 2,000.

Parties were fined and released after imprisonment just till the rising of the Court in 18 cases.

Refusing to give samples, preventing the Food Inspector from taking samples by pouring away the contents kept for sale, or preventing him in any manner from exercising any other duties under the Act as a public servant constitute offences liable for punishment under Section 16 (b) and (c) of the Prevention of Food Adulteration Act. Four milk vendors were convicted and fined from Rs. 30 to Rs. 200 for hindering thus the Food Inspector from taking samples.

A Coffee vendor was fined Rs. 100 for selling adulterated Coffee Powder and the entire stock of adulterated stuff in 13 packets (4 Kg.) seized from him was ordered by the Court to be destroyed.

By way of fees for analysis, the Laboratory collected Rs. 105 from, various institutions for analysis of 16 informal samples of food stuffs sent by them.

Thus, the total income to the Corporation through the working of the Laboratory to Administer the Prevention of Food Adulteration Act in the City during 1963 came to Rs. 88,980-50 nP.

Considerable difficulty is experienced by the Inspectors in serving the summons on the itinerant hawkers and unestablished vendors to be prosecuted, with the result the cases against them end either in dismissal or stay of legal proceedings. This accounts for the increasing number of prosecutions, pending in the Courts.

If the Food Inspectors could secure adequate co-operation from—

- (i) the public witnessing the taking of samples,
- (ii) the police in ascertaining the correct addresses of the itinerant vendors and also in serving summons subsequently and
- (iii) the retailers for eliciting information about their wholesale manufacturers and suppliers,

It will go a long way in convicting most of the vendors prosecuted, every year.

From Rs. 54 of 1962, the figure for average fine per conviction has gone up to Rs. 55 this year which should still be deemed to be rather low compared to the rich illegal profits earned by each vendor by selling the adulterated food stuffs to the public. There is, therefore, a strong case for fixing a statutory minimum fine of at least Rs. 100 even for the first offences which account for 1,575 cases of the prosecutions launched during the year in the Courts.

WATER ANALYST LABORATORY

Introduction :

This is the 41st Report of the Water Analyst, setting out the work of the Water Analysis Laboratory for the year 1963. During the year under review, the water supply to the City continued to be a chlorinated mixture of filtrates from the Slow Sand Filters and Rapid Mechanical Filters. On an average 33 to 35 million gallons of raw water were pre-chlorinated with a dose varying from 0.69 to 1.96 p.p.m. a day. About 24 to 25 million gallons of chlorinated raw water were strained through sand filters, with six inches of fine sand, as the filtering medium which were worked without any rate of filtration, while the rest were again chlorinated (1.8 to 2.4 p.p.m.), treated with alum (2 to 4 g.p.g.) and lime (1.0 to 1.7 g.p.g.) flocculated, clarified and filtered through Rapid Mechanical Filters. The filtrates of indifferent quality as obtained from the sand filters were mixed with the filtrates of fairly good quality, as obtained from the Rapid Mechanical Filters, chlorinated to a dose varying from 2.1 to 3.4 p.p.m. and supplied to the City.

The processed water, while being distributed, deteriorated to a slight extent both aesthetically and bacteriologically. Though the smell of Sulphuretted-Hydrogen was generally absent in the City Distribution System, a few blood worms and leaches made their appearance at the consumers' taps in only a very few localities. Systematic scouring and sterilisation of the mains served to set right the defects.

The following are certain important features worth mentioning in this report:—

(1) The North Pumping Main, feeding the under-ground reservoirs at Robinson's Park Pumping Station (North Madras) was put into commission. The new pumping main and the under-ground reservoirs in Robinson's Park Pumping Station were sterilised before commissioning.

(2) During the year under review, till July the results of coliform tests were reported as "Coliforms present or absent in a given volume of water samples". But from August, the universally adopted procedure of estimating the 'Most Probable Number' or coliforms in water samples are being followed for the bacteriological examination of water samples at this laboratory, on the suggestion of the Chief Water Analyst, King Institute, Guindy. (Vide his Letter No. 2938/C/63, dated 21st May 1963).

(3) The Chief Water Analyst has also recommended that the quality of protected water supply in Madras City should conform to the standards prescribed by the Indian Council of Medical Research for drinking water supplies (Vide his Letter No. R.C. 2938/C/63, dated 21st May 1963 and No. 3881/C/63, dated 10th July 1963). In compliance to the above recommendations, the water works department has been advised accordingly.

Scientific :

Water supply to the City is derived from three different sources namely, (A) the Kortalayar River System, (B) the Infiltration Gallery Wells at Saidapet and Sembium and (C) the Shallow Wells at Adayar, Kodambakkam, Guindy, North Madras, Triplicane, Naduvakkarai and on the shores of Marina. The physical, chemical and bacteriological character of the water in each of the above three sources during the year are briefly dealt below :—

(A) The Kortalayar River System :—The river Kortalayar is dammed at Poondi, about 32 miles away from the City and Sathyamoorthy Sagar has been formed for storing the flood discharges. The stored water is let down, through the river bed and another channel, called the Upper Supply Channel, into the Sholavaram Reservoir and from the latter water is let down through the Lower Supply Channel into Red Hills Reservoir. The water from the Red Hills Reservoir gravitates through two closed masonry conduits into the Head Works at Kilpauk. The above sources were visited by the Water Analyst or the Assistant Water Analysts periodically during the year and samples were collected and analysed. The results or analysis are shown in the Water Analysis Statements No.s III, IV and V.

I. Sathyamoorthy Sagar (vide Statement No. II) :—

The total yearly rainfall recorded at Poondi was 118.7 cm. as against 134.7 cm. recorded during last year. The highest rainfall of 23.3 cm. was recorded in November. The monthly average reservoir level was 137.27 feet in January, decreased to 120.10 feet in July and thereafter increased to 137.91 feet in December.

Physical, Chemical and Bacteriological characteristics. (Vide Statement No. III) :—

The temperature of the water varied from 26.5°C to 33.0°C. The turbidity decreased from 12.5 p.p.m. in January to 6 p.p.m. in February, increased to 165 p.p.m. in August and thereafter decreased to 11 p.p.m. in December.

Chemically, the pH varied from 8.5 to 8.6 during January to August 7.7. in September and again increased to 8.3 in December. The total alkalinity varied from 18.2 to 21.5 p.p.ht. during January to August, 14.8 p.p.ht. in September and thereafter rose to 17.8 p.p.ht. in December. The chlorides increased from 3.7 p.p.ht. in January to 7.8 p.p.ht. in August and thereafter decreased to 4.1 p.p.ht. in December. The hardness decreased from 11.6 p.p.ht. in January to 7.6 p.p.ht. in August and the after increased to 11.2 p.p.ht. in December. The conductivity of the water increased from 440 micromhos/cm. in January to 615 micromhos/cm. in July and thereafter decreased to 420 micromhos/cm. in December.

The albuminoid nitrogen was 0.019 p.p.ht. in January, increased to 0.096 p.p.ht. in July and August and thereafter decreased to 0.004 p.p. ht in December. The Tidy's figure increased from 0.172 p.p.ht. in January to 0.510 p.p.ht. in August and decreased thereafter to 0.165 p.p.ht. in December. The dissolved oxygen varied from 4.5 cc/l to 4.9 cc/l during July and September, 5.4 cc/l to 5.8 cc/l during January and December and 6.6 cc/l to 7.7 cc/l during February and August.

Coliforms were present in volumes varying from 5 to 20 cc during January to July. The M.P.N. of coliforms during August to December varied from 79 to 542 in 100 ml.

II. The Sholavaram Reservoir (vide Statement No. II) :—

The total rain fall recorded in the catchment area of this reservoir was 117.3 cm. as against 136.7 cm. recorded during last year. The monthly average water level fluctuated from 59.47 feet to 61.48 feet during January to July, 58.02 feet to 59.93 feet during August to November and rose to 63.75 feet in December.

Physical, Chemical and Bacteriological Characteristics. (Vide Statement No. IV) :—

The temperature of the water increased from 27.5°C in January to 32.5°C in June, decreased to 29.5°C in July, increased to 31.0°C in August and thereafter decreased to 26.5°C in December. The turbidity decreased from 12.5 p.p.m. in January to 6 p.p.m. in February, varied from 14 to 18.5 p.p.m. during April to June, increased to 80.0 p.p.m in August and thereafter decreased to 14.0 p.p.m. in December.

Chemically, the pH of the water increased from 8.5 in January to 8.9 in May, decreased to 8.0 in September and again increased to 8.3 in December. The total alkalinity varied from 15.9 to 17.9 p.p.ht. during January to May, 17.8 to 19.3 p.p.ht. during June to September and 12.7 p.p.ht. in December. The chlorides increased from 4.3 p.p.ht. in January to 5.9 p.p.ht. in June and thereafter decreased to 3.8 p.p.ht. in December. The total hardness decreased from 12.2 p.p.ht. in January to 6.6 p.p.ht. in June and thereafter increased to 9.8 p.p.ht in December. The conductivity of the water varied from 435 to 490 micromhos/cm during January to May, 515 to 550 micromhos/cm. during June to September and 360 micromhos/cm in December.

The albuminoid nitrogen was 0.016 p.p.ht. in January 0.004 p.p.ht. in December and varied from 0.040 to 0.060 p.p.ht. during rest of the year. The Tidy's figure increased from 0.125 p.p.ht. in January to 0.249 p.p.ht. in June and thereafter decreased to 0.149 p.p.ht. in December. The dissolved oxygen varied from 5.3 to 6.6 cc/l. during the year.

Coliforms were absent in 60 cc. in January and were present in volumes varying from 1 to 20 cc. during February to July. The M.P.N. of coliforms in 100 ml. ranged from 33 to 240 during August to December.

III. The Red Hills Reservoir (vide Statement No. II) :—

The total rainfall recorded in the lake region was 95.4 cm. as against 126 cm. recorded during last year. The monthly average water level was 45.23 feet in January, decreased to 43.75 feet in May, fluctuated between 42.35 and 44.27 feet during June to October and rose to 45.87 feet in December.

Physical, Chemical and Biological Conditions (vide Statement No. V and Graph No. 1) :—

The water was yellowish in July and slightly yellowish during rest of the year.

The turbidity of the water fluctuated between 11.0 and 16.5 p.p.m. The turbidity was low (11.0 to 12.5 p.p.m.) in February and December, moderate (14.0 p.p.m.) during May and September and high (15.5 to 16.5 p.p.m.) during January, April and June August.

The temperature of the water increased from 27.0°C in January to 31.5°C in June and decreased thereafter to 30.0°C in December.

Chemical conditions :

pH. :—The pH. of the water varied from 8.3 to 8.9. The pH was 8.3 during August and September, ranged from 8.4 to 8.5 during January to February and May to July and 8.7 to 8.9 during April and December. The water was alkaline throughout the year.

Carbonates.—Carbonates varied from 0.6 to 1.80 p.p.ht. Carbonates varied from 1.08 to 1.80 p.p.ht. during April, June and August and 0.60 to 0.85 p.p.ht. during rest of the year.

Bi-carbonates.—Bi-carbonates varied from 14.3 to 17.4 p.p.ht. Bi-carbonates varied from 14.3 to 14.6 p.p.ht. during February, March, July and December, 15.20 to 15.86 p.p.ht. during January, May and June and 16.1 to 17.4 p.p.ht. during August and September.

Hardness.—The water was soft throughout the year, the hardness varying from 8.0 to 9.8 p.p.ht. expressed as CaCO₃. The variation was 9.0 to 9.6 p.p.ht. during January to February, 8.4 to 8.6 p.p.ht. during April to June and 8.0 to 8.2 p.p.ht. during July to December.

Dissolved Oxygen.—Dissolved oxygen content varied from 4.7 to 6.3 cc/l. The percentage of saturation varied from 87 to 120. The water was under-saturated during January, July and August, supersaturated during February and May and saturated during rest of the year.

Phosphates.—Phosphates were absent in January, September and, December but were present during rest of the year, the values ranging from 0.001 to 0.003 p.p.ht.

Silicates.—Silicates varied from 1.6 to 2.0 p.p.ht.

Oxidisable Organic Matter.—(Tidy's Test)—The figures for Tidy's test varied from 0.168 to 0.251 p.p.ht. The figures were low (0.168 to 0.181 p.p.ht.) during January to April and in December, moderate (0.190 to 0.220 p.p.ht.) in May, June and July and high (0.240 to 0.251 p.p.ht.) in August and September.

Albuminoid Nitrogen.—The albuminoid nitrogen content varied from 0.040 to 0.060 p.p.ht. The value for the samples collected during December was 0.060 p.p.ht. while those for the samples collected during rest of the year varied from 0.040 to 0.048 p.p.ht.

Biological.—Coliforms were absent in 60 cc in January and were present in volumes varying from 1 to 20 cc during February to July. The M.P.N. of coliforms in 100 cc. ranged from 8 to 542 during August to December.

Among the planktonic organisms, Cyanophyceae was predominant throughout the year. Among the Cyanophyceae, Microcystis, Anabaenopsis, Oscillatoria, Coelospherium and Merismopaedia were present in abundance almost throughout the year. Chlorophyceae, Protozoans and Rotifers were subdominant throughout the year. Diatoms were rare throughout the year.

The following is the list of species which were very common, common and rare.

<i>Very common</i>	<i>Common</i>	<i>Rare</i>
Oscillatoria	Staurostrum	Chroococcus
Anabaenopsis	Oocystis	Aphanothece
Microcystis	Anabaena	Ankistrodesmus
Coelospherium	Peridinium	Coelastrum
Merismopaedia	Trachelomonas	Scenedesmus
	Euglena	Synedra
	Brachionus	Pinnularia
		Cyclotella
		Surirella
		Actinospherium
		Coleps
		Bursaria
		Phacus

IV. Chlorinated Raw Water (vide Statement No. VI, Graph II) :—

The raw water reaching the Kilpauk Water Works was chlorinated with gaseous chlorine just a few minutes before reaching the sand filters and the flocculators. The dose of chlorine applied to the raw water varied from 0.69 to 1.96 p.p.m. The percentage of samples showing absence of coliform organisms in 60 cc. volumes and upwards varied from 4 to 90.

CHART-1
SHOWING PHYSICO-CHEMICAL CONDITIONS OF REDHILLS LAKE
1963.

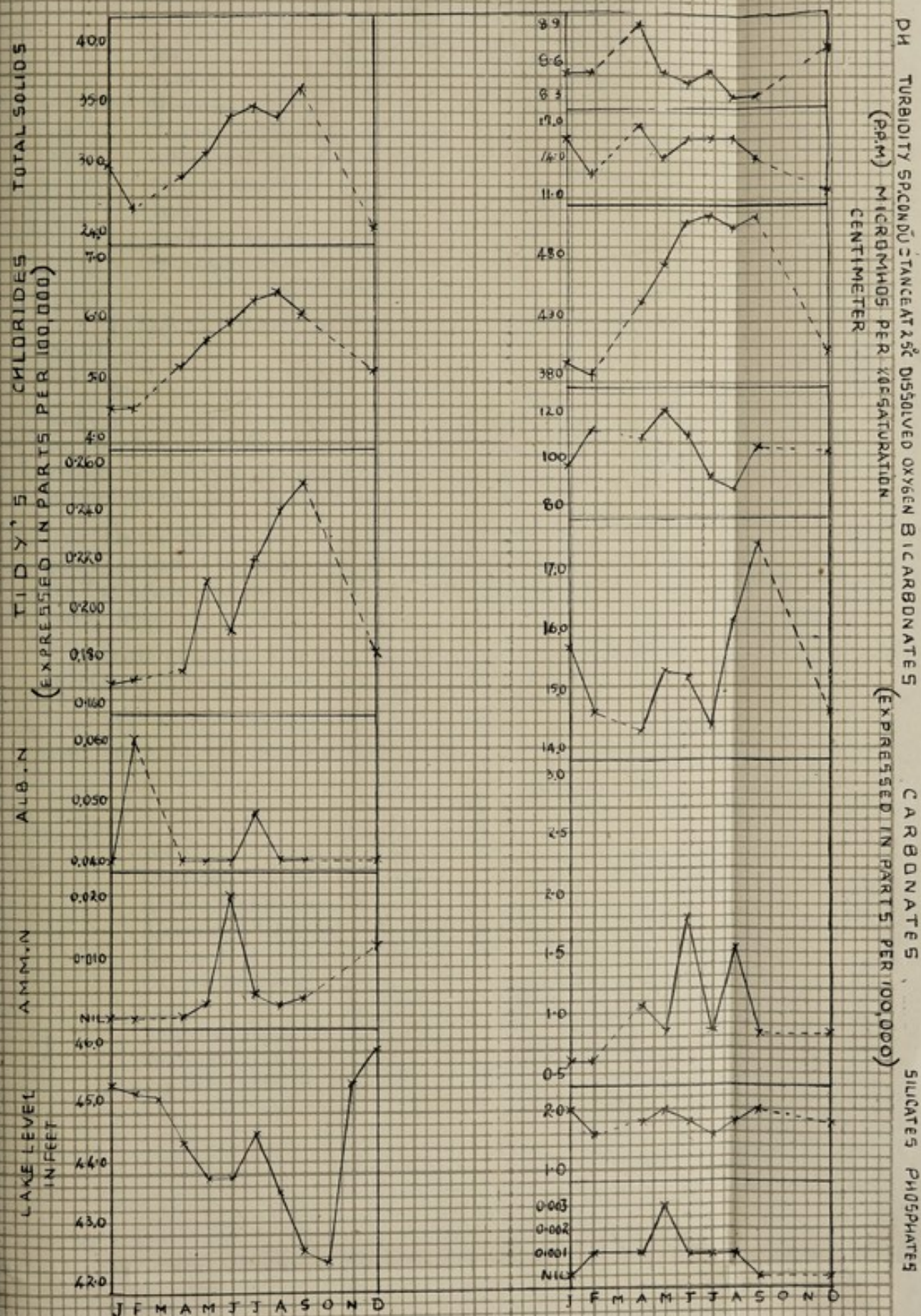
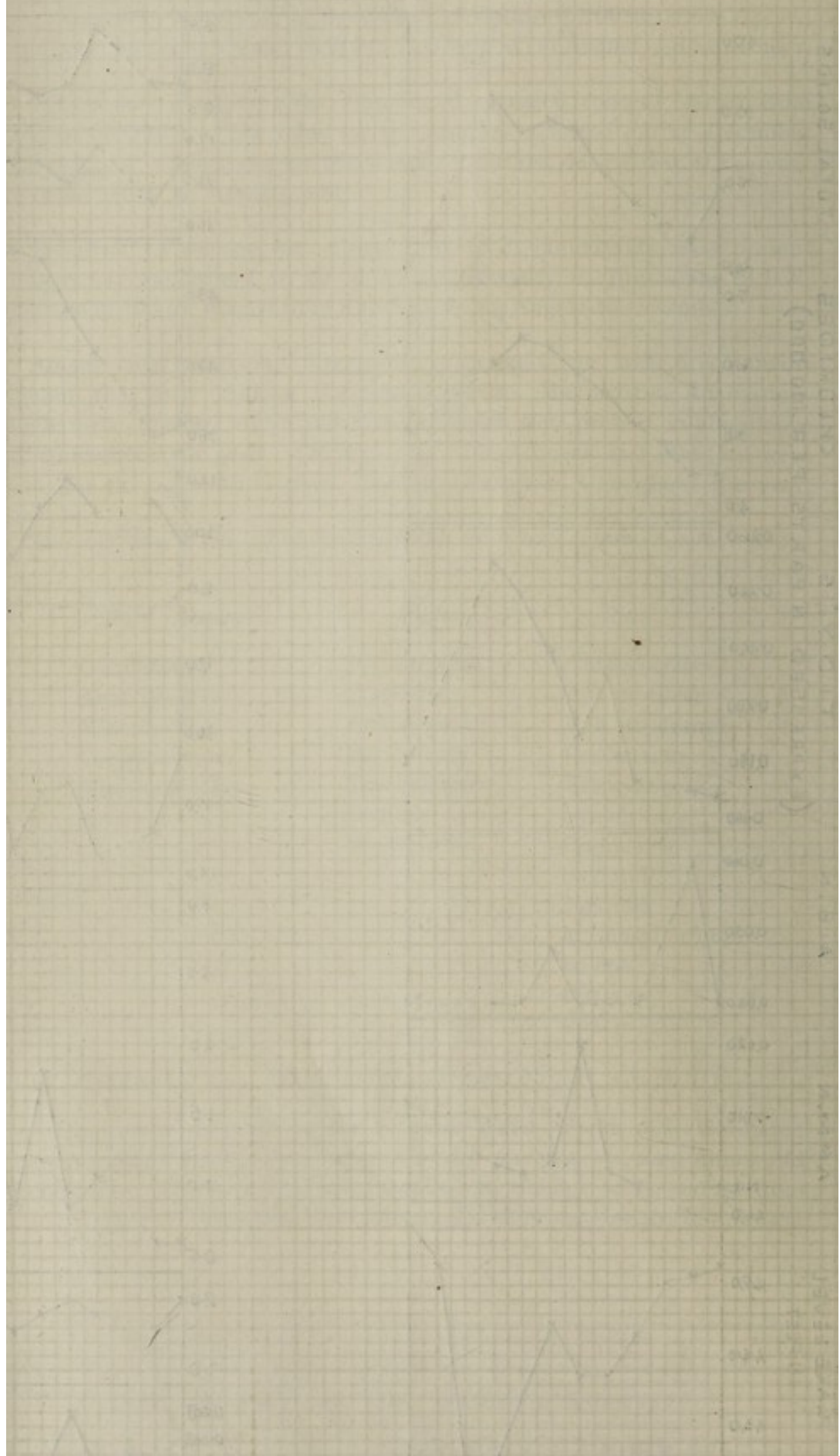


CHART-1 SHOWING PHYSIOCHEMICAL CONDITIONS OF RIVER 1963



The monthly variation in the concentration of the salient constituents of the chlorinated raw water were as given below :—

	Yearly range in p.p.ht.		
pH.	...	8.3	to 8.7
Chlorides	...	4.5	to 6.8
Hardness	...	7.8	to 9.2
Ammoniacal Nitrogen	...	Nil	to 0.019
Albuminoid Nitrogen	...	0.040	to 0.052
Oxygen Absorbed	...	0.146	to 0.218
Iron	...	Trace	to 0.010
Turbidity (p.p.m.)	...	11.9	to 17.0
Sp. Conductance (micromhos/cm at 25°C).	...	380	to 505

V. Slow Sand Filters and Filtration (vide Statement No. VII and Graph No. II) :—

There are seventeen Sand Filters with 6" of fine sand at the filtering medium. They are not worked with any fixed rate of filtration. The filtrates are therefore of indifferent quality. During the year under review on an average 12 to 13 beds were in commission every day and the quantity of water strained varied from 24 to 25 million gallons a day.

On the chemical side, the quality of the filtrates were almost of the same quality as that of the chlorinated raw water. The percentage of reduction in the Tidy's figure over the corresponding figure for the chlorinated raw water varied from 2.0 to 20.0.

Bacteriologically 0 to 32 of the samples examined showed the absence of coliform organisms in volumes of 60 cc. and upwards.

The monthly variation in concentration of some of the important constituents of the filtrates from the sand filters were as given below :—

	Yearly range in p.p. ht.		
pH.	...	7.8	to 8.3
Chlorides	...	4.5	to 6.8
Ammoniacal Nitrogen	...	0.004	to 0.034
Albuminoid Nitrogen	...	0.038	to 0.032
Hardness	...	7.8	to 9.4
Oxygen Absorbed	...	0.117	to 0.210
Iron	...	Trace	to 0.010
Turbidity (p.p.m.)	...	3.9	to 8.3
Sp. Conductance (Micromhos/cm. at 25°C).	...	385	to 510

It could be seen from above that inspite of the application of a fairly high dose of chlorine to the raw water, feeding the sand filters, the filtrates from the beds were of poor bacteriological quality.

VI. Rapid Mechanical Filters (vide Statement No. VIII and Graph No. II) :—

About 9.3 to 9.8 million gallons of chlorinated raw water was again chlorinated with a dose of 1.8 to 2.4 p.p.m. to bring down the algal load prior to alum treatment. The chlorinated raw water was treated with alum to a dose varying from 2.0 to 4.0 g.p.g. and with lime to a dose varying from 1.0 to 1.7 g.p.g. flocculated, clarified and filtered through Rapid Mechanical Filters. The quantity of the filtrates varied from 9.3 to 9.8 m.g.d.

Chemically, the quality of the filtrates from the Rapid Mechanical Filters was far better than those from the Slow Sand Filters. The percentage of reduction in Tidy's figure over that for the chlorinated raw water varied from 31 to 58.

On the bacteriological side 5 to 59 per cent of the samples examined, showed the absence of coliform organisms in volumes of 60 cc. and upwards.

The variation in the concentration of some of the salient constituents were as given below :—

		<i>Yearly range in p.p.ht.</i>
pH.	...	7.5 to 8.2
Chlorides	...	4.6 to 6.9
Hardness	...	7.8 to 10.4
Ammoniacal Nitrogen	...	Nil to 0.003
Albuminoid Nitrogen	...	0.030 to 0.050
Oxygen Absorbed	...	0.070 to 0.144
Iron	...	Nil to 0.010
Turbidity (p.p.m.)	...	2.9 to 5.6
Sp. Conductance	...	390 to 530
(micromohes/cm) at 25°C	...	

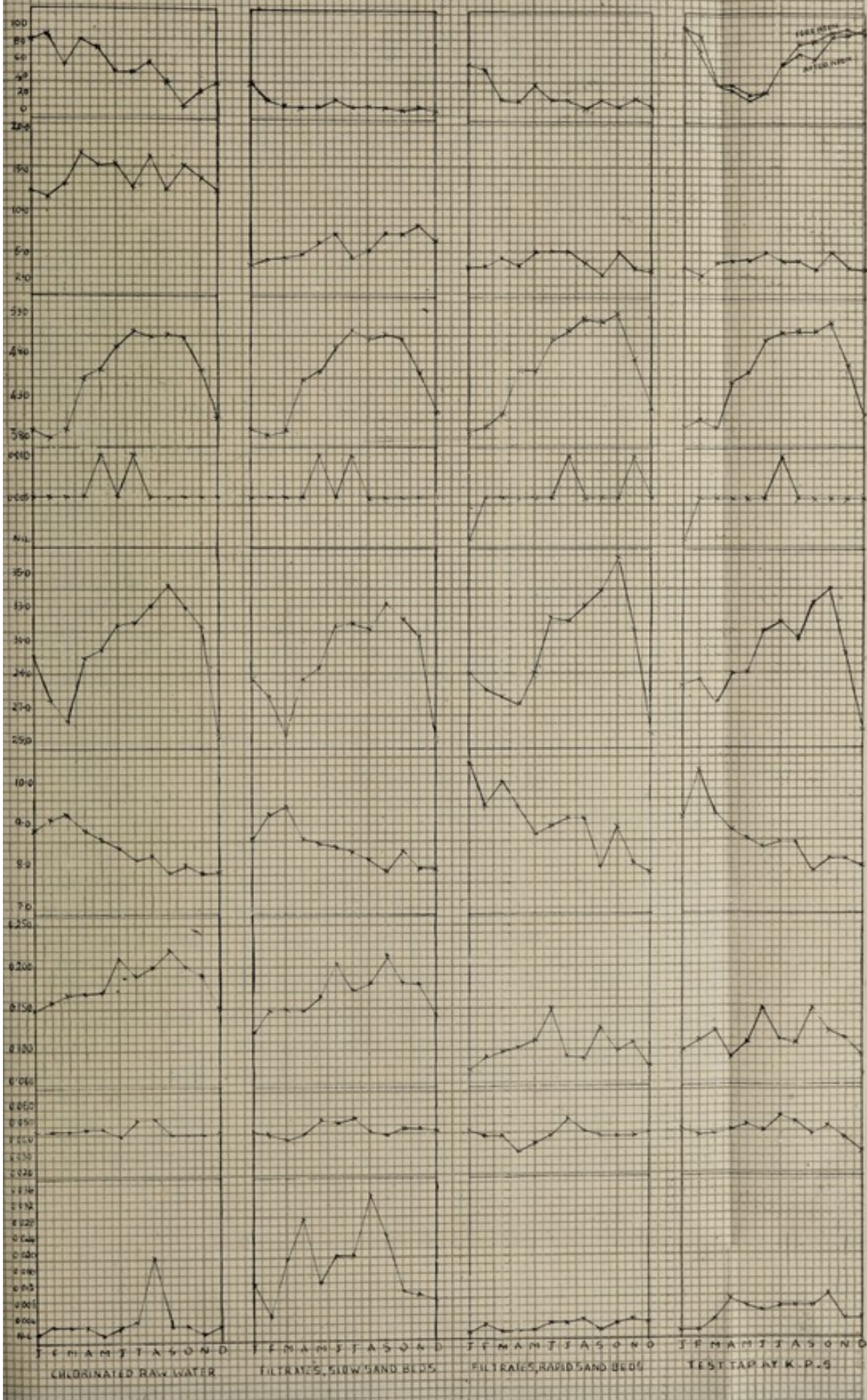
VII. Test Tap at K.P.S (vide Statement No. IX and Graph II).

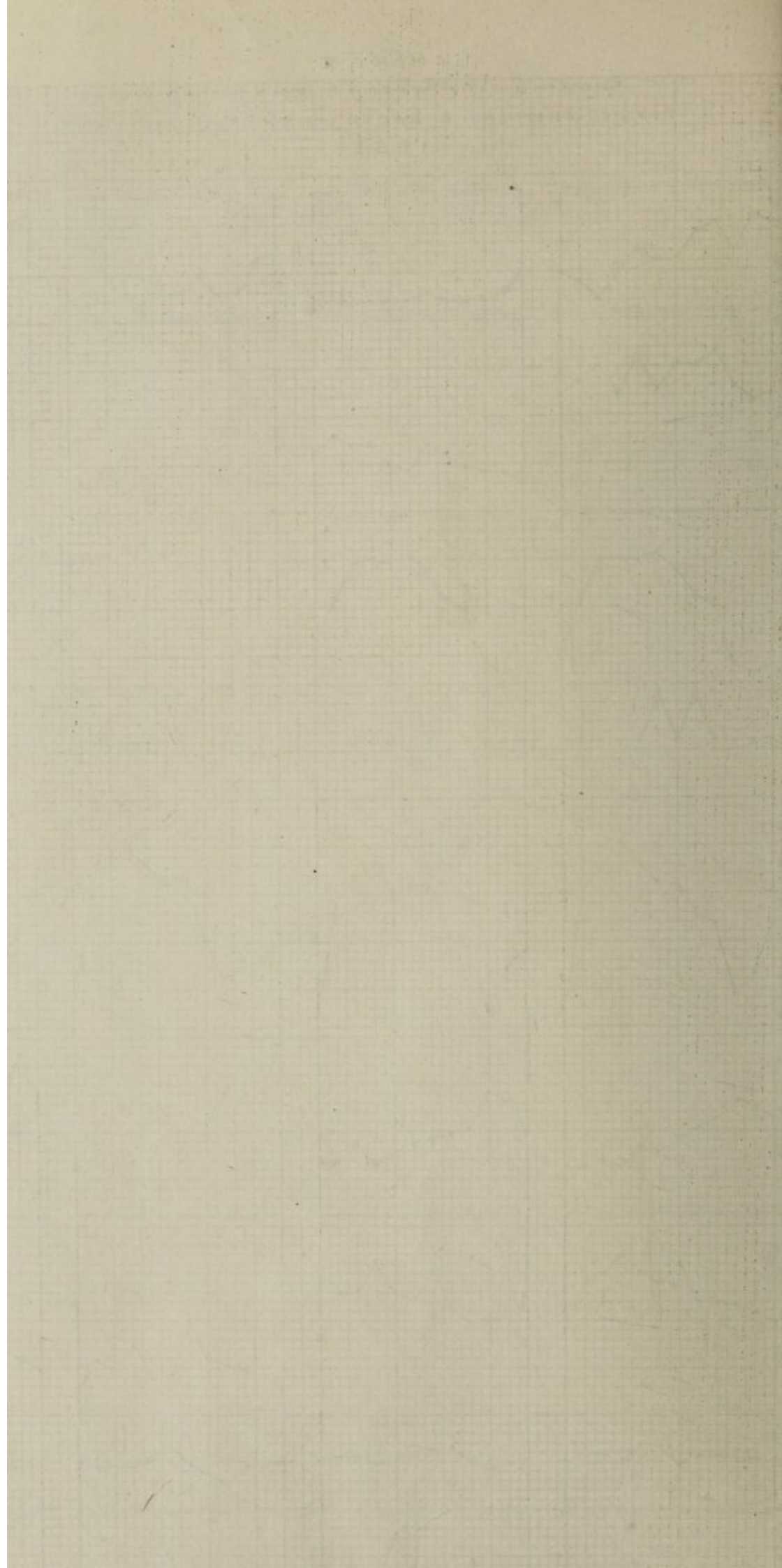
The samples of water collected from the test tap at K.P.S. represented the mixture of chlorinated filtrates from the Slow Sand Filters and the Rapid Mechanical Filters. On the chemical side, the quality of the samples was the resultant of the individual quality of the filtrates from the Rapid Mechanical Filters and Slow Sand Filters owing to the blending, effect.

On the bacteriological side 15 to 100 per cent of the samples collected at 11.0 am and 20 to 100 per cent of the samples collected at 4.0 p.m. showed the absence of coliform organisms in volumes of 60 cc. and upwards. The

CHART II

SHOWING CITY WATER SUPPLY: HEAD WORKS
PHYSICO-CHEMICAL & BACTERIOLOGICAL CONDITIONS
1963





sanitary quality of the samples collected from the test tap during the period March to July was not totally satisfactory. This may be attributed to the presence of excessive organic matter, higher pH, and other interfering substances present in the filtrates which might have retarded the bactericidal effect of chlorine. A residual of 0.2 to 0.4 p.p.m. of chlorine was generally maintained at the test tap.

The variation in the concentration of some of the salient constituents were as given below.

	<i>Yearly range in p.p.m.</i>	
pH.	7.8	to 8.3
Chlorides	4.5	to 7.0
Hardness	7.8	to 10.3
Ammoniacal Nitrogen	Nil	to 0.009
Albuminoid Nitrogen	0.030	to 0.052
Oxygen Absorbed	0.081	to 0.147
Iron	Nil	to 0.010
Turbidity (p.p.m.)	2.8	to 5.5
Sp. Conductance (micromhos/cm. at 25°C).	395	to 520

VIII. The City Distribution System (vide Statement Nos. XI, XII and XIII.)

The water distributed, deteriorated to a slight extent during transit through the lengths of mains. Such deterioration were more marked in Low Pressure areas and at tail ends of the distribution system. Bacteriologically 25 to 100%, 27 to 83%, and 0 to 100% of the samples collected from the high pressure, low pressure and Booster areas, respectively showed the absence of coliform organisms in volumes of 60 cc. and upwards on examination.

The variation in the concentration of some of the salient constituents of the samples of water, distributed were as given below :

		<i>Yearly range in parts per 100,000</i>		
		<i>H.P. Areas</i>	<i>L.P. Areas</i>	<i>Booster Areas</i>
pH.	...	7.8 to 8.1	7.9 to 8.2	7.7. to 8.1
Chlorides	...	4.6 to 6.9	4.7 to 7.0	4.6 to 7.0
Hardness	...	7.8 to 9.3	7.8 to 9.7	7.8 to 9.4
Ammoniacal Nitro- gen.	...	Nil to 0.015	0.002 to 0.016	Nil to 0.040
Albuminoid Nitro- gen.	...	0.032 to 0.048	0.034 to 0.048	0.032 to 0.056
Oxygen Absorbed.	...	0.085 to 0.148	0.081 to 0.160	0.086 to 0.166
Iron	...	Nil to 0.010	Tr. to 0.015	Tr. to 0.010
% of samples show- ing absence of coliform orga- nisms in 60 cc. and upwards.	...	25 to 100	27 to 83	0 to 100

(B) The Infiltration Gallery Wells at Sembiam and Saidapet (vide Statement Nos. XIV, XV and XVI) :—

Water supply to Sembiam and Saidapet areas were supplemented with chlorinated well water drawn from two Infiltration Gallery Wells. The water from the infiltration gallery at Sembiam contained iron in suspension and as such the water was chlorinated at the head-works and then lime-treated at the overhead tank and distributed. Filtration of the treated water is desirable to hold back the precipitated iron prior to distribution.

In case of Saidapet, the water from the infiltration gallery was of satisfactory chemical quality and as such the water was just chlorinated and distributed.

The chemical characteristics of both the water were as given below :

		<i>Yearly range in parts per 100,000</i>			
		<i>Sembiam</i>		<i>Saidapet</i>	
pH.	...	6.9	to 7.5	7.1	to 7.7
Chlorides	...	13.0	to 29.0	17.6	to 30.0
Hardness	...	17.0	to 26.0	20.0	to 27.0
Ammoniacal Nitrogen	...	Nil	to 0.003	Nil	to 0.002
Albuminoid Nitrogen	...	0.002	to 0.003	Nil	to 0.004
Oxygen Absorbed	...	0.029	to 0.071	0.012	to 0.059
Iron	...	0.040	to 0.150	Tr.	to 0.020
Total Solids	...	47.6	to 78.0	56.0	to 70.4
% of samples showing absence of coliforms in 60 cc/100 cc.		100		91	

The monthly average of percentage of samples showing absence of coliform organisms in 60 cc. volumes and upwards was 83 for Sembiam distribution system and 53 for Saidapet distribution system.

(C) The Shallow Well Supply in some of the outlying areas and in poorly served areas of the City. (vide Statement No. XVII) :—

The shallow wells, located at Ganapathy Colony (Guindy) served to supplement the Red Hills Water Supply to Guindy. The water drawn from the well was just chlorinated and distributed. The wells located at Urur, Village and Kottur Village served as source of water supply to Adyar Area. The wells in United India Colony, Puliur (Kodambakkam), Nagappier Street (Triplicane), Chellapillayar Koil Street (Triplicane) in Marina Area, Solayappan Street (Washermanpet) and in T.H. Road (near Tower Clock) served as sources of water supply to Kodambakkam, Triplicane and Washermanpet areas. The wells in Cherian Nagar, Market Farm and I.D. Hospital served to supplement the water supply to Tondiarpet area. The well in Naduvakkarakai served to supplement the water supply to Naduvakkarakai area. The water pumped from the above wells were chlorinated and distributed.

All the shallow wells with the exception of those at United India Colony, Puliur (Kodambakkam), Ganapathy Colony (Guindy), I.D. Hospital, T.H. Road (Tower Clock), yielded water of satisfactory chemical quality.

Sterilisation of Water Mains (vide Statement No. XVIII) :—

During the first quarter of the year, under review, the newly laid North Pumping Main leading to the Robinson Park Pumping Station was scoured and sterilised before putting the main into commission. This was done by, placing both the chlorine injecting plants on the job. During sterilisation of the new main, 50 samples were collected from representative points on the main and examined for physical, chemical and bacteriological quality.

During rest of the year, only one plant was used for sterilisation of old mains. The other plant went out of order and had to be serviced. Thus 12 Kilometers length of old main was sterilised. In all 825 lbs of chlorine were consumed. Samples were collected from representative points on the section of mains under sterilisation before and after sterilisation, whenever facilities were available and examined. Such samples amounted to 124. 64 per cent of the samples collected before sterilisation and 96 per cent of the samples collected after sterilisation were of satisfactory sanitary quality. Some more lengths of mains could have been sterilised but for interruptions due to the prevalence of cholera, when the plant had to be used for additional chlorination of water feeding the cholera affected areas and due to occurrence of worms, when also the plant had to be put off the infested main for eradicating the worms.

Effects of Sterilisation.—Brown, flocculent, soft deposits were dislodged from the sterilised portion of the mains, when scoured on the following day. The deposits consisted mainly of ferric oxide, organic matter and iron bacterium (*Sidero Capsa* Sp. and *Leptothrix Ochraceae*). There was an increase in the iron content immediately after sterilisation, followed by a reduction thereafter. Leeches and worms if present were eradicated. An improvement in the bacteriological quality of the water distributed, was generally noticed.

From the above, it is evident that the injection of chlorine into the mains has improved the condition of mains and also the general quality of the water distributed. Sterilisation is now considered as a positive and effective measure against the infestation of mains by leeches and blood worms. Sterilisation of the mains has also served as a precautionary measure against the prevalence of cholera and enteric fever in the City.

During the year under review samples received from the private parties and complainants for purposes of evaluating their suitability for potability and industrial uses amounted to 226 as against 274 received during last year. The fees realised on such analysis worked out to Rs. 2,030. The demand for collection of still more samples from Madras Harbour, we are unable to satisfy for want of analytical staff and facilities.

Staff.—Thiru V. Kripakaran, continued as the Water Analyst, Thiru S. Nagarajan, B.Sc., Thiru C. N. Muruganathan, B.Sc. and Thiru K. Sathya-jaganatha Rao, B.Sc., were the Assistant Water Analysts.

ASHOK VIHAR

Health and Recreation Centre

I. Service to Member Families.

Families with a monthly income of not more than Rs. 150, residing at a walking distance from the centre, were enrolled as members on a token payment of 6 nP. per month per family. The members of these families were provided with preventive and curative health service together with limited social service with the object of improving their health standard.

Particulars of Families

Total number of families on rolls on 1—1—1963	...	256
Total number of families enrolled during the year	...	33
Total number of families removed during the year	...	45
Total number of families on rolls on 31—12—1963	...	244

Owing to the increase in work in other spheres of the Health Centre's Activities, the attention to the member families had to be curtailed with the result year after year the dwindling of the total number of member families is being noticed. Moreover the Welfare Organiser of the Men and Boys' section retired on 30th June 1962 and up till now no one has been appointed in his place.

1. Monthly Income of Families

	Unemployed	Under Rs. 50	Rs. 51-100	Rs. 101-150	Over Rs. 150
Total No. of Families.	7	53	126	36	12

2. Year of Enrollment

Year	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63
No. of Families...	15	11	10	6	14	3	18	21	20	13	17	8	14	27	14	33

3. Caste

Caste	Harijans	Hindus	Christians	Muslims	Anglo-Indians
No. of Families	92	101	13	22	16

4. Residence

Residence	Periamet	Periamet slums	Chinthad-ripet	Chinthad-ripet slums	Choolai	Choolai slums	Other areas	Other areas slums
No. of families	37	81	4	41	34	14	17	16

Families residing in slums ... 152

Families residing in other areas ... 92

5. Children per Family

No. of Children	Nil	1	2	3	4	5	6	7	8	9	10
No. of families	8	33	51	53	46	23	17	8	3	2	Nil

Average per family ... 3.25

6. Nature of Work

Nature of work	Unskilled labour	Skilled labour	Trade	Ancillary	Clerical	Teaching	Priests	Pensioners	Miscellaneous	Unemployed
No. of families	69	78	25	24	22	4	3	2	8	9

Health Services :

448 General, 98 Eye, 42 Dental and 29 E.N.T. check-ups were done during the year. Out of 343 persons re-examined 288 recorded increase in weight, 39 reduction and 16 stationary weight. For the first time during this year there was not a single new case of pulmonary tuberculosis. Nine old cases received treatment from the T.B. Clinics and one person who was admitted in the T.T. Hospital, Otteri, was discharged cured after 7 months stay. Five cases of typhoid were sent to General Hospital for treatment. All of them recovered.

The following were the more important diseases noted in the health check-ups :

Deficiency diseases	... 42	Typhoid	... 5
Anaemia	... 25	Filariasis	... 1
Pulmonary Tuberculosis	... 10	Infective Hepatitis	... 9
Primary complex	... 11	Hernia	... 2
Respiratory infections	... 107	Hydrocele	... 3
Dysenteries and Diarrhoeas	... 119	Chronic alcoholism	... 5
Other digestive disorders	... 56	Mentally defective	... 2
Cardiac diseases	... 3	Speech defect	... 1
High blood pressure	... 5	Asthma	... 4
Diabetes	... 1	Epilepsy	... 1
Skin diseases	... 22	Tonsils and adenoids	... 13
Helminthic infections	... 119	Dental caries	... 4
		Cleft palate	... 1

623 pathological examinations were done of which 299 were pathological, 91 persons were referred to Government Hospitals either for admission or specialists' treatment. 77 persons were referred to T.B. Clinics of whom 9 were positive for pulmonary tuberculosis and they were old cases.

The following operations were arranged at the Government Hospitals :

(1) Appendicectomy	... 1	(5) Salpingectomy	... 2
(2) Rt. Inguinal Hernia	... 1	(6) Vesico Vaginal fistula	1
(3) Double Hydrocele	... 1	(7) Operation for cor-	1
(4) Caesarian	... 1	rection of pesca-	
		vus.	

(b) *Periodic Immunization :*

1. Vaccination against small-pox	... 256
2. T.A.B.	... 223
3. Triple vaccine	... 127
4. Manteaux test	... 115
5. B.C.G.	... 46

(c) *Health Education.*—Health education was imparted through talks to individuals and groups at the centre as well as at their homes. Demonstrations on nutrition and balanced diet were held periodically at the centre.

Films on Health and Social Education could not be screened due to want of a projecting screen.

(d) *Recreation.*—Recreational activities both in-door and out-door were provided for all age groups and both sexes. The male youth and both male and female children took advantage of the facilities provided. Volley ball and badminton were the main out-door games. Table tennis, carroms, boxing and weight lifting were the in-door games played by the members.

The Second Open Table Tennis Tournament was conducted at the Corporation Stadium, Peoples Park, from 9th December 1963 to 15th December 1963. The Commissioner of the Madras Corporation Sri Gulam Mahmood Badsha presided on the final day and distributed the trophies to the winners and runners up.

This year silver ever rolling trophies for three events were presented by the following :

Srimathi Rajeswari Ammal	} Sri T. Sambandam Mudaliar's rolling cup for Men's singles event and Srimathi Chellammal's rolling cup for Women's single event.
Srimathi Saraswathi Ammal	
Srimathi Maheswari Ammal	
Dr. P. S. Sambandam and Srimathi Jamuna Bai.	

Mr. and Mrs. Kandaswamy ... For Boys' and Girls' event.

The following were the recipients of the trophies :

Men's Singles :

Winner : Sri G. Ranganayakulu — Don Bosco.

Runner-up : Sri V. M. Merchant.

Non-Medalist Singles :

Winner : Sri Vinay Kumar — Y.M.C.A.

Runner-up : Dasaratha Lingam — R.B.R.C.

Women's Singles :

Winner : Miss A. Blankley — Southern Railway.

Runner-up : Miss Usha Abraham — Ashok Vihar.

Womens Non-Medalist Singles :

Winner : Kumari G. Meyers of State Bank.

Runner-up : Kumari K. Kamala of A.G. Office, Madras.

Boys and Girls Singles :

Winner : Darani Palan — Don Bosco.

Runner-up : V. K. Sundar — Chepauk Jovial Club.

Team matches were held against Air Force, Avadi, when Ashok Vihar team won by 7 to 3.

Volley ball matches were also arranged with Medical Stores Recreation Club, Industries Department; Recreation Club and Government Transport Recreation Club.

Handicrafts :

Nine women were using the sewing machine to earn their livelihood. 11 new members were taught the use of the machine. 1,060 garments were stitched by them. 387 garments belonging to the creche were mended. Crochet and embroidery work, doll making and paper flower making were also taught.

Cooking.—The Bala Sevika Trainees, this year also, demonstrated to the members preparation of sweets and cheap nutrition food. Demonstrations on wheat preparations were also done periodically by workers from the Guild of Service (Central).

Personal Hygiene.—Such of those members who lacked facilities for bathing and washing in their own homes made use of the amenities provided at the Centre.

Home Visits.—108 visits were made by the Welfare Organiser of the Women and Girls Section. Owing to want of transport, visit to homes of families, who have shifted to far off places had to be stopped. A social worker in the place of Thiru P. Moses who retired on 31st June 1962 was not posted, hence not only home visits but Sectional I activities were very below the usual standard.

The object of home visiting was to ensure a good relationship between the worker and the families, to follow expectant mothers, new born babies, infants and children, the sick the convalescent and to study the socio-economic and environmental condition of the families.

Creche.—This section is for the children under the age of 6 years of working class mothers, widowers and chronically ill mothers. The children were brought to the centre between 7-30 and 9 a.m. and taken back between 4 and 5-30 p.m. daily. It is closed down on Fridays and Government Holidays.

Work of the Creche :

1. *Personal Hygiene.*—All the children on arrival in the mornings were given bath and changed to clothes washed at the Centre. Attention to the hairs, nails, etc., were also given.

2. *Nutrition.*—Children under 1 year were given cow's milk 3 times a day and others were given conjee in the mornings : rice, vegetables, dhall and butter milk during the midday and bread and cow's milk in the afternoon. Each child received a plantain and an egg once a week.

3. *Education.*—A trained teacher imparted nursery education to the children of the Pre-school age.

4. *Recreation.*—Indoor and out door recreation including singing and dancing were provided at the centre.

5. *Medical Aid.*—All the children were given a monthly health check-up and minor ailments were promptly treated.

6. *Immunization.*—All the children were immunized against small-pox, typhoid, tuberculosis, whooping cough, diptheria and titanus.

Report for the Year 1963.

No. of children on rolls on 1—1—1963	...	61
No. of children admitted during the year	...	47
No. of children removed during the year	...	51
No. of children on rolls on 31—12—1963	...	57

Fifteen children were admitted in schools after the completion of 6 years. Four children died due to complications of measles.

Average daily attendance ... 44

660 general, 30 E.N.T., 51 eye and 21 dental check-ups were done. Respiratory diseases and dysenteries and diarrhoeas, worm infestations together with skin infections were the diseases more predominant. Deficiency diseases were not marked. Among the infectious diseases there were 15 cases of measles, 2 of mumps and 1 of chicken-pox.

Laboratory Investigations :

Blood :— Total ... 41

Low RBC count ... 24

Low HB% ... 11

High WBC count ... 33

High Eosinophil count ... 31

Motion :— Total ... 38

Round worm ova ... 31

Giardia Lamblia ova ... 3

Entamoeba Histolytica ... 4

Immunizations :—

(1) Vaccination against small-pox:

Primary ... 5

Secondary ... 24

(2) T.A.B. ... 34

(3) Triple antigen ... 31

(4) Manteaux ... 31

Mx. positive ... 14

B.C.G. inoculation ... 17

Maternity Service.—33 underwent ante natal examinations and 31 delivered at the centre.

Family Planning Service.—5 men and 27 women were taking family planning aids regularly. Two women who were sterilized a couple of years back started canvassing women for sterilization and supplemented their family-income through the allowance they were getting on each who underwent sterilization. In the last quarter Government of Madras stopped this allowance.

II. Curative Health Service.—Minor ailments were treated at the centre's dispensary and persons with major ailments were either referred or admitted in Government Hospitals. The medico social worker followed the case at the hospitals to help the patients.

III. Social Activities.—On Pongal Day, pongal was prepared by the lady members and distributed to the children.

On Republic Day and Independence Day, men, women and children gathered at the centre and after flag hoisting sweets were distributed to the children.

On the Tamil New Year's Day about 3,000 children were given a glass of milk each in celebration of the more milk day. The Worshipful Mayor Thiru G. Kuchelar presided over the function.

Under the joint auspices of the Corporation of Madras and the Madras Branch of the Indian Council of Child Welfare, a Healthy Baby Competition was held for the babies under 1 year born in the 45 Maternity Homes of the Corporation of Madras. The final selection was held at Ashok Vihar on 4th February 1963 when the Worshipful Mayor Thiru G. Kuchelar presided and Mrs. Mehdi, the Governor's wife distributed the prizes. In this competition, for the 3 age groups of children, 1—4 months, 5—8 months and 9—12 months, babies born in Ashok Vihar Maternity Home carried away the First Prize in the first two groups and the Second Prize in the third group.

The Navarathri week was as usual celebrated with display of dolls and hand work and the children took part daily in singing and dancing.

Marriages.—Seven members got married this year of whom 2 were ex-creche children.

Deaths :

Under 1 year	...	3
Between 1 and 12 years	...	6
Adults	...	2

Causes of death :

<i>Among Children</i>	Total	...	9
Post measles complications	...	4	
Vomiting and Diarrhoea	...	3	
Nutritional deficiency	...	1	
Neuro blastoma spine	...	1	

Adults :

Hearts failure	...	1
Kidney failure	...	1

Jobs.—Four Persons secured permanent jobs and 9 temporary jobs.

Milk distribution.—A total of 636½ lbs. of skimmed milk powder was used for distributing milk to the members. The following were the recipients:

Infants	...	8
Children under 6 years	...	21
Children above 6 years	...	19
Expectant mothers	...	3
Nursing mothers	...	2
Sick and convalescing	...	6

II. Service to the Local Public:

(a) *Dispensary Service.*—A total of 68,311 persons were treated at the Centre's dispensary.

Health Centre	...	44,600
Maternity Section	...	13,358
Periphral Pediatrics Clinic	...	10,353
Total	...	<u>68,311</u>

(b) Periphral wing of the Pediatrics Department of the Government General Hospital continued its useful work to the children of the locality 10,353 children were treated for minor ailments, 334 laboratory investigations were made and 53 classes on nutrition were held for 699 mothers. 70 home visits were made and 525 mothers were contacted.

Approximate percentage of diseases treated:

Primary complex	...	10%
Malnutrition	...	5%
Respiratory infections	...	30%
Dysenteries and Diarrhoeas	...	32%
Helminthic infections	...	10%
Skin diseases	...	5%
Eye diseases	...	3%
Ear, nose and throat	...	5%

(c) *Maternity Service:*

No. of ante-natal examinations done at Ashok Vihar	...	682
No. of ante-natal examinations done at other centres	...	156
No. of deliveries conducted at the centre	...	888
No. of deliveries conducted at Government Hospitals	...	39
No. of deliveries conducted at home by centre's midwives	...	76
No. of deliveries conducted at home by untrained persons	...	8

Diseases noted and treated in the 682 ante-natal cases :

Deficiency diseases	... 54	General Anasarca	... 1
Anaemias	... 60	General Ematiation	... 3
Valvular diseases of the heart	... 2	Skin diseases	... 2
Hypertension	... 3	Bronchitis	... 1
Pulmonary Tuberculosis	... 2	Dyspepsia	... 1
Pre-Eclamptic Toxaemia	... 5	Dysentery	... 4
Asthma	... 4	Miscellaneous diseases	... 50
			<hr/>
Total			... 196
			<hr/>

482 persons were normal without diseases.

Complications of deliveries :

Pyrexia	...	49
Perineal Laceration	...	47
Abnormal Presentation	...	23
Prolonged labour	...	16
Post Partum Haemorrhage	...	5
Accidental Haemorrhage	...	4
Puerperal Toxaemia	...	3
Retained placenta	...	1
Other diseases	...	3
Total		151

(d) Family Planning Clinic :

No. of cases advised in general	... 2,049
No. of sheaths given	... 216
No. of persons given foam tablets	... 151
No. of sterilizations done	... Nil
No. of vasectomy done	... 1
Total attendance of new cases	... 2,414
No. of re-visits to the centre	... 215
Total No. of home visits	... 1,711

(e) Triple Vaccine :

Total No. of children	... 3,633
No. of children who received on injection	... 2,091
No. of children who received two injections	... 884
No. of children who received three injections	... 658

III. Service to personal in the Medical, Nursing and Social Fields :

Two batches of health visitors from the Government Health School and 4 batches of Bala Sevika Trainees were given field training and lectures.

Lectures on Positive Health were given to 5 batches of Primary Health Centre Personal undergoing training at the Orientation Training Centre Poonamallee.

The 6th Form girls of the Kalyanam Girls High School were given training in the creche to learn mother craft.

A batch of girls from the Seva Samajam Girls Home were trained as child attendants.

The 4th and final year students of the Madras Medical College were given placement with 2 families each to follow and record their socio Medical Work.

The following also visited the Centre and Lectures on the Working of the Centre were arranged :

(1) Fourth and Final Year Students of the Madras Medical College, Stanley Medical College, Kilpauk Medical College, Madurai Medical College, Mysore Medical College, Bangalore Medical College, Christian Medical College Vellore and Medical College, Trivandrum.

(2) Sister Tutors from Christian Medical College, Vellore, Lady Hardinge Hospital, New Delhi, General Hospital, Madras and King George Hospital, Visakapattinam.

(3) Public Health Nurses and Health Visitors from Government Health School, Madras.

(4) Grama Sevika Trainees from Bhavani Sagar and Kallupatti.

(5) 6th Form girls of Seva Sadan Girls High School and Model High School, Saidapet.

(6) Students of the Diploma Course in Social Work, Stella Maris College.

(7) Home Science Students from S.I.E.T. College.

Gifts, Grants and Donations :

(1) The State Government was pleased to sanction a grant of Rs. 10,000.

(2) Out of the interest accrued on the donation of Rs. 1,000 made by the Sow. Neelambal Sisu Samrakshana Ksheera Dharama Endowment, Milk was supplied to the children in the creche.

(3) Mrs. Kandaswamy of Vepery distributed 6 pairs of half pants and shirts to 6 deserving boys in the creche. She also distributed a bun and a plantain each to all the children in the creche.

- (4) The British Information Service continued the supply of periodicals.

The authorities of the Corporation of Madras, the staff and members of Ashok Vihar are grateful to the above Organizations and individuals for their gifts, grants and donations.

The following distinguished persons visited the Centre during the year :

<i>Date</i>	<i>Name of the person.</i>
11—2—1963 ...	Dr. Lie Sein Ho., W.H.O. Fellow from Sourabaia.
27—4—1963 ...	Dr. E. A. Iceton, M.B.B.S., Darwin, N.T., Australia.
12—5—196 ...	Mayor of Calicut Corporation.
1—11—1963 ...	Calena Soars.

Staff of Ashok Vihar

(1) Director : Dr. P. S. Sambandam, retired on 27th December 1963 and was re-employed for 1 year.

(2) Assistant Director : Dr. Mrs. A. Abraham.

(3) Honorary Specials :

Dr. C. S. Raman	... Dental.
Dr. V. C. Sudarsanam	... Eye.
Dr. Govindaswamy	... E.N.T.

(4) Welfare Organizer (Women and Girls' Section) : Mrs. Mangalam Sathyanarayanan.

(5) Honorary Social Worker : Sri P. Sathyanarayanan.

(6) Clerk : K. V. Raghava Rao.

(7) Staff Nurse : Mrs. Williams.

(8) Health Visitors ... Two.

(9) Midwives ... Eight.

(10) Nursery School Teacher ... One.

(11) Peons ... Three.

(12) M.W.A. ... One.

(13) F.W.As. ... Three.

(14) Gardners ... Two.

(15) Watchmen ... Three.

(16) Sweeper ... One (Male.)

(17) Scavengers ... Two (Males.)

(18) El. Lascar ... One.

(19) Sweeper ... One (Female).

(20) Scavengers ... Two (Females).

(21) Dhoby ... One (Female).

Community Centre

The Health Administration continued to maintain the Community Centre constructed in the year 1961 at St. Xavier Street, during the year under review. In order to provide more facilities to the citizens for celebrating marriages, religious cultural and social functions an additional Centre was constructed at Dr. Besant Nagar, Pulianthope, 38th Division and thrown open for the public use in 1963.

During the year 136 and 22 functions were performed at Seven Wells Centre and Bogipalayam Centre respectively. The particulars of functions conducted in the year 1963 at the above two centres is furnished below :

S. No.	Nature of function	Number of functions conducted during the year	
		St. Xavier Street, Seven Wells	Dr. Besant Nagar Bogipalayam
1	Marriages	74	13
2	Dinners	33	3
3	Puberty Ceremonies	14	2
4	Ear Boring Ceremonies	5	1
5	Receptions	4	...
6	Betrothals	4	1
7	Seemantham	1	...
8	Cradling and Birth Day	1	1
9	Sunet Marriage	...	1
Total ...		136	22

As both the Centres gained much popularity and as there is great demand from all quarters of the City, proposals were put up and approved by the council for construction of Seven more Community Centres at important places in the City. Foundation stones were also laid at the following places and the execution of work was arranged to be commenced early. The construction of Centres at Meenambal-Swaraj Nagar, Chetput and Meersahibpet, Triplicane were taken up and were in progress.

Division number	Location of the proposed Community Centre.
8	North Madha Church Street, Royapuram.
41	Sundarajulu Perumal Koil Street, Sembiam.
53	Meenambal Swaraj Nagar, Chetput.
65	Chintadripet.
77	Meersahibpet, Triplicane.
81	Muthiah Mudaly Street, Teynampet.
94	Giriappa Road, T'Nagar.

CHILD WELFARE SCHEME

On 26—12—1963 a Maternity Ward with six beds was opened in the Royapuram Child Welfare Centre. At the close of the year 1963 there were 45 Child Welfare Centres, 22 of which had Maternity Wards with a total bed strength of 307. During the year under report there was marked reduction in the maternal and infantile mortality rates—the rates were 0.49 and 81.98 per mille during 1963 against 0.77 and 86.28 per mille of the previous year.

Staff.—Dr. V. S. Krishnaswamy, M.B.B.S., D.M.C.W. (Cal.), C.P.H. (Lond.), continued in the Office of Lady Superintendent, Child Welfare Scheme. There were 32 Assistant Surgeons, 51 Health Visitors, 9 General Trained Nurses, 271 Midwives and 26 Pharmacists.

Pre-natal Clinics were conducted in all the Centres regularly twice a week. At these clinics, the expectant mothers were given thorough medical check-up on their first visit and thereafter examined once a week or a fortnight as the cases required. Expectant mothers numbering 31,585 who attended the clinics were given medical advice and treatment by the Assistant Surgeons as against 35,075 for the previous year. These cases derived immense benefit for the advice and treatment given.

Serological Examination of blood of ante-natal cases was conducted in all the 22 Warded Centres. Treatment of positive cases was done free of cost. A statement is furnished below :

Total No. of blood Samples examined	No. of positive cases	No. of posi- tive cases that took full course of treatment	No. of posi- tive cases that took partial treatment	No. of positive cases that did not turn up inspite of persuasion
15,756	452	203	59	190

The percentage of positive cases was reduced from 3.32 of the previous year to 2.86 during the current year.

Maternity Service.—Out of the total number of 73,787 City births during the year 26, 237 labour cases came under the care and observation of the as against 28,531 of the previous year. The births conducted in the Wards during the year were 15,638 as against 16,380 of the previous year. The number of home visits made by Midwives were 1,84,262, by Health Visitors 1,88,444 and by Assistant Surgeons 26,161. Among the births that came under the care of the Child Welfare Scheme there were 209 twins, 1 triplet, 230 still births and 181 macerated and 109 dead born.

Ambulance Service.—Four ambulance vans were in service. During the year under report, 2,518 cases requiring hospitalisation were transported in these vans to the various maternity hospitals in the City.

Neo-Natal Vaccination.—During the year under report 1,233 new born babies were vaccinated against small-pox at the Periapet Maternity Home and 169 at the Choolai Maternity Home.

Imunisation with Triple Antigen. was carried out at 38 of the Centres and 1,197 children received full treatment. The particulars are appended.

Eradication of Malaria.—Under the National Malaria Eradication Programme, blood smears were taken at Centres from all mothers with a history of fever. The number of smears examined during the year were 4,719. On examination none of these was positive for Malaria.

Out-Patient Clinics.—The Assistant Surgeons conducted out-patient clinics in all the Centres. At these clinics infants, pre-school children, expectant mothers and nursing mothers were examined and treated for minor ailments—48,590 infants, 18,105 pre-school children, 31,585 expectant mothers and 60,460 nursing mothers represent the new cases that were treated and advised. The total attendance was 4,40,271 inclusive of 2,81,531 old cases.

Free Milk Distribution.—Cow's milk was continued to be supplied to ill-nourished infants and toddlers free of cost. The total number was 2,925. Skimmed Milk Powder donated by the UNICEF was reconstituted and supplied free to deserving toddlers, expectant mothers and nursing mothers in all the Child Welfare Centres.

Maternal Mortality.—Out of 26,237 labour cases that came under the care and observation of the Child Welfare Scheme there were 13 cases of mortality as against 22 cases among the 28,531 cases of labour conducted during the year 1962. Particulars are given below:—

<i>Institution</i>	<i>Death during</i>	
	1962	1963
Child Welfare Scheme	5	4
Hospitals	17	8
Private Doctors	...	...
Vaidians	...	1
Total	22	13

The rate of maternal mortality worked out of 0.49 per mille in 1963 against 0.77 per mille in the previous year.

Infantile Mortality.—There has been a slight increase in the number of still births, macerated and dead born the total being 520 for 1963 against 512 during 1962 while the number of infants born for these years were 25,717 and 28,019 respectively. The number of infants kept under observation during the first year of life in 1963 was 28,019 against 27,064 of the previous year.

The mortality among live births during the year was 2,297 against 2,335 of the previous year. The whereabouts of 2,357 children could not be traced. The infant mortality rate worked out to 81.98 per mille for the year 1963 against 86.28 per mille for the year 1962.

Maintenance of Creches.—For the benefit of working class parents with a combined income of less than Rs. 50 three Creches were maintained. The working mothers left their children at the Creches in the morning and took them back on their return from work. During their stay at the Creches the children were given bath, fresh and clean clothing and nourishing food. They attended nursery classes where action songs, story telling and prayer formed part of the programme and played indoor and outdoor games. Their minor ailments were attended to by the Assistant Surgeon. During the year under report a Creche was opened at the Perumalpet Child Welfare Centre. The benefits of this Creche are extended to employees of the Corporation whose monthly income does not exceed Rs. 300 per mensem. The average daily attendance of children at the Grace Garden, Ammen Koil (North), Perumalpet and Chetpet Creches were 26, 13, 19 and 13 respectively.

Propaganda.—Special attention was continued to be bestowed on the preventive aspects and mothers were educated in matters relating to Mother-Craft, Child Care, General Hygiene and prevention of disease. Particulars of the clinics conducted are shown below :—

	No. conducted	Attendance
Mother-Craft Classes held once weekly	... 2,961	31,503
Well Baby Clinics held twice weekly	... 3,156	20,892
Group talks held twice weekly	... 5,584	47,981

The Guild of Service carried out an intensive Programme of Demonstrations on Nutrition and Wheat. Periodical, Demonstrations on the ways and means for the Preparations of inexpensive and wholesome food were given at all the Child Welfare Centres whereby mothers benefitted to a considerable extent.

Baby Show—The Annual Baby and Competition was conducted during the year in co-operation with the Indian Council for Child Welfare. The competition was open only to children of low income group. The total number of children who competed from all the Child Welfare Centres was 630. The competing children were divided into 3 age groups, viz., 1 to 4 months, 5 to 8 months and 9 to 12 months. First, Second and Third prizes were awarded to three winning children in each of the three age groups, besides the distribution of cloth bits measuring 1 meter each to all the runners-up numbering 81. There was a slight decrease in the average weights of babies under each group. A comparative statement of weights is as follows :—

	1962	1963
I Group from 1 to 4 months	... 13.77 lbs.	12.85 lbs.
II Group from 5 to 8 months	... 18.22 lbs.	17.40 lbs.
III Group from 8 to 12 months	... 20.88 lbs.	19.81 lbs.

FAMILY PLANNING SCHEME

The Family Planning Scheme which was introduced in the City during 1962 was carried out successfully in male and female sectors simultaneously till 6th November 1962. Subsequent to Government order Ms. No. 2344/62, Health, dated 20th October 1962 abolishing Father Information Centres from 7th November 1962 only the Mother Information Centres were maintained in the City. All the 45 Mother Information Centres are attached to the Child Welfare Centres and were under the control of Dr. (Mrs.) V. S. Krishnaswamy, Lady Superintendent, C.W. Scheme. The activities of the Centres during the year under review are furnished :—

(1) Total number of houses visited	...	1,34,926
(2) Total number of women contacted	...	1,04,244
(3) Total number of mothers operated for Salpingectomy.		380
(4) Total number of fathers operated for Vasectomy.		153
(5) Total number of contraceptives supplied—		
(a) Sheaths	...	29,390
(b) Jelly	...	698
(c) Applicators	...	109
(d) Foam tablets	...	3,874
(e) Diaphragm	...	39

The location of Mother Information Centres in the City are given below :

Mother Information Centres

<i>S.No.</i>	<i>Door No.</i>	<i>Location</i>	<i>Division No.</i>
1	385	Thiruvottiyur High Road, Tondiarpet	...
2	26	Surianarayana Chetty Street, Royapuram	...
3	...	Solaiappan Street, Washermanpet	...
4	...	Near Corporation Model Lines, Palmyrahkuppam.	...
5	...	B.R. Garden Street, Madras-1	...
6	47	Linghi Chetty Street, George Town	...
7	1/27	Appu Maistry Street, George Town	...
8	44	Ammen Koil Street, George Town	...
9	86	Thiruvottiyur High Road, Washermanpet	...
10	53-A	Cochrane Basin Road	...
11	18	Zindah Sahib Street, Peddunaickenpet	...
12	52	Trevelian Basin Street, Sowcarpet	...
13	...	Mallayya Market, Walltax Road	...
14	...	Bharathi Road, Perambur	...
15	1/33	Gantz Road, Pulianthope	...

<i>S. No.</i>	<i>Door No.</i>	<i>Location</i>	<i>Division No.</i>
16	54	Perambur High Road, Perambur	... 35
17	15	Vijayavigneswarar Koil Street, Choolai	... 39
18	39	Veda Vinayagar Road (Perambur Barracks Road).	40
19	45	Paper Mills Road, Sembiam	... 41
20	...	United India Colony, Ayanavaram	... 45
21	14	Subbaroya Chetty Street, Nammalwarpet	... 46
22	8	Chellappa Mudali Street, Otteri	... 47
23	18	Kariappa Mudali Street, Perumalpet	... 49
24	109	Purasawalkam High Road, Purasawalkam	... 50
25	19	Halls Road, Kilpauk	... 52
26	27	Jaganathapuram 2nd Street, Chetput	... 53
27	15	Noor Veerasamy Iyer Street, Nungambakkam	... 55
28	46	Aziz Mulk 3rd Street, Thousand Lights	... 56
29	8	Nyniappa Maistry Street, Triplicane	... 58
30	84	Lloyds Road, Royapettah	... 60
31	2/3	Periera Street, Park Town	... 64
32	...	Ashok Vihar (behind Moore Market), P. Town	... 64
33	1/61	Arunachala Naicken Street, Chintadripet	... 66
34	37	Langs Garden Street, Pudupet	... 68
35	24/25	Surappa Mudali Street, Zam Bazaar	... 76
36	65	Dr. Besant Road, Triplicane	... 77
37	104	Mount Road, Teynampet	... 81
38	48	Bazaar Road, Mylapore	... 84
39	34	Brodies Road, Adyar	... 89
*40	44	Vasanth Press Road, Adyar	... 90
41	68	Arcot Road, Kodambakkam	... 92
42	16	Ragaviah Road, Thyagaraya Nagar	... 93
43	3	Sivagnanam Road, Thyagaraya Nagar	... 94
44	24	Dhanapal Chetty Street, Saidapet	... 97
45	2	Jeenis Road, Saidapet	... 98
*46	6	Perumal Koil Street, Kottur	... 99

* The two Centres are managed by the same staff.

SPECIAL HOME

Introduction :

The Corporation under the Control of Health Administration continued to maintain the Special Home at Krishnampet during the year 1963 also. The diseased, infirm and disabled beggars roaming in the streets of the City who were convicted and committed by the Courts under Provisions of the City Police Act were provided with Food, clothing and shelter besides other amenities. In addition to the above the inmates were also provided with medical aid both at the Home and the State Hospitals.

The year began with a strength of 192 inmates (120 Males and 72 Females) on 1st January 1963 and ended with a strength of 677 inmates (480 Males and 197 Females).

Table I

<i>Particulars</i>		<i>Male</i>	<i>Female</i>	<i>Total</i>
Strength on 1st January 1963.		120	72	192
Admission during the year ...		360	125	485
Total ...		480	197	677
Discharge ...		163	85	248
Releases ...		115	50	165
Deaths ...		9	6	15
Escapes ...		29	1	30
Hospital Admissions ...		31	5	36
		347	147	494
Total during the year ...		480	197	677
Disposals ...		347	147	494
Balance during the year ...		133	50	183
Returned from Hospital ...		25	10	35
Strength on 31st December 1963.		158	60	218

Table II

Admissions according to ages :

Age	No. of inmates admitted	Age	No. of inmates admitted
10 to 20 years	49	61 to 70 years	17
21 to 30 „	135	71 to 80 „	11
31 to 40 „	143	81 to 90 „	9
41 to 50 „	86	91 to 100 „	1
51 to 60 „	34		

Table III

Admissions to City Hospitals :

Infectious Diseases Hospital, Tondiarpet	9
Government General Hospital	12
Government Stanley Hospital	8
Government Royapettah Hospital	4
Kasthuri Bai Gandhi Hospital	3
Total	36

Table IV

Cause of death is given below :

	Male	Female	Total
1. Chronic Enteritis	4	2	6
2. Chronic Dysentery	2	1	3
3. Nephritis	0	1	1
4. P.T.	1	2	3
5. Generally Debility	2	0	2
Total	9	6	15

There were more number of admissions during the year 1963 than in the last year. There were more cases referred to hospital for opinion and treatment due to the fact that they were not responding to usual lines of treatment available here. Moreover some had to be sent for surgery, i.e., removal of toes and fingers. Some of the City Hospitals did not admit the inmates of the Special Home, as some were in the habit of escaping from the Hospital with hospital linen supplied to them.

SPECIAL HOME



Dining hall - Male Inmates.



SPECIAL HOME



Dining hall - Female Inmates.

SPECIAL WORK

Discharges, Release and Escapes :

There were more number of cases discharged during the year 1963 than the last year. But the visitors like the Collector of Madras and Director of Public Health suggested, that the inmates should not be discharged even after their term is over unless they are declared negative and cured.

Deaths :

During the year under review 9 men and 6 women died in the Home which showed a considerable decrease over the last year deaths of 12 men and 21 women.

General :

There were some mental cases which were violent at times. There was no case of any serious acute infectious disease except some cases of chicken pox.

The general repairs of wards were under progress during the year. Estimates were also prepared to set right the defects in the drainage and electrical systems at the Home and the execution of work was expected to be taken up next year.

Table V*Conditions in Leprosy Cases :*

Conditions		Male	Females	Total
1. Skin Diseases	...	96	9	105
2. Blindness	...	1	4	5
3. Tropic ulcer	...	23	2	25
4. Deafness	...	1	1	2
5. Tuberculosis	...	6	3	9
6. Paralysis	...	1	2	3
7. Mental	...	2	1	3
Total	...	130	22	152

Table VI*Conditions in Healthy Cases :*

1. Blindness	...	1	5	6
2. Paradupis	...	2	7	9
3. Cordiorsaler complications	...	3	15	18
4. Respiratory	...	9	12	21
5. Mental	...	1	11	12
Total	...	16	50	66
Leprosy Cases	...	130	22	152
		16	50	66
Total	...	146	72	218

Official Visitors :

The following official visitors visited the Home during the year and suggested various improvements and provision of amenities which were taken up immediately.

<i>S. No.</i>	<i>Official Visitor</i>	<i>Date of Visit</i>
1	Chief Presidency Magistrate	... 22— 3—1963
2	Assistant Director of Public Health	... 25— 6—1963
3	Deputy Commissioner of Police	... 10— 6—1963
4	Collector of Madras	... 19 —7—1963
5	Chief Presidency Magistrate	... 30— 9—1963
6	Assistant Director of Public Health	... 27—12—1963

Occupational Therapy :

The able bodied inmates of the Home were taught weaving and gardening at their leisure hours besides provision of Tamil dailies to keep them engaged.

Weaving Section :

Out of the 5 looms provided to the Home, 2 looms were put to work during the year for want of accommodation and lesser number of able-bodied inmates in the Home. During the year, 600 yards of Bandage cloth with 17 lbs. of raw material at the cost of Rs. 2-80 nP. per lb. was woven and thereby realised Rs. 240 on the finished articles. One of the Chief Warders was deputed for instruction purposes.

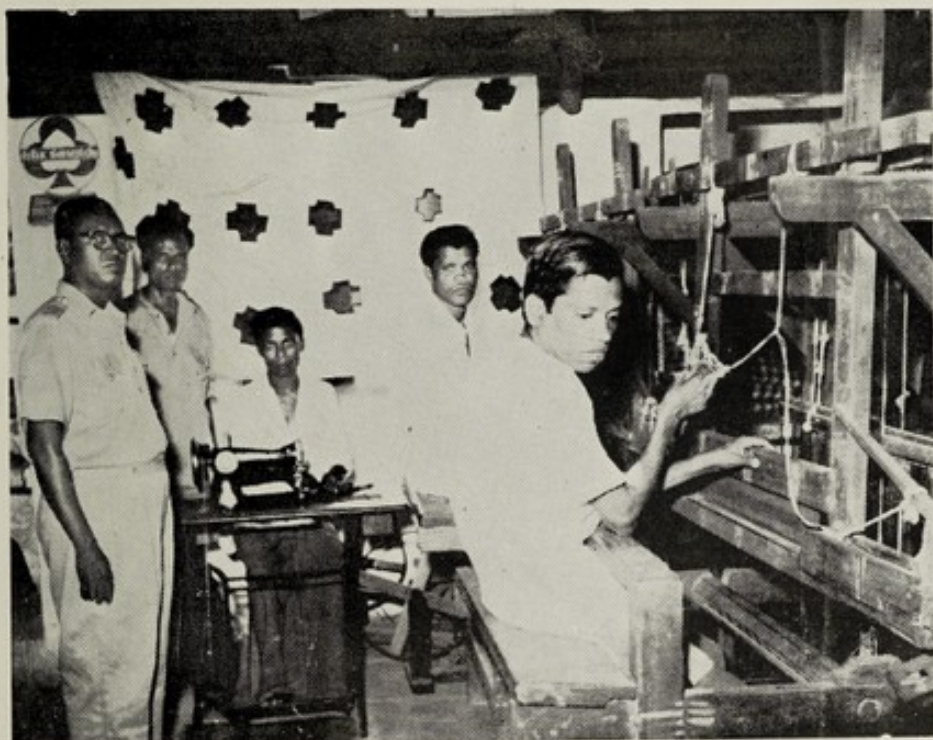
Gardening :

The complete ground where vegetables are grown every year was utilised for stocking the building materials and for mixing the chunam and mortar, when the repairs to the wards were taken up in the Home. The ground was again improved and made fit for cultivation of vegetables. An additional gardener was also requested to assist the existing incumbent.

Conclusion :

During the year under review, the Home was maintained smoothly without any disturbance. To maintain better discipline among inmates proposals for appointment of an Assistant Superintendent and 2 Additional Warders was approved and steps are being taken to implement the same. The Commissioner of Police was also requested to depute Police personnel on rounds to promote discipline. Additional amenities such as cocoanut oil, Soaps and Tamil Dailies were also supplied to the inmates during the year.

SPECIAL HOME



Weaving Section - Inmates at Work.

1843



CATTLE YARDS AND VETERINARY DISPENSARIES

Details of Licensing of Private Cattle Yards in the City :

S. No.	Circle Offices										
	First	Second	Third	Fourth	Fifth	Sixth	Seventh	Eighth	Ninth	Tenth	Total
1	105	202	170	97	152	194	181	244	134	138	1,617
2											
3	73	102	90	44	57	26	20	53	62	41	568
4	32	100	80	53	95	166	161	191	72	97	1,047
5	...	...	...	...	...	2	...	...	...	...	2
6	14	5	14	4	3	10	2	2	1	14	69
7	5	...	2	...	...	1	...	2	...	...	10
8	9	5	12	4	3	9	2	...	1	14	59
9	...	...	...	...	...	...	...	...	...	...	...
10	30	31	14	20	27	6	150	175	36	168	657
11	30	54	14	20	27	6	150	174	36	168	679
12	29	77	59	19	22	6	150	75	36	178	645
13	8	35	14	...	...	1	29	...	10	15	112
14	15	57	23	8	...	2	23	7	6	...	141
	5	3	13	2	2	2	10	2	4	15	68
	Number of renewal applications received ...										
	Number of applications recommended ...										
	Number refused ...										
	Number pending ...										
	Number of new applications received ...										
	Number of new applications recommended ...										
	Number refused ...										
	Number pending ...										
	Number of unlicensed cattle yards.										
	Number of notices issued in respect of item 9 ...										
	Number prosecuted for non-compliance ...										
	Number prosecuted for more than once ...										
	Number improved and found fit for licence as a result of action taken ...										
	Number evacuated in pursuance of action taken ...										

PUBLIC CATTLE YARDS

S. No.	Division No.	Circle	Location	Accommodation for number of animals
1	25	III	41, Basin Bridge Road, North District ...	207
2	47	V	73/74, Venkatathri Naicken Street, North District.	200
3	70	VII	43, Singanna Chetty Street, South District ...	87
4	74	VIII	Swarajapuram, South District ...	40
				327

VETERINARY DISPENSARIES

Veterinary Dispensaries are run by the Corporation of Madras. These institutions continued to cater to the needs of public as in previous year.

1. Veterinary Dispensary, 'B' Cattle Depot at Basin Bridge Road.
2. Veterinary Dispensary, 'D' Cattle Depot, Pudupet.
3. Veterinary Dispensary, 'F' Cattle Depot, Mylapore.
4. Veterinary Dispensary, 'G' Cattle Depot, Perambur.
5. Veterinary Dispensary, 'H' Cattle Depot, Thirumalai Pillai Road, Nungambakkam.

Name of Veterinary Dispensary	Bovines			Equines			Others			Grand Total
	New	Old	Total	New	Old	Total	New	Old	Total	
B. Depot	1,515	1,240	2,755	1	...	1	1,924	1,260	3,184	5,940
D. Depot	1,294	2,659	3,953	1	...	1	1,414	2,618	4,032	7,986
F. Depot	4,116	3,895	8,011	4	3	7	3,100	2,142	5,242	13,260
G. Depot	1,025	665	1,690	...	...	...	860	608	1,468	3,158
H. Depot	5,322	3,210	8,532	...	...	...	3,126	2,308	5,434	13,966
Total ...	13,272	11,669	24,941	6	3	9	10,424	8,936	19,360	44,310

Specimens sent to Madras Veterinary College ... 10

Artificial inseminations done at B, F and H Depots :—

Cows	...	2,733
She Buffaloes	...	1,154
Total	...	3,887

No. of Castrations done ... Nil

Amount collected during the year ... Rs. 378-25 P.

**Statement of Sick Animals Disease war treated at the Cattle
Depots during the year, 1963**

Name of the Depot	Yoke Gall and Yoke diseases	Old age and debility	Lameness	Medical cases	Surgical cases	Other cases	Foot and mouth	Total
A	31	13	14	4	15	10	...	87
B	63	42	10	15	6	39	...	175
C	48	43	9	32	8	21	...	161
D	44	6	14	9	9	17	...	99
E	13	4	2	11	1	3	...	34
F	49	34	4	16	6	15	...	124
G	52	10	8	2	5	6	...	83
H	36	18	4	18	2	14	...	92
I	42	12	12	10	16	6	...	98
Total	378	182	77	117	68	130	...	953

**Statements of Animals treated at the Five Veterinary
Dispensaries during the year 1963**

Location of the Dispensary	New Cases				Old Cases			
	Bovines	Others	Equines	Total	Bovines	Others	Equines	Total
B	1,515	1,924	1	3,440	1,240	1,260	...	2,500
D	1,294	1,414	1	2,709	2,659	2,618	...	5,277
F	4,116	3,100	4	7,220	3,895	2,142	3	6,040
G	1,025	860	...	1,885	665	608	...	1,273
H	5,322	3,126	...	8,448	3,210	2,308	...	5,518
Total	13,272	10,424	6	23,702	11,669	8,936	3	20,608

ZOOLOGICAL GARDENS

The Zoological Garden, in its evergreen setting at Peoples' Park, continued to be the highest attraction in the Metropolitan City of Madras, affording pleasure and interest to the young and the aged, the rich and the poor. Of late, the question of shifting the existing institution seemed to be an impractical proposition. Besides, the enormous cost to be incurred in its shifting and rebuilding, it was doubted whether this could likely come through in the near future for various factors.

The attendance to the Zoological Garden was on the increase and on an average 1,500 adults and 350 children visited daily. Attendance would go down substantially, if displaced too far out of the City. It was a great attraction and of educative value, especially, to the secondary school going children, who came in parties. Again, it might not be possible to secure a suitable location as it had now; the natural lake that the Garden had for plying pleasure boats for visitors, might be very difficult to duplicate.

Distinguished Visitors.—During the calendar year 1963, the following distinguished visitors visited the institution :—

(1) Mr. E. Sawa, 156, Yamatecho, Ashiya City, Japan, visited on 2nd January 1963.

(2) Mr. B. Iserentant, Sales Superintendent, Air India, Paris, visited on 12th March 1963.

(3) Mrs. and Mr. Litchak, Vice-Consul of the Consulate-General of the U.S.S.R. for Madras, visited on 29th March 1963.

(4) Mr. Milton Orshefsky, Life Magazine, Honghong, visited on 21st May 1963.

(5) Mr. Lutz Ruhe, Thousand Oaks, California, visited on 18th October 1963.

(6) Dr. H. E. Bywater, M.R.C.V.S., F.R.S.H., London, visited on 5th December 1963.

(7) Messrs. Lesley Ragao, Roli Johnson, and other Australian students visited on 27th December 1963.

(8) Dr. K. A. Breev and three other Soviet Zoologists, visited on 31st December 1963.

Live-stock.—At the beginning of the Calendar Year 1st January 1963, there were 212 mammals, 385 birds and 14 reptiles. There were certain additions by birth, hatches and gifts. The total worked out to 48. Besides, there were disposals by sales and deaths during the year under report. The total live-stock as on the 31st December 1963 worked out to 609.

The following statement will furnish details for the year 1963 :—

S. No.	Particulars	Live-stock as on 1-1-1963.	Additions			Disposals		Stock as on 31-12-1963
			Births or hatches	Gifts	Purch- ases	Sales	Deaths	
1	Mammals ...	212	18	7	...	12	10	215
2	Birds ...	385	6	16	...	6	20	381
3	Reptiles ...	14	...	1	...	...	2	13
	Total ...	611	24	24	...	18	32	609

Additions.—(a) *By free gifts.*—A good number of exhibits were collected during the year by way of gifts to the institution. The note worthy additions were one Porcupine offered for the institution by Miss N. K. Laxmi of Kohikode, two jungle cats by a well wisher, thirteen budgeri gars and one country Pea Hen by Mr. D. S. Sastri, Agent, Central Bank of India, Ltd. These gifts were acknowledged with thanks and the institution recorded its deep appreciation to all the donors.

(b) *By births and hatches.*—During the year, there were the following list of births :—

Nos.	
1	Black Buck.
9	Guinea Pigs.
5	Long Eared or Kutch Goats.
3	Sambur Deers.
6	Pigeons of sorts.

(c) *By Purchase.*—No purchase of new animal was effected during the year under report and every attempt was made to conserve the existing stock.

Depletion—(a) *By Deaths.*—Efforts had been made during the year to reduce the mortality due to infectious diseases and other preventable causes. There were no deaths amongst the large carnivora. Amongst the ruminants, one male Llama and one female Gnu died of generalised tuberculosis.

The death for the calendar year ended with 31st December 1963, worked out to 4.6% as against 5% for last year 1962.

(b) *By Sales.*—The following animals were disposed of by sales, being surplus stock :—

Nos.	
4	Guinea Pigs
2	Long Eared or Kutch Goats.
6	Pigeons of sorts.
6	White Rats.

Improvements to the Garden.—It was considered absolutely necessary to replace flimsy wooden aviaries for Macaw Parrots with concrete enclosures, providing roosting cages for their breeding purpose. The work of construction could be started only during the end of the Calendar year 1963.

A children's section with playground equipments was insisted by the City Fathers and provision for the purpose was accordingly made in the financial year Budget for 1963-64. A section in the frontage had been set up with playground equipments like sea-saw, swing, slide, etc., for the children visitors to the institution. The section is really popular amongst them.

The old leaky vessels plying within the Zoolake had been replaced with new sets of vessels—three punts and one Row Boat, on 1st April 1963. These new vessels were acquired by purchase from Messrs. Kumar Industrial Enterprise, Madras-7, at a cost of Rs. 8,496-60 nP.

Finance.—The right of collecting fees at the entrance of the Zoological Garden and for Cycle Stand was let on contract for the financial year 1963-64 for a sum of Rs. 1,51,000. The right of Plying Pleasure Boats inside the Zoo Lake was let for a sum of Rs. 10,115 for the financial year ending with 31st March 1963. The right of running the Cafe inside the Zoo was let for Rs. 12,005.

Besides, there were other miscellaneous collections under 'Zoo—Other Receipts', by way of admission of still cameras inside the Garden, hire of animals admission of cars, amateur cine cameras, sales of elephant dung, etc. The total receipts under these heads during the calendar year worked out to Rs. 2,694-25 nP.

Wild Life Day.—In connection with the Wild Life Week, a procession of wild animals from the Zoological Garden went round the main thoroughfares of the City on the afternoon of 1st October 1963. Besides, elephant 'Kamala' and a pair of Camels, the other attractions in the procession were one pair of Chimpanzees 'Zippy and Ivy', one pair Lion Tailed Monkeys, one Black Nilgiri Langur, one pair Tiger Cubs, one pair of Leopard Cubs and one pair African Crowned Cranes.

Zoo Conference.—On 20th July 1963, a conference was convened at the Zoological Gardens at 8-30 a.m. with Health Officer as Chairman, Dr. Bertie A. D'Souza, Dean and Dr. M. S. Ganapathi, Professor of Preventive Medicines, Madras Veterinary College and Zoo Staff and it considered at length the preventive aspects of coal smoke from the adjunct steam engine, which was stated to be a prelude for the onset of tuberculosis and for which cause it was planned to shift the institution from its present location, well-bred isolation, behind My Ladye's Park. It concluded to extend the existing institution further alongside north to the open plain yard to provide more accommodation with bushes, trees and moats for these ungulates.

ZOOLOGICAL GARDENS



The Pleasure Boats in Zoo lake.

ZOOLOGICAL GARDENS

The Zoological Gardens in London

LETHAL CHAMBER

Introduction.—Stray dogs in the City not only cause nuisance but also become a danger to the public health if they become rabid. They breed very fast due to conditions in the City and due to hospitable feelings of the public towards dogs. The most horrible and mortal disease Rabis ("Hydrophobia") is transmitted to human beings mainly by rabid dogs if they either bite or snap human beings. Sickly mangy dogs roaming freely and causing nuisance in the public roads and places resorted by public are not only unhygienic but, becomes dangerous and risky for the free movement of the public. Many a traffic accident involving human lives are caused by stray dogs on the busy roads. Further stray dogs crossing in the public forms very unhealthy impressions in the minds of children. To control the nuisance and risks to public health caused by the stray dogs Corporation of Madras is maintaining the Lethal Chamber under the Control of the Health Officer.

Institution and its Workings.—The Lethal Chamber is situated at the Basin Bridge Road near the Power House, Pulianthope, 38th Division under the Supervision of a Sanitary Inspector. In the premises there is a "Dog's Home" and an electrocution station for dogs.

All the ownerless dogs straying in any street or place frequented by the public like Markets, Slaughter Houses, Cart Stands, Bus Stops, Choultries, Public Offices, Educational Institutions, Hospitals and Factories, etc., are seized by the Expert Dogs Catchers by noosing and they are brought to the "Dogs Home" by Motor Vans specially provided for the purpose.

They are detained in the Dogs Home in well maintained chambers for three days (72 hours) fed and cared for. In the meanwhile these dogs are being released by their owners on payment of license fees of Rs. 1-25 nP. and detention charges at 25 nP. per day of detention in the "Dogs Home". Unclaimed dogs after 3 days are electrocuted on the 4th day and their carcasses are buried immediately. The dog catchers are not regular employees of the Corporation but they are paid a reward of 19 nP. for each dog caught by them. Even though there are 4 motor vans for Dog Raids only two vans were put on road to cover 100 divisions of the City of Madras.

Human methods.—Dogs are caught with minimum force without beating, clubbing or dragging in the public which will provoke sentimental objections from the dog loving public. They are muzzled and tied in the vans on special convenient stands without strangulating and quickly transported to the Dog Home.

Killing of dogs is done by electrocution which is the most modern known method to-day. It is instanteneous, painless and sanitary process. Dogs are killed individually without beings seen by its companion dogs, which will cause mental agony and shock to these sensitive animals.

Educational Visits.—Control of rabis being an academical subject, the students from the following institutions visited this institution to whom the salient features and working were explained in detail. Demonstration of noosing and electrocution were conducted for the benefit of these visitors.

1. Medical Interness of Stanley Medical College, Madras.
2. Do. Madras Medical College, Madras.
3. Do. Christian Medical College, Vellore.
4. Do. Government Medical College, Pondicherry.
5. Students undergoing training in Health Visitors Course.
6. Do. in Sanitary Inspector's Course.
7. Do. Public Health Nursing Course.
8. Do. in B.S.Sc. Course.

Research Scholars from the Madras Veterinary College come to collect organs and parts of carcasses for research purposes. Live dogs are given to Medical and Veterinary Colleges in the City for experimental purposes. Dr. H. E. Bywater, Member of the Royal College of Veterinary Surgeons and Royal Society for Prevention of Cruelty to Animals, London, visited this institution and promised to bring "telectrothianator" which first stuns the dog into on unconsciousness and then painlessly kills it with an other shock.

Doctors undergoing training in D.P.H. Course in Osmania University visited this institution and studied this working of the institution. The Medical and Health Officers attached to Indian Telephone Industries, Bangalore visited to study the working of this institution in order to install similar institution in their township.

Conclusion.—Apart from the work done in the City limits our dog, catchers are deputed to help the Thriuvethiyur Municipality, Villivakam Town Panchayat, T. B. Sanatorium and Meenambakam Aerodrome, for catching stray dogs and they were brought to this institution for electrocution on payment of 25 nP. per dog. The monkeys captured from the ships coming from African countries with yellow fever are sent for electrocution by the Port Health Officer.

Particulars of work done during the year 1963.

S. No.	Particulars	No. of dogs	No. of bitches
1	No. of dogs left over on 31st December 1962.	131	155
2	No. of dogs admitted during the year 1963.	22,258	23,265
3	Total No. of dogs ...	22,389	23,420
4	No. of electrocuted (destroyed) during the year 1962 ...	19,553	22,365
5	No. of dogs released to the owners on payment ...	2,413	869
6	No. of dogs given to Medical Colleges for experimental purpose ...	403	149
7	No. of dogs put in public auction ...	Nil	Nil
8	No. of left remaining in the Lethal Chamber on 31st December 1963. ...	20	37

CORPORATION OF MADRAS

INSTITUTIONS UNDER THE HEALTH ADMINISTRATION
DURING 1963

Health Department—Central Office

	Telephone Numbers
<i>Hospital :</i>	
Infectious Diseases Hospital, Tiruvottiyur High Road, Tondiarpet ...	51036 51037
<i>Laboratories :</i>	
Public Analyst's Laboratory, Ripon Buildings, Madras ...	39171
Public Health Clinical Laboratory, Ripon Buildings, Madras-3 ...	39171
Water Analyst's Laboratory, Kilpauk Water Works, Madras-10 ...	61197
Malaria Laboratory, Trevelyan Basin Water Works Street Madras-1 ...	...
<i>Other Institutions :</i>	
Ashok Vihar, Health and Recreation Centre, Peoples Park, behind Moore Market, Madras-3 ...	33259
Zoological Gardens, Peoples Park, Madras-3 ...	31414
Lethal Chamber, Basin Road, Madras- 2 ...	33192
Special Home, Krishnampet, Madras-5 ...	86377
<i>Midday Meals Centres :</i>	
Basin Bridge Road, Kondithope, North Range ...	...
Iya Mudali Street, Chintadripet, Central Range ...	85763
Conran Smith Road, Gopalapuram, South Range ...	...
<i>Slaughter Houses :</i>	
<i>Sheep and Cattle—</i>	
Gantz Road, Perambur Barracks, Madras 12 ...	32027
Alandur Road, Saidapet.	
<i>Pigs—</i>	
Junction of Basin Road and Pulianthope High Road ...	...
Alandur Road, Saidapet.	
<i>Miscellaneous :</i>	
<i>Hearse—</i>	
Corporation Lorry Station, Annapillai Street, George Town, Madras-1 ...	31837
<i>Community Centre :</i>	
St. Xavier Street, Seven Wells, Madras-1 ...	...
<i>Senior Entomologist :</i>	
N.M.E.P., At Ashok Vihar, Peoples Park ...	33259

Health Department

I CIRCLE

<i>S. No.</i>	<i>Divn. No.</i>	<i>Name of Dispensary</i>	<i>Location</i>
<i>General Dispensaries :</i>			
1	1	New Washermanpet.	10, Avoor Muthiah Maistry Street, New Washermanpet.
2	2	Royapuram ...	2/87, Suryanarayana Chetty Street, Royapuram.
3	3	Palmyrah Yard ...	Kalmandapam Road, Royapuram.
4	4	Sanjeevarayanpet ...	21/22, Kappal Polu Chetty Street, Old Washermanpet.
5	7	Royapuram, Siddha ...	109, Adam Sahib Street, Royapuram.

Veterinary Dispensaries :

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Sanitary Inspectors Office

<i>S. No.</i>	<i>Divn. No.</i>	<i>Location</i>
1	1 & 2 ...	81, Suryanarayana Chetty Street, Tondiarpet.
2	3 & 4 ...	Kalmandapam Road, Royapuram.
3	5 & 6 ...	151, Mannarswamy Koil Street, Royapuram.
4	7 & 8 ...	151, Mannarswamy Koil Street, Royapuram.
5	9 & 10 ...	151, Mannarswamy Koil Street, Royapuram.

Births and Deaths Registration Offices and Vaccination Depots

<i>S. No.</i>	<i>Divns. Served</i>	<i>Location</i>
1	1, 2, 3, 7, 8 and 9.	2/87, Suryanarayana Chetty Street, Royapuram.
2	4, 5, 6 and 10.	546 Thiruvottiur High Road, Washermanpet.

Burial and Burning Grounds

<i>S.No.</i>	<i>Divn. No.</i>	<i>Name of Burial Ground</i>	<i>Location</i>
1	2	Corporation Hindu, Muslim Xian, Chinese and Janesh Burial and Burning Grounds.	Suryanarayana Chetty Street, Kasimodu.
2	2	Xian Private Cementry.	Kasimodu Suryanarayana Chetty Street.
3	2	Muslim Private Burial Ground.	Thandavaraya Gramani Street.
4	5	St. Thomas Cementry ...	West Cementry Road.
5	8	Parsee Burial Ground ...	West Mada Church Street, Royapuram.
6	9	St. Roques Cementry ...	6, Monegar Choultry Road.
7	9	Christian Mission Society Burial Ground.	Old Slaughter House Road.

CHILD WELFARE CENTRES

<i>S.No.</i>	<i>Divn. No.</i>	<i>Name of Circle</i>	<i>Location</i>
1	1	New Washermanpet Centre.	385, Thiruvottiyur High Road, Tondiarpet.
2	3	Grace Garden Centre and Creche.	26, Surianarayana Chetty Street, Royapuram.
3	4	Sanjeevirayanpet ...	Solaiappan Street, Washermanpet.
4	8	Royapuram ...	Near Corporation Model Lines, Palmyrahkuppam.

II CIRCLE

General Dispensaries

<i>S. No.</i>	<i>Dn. Nos.</i>	<i>Name of Dispensary</i>	<i>Location</i>
1	11	Seven Wells ...	1/50, St. Xavier Street.
2	14	Harbour ...	6/7, Adam Street.
3	15	Muthialpet ...	2, Geils Street Muthialpet.
4	19	Mofuskhan Garden ...	55, Thatha Muthiappan Street.
5	20	Mannady ...	47, Linghi Chetty Street.

Sanitary Inspectors Offices

<i>S.No.</i>	<i>Dn. Nos.</i>	<i>Location</i>
1	11 & 12	84, Seven Wells Street, G.T., Madras.
2	13 & 14	42, Marakayar Labbai Street.
3	15 & 16	84, Seven Wells Street, G.T., Madras.
4	17 & 18	171, Govindappa Naicken Street.
5	19 & 20	47, Thatha Muthiappan Street.

Births and Deaths Registration Offices and Vaccination Depots

<i>S. No.</i>	<i>Divns. Served</i>	<i>Location</i>
1	11, 12, 16, and 17.	27, Venkier Street, Kondithope.
2	13, 14, 15 and 20.	47, Linghi Chetty Street.
3	18 and 19	84, Seven Wells Street.

Burial and Burning Grounds

<i>S.No.</i>	<i>Dn. No.</i>	<i>Name of Burial Ground</i>	<i>Location</i>
1	14	Bora Muslim Burial Ground.	1/46 Angappa Naicken Street.

Child Welfare Centres

<i>S. No.</i>	<i>Dn. Nos.</i>	<i>Name of Circle</i>	<i>Location</i>
1	12	Ammen Koil North Creche.	B.R. Garden Street, Madras-1.
2	13	Muthialpet Centre ...	47, Linghi Chetty Street, George Town.
3	16	Ammen Koil South Centre.	1/27, Appu Maistry Street, George Town.
4	17	Seven Wells (S) Centre and F.P.C.	44, Ammen Koil Street, George Town.

III CIRCLE

General Dispensaries

<i>S. No.</i>	<i>Dn. No.</i>	<i>Name of Dispensary</i>	<i>Location.</i>
1	21	Tondiarpet	... Thiruvottiyur High Road.
2	23	Washermanpet	... 85, T.H. Road, Old Washermanpet.
3	25	Mint	... 244, Mint Street.
4	25	Basin Bridge	... 50, Basin Bridge Road.
5	28	Trevelyan Basin	... 17, Basin Bridge Road.

Veterinary Dispensaries

1	25	Basin Bridge	... 50, Basin Bridge Road, Kondithope.
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Sanitary Inspectors Offices

<i>S.No.</i>	<i>Dn. Nos.</i>	<i>Location</i>
1	21, 22 & 23.	546, T.H. Road, Madras-21 (Old Washermanpet).
2	24 & 25	... 27, Venkier Street, Kondithope.
3	26 & 27	... 183, Wall Tax Road.
4	28 & 29	... 183, Wall Tax Road.
5	30	... 1/96, Wall Tax Road.

Births and Deaths Registration Offices and Vaccination Depots

<i>S.No.</i>	<i>Divns. Served</i>	<i>Location</i>
1	21, 22, 23, 24 and 25.	27, Venkier Street, Kondithope.
2	26, 27, 28, 29 and 30.	17, Basin Water Works Street.

Corporation Cattle Yards

<i>S.No.</i>	<i>Dn. Nos.</i>	<i>Location</i>
1	25	Basin Bridge Road, Kondithope.

Burial and Burning Grounds

<i>S.No.</i>	<i>Dn. Nos.</i>	<i>Name of Burial Ground</i>	<i>Location</i>
1	23	Sait Mosque Burial Ground.	556, Thiruvottiyur High Road.
2	24	Washermanpet Hindu Burial Ground.	Kathiwalkkam High Road.

CHILD WELFARE CENTRES

<i>S.No.</i>	<i>Dn. Nos.</i>	<i>Name of Centre or Creche</i>	<i>Location</i>
1	23	Dr. V. R. Nagar Centre.	86, T.H. Road, Washermanpet.
2	25	Kondithope Centre ...	53-A, Cochrane Basin Bridge Road.
3	26	Peddunaickenpet Centre.	18, Zindah Sahib Street, Peddunaickenpet.
4	28	Treveleyan Basin Centre.	52, Trevelian Basin Street, Sowcarpet.
5	29	Elephant Gate Centre ...	Mallayya Market, Walltax Road.

IV CIRCLE**General Dispensaries**

<i>S.No.</i>	<i>Dn. Nos.</i>	<i>Name of Dispensary</i>	<i>Location</i>
1	31	Perambur ...	55, Madhavaram High Road,
2	32	Vyasarpady ...	22, Gantz Road.
3	33	Pulianthope Unani ...	55, Pulianthope High Road.
4	34	Otteri ...	83, Strahans Road, Otteri.
5	35	Otteri Siddha ...	1/B, Bashiam Reddy I Street.
6	39	Choolai Siddha ...	16, Alathur Subramania Achari Street.
7	40	Baliah Naidu ...	6, Rotlers Street.

Sanitary Inspectors Offices

<i>S.No.</i>	<i>Dn. Nos.</i>	<i>Location</i>
1	31 & 32	40, Barathy Road, Perambur.
2	33 & 38	55, Pulianthope High Road.
3	34 & 35	1-A, Bashiam Reddy 1st Street.
4	36 & 37	Kalathiappa Mudali Street, Choolai.
5	39 & 40	Kalathiappa Mudali Street, Choolai.

Births and Deaths Registration Offices and Vaccination Depots

<i>S.No.</i>	<i>Divns. Served</i>	<i>Location</i>
1	31	Barathy Road, Perambur (Evenings).
2	32	22, Gantz Road (Mornings).
3	33, 34, 35 and 38.	55, Pulianthope High Road, Madras-12.
4	36, 37, 39 and 40.	Rotler Street, Vepery.

Cattle Depots and Veterinary Dispensaries

<i>S.No.</i>	<i>Dn. Nos.</i>	<i>Location</i>
1	33, 34 and 35	'G' Cattle Depot, Perambur High Road.

Burial and Burning Grounds

<i>S.No.</i>	<i>Dn. Nos.</i>	<i>Name of Burial Ground</i>	<i>Location</i>
1	31	Melapathi Ponnappa Mudaliar Burial Ground.	Melapathi Ponnappa Mudali Street.
2	32	Mannali Hindu Burial Ground.	Mannali Road, Vyasarpady.
3	32	Subedar Muslim Burial Ground.	Gantz Road.
4	38	Pulianthope Cremation Ground.	Basin Bridge Road.
5	38	Gujarathi and Maravari Burning Ground.	Dr. Ansari Road.
6	38	Vysia Burning Ground...	Do.

CHILD WELFARE CENTRE

<i>S.No.</i>	<i>Dn Nos.</i>	<i>Name of Centre or Creche</i>	<i>Location</i>
1	31	Perambur Centre, and F.P.	Barathi Road, Perambur.
2	33	Pulianthope ...	1/33, Gantz Road, Pulianthope
3	35	Thiru-vi-ka Nagar ...	54, Perambur High Road, Perambur.
4	39	Choolai Centre and F.P.	15, Vijayavigneswarar Koil Street, Choolai.
5	40	Hospital Maidan Centre.	1, Manicka Chetty St., Choolai.

V. CIRCLE**General Dispensaries**

<i>S.No.</i>	<i>Dn. Nos.</i>	<i>Name of the Dispensary</i>	<i>Location</i>
1	41	Sembiam ...	178, Paper Mills Road.
2	45	Ayanavaram ...	127, Konnur High Road.
3	46	Nammalwarpet ...	21-A, Subbaraya Chetty Street, 2nd Lane.
4	48	Kosapet (Old) ...	1/7, Chellappa Mudali Street.
5	48	Kosapet (New) ...	Sachidanandam Street, Kosapet

Sanitary Inspectors Offices

<i>S.No.</i>	<i>Dn. Nos.</i>	<i>Location</i>
1	41 & 42	23, Paper Mills Road, Sembiam.
2	43 & 45	127, Konnur High Road.
3	44 & 46	1-B, Bashiam Reddy 1st Street.
4	47 & 48	Smith Field Market, Choolai.
5	49 & 50	Do.

Births and Deaths Registration Offices and Vaccination Depots

<i>S.No.</i>	<i>Divns. Served</i>	<i>Location</i>
1	41, 42 and 43	23, Paper Mills Road, Sembiam.
2	44 and 45	127, Konnur High Road, Ayanavaram.
3	46, 47, 48, 49 and 50.	6, Gangadareswarar Koil Street.

Corporation Cattle Yards

<i>S.No.</i>	<i>Dn. Nos.</i>	<i>Location</i>
1	47	73/74, Venkadathri Naicken Street.

Burial and Burning Grounds

<i>S.No.</i>	<i>Dn. Nos.</i>	<i>Name of Burial Ground</i>	<i>Location</i>
1	41	Hindu Burial Grounds.	Madhavaram High Road, Sembiam.
2	42	Do.	Do.
3	43	Battu Mode Burial Ground.	Agaram, near North of Villivakkam Station.
4	47	Luther Christian Burial Ground.	Brick Kiln Road.
5	50	Otteri Burial and Burning Ground.	Brick Kiln Road.
6	50	Muslim Burial Ground.	Thandavaraya Mudali Street.
7	50	Lutheran Mission Cemetery.	Bricklin Street.

CHILD WELFARE CENTRES

<i>S. No.</i>	<i>Dn. Nos.</i>	<i>Name and Centre or Creche</i>	<i>Location</i>
1	41	Sembiam Centre ...	45, Paper Mills Road, Sembiam.
2	45	Ayanavaram Centre and Stores.	United India Colony, Ayana- varam.
3	46	Nammalwarpet Centre.	14, Subbaroya Chetty Street, Nammalwarpet.
4	47	Otteri Centre ...	8, Chellappa Mudali Street, Otteri.
5	49	Perumal Centre & Creche.	18, Kariappa Mudali Street, Perumalpet.
6	50	Purasawalkam Centre ...	109, Purasawalkam High Road, Purasawalkam.

VI CIRCLE**General Dispensaries**

<i>S. No.</i>	<i>Dn. Nos.</i>	<i>Name of Dispensaries</i>	<i>Location</i>
1	51	Aminjikarai ...	171, Peonamallee High Road.
2	53	Chetput ...	241, McNichols Road.
3	55	Nungambakkam ...	15, Noor Veeraswamy Iyer Street.
4	56	Thousand Lights ...	43, Model School Road.
5	59	Pudupakkam ...	369, Pycrofts Road.

Sanitary Inspectors Offices

<i>S. No.</i>	<i>Dn. Nos.</i>	<i>Location</i>
1	51 & 52	10, Shenoy Nagar Market.
2	53 & 54	15-B, Nungambakkam High Road.
3	55 & 56	21, Village Road, Nungambakkam.
4	57 & 58	369, Pycrofts Road, Amir Mahal.
5	59 & 60	369, Pycrofts Road, Amir Mahal.

Births and Deaths Registration Offices and Vaccination Depots

<i>S. No.</i>	<i>Divns. Served</i>	<i>Location</i>
1	51 & 52	1, Round Market, Shenoy Nagar.
2	53 & 54	15, Nungambakkam High Road.
3	55 & 56	15, Nungambakkam High Road.
4	57, 58, 59 and 60.	369, Pycrofts Road, Pudupakkam.

Burial and Burning Grounds

<i>S. No.</i>	<i>Dn. Nos.</i>	<i>Name of Burial Ground</i>	<i>Location</i>
1	51	Ayanavaram Burial Ground.	Ayanavaram.
2	51	Kilpauk Old Cemetery ...	Kilpauk Garden Road.
3	51	Aminjikarai Muslim Burial Grounds.	Aminjikarai.
4	51	Kilpauk New Cemetery.	Brevary Road.
5	51	Buddhist Burial Ground.	Thandavarayan Street.
6	51	Kujji Naicken Hindu Burial Ground.	New Avadi Road (Velangadu).
7	51	Reddythope (Periakudal) Muslim Burial Ground.	Shenoy Nagar (Riverside).
8	51	Arumbakkam Burial and Burning Ground.	Arumbakkam, N.S.K. Nagar (River side).
9	51	Naduvankarai Burial and Burning Ground.	Do.
10	54	Sterling Road Burial and Burning Ground.	Sterling Road.
11	57	St. George Cathedral Burial Ground.	Mount Road, Cathedral.
12	59	Rama Rao Makhan Burial Ground.	16, Peters Road, Madras-14.

CHILD WELFARE CENTRES

<i>S. No.</i>	<i>Dn. No.</i>	<i>Name of Centre or Creche</i>	<i>Location</i>
1	52	Kilpauk Centre ...	19, Halls Road, Kilpauk.
2	53	Chetput C.W.C., F.P. & Creche.	27, Jaganathapuram 2nd Street, Chetput.
3	55	Nungambakkam South Centre.	15 Noor Veerasamy Iyer Street, Nungambakkam.
4	56	Thousand Light (West).	46 Aziz Mulk 3rd Street, Thousand Lights.
5 *	58	Pudupakkam Centre and F.P.	8, Nyniappa Maistry Street, Triplicane.
6	60	Durgapuram Centre ...	84, Lloyds Road, Royapettah.

VII CIRCLE**General Dispensaries**

<i>S. No.</i>	<i>Dn. Nos.</i>	<i>Name of Dispensary</i>	<i>Location</i>
1	61	Kilpauk ...	6, Gangathareeswarar Koil Street.
2	63	Ripon Building Staff Dispensary.	Ripon Buildings.
3	66	Chintadripet ...	2/61, Arunachala Naicken Street
4	67	Egmore ...	34, Poosala Gengu Reddi Street.
5	69	Pudupet ...	83, Harris Road.

Veterinary Dispensaries

<i>S. No.</i>	<i>Dn. Nos.</i>	<i>Name of Dispensary</i>	<i>Location</i>
1	68	Pudupet Dispensary ...	Harris Road, Pudupet.

Sanitary Inspectors Offices

1	61 & 62	65, Poonamallee High Road (Nehru Park.)
2	63 & 64	23, Kolandai Street, Park Town.
3	65 & 66	Vedagiri Maistry Street, Chintadripet.
4	67 & 68	34, Poosala Gengu Reddy Street.
5	69 & 70	Adikesavalu Street, Narasingapuram.

Births and Deaths Registration Offices and Vaccination Depots

<i>S. No.</i>	<i>Divns. Served</i>	<i>Location</i>
1	61 & 62	65, Poonamallee High Road.
2	63 & 64	23, Kolandai Street, Park Town.
3	65, 66 & 70	3/61, Arunachala Naicken Street, Chintadripet.
4	67, 68 & 69	34, Poosala Gengu Reddy Street, Egmore.

Corporation Cattle Yards

<i>S. No.</i>	<i>Dn. Nos.</i>	<i>Location</i>
1	70	43, Singanna Chetty Street, Chintadripet.

Cattle Depots and Veterinary Dispensaries

1	68 & 69	'D' Depot, 25, Harris Road.
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CHILD WELFARE CENTRE

<i>S. No.</i>	<i>Dn Nos.</i>	<i>Name of Cenrte or Creche</i>	<i>Location</i>
1	64	Park Town Centre ...	2/3, Periera Street, Park Town.
2	64	Ashok Vihar Centre ...	Ashok Vihar, behind Moore Market P.T., Madras.
3	66	Chintadripet ...	1/61, Arunachala Naicken Street, Chintadripet.
4	68	Pudupet ...	37, Langs Garden Road, Pudupet

VIII CIRCLE

General Dispensaries

<i>S. No.</i>	<i>Dn. Nos.</i>	<i>Name of Dispensary</i>	<i>Location</i>
1	71	Thiruvateeswaranpet ...	42, Thayar Sahib Street.
2	72	Chepauk ...	8, Khana Bhaugh Street.
3	75	Triplicane ...	25, Pycrofts Road.
4	77	Zambazaar ...	21, Gazette Begum Street.
5	80	Krishnampet ...	25, Dr. Natesan Road.

Veterinary Dispensaries

<i>S. Nos.</i>	<i>Dn. Nos.</i>	<i>Name of Dispensary</i>	<i>Location.</i>
1	80	Barbers Bridge ...	Barbers Bridge Road, Krishnampet.

Sanitary Inspectors Offices

1	71 & 72	1, Balamuthu Street, Madras-2.
2	73 & 74	25, Pycrofts Road, Triplicane.
3	75 & 76	22, Namasivaya Mudali Street, Triplicane.
4	77 & 78	25, Dr. Natesan Road, Krishnampet.
5	79 & 80	25, Dr. Natesan Road, Krishnampet.

Births and Deaths Registration Offices and Vaccination Depots

<i>S. No.</i>	<i>Dnns. Served</i>	<i>Location.</i>
1	71, 72 & 73	102, Thayar Sahib Street.
2	74, 75, 76 & 77	Dr. Besant Road, near Ice House Pumping Station.
3	78, 79 & 80	25, Barbers Bridge Road, Krishnampet.

Corporation Cattle Yards

<i>S. No.</i>	<i>Dn. No.</i>	<i>Location</i>
1	74	Swarajapuram.

Cattle Depots and Veterinary Dispensaries

<i>S. No.</i>	<i>Dn. Nos.</i>	<i>Location</i>
1	78	'E' Depot, Muthiah Mudali Street.

Burial and Burning Grounds

<i>S. No.</i>	<i>Dn. No.</i>	<i>Name of Burial Ground</i>	<i>Location</i>
1	71	St. Patric Burial Ground.	Body Guard Road.
2	71	Sacred Heart Burial Ground.	Do.
3	71	St. Andrews Burial Ground.	Do.
4	71	St. Armenian Street Burial Ground.	Do.
5	71	St. Mary's Burial Ground.	Do.
6	79	Desthagir Sahib Durkha Burial Ground.	82, Dr. Natesan Road.
7	79	Syed Karimulla Sahib Burial Ground.	Do.
8	79	Pappu Masthan Durgha Burial Ground.	Lloyds Road.
9	79	Haji Ismail Maccan Burial Ground.	Do.
10	80	Krishnampet Burial and Burning Ground.	Gajapathi Lala Street;
11	80	Kudratha Alimakhan Burial Ground.	42, Dr. Natesan Road;
12	80	Neelam Badsha Durgha Burial Ground.	Dr. Besant Road, behind Lady Willingdon College.

CHILD WELFARE CENTRES

<i>S. No.</i>	<i>Dn. Nos.</i>	<i>Name of Centre or Creche</i>	<i>Location</i>
1	76	Zambazaar	... 24/25, Surappa Mudali Street, Zambazaar
2	77	Mirsahibpet	... 65, Dr. Besant Road, Triplicane.

IX CIRCLE**General Dispensaries**

<i>S. No.</i>	<i>Dn. Nos.</i>	<i>Name of Dispensary</i>	<i>Location</i>
1	81	Teynampet (North)	... 56-C, Muthiah Mudali Street, Madras-6.
2	84	Mylapore (North)	... 8, Karneswarar Pagoda Street.
3	85	Mylapore (South)	... 101, Kutchery Road.
4	88	Teynampet (South)	... 104, Mount Road, Teynampet.
5	89	Adyar	13, Greenways Road.

Veterinary Dispensaries

<i>S. No.</i>	<i>Dn. Nos.</i>	<i>Name of Burial Ground</i>	<i>Location</i>
1	84	Prasanna Vinayagar Koil Dispensary.	Prasanna Vinayagar Koil Street, Mylaopre.

Sanitary Inspectors Offices

<i>S. No.</i>	<i>Dn. Nos.</i>	<i>Location</i>
1	81 & 82	2/104, Mount Road, Teynampet
2	83 & 84	65, Kutchery Road, Mylapore.
3	85 & 86	101, Kutchery Road, Mylapore.
4	87 & 88	2/104, Mount Road, Madras-2.
5	89 & 90	13, Greenways Road, Adyar.

Births and Deaths Registration Offices and Vaccination Depots

<i>S. No.</i>	<i>Divns. Served</i>	<i>Location</i>
1	81, 87 & 88	2/104, Mount Road, Teynampet.
2	82, 83 & 84	55, Royapettah High Road.
3	85 & 86	63, Kutcheri Road, Mylapore.
4	89 & 90	13, Greenways Road, Adyar.

Cattle Depots and Veterinary Dispensaries

<i>S. No.</i>	<i>Dn. No.</i>	<i>Location</i>
1	84	'F' Depot, Karneeswarar Pagoda Street.

Burial and Burning Grounds

<i>S. No.</i>	<i>Dn. Nos.</i>	<i>Name of Burial Grounds</i>	<i>Location</i>
1	84	Mylapore Hindu Burial and Burning Ground.	Karneeswarar Pagoda Street,
2	86	Elapatha Mada Koil Cemetery.	66, St. Mary's Road.
3	89	Quiebal Cemetery ...	Santhome High Road.
4	90	Urur Hindu Burial and Burning Ground.	Adyar.

CHILD WELFARE CENTRES

<i>S. No.</i>	<i>Dn. Nos.</i>	<i>Name of Centre or Creche</i>	<i>Location</i>
1	81	Teynampet Centre ...	104, Mount Roat, Teynampet.
2	84	Karneeswarapuram Centre.	48, Batrezaar Road, Mylapore.
3	89	Raja Annamalaipuram, Centre.	34, Brodies Road, Adyar.
4	90	Adyar Centre ...	44, Vasantha Press Road, Adyar.

X CIRCLE

General Dispensaries

<i>S. No.</i>	<i>Dn. Nos.</i>	<i>Name of Dispensary</i>	<i>Location</i>
1	92	Kodambakkam ...	107, Arcot Road.
2	93	T.Nagar (North) ...	4, Dr. Sadasivam Road.
3	94	T.Nagar (South) ...	3, Sivagnanam Road.
4	97	Saidapet ...	51, Sadayappa Mudali Street.
5	99	Guindy ...	1-A, Sathani Street.

Sanitary Inspectors Offices

<i>S. No.</i>	<i>Dn. Nos.</i>	<i>Location</i>
1	91 & 92	114, Arcot Road, Kodambakkam.
2	93 & 94	3, Sivagnanam Road, T'Nagar.
3	95 & 96	3, Sivagnanam Road, T'Nagar.
4	97 & 98	16, Koothadum Pillair Koil Street.
5	99 & 100	8, Little Mount Road, Guindy.

Births and Deaths Registration Offices and Vaccination Depots

<i>S. No.</i>	<i>Divn. Served</i>	<i>Location</i>
1	91 & 92	107, Arcot Road, Vadapalani.
2	93, 94, 95 & 96.	3, Sivagnanam Road, T'Nagar.
3	97, 98, 99 & 100.	16, Koothadum Pilliar Koil Street.

Cattle Depots and Veterinary Dispensaries

<i>S. No.</i>	<i>Dn. No.</i>	<i>Location</i>
1	93	'H' Depot, Junction of Kodambakkam Road and Thirumalai Pillai Road.

Burial and Burning Grounds

<i>S. No.</i>	<i>Dn. Nos.</i>	<i>Name of Burial Ground</i>	<i>Location</i>
1	92	Puliyur Burning and Burial Ground.	Puliyur.
2	92	Kodambakkam Burial and Burning Ground.	Arcot Road, Kodambakkam.
3	95	Kannammappet Burial and Burning Ground.	Kannammappet, T.Nagar.
4	97	Saidapet Burial and Burning Ground.	Jones Road.
5	99	Jain Adayar Burial and Burning Ground.	Adyar.
6	99	Kottur Burial and Burning Ground.	Kottur.
7	99	Vellichery Burial and Burning Ground.	Velacheri Road.
8	99	Mohamadan Burial Ground.	Y.M.C.A., Mount Road.
9	99	Christian Burial Ground.	Do.
10	99	Christian Burial Ground.	Little Mount.
11	100	Muslim Burial Ground.	32, Mosque Street.
12	100	Ikkattu Thangal Hindu Burial and Burning Ground.	Ikkattu Thangal, Saidapet.

CHILD WELFARE CENTRES

<i>S. No.</i>	<i>Dn. Nos.</i>	<i>Name of Centre or Creche</i>	<i>Location</i>
1	92	Vadapalani Centre ...	68, Arcot Road, Kodambakkam.
2	93	Theagaraya Nagar Centre.	16, Raghaviah Road, Theagaraya Nagar.
3	94	Sathyamurthi Nagar Centre.	3, Sivagnanam Road, T.Nagar.
4	97	Saidapet North Centre.	24, Dhanapal Chetty Street, Saidapet.
5	98	Saidapet Maternity Home & F.P.	6, Jeenis Road, Saidapet.
6	99	Guindy Centre ...	6, Perumal Koil Street, Kottur.

ANNUAL HEALTH REPORT

1963

STATISTICAL SUPPLEMENT

Meteorological data of Madras City (Nungambakkam) for 1963

Months	(1)	(2) Mean Barometric Pressure corrected for temperature and reduced to standard gravity and mean sea level in Millibars 03.30 hours, I.S.T.	Temperature (C)				Latitude		Humidity		Rainfall in Millimetres.		
			Mean Maximum Co.	Mean Minimum Co.	Mean daily range columns (3-4)	Mean daily temperature $\frac{1}{2}$ of Columns (3+4)	Latitude		Percentage of Humidity at 08.30 hours I.S.T.	(10) Mean direction of wind in degrees from North at 08.30 hours I.S.T.	(11) Total fall for the month in millimetres.	(12) Heaviest rainfall in 24 hours in millimetres.	(13) No. of rainy days 2.5 mm. or more and over
							Mean dew point 08.30 hours I.S.T.	Difference between mean temperature and dew point temperature at 08.30 hours I.S.T. Columns (6-7)					
January	...	1014.8	28.0	20.9	7.1	24.5	19.8	4.7	77	N 23 E	97.5	57.0	4
February	...	1015.1	29.2	20.4	8.7	24.8	20.7	4.1	80	N 24 W	00.0	00.0	0
March	...	1012.6	31.5	23.0	8.5	27.3	22.7	4.6	78	S 71 W	27.6	14.2	2
April	...	1010.7	32.7	24.7	7.9	28.7	24.0	4.7	75	S 51 W	50.6	48.0	1
May	...	1007.2	35.6	27.0	8.6	31.3	24.2	7.1	69	S 51 W	5.6	5.6	1
June	...	1006.8	36.6	26.7	9.8	31.7	21.6	10.1	62	S 78 W	75.2	32.6	5
July	...	1005.8	35.1	25.9	9.2	30.5	22.3	8.2	68	S 72 W	46.8	13.5	5
August	...	1006.5	33.4	25.1	8.3	29.3	23.4	5.9	78	S 67 W	161.0	41.2	10
September	...	1008.5	33.9	24.8	9.1	29.3	23.6	5.7	75	S 69 W	87.9	40.0	5
October	...	1010.7	31.9	24.4	7.5	28.1	24.1	4.0	82	S 61 W	255.4	79.0	10
November	...	1014.1	29.7	23.4	6.3	26.5	23.0	3.5	81	N 38 E	365.2	67.4	13
December	...	1014.8	28.5	21.8	6.7	25.1	21.3	3.8	80	N 23 E	157.1	49.3	8
Total	...	12127.6	386.1	288.1	97.7	337.1	270.7	66.5	90.5	...	1329.9	447.5	64

VITAL STATISTICS

STATISTIC SUPPLEMENT No. 2
Showing Births, Deaths and Infantile deaths Registered in each division during 1963

Division No.	Name of the New Division.	Area in square Miles.	Area in acres.	Number of Live-Births Registered.			Number of Deaths Registered excluding Still-Births.			Number of Deaths of Males to every 100 Females Deaths.			Number of Infant Deaths Registered.			Rate per 1,000 Live-Births Registered	Number of Still-Births Registered
				Males.	Females.	Total	Males.	Females.	Total	Males to every 100 Females Deaths.	Males to every 100 Females Deaths.	Males to every 100 Females Deaths.	Males	Females	Total		
1	New Washermanpet.	2.1629	1384.256	719	641	1380	330	308	638	108.7	107.3	107.3	99	67	166	1 0.2	29
2	Tondiarpet	0.4529	289.856	414	388	802	169	170	339	106.7	99.4	99.4	60	30	90	112.2	5
3	Grace Garden	0.2520	161.280	384	465	849	147	116	263	122.4	126.7	126.7	40	28	68	81.2	9
4	Sanjeevarayanpet	0.1613	103.232	365	315	680	120	128	248	82.5	93.7	93.7	52	43	95	139.7	13
5	Mottai Garden	0.1113	71.232	286	277	563	140	110	250	115.8	127.2	127.2	43	32	75	133.2	10
6	Narayana Naicker Garden	0.0713	45.632	251	230	481	115	100	215	103.2	115.0	115.0	31	17	48	135.1	11
7	Singara Garden	0.1320	84.480	291	293	584	110	114	224	109.1	96.4	96.4	38	27	65	118.1	10
8	Rayapuram	0.1321	199.744	315	343	658	100	117	217	92.5	85.4	85.4	24	45	69	94.2	7
9	Meenakshiammenpet	0.1984	126.976	1350	1696	3046	150	181	331	91.8	82.8	82.8	25	37	62	29.8	3
10	Old Washermanpet...	0.1810	115.840	319	296	615	142	170	312	84.0	83.5	83.5	42	49	91	148.8	42
11	Seven Wells (N.)	0.0891	57.024	258	251	509	338	412	750	147.7	82.0	82.0	64	46	110	149.3	18
12	Ammen Koil (N.)	0.0510	32.624	242	221	463	93	86	179	102.7	108.2	108.2	42	34	76	116.8	6
13	Muthialpet	0.0837	53.568	232	249	481	104	97	201	109.5	107.2	107.2	32	22	54	114.4	9
14	Harbour	0.5100	326.400	273	293	566	168	148	316	93.1	113.5	113.5	25	28	53	110.1	12
15	Mannady	0.0656	41.984	190	169	359	72	62	134	112.4	116.1	116.1	57	44	101	178.4	18
16	Ammen Koil (S.)	0.0517	33.088	202	203	405	57	75	132	99.5	76.0	76.0	14	19	33	91.0	9
17	Seven Wells (S.)	0.0767	49.088	311	333	644	92	88	180	99.3	104.4	104.4	18	10	28	69.0	10
18	Sowcarpet	0.0818	52.352	152	151	303	60	59	119	100.6	101.6	101.6	21	22	43	66.7	7
19	Kothawal Chavadi	0.1250	80.000	226	217	443	100	89	189	100.4	112.3	112.3	13	11	24	79.2	10
20	Katchaleeswarar	0.5490	351.360	177	172	349	81	48	129	100.2	168.7	168.7	18	10	28	108.3	6

23	Nagar ...	0.1792	114.688	419	413	832	100.1	207	191	398	95.2	60	48	108	160.7	12
23	Dr. Vijayaragavalu Nagar	0.4331	277.184	531	559	1090	94.9	300	261	561	108.3	100	98	198	129.8	43
24	Basin Bridge	0.2410	154.240	306	341	647	110.2	200	159	359	114.9	57	40	97	181.6	26
25	Kondithope	0.1155	73.920	332	301	633	89.7	122	131	253	93.1	30	38	68	149.7	13
26	Peddunaickenpet	0.0983	62.912	370	347	717	106.6	133	166	299	80.1	29	31	60	107.4	7
27	Perumal Koil															
27	Gardens...	0.0524	33.536	318	281	599	113.5	133	106	239	125.4	30	18	48	83.6	1
28	Trevelyan Basin	0.0696	44.544	238	205	443	116.0	90	64	154	140.6	19	17	36	80.1	—
29	Elephant Gate	0.0604	38.656	217	184	401	117.9	76	75	151	101.3	24	19	43	81.2	—
30	Edapalayam	0.0799	51.136	268	243	511	110.2	70	63	133	111.1	27	16	43	107.2	3
31	Perambur	0.8650	553.600	468	391	859	119.6	148	159	307	93.0	44	41	85	84.1	17
32	Vysarpady	1.3200	844.800	428	499	927	85.6	232	227	459	102.2	63	59	122	98.9	19
33	Pulianthope	0.2880	184.320	570	554	1124	102.8	258	291	549	88.6	67	73	140	120.4	6
34	Wadia Nagar	0.4025	257.600	300	283	583	106.0	163	166	329	98.1	42	53	95	162.9	5
35	Thiru-vi-ka Nagar	0.5025	321.600	344	359	703	95.8	194	138	332	145.7	41	30	71	100.9	5
36	Pattalam	0.0845	54.080	203	184	387	110.3	158	102	260	154.9	22	24	46	118.8	7
37	Thattam Kulam	0.0655	41.920	274	339	613	80.8	141	115	256	122.6	43	25	68	110.9	14
38	Dr. Besant Nagar	0.2965	189.760	489	476	965	102.7	205	241	446	85.0	64	75	139	140.	1
39	Choolai	0.0915	58.560	331	292	623	113.6	138	109	247	126.6	34	22	56	89.8	11
40	Hospital Garden	0.1321	84.544	335	341	676	98.2	130	121	251	107.4	25	24	49	72.4	12
41	Sembiam	0.8271	530.560	419	430	849	97.4	145	178	323	81.4	35	35	70	82.3	6
42	Siruvellore	0.3019	193.216	307	241	548	127.3	106	100	206	106.0	41	17	58	100.3	7
43	Agaram	2.6509	1696.756	260	214	474	121.4	82	78	160	105.1	26	22	48	101.	4
44	Nagaammairamai															
45	Nagar	0.3107	198.976	408	344	752	118.6	182	144	326	126.3	56	47	103	137.9	25
45	Ayanavaram	0.5300	339.200	571	595	1166	95.9	200	157	395	155.9	54	41	95	81.4	19
46	Nammalwarpet	0.6001	384.064	310	323	633	96.2	186	181	367	128.1	32	43	75	118.4	16
47	Otteri	0.1178	75.392	403	352	755	114.4	161	171	332	94.1	54	48	102	135.	15
48	Kosapet	0.1237	79.168	359	336	695	106.3	121	146	267	82.8	29	37	66	94.9	25
49	Perumalpet	0.1272	81.408	257	229	486	112.2	51	66	117	75.5	11	20	31	65.8	8
50	Purasawalkam	0.1847	118.208	340	227	567	148.1	100	107	207	93.4	29	24	53	93.2	13
51	Shenoy Nagar	2.3891	1,529.024	463	457	920	101.3	170	198	368	85.8	36	57	93	101.	9

VITAL STATISTICS

STATISTICS SUPPLEMENT No. 2 (Contd.)
Showing births, deaths and infantile deaths registered in each division during 1963.

Division No.	Name of the New Division.	Area in Square Miles.	Area in Acres.	Number of Live-Births Registered.			Number of Deaths Registered excluding Still-Births.			Number of Births of Males to every 100 Female Births.	Number of Deaths of Males to every 100 Female Deaths.			Number of Infant Deaths Registered.			Rate per 1,000 Live-Births Registered.	Number of Still-Births Registered.
				Males.	Females.	Total.	Males.	Females.	Total.		Males.	Females.	Total.	Males.	Females.	Total.		
52	Kilpauk	0.6186	395.904	473	473	946	179	165	344	100.0	108.4	41	40	81	40	81	85.6	18
53	Chetput	0.4513	288.832	328	315	643	110	125	235	104.4	88.0	25	34	59	34	59	91.7	16
54	Nungambakkam	0.6754	432.256	297	292	589	130	127	257	101.7	102.3	23	24	47	24	47	79.7	16
55	Sevagram	0.4210	269.440	323	315	638	133	133	266	102.6	100.0	28	41	69	41	69	108	23
56	Thousand Lights (West)	0.7479	478.656	383	311	694	130	119	249	123.1	109.1	24	22	46	22	46	67.7	21
57	Thousand Lights (East)	0.2501	160.064	208	217	425	92	89	181	95.8	103.3	20	27	47	27	47	110.5	8
58	Pudupakkam	0.0842	53.888	312	313	625	109	125	234	99.6	87.2	35	49	84	49	84	62.5	13
59	Amir Mahal	0.2061	131.904	310	333	643	230	177	407	96.0	129.9	43	33	76	33	76	102.6	19
60	Royapettah	0.1631	104.384	248	312	610	126	97	223	98.8	129.8	43	31	74	31	74	121.3	9
61	Gangadareswararkoil	0.1771	113.344	242	214	456	81	76	157	113.0	105.5	22	19	41	19	41	89.9	9
62	Dr. Ambedkar Nagar	0.3526	225.664	281	278	559	145	111	256	101.4	130.6	35	29	64	29	64	110.8	13
63	Periamet	0.3321	212.544	267	212	479	88	85	173	115.9	103.5	22	18	40	18	40	83.5	11
64	Park Town	0.4588	293.632	310	317	629	814	600	1,414	97.7	135.6	44	54	98	54	98	156.3	8
65	Adikesavapuram	0.1859	118.976	319	299	618	132	104	236	106.6	126.9	32	26	58	26	58	94	2
66	Chintadripet	0.1524	97.536	287	320	607	87	104	191	89.6	83.6	24	25	49	25	49	80.7	2
67	Egmore	0.5670	362.880	2,113	1,454	3,567	285	327	612	145.3	87.1	170	185	355	185	355	96.7	236

72 Thiruvateswaranpet.	0.1685	107.840	315	326	641	96.6	135	120	255	112.5	47	42	89	138.6	19
73 Chepauk	0.2535	162.240	667	558	1225	119.5	134	109	243	122.9	54	34	88	70.2	29
74 Marina	0.1390	88.960	348	347	695	100.0	195	171	366	114.0	52	35	87	110.7	26
75 Triplicane	0.1573	100.672	244	246	490	99.1	112	103	215	108.7	24	20	44	89.6	16
76 Jam Bazaar	0.1286	82.304	391	343	734	113.9	168	164	332	102.4	46	40	86	117.1	21
77 Mirsahebpet	0.1253	80.192	373	341	714	108.4	294	215	509	136.7	100	76	176	246.4	22
78 Azad Nagar	0.2827	180.928	415	370	785	112.1	184	173	357	106.3	55	49	104	13.2	29
79 Durgapuram	0.3048	195.072	302	326	628	92.3	154	161	315	95.6	53	36	89	141.7	17
80 Krishnampet	0.1418	90.752	341	331	672	103.0	181	163	344	111.0	49	47	96	142.8	21
81 Teynampet	1.5236	335.104	336	305	641	120.0	100	106	206	94.3	28	24	52	81.1	13
82 Vivekanandhapuram.	0.3838	245.632	290	254	544	114.1	144	96	240	150.0	22	28	50	91.9	17
83 Madhavaperumal- puram	0.103	66.432	220	236	450	93.2	112	111	223	100.9	21	27	48	10.5	5
84 Karneeswarapuram.	0.2609	166.976	354	350	704	101.1	201	149	350	135.0	66	40	106	150.5	16
85 San Thome	0.2104	134.656	283	291	574	97.2	131	116	247	112.8	38	26	64	111.1	15
86 Mylapere	0.2195	140.480	213	275	488	71.4	129	110	239	117.2	31	18	49	100.4	13
87 Bheemannapet	0.7666	490.624	357	331	688	107.8	126	112	238	112.5	38	20	58	84.3	6
88 Alwarpet	0.6906	441.984	325	346	671	94.1	179	161	340	111.1	50	45	95	141.6	9
89 Raja Annamalai- puram	1.9966	1,277.824	605	578	1183	104.6	211	202	413	104.4	67	49	116	98.06	17
90 Adyar	1.9616	1,255.424	315	325	640	96.9	124	96	220	129.1	35	21	56	87.5	15
91 Aminjikarai	1.9516	1,249.024	592	635	1227	93.2	280	259	539	108.1	70	58	128	102.6	38
92 Vadapalani	1.0860	695.424	808	586	1394	137.8	266	232	498	110.3	95	53	148	106.5	54
93 Theagaraya Nagar	0.6245	399.680	364	347	711	104.8	133	126	259	105.5	46	35	81	112.5	24
94 Sathiyamoorthy Nagar	0.7735	495.040	327	363	690	90.8	170	201	371	84.5	57	65	122	170.8	14
95 Rajaji Nagar	0.4685	299.840	449	402	851	111.6	129	146	275	88.3	49	29	78	96.6	16
96 Kamaraj Nagar	1.2526	801.664	623	512	1135	121.6	264	231	495	114.2	63	42	105	93.3	31
97 Saidapet (North)	0.6026	385.664	349	320	669	109.0	162	160	322	101.2	57	47	104	155.4	15
98 Periapet	0.4215	269.760	432	499	931	86.5	161	154	315	104.5	32	39	71	76.2	13
99 Guindy	5.3240	3,407.360	391	387	778	101.0	146	172	318	84.5	41	36	77	98.8	15
100 Saidapet (South)	1.5186	471.904	414	435	849	95.1	156	146	302	100.6	30	35	65	76.5	14
Total	49.740	31823.594	37,706	36,091	72,787	4,094	15,765	14,790	30,555	16.95	4,234	3,710	7,944	107.66	1651

VITAL STATISTICS

STATISTICS SUPPLEMENT No. 3.

Birth Registered in each Division during each month in 1963

Division No.	Name of the New Division.	January	February	March	April	May	June	July	August	September	October	November	December.	Total
1	New Washermanpet.	21	80	80	90	45	52	162	123	89	66	93	479	1,380
2	Tondiarpet	9	28	53	86	13	11	162	9	92	39	43	257	802
3	Grace Garden	23	52	47	79	13	13	39	15	20	80	62	401	849
4	Sanjeevirayanpet	23	55	60	37	69	27	49	44	52	57	53	154	680
5	Mottai Garden	10	45	39	45	57	28	30	45	31	65	51	107	563
6	Narayanappa Naicken Garden	12	28	33	44	61	30	18	36	31	31	42	115	481
7	Singara Garden	7	29	24	57	42	49	17	13	25	40	43	238	584
8	Royapuram	7	38	28	26	55	45	14	88	26	47	47	237	658
9	Meenakshiammanpet.	14	112	181	292	16	185	111	193	201	177	205	1209	3,046
10	Old Washermanpet	11	60	43	59	73	39	35	19	42	29	51	154	615
11	Seven Wells (North).	20	30	46	53	67	39	31	48	44	48	30	53	509
12	Amman Koil (North).	18	31	35	47	37	21	44	42	39	41	30	78	463
13	Muthialpet	17	32	24	53	57	34	26	32	36	41	53	74	481
14	Harbour	29	42	27	48	64	40	39	41	36	60	69	69	566
15	Mannady	16	24	27	30	38	25	17	38	38	38	26	42	359
16	Amman Koil (South)	19	33	32	37	34	25	34	36	33	31	25	64	405
17	Seven Wells (South)	31	48	53	44	55	39	52	52	52	56	43	119	644
18	Sowcarpet	13	14	31	23	26	29	32	21	20	36	20	38	303
19	Kothavalchavadi	29	26	23	37	40	36	39	32	40	54	19	68	443
20	Katchalees warar	11	23	15	33	41	35	28	28	33	29	26	47	349
21	Korukkupet	35	40	59	62	74	41	44	78	73	78	106	107	797
22	Kumarasamy Nagar	38	46	73	65	92	49	73	68	63	67	91	117	832

26	Peddu Naickenpet ...	16	54	75	50	70	74	56	60	50	58	65	89	717
27	Perumal Koil Garden	7	70	35	49	53	53	43	50	28	67	62	82	599
28	Tiruveyan Basin	4	35	24	38	45	36	31	37	30	53	40	70	443
29	Elephant Gate	4	30	38	47	39	22	25	38	35	36	35	42	401
30	Edapalayam...	8	38	57	39	41	35	25	21	42	87	43	75	511
31	Perambur	23	50	78	63	123	96	52	56	77	83	82	76	859
32	Vyasarpadu	25	68	77	56	104	78	54	63	79	79	64	131	927
33	Puliyanthope	78	89	78	113	45	64	108	91	89	105	104	160	1,124
34	Wadia Nagar	23	42	42	41	64	57	37	39	63	41	46	88	583
35	Thiru Vi-Ka-Nagar	29	56	44	64	69	46	54	42	53	54	72	120	703
36	Pattalam	6	28	41	28	30	26	38	13	35	25	48	69	387
37	Thattam Kulam	19	28	90	28	61	55	57	43	78	57	69	108	613
38	Dr. Besant Nagar	54	104	86	79	86	54	75	72	75	77	66	137	965
39	Choolai	19	29	72	56	58	39	46	28	85	47	44	100	628
40	Hospital Garden	25	50	77	43	46	49	64	46	68	46	51	111	676
41	Sembiam	14	78	74	65	55	50	35	56	77	64	55	226	849
42	Seru Vellore	15	47	51	44	14	62	65	12	35	75	53	75	548
43	Agaram	9	32	46	39	20	35	49	7	44	38	77	83	474
44	Agamma Ammai Nagar	27	54	74	52	64	59	55	68	62	85	54	116	752
45	Ayanavaram	52	85	91	95	115	69	101	101	80	145	92	140	1,166
46	Nammalvarpet	21	51	64	38	81	41	39	32	52	65	38	111	633
47	Otteri	27	74	51	45	81	62	54	38	75	53	51	144	755
48	Kosapet	25	58	71	38	77	47	57	46	55	58	38	125	695
49	Perumalpet	16	30	46	22	58	43	34	33	39	46	28	91	486
50	Purasawalkam	11	44	44	63	70	40	32	35	51	47	31	99	567

VITAL STATISTICS

STATISTICS SUPPLEMENT No. 3—(contd.)

Births Registered in each Division during each month in 1963—(contd.)

Division No.	Name of the New Division.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
51	Shenoy Nagar	11	65	79	52	109	75	73	51	39	100	109	157	920
52	Kilpauk	2	39	82	67	102	61	76	52	112	98	152	173	946
53	Chetpet	15	44	49	45	65	51	52	37	78	51	40	115	643
54	Nungambakkam	10	67	40	47	43	41	52	39	57	46	36	111	589
55	Sevagram	11	43	46	63	64	50	49	40	54	45	61	112	638
56	Thousand Lights (West)	15	46	54	62	61	56	40	38	68	53	61	143	694
57	Thousand Lights (East)	6	19	44	31	53	39	29	18	43	51	24	68	425
58	Pudupakkam	5	24	72	71	63	29	49	34	52	65	50	111	625
59	Amir Mahal	10	19	79	74	76	45	41	44	43	55	52	95	643
60	Royapettah	13	21	73	57	52	44	44	26	68	51	68	93	610
61	Gangadeeswarar Koil	5	22	36	40	61	13	33	35	36	48	26	101	456
62	Dr. Ambedkar Nagar.	8	40	58	51	69	44	37	42	50	38	31	91	559
63	Periamet	23	31	43	47	49	40	43	33	30	44	33	63	479
64	Park Town	18	48	43	66	59	55	38	63	69	51	35	82	627
65	Adikesavapuram	14	54	45	63	57	34	51	44	65	54	38	99	618
66	Chintadripet	17	45	42	57	57	33	59	28	48	73	38	110	607
67	Egmore	4	150	202	336	382	148	215	124	242	342	281	1,041	3,567
68	Pudupet	7	18	84	72	75	52	54	44	76	50	50	132	714
69	Komaleeswaranpet	2	19	75	39	34	26	37	45	54	33	41	76	481
70	Narasingapuram	11	35	46	50	69	24	40	33	50	59	32	99	548
71	Nehru Nagar	7	41	50	94	83	54	59	43	74	91	58	101	755

76	Jam Bazaar	13	60	10	77	89	9	71	64	9	164	66	102	734
77	Mirsalibpet	24	22	23	51	90	67	64	72	16	131	63	91	714
78	Azad Nagar	27	51	74	56	65	45	80	47	52	67	96	125	785
79	Durgapuram	22	54	58	58	62	42	54	33	39	63	55	88	628
80	Krishnampet	3	38	64	60	66	54	61	33	36	72	62	123	672
81	Teynampet	9	8	45	60	89	31	54	16	36	59	50	184	641
82	Vivekanandapuram	5	28	35	71	52	40	...	54	37	66	63	93	544
83	Madava Perumal- puram	14	27	12	61	31	30	33	39	37	60	44	68	456
84	Karniswarapuram	17	54	49	76	32	57	44	68	61	80	61	105	704
85	Santhome	12	28	9	61	51	31	37	62	35	70	48	130	574
86	Mylapore	13	26	17	45	57	29	25	49	12	71	43	101	488
87	Bheemannapet	10	10	55	31	173	48	...	13	7	90	134	117	688
88	Alwarpet	15	18	69	94	88	50	...	16	20	108	52	142	671
89	Raja Annamalaipuram	24	20	33	132	89	27	76	150	193	113	82	244	1,183
90	Adyar	4	5	12	63	20	17	14	91	204	60	72	78	640
91	Aminjikarai	35	62	69	169	101	95	113	81	86	142	96	178	1,227
92	Vadapalani	42	85	80	111	84	152	136	109	126	121	120	228	1,394
93	Theagaroyanagar	12	46	52	65	45	60	70	71	60	73	86	71	711
94	Sathyamoorthi Nagar	12	43	70	52	56	59	58	49	48	45	97	101	690
95	Rajaji Nagar	15	77	55	18	28	92	124	83	71	49	97	141	851
96	Kamaraj Nagar	20	82	74	83	61	71	116	112	73	123	155	165	1,135
97	Saidapet (North)	10	62	46	76	45	17	87	60	49	39	93	85	669
98	weriapet	14	120	50	87	73	33	82	71	87	56	136	122	931
99	Guindy	18	57	45	78	51	40	132	52	52	76	63	114	778
100	Saidapet (South)	16	71	65	72	72	44	89	67	71	79	104	99	849
Total		1,739	4,644	5,374	6,590	6,663	4,781	5,586	5,141	5,896	6,832	6,549	13,992	73,787

Births Registered among principle communities in each Division during 1963.

Division No.	Name of the New Division.	Aliens.		Anglo-Indians.		Indian Christians.		Hindus.		Muslims.		Others.		Total.		Grand Total.
		Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	
1	New Washermanpet.	...	...	3	5	65	38	568	588	83	30	...	...	719	661	1,380
2	Tondiarpet	...	...	...	...	50	59	353	307	11	22	...	...	414	388	802
3	Grace Garden	...	...	...	2	47	54	272	368	65	41	...	...	384	465	849
4	Sanjeevirayanpet	...	...	...	...	5	4	358	308	2	3	...	...	365	315	680
5	Mottai Garden	...	...	...	1	5	4	252	233	26	38	...	3	286	277	563
6	Narayanappa Naicken Garden	...	...	...	...	1	2	247	225	3	3	...	...	251	230	481
7	Singara Garden	...	...	...	...	6	10	282	275	3	8	...	...	291	293	584
8	Royapuram	...	...	6	6	34	35	256	295	17	7	...	2	315	343	658
9	Meenakshiammanpet.	...	...	31	35	138	103	1,084	1,446	97	112	...	...	1,350	1,696	3,046
10	Old Washermanpet	...	...	...	...	12	13	279	257	28	25	...	1	319	296	615
11	Seven Wells (North).	...	...	...	...	11	20	232	221	15	10	...	...	258	251	509
12	Annan Koil (North).	...	...	...	...	18	22	188	179	36	20	...	...	242	221	453
13	Muthialpet	...	...	2	1	3	4	207	221	20	23	...	...	232	249	481
14	Harbour	...	...	...	...	11	9	154	169	108	115	...	...	273	293	566
15	Mannady	...	...	...	...	5	6	177	144	8	19	...	...	190	169	359
16	Annan Koil (South)	...	...	2	3	20	13	144	150	36	37	...	...	202	203	405
17	Seven Wells (South)	...	...	2	3	12	17	264	273	3	40	...	...	311	333	644
18	Sowcarpet	...	...	...	...	2	1	146	140	4	10	...	...	152	151	303
19	Kothavalchavadi	...	...	...	...	1	2	175	163	50	51	...	1	226	217	443

VITAL STATISTICS

STATISTICS SUPPLEMENT No. 4—(contd.)

Births registered among principle communities in each division during 1963—(contd.)

Division No.	Name of the New Division.	Aliens.		Anglo-Indians.		Indian Christians.		Hindus.		Muslims.		Others.		Total.		Grand Total
		Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	
53	Chetpet	...	...	1	2	28	28	279	277	20	8	...	...	328	315	643
54	Nungambakkam	...	...	...	...	18	19	276	269	3	4	...	...	297	292	589
55	Sevagram	...	...	...	1	11	9	307	299	5	...	...	...	323	315	638
56	Thousand Lights (West)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
57	Thousand Lights (East)	3	3	...	...	42	36	304	246	34	26	...	...	383	311	694
58	Pudupakkam	1	2	...	3	20	19	149	151	36	42	...	...	208	217	425
59	Amir Mahal	...	...	...	1	6	7	259	252	47	53	...	...	312	313	625
60	Royapettah	...	...	...	3	21	22	178	221	110	87	...	...	310	333	643
61	Gangadeeswarar Koil	...	...	...	...	13	6	279	300	6	6	...	...	298	312	610
62	Dr. Ambedkar Nagar.	...	...	...	3	9	13	221	194	12	7	...	...	242	214	456
63	Periamet	...	...	...	...	33	28	221	224	27	23	...	...	281	278	559
64	Park Town	...	...	...	1	17	21	230	174	20	16	...	...	267	212	479
65	Adikesavapuram	...	...	6	2	11	16	282	287	11	12	...	...	310	317	627
66	Chintadripet	...	...	...	...	24	38	270	241	21	18	4	2	319	299	618
67	Egmore	...	...	1	...	26	29	230	270	30	21	...	...	287	320	607
68	Pudupet	...	...	1	1	64	61	2,008	1,354	40	38	...	...	2,113	1,454	3,567
69	Komaleeswaranpet	...	...	...	4	38	28	256	290	49	49	...	...	343	371	714
70	Narasingapuram	1	...	3	...	14	9	218	187	25	24	...	...	261	220	481
71	Nehru Nagar	...	...	...	...	9	6	248	213	32	38	1	1	290	258	548
72	Thiruvananthapuram	...	...	...	...	...	...	...	...	...	...	...	...	410	345	755

76	Jam Bazaar	...	...	...	...	3	2	313	276	75	65	...	...	391	343	734
77	Mirshahibpet	...	...	...	...	11	12	234	185	128	143	...	...	373	341	714
78	Azad Nagar	...	...	...	...	15	10	340	319	58	41	...	2	415	370	785
79	Durgapuram	...	...	...	...	5	5	235	246	62	75	...	...	302	326	628
80	Krishnampet	...	...	...	...	13	1	298	303	30	26	...	...	341	331	672
81	Teynampet	...	...	...	...	14	10	302	273	20	22	...	...	336	305	641
82	Vivekanandapuram	...	...	...	...	18	6	258	236	14	12	...	...	290	254	544
83	Madava Perumal- puram	...	...	...	...	3	12	206	210	11	4	...	...	220	236	456
84	Karniswarapuram	...	...	...	2	15	24	318	311	19	15	...	...	354	350	704
85	Santhome	...	...	...	...	30	30	228	240	25	21	...	...	283	291	574
86	Mylapore	...	...	...	2	12	14	193	258	6	1	...	2	213	275	488
87	Bheemannapet	...	...	...	1	7	6	339	305	10	20	...	...	357	331	688
88	Alwarpet	...	...	...	2	12	12	303	322	8	9	...	...	325	346	671
89	Raja Annamalaipuram	...	...	...	...	18	25	573	532	14	21	...	...	605	578	1,183
90	Adyar	...	...	...	...	24	22	278	291	13	12	...	...	315	325	640
91	Aminjikarai	...	...	...	...	23	26	547	587	21	22	...	1	592	635	1,227
92	Vadapalani	...	...	...	...	22	19	763	548	23	19	...	...	808	586	1,394
93	Theagaroyanagar	...	...	...	...	8	6	348	336	8	4	...	1	364	347	711
94	Sathyamoorthi Nagar	...	...	...	...	2	1	316	350	9	12	...	...	327	363	690
95	Rajaji Nagar	...	...	...	...	7	5	438	393	4	4	...	...	449	402	851
96	Kamaraj Nagar	...	...	...	...	3	3	615	507	5	2	...	...	623	512	1,135
97	Saidapet (North)	...	...	...	...	9	3	319	303	21	14	...	...	349	320	669
98	weriapet	...	...	...	...	8	16	408	465	15	17	...	1	432	499	931
99	Guindy	...	...	...	...	14	22	357	348	20	17	...	...	391	387	778
100	Saidapet (South)	...	...	...	...	5	8	403	420	6	7	...	...	414	435	849
	Total	6	8	93	118	1,718	1,712	32,947	31,422	2,926	2,813	16	8	37,706	36,081	73,787

VITAL STATISTICS

STATISTICS SUPPLEMENT No. 5.

Deaths Registered in each Division during each month in 1963

Division No.	Name of the New Division.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total deaths registered excluding still births.
1	New Washermanpet.	38	53	28	25	57	20	42	54	58	63	72	128	628
2	Tondiarpet	23	27	23	29	28	22	24	24	28	38	30	44	339
3	Grace Garden	17	33	10	11	11	13	11	41	18	16	34	48	263
4	Sanjeevirayanpet	12	16	24	20	15	18	14	20	23	25	20	31	248
5	Mottai Garden	16	18	23	23	21	15	18	28	14	21	22	31	250
6	Narayanappa Naicken Garden	16	17	15	13	18	15	11	14	20	21	23	32	215
7	Singara Garden	25	20	11	18	23	10	14	18	19	15	21	30	224
8	Royapuram	14	21	17	17	16	14	30	17	14	19	13	26	217
9	Meenakshiammanpet.	16	19	13	21	35	21	13	58	25	28	38	44	331
10	Old Washermanpet	23	20	27	32	25	19	25	18	34	29	21	39	312
11	Seven Wells (North).	32	96	50	57	66	102	69	93	78	48	42	25	750
12	Amman Koil (North).	7	18	8	7	10	19	11	23	22	18	15	21	179
13	Muthialpet	12	9	19	24	23	16	12	17	20	15	13	21	201
14	Harbour	21	25	26	38	19	28	22	21	33	23	26	34	316
15	Mannady	5	8	8	10	16	12	10	7	15	2	11	20	134
16	Amman Koil (South)	9	12	9	6	14	13	10	7	17	8	11	16	132
17	Seven Wells (South)	17	18	20	16	20	14	11	14	15	8	14	16	180
18	Sowcarpet	8	11	9	18	11	10	18	7	7	11	...	9	119
19	Kothavalchavadi	17	15	7	15	20	15	12	15	19	11	17	26	189
20	Katchaleeswarar	9	10	11	10	13	11	15	12	10	9	9	10	129
21	Korukinpet	28	29	17	31	31	33	38	29	32	57	44	86	455
22	Kumarasamy Nagar	31	30	20	39	37	28	32	33	26	37	31	54	398
23	Dr. Vijayaragavali													

26	Peddu Naickenpet	25	26	31	21	32	26	19	31	29	20	17	32	299
27	Perumal Koil Garden	14	26	14	24	32	24	12	19	15	16	20	33	239
28	Tiruveyan Basin	3	20	8	17	16	11	12	7	12	12	15	11	154
29	Elephant Gate	10	11	9	12	23	9	16	13	15	13	10	10	151
30	Edapalayam...	18	8	9	12	13	10	6	7	12	9	14	15	133
31	Perambur	22	12	23	28	29	23	17	29	26	30	26	42	307
32	Vyasarpady	28	26	26	31	41	38	50	43	39	36	43	58	459
33	Puliyanthope	52	45	32	46	52	20	43	58	46	47	48	60	549
34	Wadia Nagar	5	53	20	18	23	24	18	20	31	38	30	44	329
35	Thiru Vi-Ka-Nagar	23	22	24	24	9	29	29	35	27	46	34	48	332
36	Pattalam	8	34	8	11	25	32	15	36	35	13	20	23	260
37	Thattan Kulam	25	8	13	20	37	20	18	16	33	23	21	22	256
38	Dr. Besant Nagar	29	19	31	44	21	29	50	29	41	55	39	59	446
39	Choolai	12	43	9	14	24	15	15	17	24	19	20	25	247
40	Hospital Garden	13	7	16	25	35	26	22	16	21	19	19	32	251
41	Sembiam	25	24	31	21	29	29	12	15	29	32	24	52	323
42	Seru Vellore	10	30	18	18	7	16	15	18	10	14	7	43	206
43	Agaram	4	28	22	14	9	12	8	8	17	8	6	24	160
44	Agamma	18	15	21	32	23	17	26	31	25	36	37	45	326
45	Nagar	20	38	32	31	20	13	34	40	41	51	32	43	395
46	Ayanavaram	...	...	...	...	...	...	...	...	...	...	...	...	...
47	Nammalvarpet	19	32	29	26	32	17	31	27	40	39	27	48	367
48	Otteri	16	35	26	17	35	30	26	31	27	23	24	43	332
49	Kosapet	11	26	23	31	24	16	12	20	23	26	27	28	267
50	Perumalpet	11	13	6	10	10	5	10	5	8	12	11	16	117
...	Puresawalkam	13	8	12	17	21	16	12	14	16	19	20	39	207

VITAL STATISTICS

STATISTICS SUPPLEMENT No. 5—(contd.)

Deaths Registered in each Division during each month in 1963—(contd.)

Division No.	Name of the New Division.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total deaths registered excluding still births.
51	Shenoy Nagar	21	39	17	24	28	27	26	28	28	36	35	59	368
52	Kilpauk	22	28	34	26	34	25	8	31	18	42	36	40	344
53	Chetpet	14	17	24	8	17	21	19	18	20	17	25	35	235
54	Nungambakkam	22	14	33	26	19	17	13	18	13	15	23	44	257
55	Sevagram	12	12	13	25	24	23	18	26	21	22	29	41	266
56	Thousand Lights (West)	11	10	33	21	20	13	20	22	20	18	12	49	249
57	Thousand Lights (East)	14	15	8	14	13	12	14	14	19	19	17	22	181
58	Pudupakkam	18	15	11	20	33	19	22	10	19	27	11	29	234
59	Amir Mahal	16	48	35	52	34	28	32	23	28	28	28	55	407
60	Royapettah	15	18	15	21	23	18	14	16	14	22	20	27	223
61	Gangadeeswarar Koil.	8	14	11	14	20	13	9	11	21	8	12	16	157
62	Dr. Ambedkar Nagar	20	23	20	23	20	29	27	23	15	17	15	24	256
63	Periamet	10	18	20	14	20	6	16	17	10	15	8	19	173
64	Park Town	11	116	155	127	83	114	149	100	87	135	123	146	1,414
65	Adikesavapuram	13	27	25	14	16	14	19	25	22	23	14	24	236
66	Chintadripet	17	17	9	11	12	8	20	13	21	25	12	26	191
67	Egmore	10	33	23	96	48	34	50	38	66	43	41	130	612
68	Pudupet	8	9	17	28	31	14	16	15	24	28	21	25	236
69	Komaleeswaranpet	14	15	17	17	11	12	14	12	12	16	11	26	177
70	Narasingapuram	11	11	18	19	19	7	15	19	12	13	13	34	191
71	Nehru Nagar	12	22	16	45	35	23	23	35	36	26	26	26	298

76	Jam Bazaar	12	34	31	24	25	19	43	25	22	30	26	41	332
77	Mirsahibpet	25	37	36	33	43	36	35	79	32	46	48	59	509
78	Azad Nagar	27	28	30	24	31	35	26	23	26	26	33	48	357
79	Durgapuram	22	16	17	28	25	36	35	25	40	23	25	43	315
80	Krishnampet	15	20	20	25	33	32	34	31	23	29	38	44	344
81	Teynampet	10	11	31	18	16	17	...	10	7	22	18	46	206
82	Vivekanandapuram	7	25	12	19	21	18	18	14	16	33	21	31	240
83	Madava Perumal- puram	20	16	22	23	23	15	15	20	15	18	15	21	223
84	Karniswarapuram	18	16	29	30	26	21	35	40	28	38	31	38	350
85	Santhome	24	18	17	14	20	14	19	20	23	18	18	42	247
86	Mylapore	16	24	16	16	28	19	8	11	21	27	19	34	239
87	Bheemannapet	24	13	24	32	28	14	...	15	12	22	18	36	238
88	Alwarpet	22	25	50	39	34	12	...	25	18	31	28	56	340
89	Raja Annamalaipuram	31	23	30	33	42	26	19	29	60	37	27	56	413
90	Adyar	11	15	23	19	19	22	18	9	32	15	11	26	220
91	Aminjikarai	27	39	22	54	43	34	56	45	49	47	60	63	539
92	Vadapalani	30	52	22	47	38	28	41	34	41	56	43	66	498
93	Theagarayanagar	20	14	25	13	11	20	22	26	23	35	26	24	259
94	Sathyamoorthi Nagar	35	33	29	39	38	21	27	26	39	32	24	28	371
95	Rajaji Nagar	14	27	17	21	11	12	18	24	36	38	28	29	275
96	Kamaraj Nagar	23	40	32	25	44	33	44	34	53	60	53	54	495
97	Saidapet (North)	18	19	27	33	24	28	20	30	28	35	30	30	322
98	weriapet	21	23	32	28	28	19	17	20	29	33	29	36	315
99	Guindy	22	27	25	21	35	27	23	16	21	35	29	37	318
100	Saidapet (South)	20	18	29	22	33	29	15	16	24	30	28	38	302
Total		1,764	12,406	2,225	2,568	2,617	2,198	2,333	2,603	2,592	2,841	2,575	3,933	30,555

VITAL STATISTICS

STATISTICS SUPPLEMENT No. 6

Deaths registered among Principal communities in each Division during the year 1963.

Division No.	Name of the New Division.	Aliens.		Anglo-Indians.		Indian Christians.		Hindus.		Muslims.		Others.		All communities.		Total Deaths Registered (excluding still Births)
		Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	
1	New Washermanpet.	—	—	—	—	19	26	278	251	33	31	—	—	330	308	638
2	Tondiarpet	—	—	—	—	19	18	134	138	16	14	—	—	169	170	339
3	Grace Garden	—	—	—	—	8	7	115	92	24	2	—	—	147	116	263
4	Sanjeevirayanpet	—	—	—	—	1	1	111	125	8	2	—	—	120	128	248
5	Mottai Garden	—	—	—	—	—	1	124	99	16	10	—	—	140	110	250
6	Narayanappa Naicken Garden	—	—	—	—	—	—	111	98	4	1	—	—	115	100	215
7	Singara Garden	—	—	—	—	4	4	101	104	3	5	—	1	110	114	224
8	Royapuram	1	—	2	3	10	18	82	82	4	13	1	1	100	117	217
9	Meenakshiammanpet.	—	—	—	—	6	5	132	154	12	22	—	—	150	181	331
10	Old Washermanpet	—	—	1	1	5	4	128	161	8	4	—	—	142	170	312
11	Seven Wells (North).	—	—	1	1	20	21	305	385	12	5	—	—	338	412	750
12	Amman Koil (North).	—	—	1	2	8	8	68	56	16	20	—	—	93	86	179
13	Muthialpet	—	—	—	—	5	4	75	78	24	15	—	—	104	97	201
14	Harbour	—	—	—	—	4	4	99	100	65	44	—	—	168	148	316
15	Mannady	—	—	—	1	5	1	63	51	4	9	—	—	72	62	134
16	Amman Koil (South)	—	—	3	1	6	7	42	58	6	8	—	1	57	75	132
17	Seven Wells (South)	—	—	—	2	3	2	77	75	12	9	—	—	92	88	180
18	Sowcarpet	—	—	—	—	3	—	40	45	17	14	—	—	60	59	119

[illegible]

VITAL STATISTICS

STATISTICS SUPPLEMENT No. 6—(contd.)

Deaths registered among Principal communities in each Division during the year 1963.

Division No.	Name of the New Division.	Aliens.		Anglo-Indians.		Indian Christians.		Hindus.		Muslims.		Others.		All communities.		Total Deaths Registered (excluding still Births.)
		Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	
53	Chetpet	—	—	—	—	21	15	88	105	1	5	—	—	110	125	235
54	Nungambakkam	—	—	3	—	22	14	102	106	6	7	—	—	130	127	257
55	Sevagram	—	—	—	—	7	8	123	121	3	4	—	—	133	133	266
56	Thousand Lights (West)	—	—	1	1	10	4	106	103	13	12	1	—	130	119	249
57	Thousand Lights (East)	1	—	1	—	23	14	37	47	32	28	—	—	92	89	181
58	Pudupakkam	—	—	1	—	9	13	68	87	32	25	—	—	109	125	134
59	Amir Mahal	—	—	—	—	3	11	200	146	27	20	—	—	230	177	407
60	Royapettah	—	—	—	—	13	5	95	71	18	21	—	—	126	97	223
61	Gangadeeswarar Koil	—	—	1	1	7	5	70	67	4	4	—	—	81	76	257
62	Dr. Ambedkar Nagar.	—	—	—	—	20	18	102	79	23	14	—	—	145	111	256
63	Periamet	—	—	2	2	15	8	63	73	10	4	—	—	88	85	173
64	Park Town	—	—	3	2	18	8	801	549	28	8	3	2	814	600	1414
65	Adikesavapuram	—	—	1	1	20	13	93	84	19	7	—	—	132	104	236
66	Chintadripet	—	—	—	—	6	7	76	89	5	8	—	—	87	104	191
67	Egmore	—	—	—	1	6	13	271	304	8	10	—	—	285	327	612
68	Pudupet	—	—	2	2	12	13	95	87	13	16	—	—	120	116	236
69	Komaleeswaranpet	—	—	—	—	14	10	66	38	20	29	—	—	100	97	177
70	Narasingapuram	—	—	—	—	2	6	84	70	14	15	—	—	100	91	191
71	Nehru Nagar	—	—	2	—	1	3	106	118	36	34	—	—	143	155	298

[illegible]

VITAL STATISTICS

STATISTICS SUPPLEMENT No 7.

Deaths Registered according to Age and Sex in each Division during the year 1963.

Division No.	Name of the New Division.	Under 1 year.		1 to 5 years.		5 to 10 years.		10 to 15 years.		15 to 20 years.		20 to 30 years.		30 to 40 years.		40 to 50 years.		50 to 60 years.		60 and above.		Total		Grand Total
		Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	
1	New Washermanpet.	99	67	72	65	13	13	4	3	1	5	28	11	17	12	8	10	16	15	72	107	330	308	638
2	Toydiarpet	60	30	45	59	6	8	3	2	1	...	3	4	11	14	8	9	11	14	21	30	169	170	33
3	Grace Garden	40	28	33	29	3	5	2	9	3	4	13	17	19	17	18	15	5	...	10	4	147	116	263
4	Sanjeevirayanpet	52	43	23	27	2	3	5	5	2	3	3	7	10	17	9	8	11	2	3	13	102	128	248
5	Mottai Garden	43	32	25	24	5	12	2	2	...	1	18	16	5	3	17	6	9	8	16	6	140	110	250
6	Narayanappa Naicken Garden	38	27	32	29	2	3	2	2	3	...	3	5	16	13	2	2	10	9	7	10	115	100	215
7	Singara Garden	24	45	25	29	1	2	4	1	1	1	12	13	15	14	8	3	6	4	14	2	110	114	224
8	Royapuram	25	37	21	37	6	2	6	1	2	1	10	16	3	5	6	5	15	7	6	6	100	117	217
9	Meenakshiammanpet.	42	49	25	30	4	6	9	7	8	7	3	5	12	17	18	7	11	14	28	39	150	181	331
10	Old Washermanpet	64	46	28	40	2	1	9	6	9	3	12	18	19	11	6	12	2	9	5	24	142	170	312
11	Seven Wells (North).	42	34	27	22	21	15	9	8	10	5	1	2	7	4	16	5	78	25	127	192	338	412	750
12	Amman Koil (North).	32	22	24	24	5	4	1	3	7	4	11	12	17	13	12	8	10	3	14	10	93	86	179
13	Muthialpet	25	28	16	25	9	4	2	1	...	2	14	17	12	18	14	8	11	4	1	10	104	97	201
14	Harbour	57	44	22	27	4	10	1	1	2	5	...	1	19	15	9	5	26	10	20	30	168	148	316
15	Mannady	14	19	17	22	1	2	...	...	1	2	3	3	9	1	15	7	2	6	2	2	72	62	134
16	Amman Koil (South)	18	10	19	20	3	1	3	3	2	3	3	3	4	4	7	4	2	3	2	24	57	75	132
17	Seven Wells (South)	21	22	15	21	7	4	...	2	4	2	2	2	10	13	3	2	12	8	18	12	92	88	180
18	Sowcarpet	13	11	19	23	5	4	1	2	3	6	4	2	6	4	7	5	10	6	5	3	60	95	119
19	Kattankuppam	8	17	14	14	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

23	Nagar	100	98	33	49	10	14	1	3	2	3	12	16	12	18	15	8	9	3	26	49	300	261	361
24	Basin Bridge	57	40	33	21	9	6	1	2	6	1	13	16	4	7	9	8	11	8	57	50	200	159	359
25	Kondithope	30	38	30	35	6	4	1	6	1	1	1	3	11	13	14	13	14	11	14	7	122	131	253
26	Peddu Naickenpet	29	31	28	28	1	3	1	4	2	1	2	1	5	3	17	9	21	9	27	77	133	166	299
27	Perumal Koil Garden	30	18	24	26	5	3	...	2	1	5	1	1	6	3	13	12	10	3	43	33	133	106	239
28	Tiruvelyan Basin	19	17	22	39	2	3	...	1	3	3	13	5	5	5	4	4	10	2	10	2	90	64	154
29	Elephant Gate	24	19	22	39	4	2	...	...	1	1	3	...	14	16	8	2	3	2	3	3	76	75	151
30	Edapalayam...	27	16	32	29	2	4	2	...	...	1	5	16	6	3	15	5	5	2	5	7	70	63	133
31	Perambur	44	41	38	37	7	6	1	1	4	6	3	3	12	14	7	7	11	16	21	28	148	159	307
32	Vyasarpady	63	59	53	59	3	9	1	1	5	4	14	18	5	8	14	6	10	7	64	56	232	227	459
33	Puliyanthope	67	73	64	88	4	4	...	...	8	...	3	2	4	7	9	5	16	10	83	102	258	291	549
34	Wadia Nagar	42	53	45	38	7	8	4	1	1	5	16	16	11	16	9	11	10	10	18	8	163	166	329
35	Thiru Vi-Ka-Nagar	41	30	32	32	3	7	1	2	1	5	1	4	1	3	15	3	9	5	90	47	194	138	332
36	Pattalam	22	24	34	37	3	3	1	1	...	8	3	5	15	9	6	3	7	7	67	5	158	102	260
37	Thattan Kulam	43	25	43	55	2	2	1	1	...	...	2	5	3	5	4	2	12	6	31	14	141	115	256
38	Dr. Besant Nagar	64	75	48	55	3	5	1	1	...	8	15	15	11	16	12	8	13	6	38	52	205	241	446
39	Choolai	34	22	23	37	2	2	2	1	...	...	2	2	3	5	10	5	10	4	52	31	138	109	247
40	Hospital Garden	25	24	24	25	1	4	1	...	...	2	4	10	2	4	13	15	8	9	52	28	130	121	251
41	Sembiam	35	35	27	24	3	2	2	3	...	1	1	3	7	5	10	5	12	8	48	92	145	178	323
42	Seru Vellore	41	17	22	22	1	3	2	...	...	3	...	1	5	14	8	5	7	9	20	26	106	100	206
43	Agaram	26	22	25	25	1	5	1	...	...	...	2	2	13	17	14	15	4	3	4	4	82	78	160
44	Agamma	56	47	30	25	1	5	...	...	2	6	3	3	1	4	13	5	6	5	70	44	182	144	326
45	Nagar	54	41	29	38	3	2	3	2	1	2	13	12	11	10	7	7	15	10	22	33	238	157	395
46	Nammalvarpet	32	43	35	34	6	6	1	...	...	4	3	2	4	2	12	5	10	7	82	78	186	181	367
47	Otteri	54	48	35	37	5	1	...	...	...	...	9	5	9	4	12	5	21	27	16	44	161	171	332
48	Kosapet	29	37	28	30	1	4	...	3	2	...	3	2	7	8	9	9	10	5	23	46	121	146	267
49	Perumalpet	11	20	28	20	4	2	1	1	2	2	3	2	18	9	15	5	3	4	6	7	51	66	117
50	Purasawalkam	29	24	29	25	16	13	1	1	1	1	10	16	3	3	18	7	3	4	50	13	100	107	207
51	Shenoy Nagar	36	57	23	33	2	11	4	...	2	1	3	2	5	2	8	7	9	7	78	78	170	198	368
52	Kilpauk	41	40	22	24	1	8	1	2	...	2	11	13	4	4	9	7	12	11	78	54	179	165	344

VITAL STATISTICS

STATICS SUPPLEMENT No. 7—(contd.)

Deaths Registered according to Age and Sex in each Division during the year 1963—(contd.)

Division Co.	Name of the New Division.	Under 1 year		1 to 5 years.		5 to 10 years.		10 to 15 years.		15 to 20 years.		20 to 30 years.		30 to 40 years.		40 to 50 years.		50 to 60 years.		60 and above.		Total		Grand Total.
		Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	
53	Chetpet	25	34	29	26	5	1	6	2	2	5	2	3	2	4	7	3	17	7	15	40	110	125	235
54	Nungambakkam	23	24	33	37	6	4	5	7	...	...	16	16	8	2	4	3	11	12	24	22	130	127	257
55	Sevagram	28	41	29	42	4	3	3	4	2	9	1	4	2	2	13	11	23	11	28	6	133	133	266
56	Thousand Lights (West)	24	22	31	21	1	1	6	5	8	14	14	12	10	10	15	7	13	7	8	20	130	119	249
57	Thousand Lights (East)	20	27	26	27	6	4	1	2	1	1	1	3	4	5	11	10	10	6	12	4	92	89	181
58	Pudupakkam	35	49	36	20	4	3	2	3	6	3	19	16	16	7	8	5	3	5	3	14	109	125	234
59	Amir Mahal	43	33	33	27	15	12	4	5	2	1	11	6	12	10	18	15	56	12	46	56	230	177	407
60	Royapettah	43	31	23	39	7	1	5	4	4	4	16	10	24	11	12	13	2	6	2	9	126	97	223
61	Gangadeeswarar Koil	22	19	25	20	8	7	11	11	...	...	18	2	10	11	13	13	8	4	8	4	81	76	157
62	Dr. Ambedkar Nagar.	35	29	22	48	6	11	1	...	5	2	1	5	3	3	3	2	6	7	63	4	145	111	256
63	Periamet	22	18	30	26	14	24	1	1	7	3	2	3	2	6	10	10	10	3	13	4	88	85	173
64	Park Town	44	54	40	106	26	24	20	9	12	20	21	24	22	16	65	8	216	152	195	154	814	600	1,414
65	Adikesavapuram	32	26	28	27	1	1	2	3	4	1	15	6	13	2	13	7	12	10	12	21	132	104	236
66	Chintadripet	24	25	25	26	5	5	3	...	...	1	...	6	11	19	14	8	10	8	8	8	87	104	191
67	Egmore	170	185	28	30	5	4	1	5	1	1	16	16	13	10	5	2	26	16	20	58	285	327	612
68	Pudupet	50	29	27	20	2	2	...	...	1	...	...	8	15	13	21	10	17	11	7	23	120	116	236
69	Komaleeswaranpet	24	14	27	31	6	5	1	1	...	2	15	10	16	14	21	6	8	6	6	10	100	77	177
70	Narsingapuram	25	20	28	31	4	1	...	1	1	...	2	4	11	13	5	3	15	15	9	3	100	91	191

VITAL STATISTICS

STATISTICS SUPPLEMENT No. 8.

Deaths from Principal Causes Registered in the Divisions during the year 1963.

Division No.	Name of the Division	Plague	Cholera	Small-pox	Measles	Enteric Fever	Kala-Azar	Malaria	Influenza	Other Fevers	Dysentery	Diarrhoea	Tuberculosis including T.B. of Lungs.	General Respiratory Diseases	Injuries	Maternal Deaths	Neoplasms	All other causes	Total deaths registered (excluding Still-births)
1	New Washerpet	...	3	48	2	...	...	...	...	42	50	22	9	172	2	3	1	284	638
2	Tondiarpet	...	...	4	...	...	...	...	...	30	30	6	3	141	1	2	3	119	339
3	Grace Garden	...	...	3	...	...	...	1	...	20	22	19	4	98	...	1	4	91	263
4	Sanjeevirayanpet	...	...	4	...	1	...	...	...	14	34	9	2	74	...	...	1	109	248
5	Mottai Garden	...	...	4	...	1	...	...	...	10	23	11	5	43	2	...	3	148	250
6	Narayanappa Naicken Garden	...	...	...	...	...	...	...	...	21	9	13	...	63	...	6	...	103	215
7	Singara Garden	...	...	6	...	2	...	...	...	13	23	18	4	36	1	...	2	119	224
8	Royapuram	...	...	5	...	...	...	...	...	18	24	11	5	37	2	...	...	111	217
9	Meenakshiammenpet	...	...	14	1	1	...	...	...	17	21	14	6	45	...	10	1	201	331
10	Old Washerpet	...	1	4	1	1	...	...	...	15	27	15	25	83	10	3	2	125	312
11	Seven Wells (North)	...	...	2	...	15	...	...	...	13	36	29	...	77	2	...	12	546	750
12	Ammen Koil (North)	...	1	2	...	1	...	...	...	11	26	7	2	57	...	...	1	71	179
13	Muthialpet	...	...	...	...	...	...	...	...	15	13	10	6	38	...	...	1	118	201
14	Harbour	...	...	3	1	2	...	...	2	10	16	15	4	68	3	1	...	191	316
15	Mannady	...	...	1	...	...	...	...	...	16	12	7	3	20	...	...	4	71	134
16	Ammen Koil (South)	...	...	1	1	1	...	...	...	28	18	3	4	32	2	...	1	41	132
17	Seven Wells (South)	...	...	1	...	...	...	...	...	19	14	4	5	41	1	2	2	91	180
18	Sowcarpet	...	...	1	...	2	...	...	...	12	18	9	3	32	...	...	1	41	119
19	Kothavalchavadi	...	...	...	...	...	1	...	...	16	11	6	7	52	2	...	1	93	189
20	Katchaleeswarar	...	...	...	...	1	...	...	...	13	12	6	2	25	...	...	3	67	129
21	Korukkupet	...	1	1	...	...	...	...	...	19	10	8	...	84	...	...	...	322	455

VITAL STATISTICS

STATISTICS SUPPLEMENT No. 8—(contd.)

Deaths from Principal Causes Registered in the Divisions during the year 1963—(contd.)

Division No.	Plague	Cholera	Small-pox	Measles	Enteric Fever	Kala-Azar	Malaria	Influenza	Other Fevers	Dysentery	Diarrhoea	Tuberculosis including T.B. of Lungs	General Respiratory Diseases	Injuries	Maternal Deaths	Neoplasms	All other causes	Total deaths registered (excluding Still-births)
56	1	..	..	..	..	..	22	17	10	5	52	2	4	2	134	249
57	3	..	1	..	..	..	15	22	14	25	41	..	3	..	57	181
58	5	..	..	..	..	..	17	26	11	11	74	..	..	..	90	234
59	13	..	..	..	..	..	12	47	16	12	64	6	..	..	237	407
60	1	..	1	..	..	..	11	20	7	13	44	2	..	1	123	223
61	3	..	..	..	..	..	13	8	7	8	19	..	1	..	98	157
62	1	..	..	..	16	15	10	58	83	..	..	..	73	256
63	..	1	4	..	1	..	..	..	12	16	22	7	34	..	..	..	75	173
64	22	..	..	..	25	52	44	3	124	14	..	40	1090	1414
65	..	1	8	..	..	..	..	..	8	14	16	5	46	..	..	5	133	236
66	1	1	..	..	..	..	13	17	17	9	29	..	4	..	100	191
67	1	..	2	..	..	..	17	19	13	6	43	2	12	12	482	612
68	1	..	1	..	..	..	9	21	9	4	45	..	..	..	146	236
69	5	..	1	..	..	..	14	28	18	3	35	2	..	..	71	177
70	4	..	..	..	..	..	10	22	13	5	27	..	..	1	109	191
71	19	..	..	..	..	..	15	23	11	5	34	..	2	..	189	298
72	12	..	..	..	..	..	18	39	15	4	68	..	1	6	91	255
73	58	..	1	1	..	..	11	25	18	7	44	..	11	..	67	243
74	12	1	1	..	..	..	22	28	17	13	33	2	3	2	232	366
75	33	..	..	..	..	..	12	38	9	16	75	..	10	3	19	215

79	Durgapuram	32	1	...	1	...	...	...	...	13	23	13	2	121	2	...	...	1	106	315
80	Krishnampet	8	...	...	...	...	...	...	...	17	22	12	5	137	1	...	...	...	141	344
81	Teynampet	1	...	...	...	...	...	...	...	12	28	5	4	62	...	...	...	5	88	206
82	Vivekanandapuram	1	...	...	...	...	...	...	...	9	17	4	1	63	...	...	...	...	143	240
83	Madava Perumalpuram	15	...	...	...	...	...	...	...	11	29	8	3	71	...	...	...	2	81	223
84	Karniswarapuram	5	...	...	...	...	...	...	...	10	14	7	3	124	...	...	...	4	176	350
85	Santhome	2	...	...	...	...	...	...	...	9	20	4	2	43	1	5	...	3	156	247
86	Mylapore	38	...	...	...	...	...	...	...	13	19	11	4	45	...	3	...	...	104	239
87	Bleemannahampet	2	...	...	...	...	...	...	...	14	17	12	1	63	1	...	...	1	123	238
88	Alwarpet	1	...	...	...	...	...	...	...	17	19	9	3	116	...	2	...	...	173	340
89	Raja Annamalaipuram	8	...	...	...	...	...	...	...	15	10	15	3	81	...	1	...	2	278	413
90	Adayar	2	...	...	...	...	...	...	...	7	12	18	1	46	...	1	...	2	131	220
91	Aminjikarai	10	...	...	...	...	...	...	...	13	23	17	18	86	2	...	...	1	369	539
92	Vadapalani	1	...	...	...	...	...	...	...	18	28	15	4	71	1	4	...	2	354	498
93	Theagarayanagar	...	...	...	...	...	...	...	...	6	24	18	2	46	...	3	...	...	160	259
94	Sathyamoorthi Nagar	...	...	...	...	...	...	...	...	7	27	14	6	90	...	2	...	1	224	371
95	Rajaji Nagar	2	...	...	...	...	...	...	...	15	26	17	2	68	...	...	...	1	144	275
96	Kamaraj Nagar	2	...	...	...	...	...	...	...	18	23	17	2	63	1	2	...	...	366	495
97	Saidapet (North)	1	...	...	...	...	...	...	...	11	28	17	7	107	1	...	...	5	136	322
98	Periapet	3	...	...	...	...	...	...	...	19	39	11	5	120	...	1	...	4	112	315
99	Guindy	...	...	...	...	...	...	...	...	16	29	9	4	81	...	2	...	2	174	318
100	Saidapet (South)	1	...	...	...	...	...	...	...	14	27	10	3	76	1	...	...	3	164	302
Total		21	609	16	113	2	4	24	1,394	2,217	1,333	802	6,556	99	146	246	16,973	30,555		

VITAL STATISTICS

STATISTICS SUPPLEMENT No. 9

Births, Deaths and Infant Deaths with rates by months in 1963 and 1962.

Months	1963						1962					
	Births registered excluding still births	Birth rate	Deaths registered excluding still births	Death rate	Infant deaths	Infant death rate	Births registered excluding still births	Birth rate	Deaths registered excluding still births	Death rate	Infant deaths	Infant death rate
January	1,739	11.58	1,764	11.74	422	242.66	3,406	23.07	2,131	14.43	489	143.57
February	4,644	30.92	2,406	16.20	615	132.43	4,436	30.05	2,264	15.34	561	126.46
March	5,374	36.79	2,225	14.81	510	94.90	5,944	40.57	2,476	16.77	633	106.49
April	6,590	43.88	2,568	18.21	688	104.32	3,321	22.47	1,666	11.28	393	118.33
May	6,663	44.26	2,617	17.42	673	101.90	4,547	30.80	2,131	14.43	527	115.90
June	4,871	31.83	2,198	14.63	564	136.75	4,336	29.39	2,258	15.29	625	114.14
July	5,586	37.19	2,333	15.53	642	111.35	5,766	39.07	2,520	17.07	655	113.59
August	5,141	34.23	2,503	16.66	650	126.43	7,215	49.48	2,717	18.40	689	95.49
September	5,896	39.26	2,592	17.20	720	123.81	6,885	46.06	2,023	13.70	566	82.20
October	6,832	45.51	2,841	18.92	735	107.58	7,338	44.18	2,218	15.02	517	70.45
November	6,549	43.86	2,575	17.14	619	93.80	7,716	52.28	2,606	17.65	627	81.25
December	13,992	93.17	3,933	26.19	1,106	79.03	14,709	88.46	3,753	25.42	1,068	72.60
Total	73,787	40.94	30,555	16.95	7,944	107.66	75,619	42.68	28,76	16.24	7,350	97.19

Births, Deaths and Infant Deaths Registered among principal communities during 1963 compared with 1962

Community	1963			1962		
	Total number of births registered excluding still births.	Total number of deaths registered excluding still births.	Infant deaths registered.	Total number of births registered excluding still births.	Total number of deaths registered excluding still births.	Infant deaths registered.
Aliens	...	14	4	1	21	2
Anglo-Indians	...	211	79	8	126	118
Indian Christians	...	3,430	1,340	295	3,099	1,241
Muslims	...	5,739	3,075	890	5,623	2,748
Hindus	...	64,369	26,037	6,750	66,707	24,635
Others	...	24	20	...	43	19
Total	...	73,787	130,555	7,944	75,619	28,763
						7,350

VITAL STATISTICS

STATISTICS SUPPLEMENT No. 11

Infant Deaths among Principal Communities during 1963

Community.	Under seven days		Seven days and under one month		One month and under six months		Six months and under one year		Total		Total of Males and Females
	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	
Aliens	...	...	...	...	...	1	...	...	...	1	1
Anglo-Indians	...	...	...	...	4	2	...	2	4	4	8
Indian Christians	55	26	21	20	46	41	50	36	172	123	295
Muslims	89	77	45	57	174	155	147	146	455	435	890
Hindus	1,022	803	466	365	1,000	878	1,115	1,101	3,603	3,147	6,750
Others	...	...	...	...	...	...	...	...	...	...	...
Total	1,166	906	532	442	1,224	1,077	1,312	1,285	4,234	3,710	7,944

Age Periods	Cholera		Small-pox		Measles		Diphtheria		Enteric Fever		Malaria		Other Fever		Dysentery		Diarrhoea		Infantile debility including prematurity births, etc.		Diseases of the respiratory system		Convulsions		Other Causes		Total Infantile deaths	
	Death	Rate	Death	Rate	Death	Rate	Death	Rate	Death	Rate	Death	Rate	Death	Rate	Death	Rate	Death	Rate	Death	Rate	Death	Rate	Death	Rate	Death	Rate	Death	Rate
Under one week	...	...	...	...	...	...	...	...	...	...	...	...	6	0.28	3	0.14	9	0.43	1610	77.70	86	4.15	...	...	358	17.27	2072	26.10
One week and under one month	...	...	4	0.41	...	...	...	...	29	2.97	26	2.66	51	5.23	605	62.11	175	17.96	5	0.51	79	8.11	974	12.24	...	...	...	...
One month and under six months	52	2.25	...	...	2	0.08	...	...	163	7.08	220	9.5	238	1.34	180	7.82	823	35.76	7	0.30	616	26.77	2301	28.96	...	...	...	...
Six months and under one year	65	2.50	...	...	8	0.30	2	0.07	165	6.35	286	11.01	248	9.54	20	0.77	934	35.96	12	0.46	857	32.99	2597	32.70	...	...	...	...
Total	121	1.52	...	...	10	0.12	2	0.02	363	4.56	535	6.73	546	6.87	2415	30.40	2018	25.40	24	0.30	1910	24.04	7944	100.00	...	...	...	...

Infant deaths from principal causes by months in 1963.

Months	Cholera	Small-pox	Measles	Diphtheria	Enteric Fever	Malaria	Other Fevers	Dysentery	Diarrhoea	Infantile debility and Malformations including prematurity births	Diseases of the respiratory system	Convulsions	Other causes	Total infant deaths in 1963.	Total Infant deaths in 1962.
January	...	8	...	...	...	...	21	49	60	104	164	4	12	422	489
February	...	5	...	1	...	...	21	34	52	176	173	6	147	615	561
March	...	9	...	...	...	...	39	28	37	149	166	2	80	510	633
April	...	8	...	...	...	...	42	35	41	224	139	1	198	688	393
May	...	7	...	1	...	...	43	43	53	154	194	3	175	673	527
June	...	10	...	1	...	...	35	38	32	238	138	2	70	564	625
July	...	17	...	1	...	...	23	45	49	197	237	...	73	642	655
August	...	10	...	1	...	...	31	42	43	212	168	2	141	650	689
September	...	8	...	2	...	...	22	45	37	155	148	...	303	720	566
October	...	14	...	1	1	...	24	51	49	188	152	2	253	735	517
November	...	15	...	...	...	...	28	52	41	283	130	1	69	619	627
December	...	10	...	2	1	...	34	73	52	335	209	1	389	1,106	1,068
Total		101		15	9		969	595	546	2,415	2,019	24	1,010	7,944	7,350

Statement of live births by age of mother and order of live births registered in order of confinement at live birth during 1963.

Age of Mother at birth.	Other of confinement at Live Births.															Total	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15		not defined
Under 15 years	173	5	1	1	...	...	...	...	...	...	...	...	...	...	...	3	183
15 yrs. & under 20 yrs.	6,681	2,787	1,105	321	...	12	114	37	16	...	...	...	...	...	...	36	10,974
20 yrs. & under 25 yrs.	5,729	7,168	5,867	3,432	1,264	267	1,028	445	176	4	4	...	...	...	...	51	24,053
25 yrs. & under 30 yrs.	1,797	3,575	4,866	4,280	3,327	1,971	1,386	912	450	182	19	36	4	1	...	54	21,589
30 yrs. & under 35 yrs.	484	943	1,540	1,988	2,032	1,684	1,386	570	443	232	60	52	12	11	3	36	11,738
35 yrs. & under 40 yrs.	84	152	338	562	653	620	696	85	70	55	26	15	7	6	1	12	4,533
40 yrs. & under 45 yrs.	7	9	19	26	57	44	85	85	4	6	3	2	1	1	...	2	514
45 years	1	1	2	3	5	6	3	4	5	1	...	...	...	...	...	...	43
46 years	...	...	1	...	1	...	...	...	1	1	...	...	...	...	...	...	4
47 years	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	2
48 years	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
49 years	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
50 years	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	5
Not stated	25	19	17	12	12	11	7	4	1	...	...	...	...	1	...	39	148
Total	14,981	14,660	13,756	10,625	7,379	4,716	3,322	2,060	1,163	526	208	109	26	19	4	233	73,787

VITAL STATISTICS

Deaths registered from principal causes with rates in 1963 compared

Year.	Plague.	Cholera		Small-pox		Measles		Enteric fevers		Malaria		Other fe	
		Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.	Deaths.	
1958	63	0.034	1,389	0.76	3	0.001	165	0.09	14	0.007	3,728	
1959	64	0.03	517	0.24	1	0.001	108	0.05	8	0.003	1,015	
1960	521	0.23	2	0.000	137	0.06	4	0.001	1,341	
1961	904	0.52	7	0.000	209	0.12	6	0.001	1,904	
1962	55	0.03	316	0.17	5	0.002	86	0.04	5	0.002	1,028	
Mean of the previous five years	36	0.08	729	3.84	4	0.000	141	0.07	7	0.003	1,803	
1963	21	0.01	609	0.33	16	0.01	113	0.06	4	0.00	1,394	

STATISTICS SUPPLEMENT No. 15

previous five years.

Century	Diarrhoea		Tuberculosis including Tuberculosis of lungs		General Respiratory diseases		Injuries.		Maternal Deaths		All other causes		Total deaths		
	Rate.	Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.	Deaths.	
68	1.58	2545	1.45	629	0.34	8,174	4.50	129	0.07	145	0.07	17,371	9.57	36,888	23.34
83	1.41	1902	0.90	672	0.31	8,415	3.98	79	0.03	140	0.06	17,690	8.38	33,515	15.88
87	1.28	1894	0.85	730	0.33	7,988	3.64	79	0.19	119	0.05	18,077	8.19	33,729	15.27
94	1.55	1812	1.04	729	0.42	6,927	3.99	66	0.03	183	0.05	17,153	9.88	32,494	18.71
16	0.99	1384	0.77	740	0.42	6,269	3.54	78	0.04	124	0.21	16,857	9.51	28,763	16.24
40	1.36	1907	1.00	700	0.36	7575	3.93	86	0.07	142	0.09	17,430	9.10	33,078	15.89
17	1.02	1333	0.73	802	0.44	6,556	3.63	99	0.05	146	0.08	17,245	9.62	30,555	16.95

CORPORATION OF MADRAS

FO

DETAILED RETURN OF DEATHS IN

Age at the time of death.	Infectious diseases.								Fever.				
	Cholera.	Plague.	Small-pox.	Measles.	Chicken-pox.	Typhoid or Enteric Fever.	Diphtheria.	Others.	Malaria.	Influenza.	Relapsing Fever.	Kala-Azar.	Rheumatic Fever.
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Under one year.													
{ Under one week
{ Over one week and not exceeding one month.	4	...	...	...	...	...	...	...	...	...	...
{ Over one month and not exceeding 6 months	62	...	...	...	2	8	...	...	...	...	...
{ Over 6 months and not exceeding 12 months	65	...	...	2	8	11	...	...	...	...	...
Total under one year	121	...	...	2	10	20	...	...	...	...	...
One year and under 5 years	...	5	227	9	...	15	16	21	...	4	...	...	13
5 years and under 10 years	...	2	89	4	...	12	5	7	...	3	...	...	5
10 years and under 15 years	...	3	9	3	...	14	...	5	1	6	...	1	12
15 years and under 20 years	...	2	22	...	...	20	...	4	1	8	...	1	7
20 years and under 30 years	69	...	...	27	...	11	1	3	...	...	8
30 years and under 40 years	...	1	36	...	...	13	...	12	1	...	...	...	5
40 years and under 50 years	...	2	20	...	...	6	...	5	...	...	...	...	4
50 years and under 60 years	...	2	10	...	...	4	...	4	...	...	...	...	6
60 years and upwards	...	4	6	...	...	...	...	3	...	...	...	...	6
Total	...	21	609	16	...	113	31	92	4	24	...	2	66

* Total Births and Deaths s

HEALTH DEPARTMENT.

MADRAS DURING THE YEAR 1963.

Respiratory diseases.		Alimentary System.			Diseases of the Liver.		Circulatory System.			Genito-urinary diseases excluding Venereal diseases.		Venereal diseases.		
Pneumonia.	Others.	Dysentery.	Diarrhoea.	Others.	Cirrhosis.	Others.	Heart diseases.	Arterio Sclerosis.	Others.	Bright's disease.	Others.	Syphilis.	Gonorrhoea.	Others.
17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
30	56	3	9	4	1	5	...	...	18	...	4	...	...	...
110	65	26	51	32	1	10	...	...	8	...	1	...	...	...
5 483	335	220	238	139	12	15	...	...	12	...	1	...	...	...
4 573	357	286	248	177	12	14	4	...	16	...	...	...	—	...
9 1196	813	535	526	352	26	44	4	...	54	...	6	...	...	...
7 1160	1312	1053	440	328	53	50	7	...	48	...	21	...	...	...
7 184	157	140	45	18	17	5	10	...	23	1	9	...	...	...
8 35	26	30	21	17	5	7	22	...	28	4	1	...	...	...
8 30	41	24	32	19	12	9	23	...	28	...	5	...	...	1
6 96	125	66	31	28	24	19	55	6	94	7	17	...	...	...
7 98	169	85	56	50	24	31	121	4	98	4	24	1	...	...
5 165	202	85	62	60	37	44	140	3	168	5	23	...	...	...
2 138	221	107	60	65	34	22	220	2	175	6	44	...	...	3
3 134	154	91	50	66	14	27	219	3	234	5	38	...	...	1
2 3236	3320	2217	1333	1003	246	258	821	18	940	32	188	1	...	5

Include "Still Births" 1,04,342

CORPORATION OF MADRAS

DETAILED RETURN OF DEATHS IN

Age at the time of death.		Diseases of the Nervous System.				Accidents or pregnancy and child-birth.			Deficiency diseases.			Malignar diseases.			
		Convulsions.	Cerebral haemorrhage (apoplexy)	Tetanus.	Epilepsy.	Others.	Puerperal sepsis.	Abortion.	Other accidents and diseases of pregnancy and parturition.	Beri-Beri.	Rickets.	Others.	Alimentary tract.	Genitor-urinary	Breast.
		32	33	34	35	36	37	38	39	40	41	42	43	44	45
Under one year.	Under one week	...	...	...	...	31	...	...	...	...	...	...	...	...	...
	Over one week and not exceeding one month	5	...	...	...	13	...	...	...	...	...	...	...	...	...
	One over month and not exceeding 6 months	7	...	5	...	64	...	...	...	...	6	5	...	...	...
	Over 6 months and not exceeding 12 months	12	...	7	...	44	...	...	...	...	2	8	...	...	...
Total under one year		24	...	12	...	152	...	...	...	...	8	13	...	...	...
One year and under 5 years		29	...	43	2	100	...	...	...	...	10	36	2	1	...
5 years and under 10 years.		8	2	...	1	20	...	...	...	...	1	8	...	1	...
10 years and under 15 years		2	...	8	1	20	...	...	...	...	...	4	...	...	...
15 years and under 20 years		...	...	5	3	21	3	...	13	...	...	1	...	2	...
20 years and under 30 years		...	5	6	28	1	46	3	2	30	...	11	3	5	...
30 years and under 40 years		...	5	3	37	2	48	3	1	54	...	11	1	2	...
40 years and under 50 years		...	5	3	16	...	48	...	...	27	...	11	1	5	...
50 years and under 60 years		...	7	12	17	...	85	...	...	10	...	17	2	2	1
60 years and upwards		...	2	15	9	2	124	...	...	...	...	7	4	4	...
Total		...	87	41	175	12	664	9	3	134	...	19	119	13	22

* Total births and deaths

HEALTH DEPARTMENT

Y OF MADRAS DURING THE YEAR 1963.

Diabetes.	Leprosy.	Alcoholism.	Congenital debility and malformation, Premature birth.	Rabies.	Wounds and accidents.	Snake-bite.	Killed by wild beasts.	Suicides.	Poisons.	Old age.	All other causes.	Total deaths from all causes.	Total of Births and Deaths.
48	49	50	51	52	53	54	55	56	57	58	59	60	61
...	...	...	1,610	...	...	...	...	...	...	...	294	2,072	Males Females
...	...	...	605	...	...	...	...	...	...	...	14	974	* Births
...	...	...	180	...	...	...	...	...	...	...	347	2,301	
...	...	...	20	1	6	...	...	...	...	...	555	2,597	
...	...	...	2,415	1	6	...	...	...	...	...	1,210	7,944	Deaths
1	...	...	15	3	10	2	...	...	4	...	1,268	6,783	15,765 14,790
...	...	...	...	4	11	3	...	...	...	...	27	1,118	
...	...	...	...	4	3	4	...	14	3	...	16	452	
1	1	...	...	1	10	1	...	19	11	...	25	499	Still Births
1	3	0	...	3	17	2	...	41	18	...	411	1,539	
5	7	6	0	3	4	3	...	19	5	...	250	1,557	886 765
7	13	2	...	1	7	...	...	17	1	...	331	1,766	
5	23	2	...	2	4	1	...	19	...	26	660	2,248	
3	33	3	...	1	6	...	...	17	3	4,205	973	6,649	
21	81	14	...	2,430	23	78	16	...	146	45	4,231	5,171	30,555

clude "Still Births" 1,04,342

VITAL STATISTICS

STATISTICS SUPPLEMENT NO. 17.

List of deaths according to cause groups during the year 1963.

GROUP I

Serial No.	Cause.	Total No. of deaths.
1	Typhoid	113
2	Para Typhoid	52
3	T.B. Respiratory system	425
4	T.B. All forms	317
5	Diphtheria	31
6	Smallpox	609
7	Influenza	24
8	Whooping cough	33
9	Acute polio Myelitis and PolioEncephalitis	7

GROUP II

1	Cholera	21
2	Dysentery all forms	2217
3	Scarlet fever and streptococcal throat	19
4	Meningo coccal infection	12
5	Plague	Nil.
6	Measles	16
7	Malaria	4
8	Malinghat neoplasave	246
	(a) of Buccal Cavity and pharynx	14
	(b) uterus	19
	(c) Stomache and deodenuue	47
	(d) Breast	5
	(e) All other sites	161

VITAL STATISTICS STATISTICS SUPPLEMENT No. 17—*contd.*

List of death according to cause groups during the year 1963

GROUP II—*contd.*

Serial No.	Cause	Total No. of deaths
9	Rhematic fever	66
10	Chronic rheumatic heart disease	13
11	Arterio-Sclerotic and degeneractife heart disease	18
12	Other diseases of heart	463
13	Hypertensive heart diseases	240
14	Preumonia	3336
15	Bronchitis	1493
16	Motor vehicle accidents	38
17	All other accidents	135
18	Suicide and self-inflicted injury	146
19	Homicide and operation of war	10
20	Anaemias	285
21	Cirrhosis of liver	246
22	Kale-Azar	2
23	Menigo co-coal meningitis	12
24	Maternal deaths	146
25	Acute infectious encephalitis	81
26	Tetenus	175
27	Anthorax	4
28	Chicker pox	3
29	Infective hepatitis	25
30	Rabies	25
31	Filariasis	11
32	Kwashiorakor	17

Certification of cause of deaths for

1. Medically certified by :—

(a) Practitioners of modern medicines	...	3419
(b) Other medical practitioners	...	571

2. Not medically certified but verified by medical and para medical staff obtaining symptoms and conditions for the relations of the deceased	...	18376
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3. Deaths certified by :—

(1) Medical officers of hospitals	...	5429
(2) Private medical practitioners	...	1840
(3) Hakims and vaidas	...	9
(4) Commissioner of Police	...	911
(5) Coroner of Bombay and District registrars	...	...

Vaccinations performed by Health Staff during each month in 1963.

Months.	Primary Vaccinations.					Re-vaccinations.						
	Number of persons vaccinated.			Results.		Number of persons Re-vaccinated.			Results.			
	Males	Females	Total.	Success-ful.	Failure	Absent.	Males.	Females	Total.	Success-ful.	Failure.	Absent.
January	2,668	2,508	5,176	5,176	...	...	11,174	10,908	22,082	1,119	16,785	4,178
February	4,130	3,915	8,045	8,045	...	...	24,188	28,199	52,387	6,222	37,166	8,999
March	3,664	3,371	7,035	7,035	...	...	25,832	24,100	49,932	10,236	31,772	7,924
April	2,607	2,489	5,096	5,096	...	...	12,638	11,354	23,992	3,042	15,948	5,002
May	1,878	1,790	3,668	3,668	...	...	8,509	8,838	17,347	2,134	11,603	3,610
June	2,521	2,233	4,754	4,717	3	34	9,965	10,699	20,664	2,146	14,465	4,053
July	2,851	2,776	5,627	5,627	...	...	13,073	14,370	27,443	3,319	19,777	4,527
August	2,554	2,476	5,030	5,030	...	...	15,083	16,431	31,514	3,112	22,723	5,679
September	2,492	2,346	4,838	4,833	3	2	12,036	13,014	25,050	3,053	16,407	5,590
October	2,277	2,163	4,440	4,440	...	...	10,484	9,980	20,464	2,787	13,648	4,029
November	1,831	1,901	3,732	3,732	...	...	7,444	7,952	15,396	1,992	9,845	3,559
December	2,019	1,967	3,986	3,986	...	...	6,618	6,910	13,528	2,109	8,845	2,574
Total	31,492	29,935	61,427	61,385	6	3	157,044	1,62,755	3,19,799	41,091	2,18,984	59,724

Particulars of Vaccinations Performed in each Division during the year 1963

Division No.	Name of the Division	Total number of persons vaccinated				Primary vaccination.								Re-vaccination.				Percentage of successful cases in which the results are known.			
		Total		Successful		Total		Successful		Total		Result									
		Males	Females	Total	Males	Females	Total	Under one year.	One year and under 5 years	5 years and under 10 yrs.	Ten years and above.	Total		Successful	Failure	Absent					
												Unsuccessful	Unknown								
1	New Washermenpet...	1,083	1,272	2,355	270	272	542	342	180	9	1	542	...	813	1,000	1,813	194	1,319	300	100.0	10.70
2	Tondiarpet	1,581	1,490	3,071	274	279	553	366	174	12	1	553	...	1,307	1,211	2,518	319	1,775	424	100.0	12.66
3	Grace Garden	2,334	2,314	4,648	340	314	654	433	209	11	1	654	...	1,994	2,000	3,994	619	2,819	556	100.0	32.94
4	Sanjeevitayanpet	1,033	948	2,031	316	266	582	412	161	9	...	582	...	767	682	1,449	300	808	341	100.0	2.07
5	Mottai Garden	1,389	1,207	2,596	292	254	546	359	180	7	...	546	...	1,097	95	2,050	329	1,281	440	100.0	16.04
6	Narayanappa Naicken Garden	721	921	1,642	213	236	449	334	115	...	...	449	...	508	685	1,193	109	826	258	100.0	9.13
7	Singara Garden	997	1,175	2,172	225	255	480	367	106	7	...	480	...	772	918	1,690	168	1,123	309	100.0	9.94
8	Royapuram	1,423	1,826	3,249	252	247	499	339	151	9	...	499	...	1,171	1,579	2,750	377	1,961	412	100.0	13.71
9	Meenakshiammenpet.	1,435	1,876	3,311	231	291	522	368	154	...	...	522	...	1,204	1,585	2,789	392	1,953	444	100.0	14.05
10	Old Washermenpet	2,188	2,052	4,240	420	362	782	455	315	12	...	782	...	1,768	1,690	3,458	444	2,234	780	100.0	12.83
11	Seven Wells (North)	1,875	2,114	3,989	305	295	600	449	132	19	...	600	...	1,570	1,819	3,389	1,066	1,839	484	100.0	31.45
12	Ammen Koil (North)	1,000	1,078	2,078	234	233	467	352	114	...	...	467	...	766	845	1,611	452	892	267	100.0	28.05
13	Muthialpet	1,639	1,980	3,619	293	284	577	428	147	2	...	577	...	1,346	1,696	3,042	1,244	1,315	483	100.0	40.98
14	Harbour	1,651	1,029	2,680	310	271	581	401	175	6	...	581	...	1,341	758	2,099	660	1,130	309	100.0	31.44
15	Mannady	810	971	1,781	173	170	343	265	76	2	...	343	...	637	801	1,438	240	894	304	100.0	16.68
16	Ammen Koil (South).	860	1,800	2,660	174	166	340	274	66	...	...	340	...	686	1,634	2,320	440	1,259	621	100.0	18.96
17	Seven Wells (South)	1,809	1,959	3,768	384	296	680	427	244	8	1	680	...	14,25	16,63	3,088	578	2,510	...	100.0	18.77
18	Sowcarpet	781	983	1,764	186	183	369	250	113	5	1	369	...	595	800	1,395	244	1,151	...	100.0	17.49
19	Kothavalchavadi	1,155	771	1,926	231	185	416	307	106	3	...	416	...	924	586	1,510	247	1,263	...	100.0	16.43
20	Katchaleswarar	2,915	1,387	4,302	707	158	375	278	85	2	...	365	...	2,718	1,229	3,947	1,744	1,679	524	100.0	44.18

VITAL STATISTICS

STATISTICS SUPPLEMENT No. 19—(contd.)

Particulars of Vaccinations performed in each division during the year 1963—(contd.)

Division No.	Name of the Division	Total number of persons vaccinated			Primary Vaccination							Re-vaccination.				Percentage of successful cases in which the results are known.						
		Males	Females	Total	Total			Successful				Total			Result							
					Males	Females	Total	Under one year.	One year and under 5 years	5 years and under 10 yrs.	Ten years and above.	Total	Unsuccessful	Unknown	Males		Females	Total	Successful	Failure	Absent	
51	Shenoy Nagar	1,529	1,242	2,771	362	338	700	491	202	7	..	700	..	..	1,167	904	2,071	403	1,268	400	100.0	19.45
52	Kilpauk	1,505	1,176	2,681	195	218	413	296	109	8	..	413	..	..	1,310	958	2,268	568	1,193	507	100.0	25.04
53	Chetpet	2,023	2,351	4,374	354	364	718	510	185	23	..	718	..	..	1,669	1,987	3,656	186	2,876	594	100.0	5.08
54	Nungambakkam	1,418	1,863	3,281	188	241	429	322	87	20	..	429	..	..	1,230	1,622	2,852	143	2,191	518	100.0	5.01
55	Sevagram	1,577	1,926	3,503	292	305	597	444	128	25	..	597	..	..	1,285	1,621	2,906	165	2,189	552	100.0	5.67
56	Thousand Lights (West)	2,337	2,785	5,122	345	386	731	544	157	30	..	731	..	..	1,992	2,399	4,391	249	3,509	633	100.0	5.67
57	Thousand Lights (East)	2,020	1,564	3,584	270	319	589	420	159	10	..	589	..	..	1,750	1,245	2,995	301	2,207	487	100.0	10.05
58	Pudupakkam	2,744	2,786	5,530	355	351	712	507	194	11	..	712	..	..	2,389	2,429	4,818	542	2,329	847	100.0	11.24
59	Amir Mahal	3,066	3,398	6,464	385	372	757	506	249	2	..	757	..	..	2,681	3,026	5,707	451	4,030	1,226	100.0	7.90
60	Royapettah	2,370	2,195	4,565	337	328	665	493	162	10	..	665	..	..	2,033	1,867	3,900	488	2,518	894	100.0	12.51
61	Gangadeswarar Koil...	2,227	1,999	4,226	295	249	544	410	131	2	..	544	..	..	1,932	1,750	3,682	471	2,538	672	100.0	12.79
62	Dr. Ambedkar Nagar.	1,458	1,464	2,922	214	182	396	298	97	2	..	396	..	..	1,244	1,282	2,526	232	1,458	836	100.0	9.18
63	Periamet	1,851	3,031	4,882	269	237	506	407	98	2	..	506	..	..	1,582	2,794	4,376	469	2,767	1,140	100.0	10.71
64	Park Town	2,501	2,356	4,827	351	400	751	547	193	12	..	751	..	..	2,150	1,926	4,076	674	2,979	605	100.0	16.53
65	Adikesavapuram	1,643	1,480	3,133	308	290	598	427	158	14	..	598	..	..	1,345	1,190	2,535	270	1,865	400	100.0	10.65
66	Chintadripet	1,651	1,598	3,249	278	280	558	405	143	11	..	558	..	..	1,373	1,318	2,691	270	1,994	427	100.0	10.03
67	Egmore	3,135	3,144	6,279	266	230	496	385	106	6	..	496	..	..	2,869	2,914	5,783	355	3,963	1,465	100.0	6.13
68	Pudupet	2,323	2,227	4,550	347	300	647	502	133	13	..	647	..	..	1,976	1,927	3,903	342	2,614	947	100.0	8.76

72	Thiruvattar	1,022	984	2,006	212	185	397	266	132	...	...	397	...	810	799	1,609	149	1,023	437	100.0	9.26
73	Chepauk	...	...	...	212	185	397	266	132	...	...	397	...	...	...	...	149	1,023	437	100.0	9.26
74	Marina	4,125	4,698	8,823	450	321	771	470	277	24	1	771	...	3,675	4,377	8,052	610	5,024	2,418	100.0	7.57
75	Triplicane	3,563	4,316	7,879	382	368	750	435	309	7	...	750	...	3,181	3,948	7,129	476	4,583	2,070	100.0	6.67
76	Jam Bazaar	2,168	2,271	4,439	404	359	763	534	219	10	1	763	...	1,764	1,912	3,676	210	2,695	771	100.0	5.71
77	Mirsaipet	6,004	6,029	12,033	490	428	918	528	388	3	...	918	...	5,514	5,601	11,115	624	9,638	853	100.0	86.71
78	Azad Nagar	2,938	2,969	5,907	368	306	674	391	274	9	...	674	...	2,570	2,663	5,233	280	4,415	538	100.0	5.34
79	Durgapuram	1,325	1,262	2,587	316	276	592	349	223	19	1	592	...	1,009	986	1,995	222	1,277	496	100.0	11.12
80	Krishnampet	1,762	2,851	4,613	269	238	507	315	181	11	...	507	...	1,493	2,613	4,106	251	3,100	755	100.0	6.11
81	Teynampet	2,213	1,912	4,125	358	323	681	523	158	...	...	681	...	1,855	1,589	3,444	176	2,592	676	100.0	5.11
82	Vivekanandapuram	1,708	1,761	3,469	254	240	494	326	166	2	...	494	...	1,454	1,521	2,975	364	1,977	634	100.0	12.23
83	Madava Perumal- puram.	1,311	1,321	2,632	267	233	500	331	165	4	...	500	...	1,044	1,088	2,132	189	1,427	516	100.0	8.86
84	Karniswarapuram	2,015	2,050	4,065	356	361	717	496	221	...	...	717	...	1,659	1,689	3,348	351	2,153	844	100.0	10.48
85	San thome.	2,419	2,738	5,157	343	310	653	426	205	21	1	653	...	2,076	2,428	4,504	243	3,763	498	100.0	5.39
86	Mylapore	2,306	1,756	4,062	316	300	616	437	170	9	...	616	...	1,990	1,456	3,446	229	2,704	513	100.0	6.64
87	Bheemannaipet	1,318	1,534	2,852	236	231	467	316	143	8	...	467	...	1,082	1,303	2,385	120	1,609	656	100.0	5.03
88	Alwarpet	1,994	2,504	4,498	369	364	733	412	319	2	...	733	...	1,624	2,140	3,765	205	2,412	1,148	100.0	5.44
89	Raja Annamalai- puram	1,836	1,787	3,623	392	329	721	475	233	13	...	721	...	1,444	1,458	2,902	125	2,237	540	100.0	4.30
90	Adayar	1,808	2,468	4,276	285	324	609	404	186	18	1	609	...	1,523	2,144	3,667	129	2,810	728	100.0	3.51
91	Aminjikarai	2,343	2,526	4,869	537	531	1,068	753	307	8	...	1,068	...	1,806	1,995	3,801	1223	2,061	517	100.0	32.17
92	Vadapalani	1,850	1,542	3,392	579	555	1,134	631	444	58	1	1,134	...	1,271	987	2,258	98	1,797	363	100.0	4.34
93	Theagarayanagar	1,348	1,241	2,589	322	278	600	379	216	5	...	600	...	1,026	963	1,989	207	1,455	327	100.0	10.40
94	Sathyamoorthi Nagar	1,955	1,690	3,645	367	335	702	462	240	...	...	702	...	1,588	1,355	2,943	263	2,263	417	100.0	8.93
95	Rajaji Nagar	1,930	1,813	3,743	354	356	710	486	224	...	...	710	...	1,576	1,457	3,033	339	2,362	332	100.0	21.39
96	Kamaraj Nagar	1,556	1,498	3,054	416	409	825	497	304	24	...	825	...	1,140	1,089	2,229	250	1,686	293	100.0	11.21
97	Saidapet (North)	1,755	1,878	3,633	329	340	633	515	108	10	...	633	...	1,426	1,574	3,000	501	1,764	735	100.0	16.70
98	Periapet	1,937	2,002	3,939	361	383	744	513	222	9	...	744	...	1,576	1,619	3,195	400	2,098	697	100.0	12.51
99	Guindy	2,583	1,745	4,328	315	312	627	424	180	20	3	627	...	2,268	1,433	3,701	471	2,266	964	100.0	12.72
100	Saidapet (South)	1,294	1,413	2,707	309	388	697	463	218	16	...	697	...	985	1,025	2,010	346	1,094	570	100.0	17.21
Total		1,88,536	1,92,690	3,81,226	31,492	29,935	61,427	42,716	17,894	802	15,614	427	...	1,57,044	1,62,755	3,19,799	41,091	2,18,984	59,724	100.0	12.84

Comparative Statement of the Out-turn of Work in Dispensaries during 1962-63

Serial No.	Division No.	Year of opening.	Names of the Dispensaries.	Location.	Attendance.						Minor operations.	System of Treatment
					Old		New		Total			
					1962	1963	1962	1963	1962	1963		
1	1	1962	New Washermanpet	10, Avoor Muthiah Maistry Street.	8,675	10,843	11,904	15,137	20,579	25,980	93	Allopathy
2	2	1924	Royapuram	2/87, Suryanarayana Chetty Street.	29,030	30,106	33,768	36,251	62,798	66,357	530	Do.
3	3	1952	Palmyrahayad	Kalmandapam Road	20,684	26,473	43,372	60,675	64,056	87,148	104	Do.
4	4	1957	Sanjeevirayanpet	21/22, Kappal Polu Chetty Street.	22,474	21,394	22,219	23,920	344,69	45,314	20	do.
5	7	1944	Royapuram Siddha	109, Adam Sahib Street	31,697	33,317	39,993	44,254	071,69	77,571	42	Siddha
6	11	1956	Seven Wells	1/50, St. Xavier Street.	43,976	38,658	36,826	37,117	80,802	75,775	152	Allopathy
7	14	1929	Harbour	6/7, Adam Street.	17,534	20,259	31,835	37,258	49,369	57,517	70	do.
8	15	1955	Muthialpet	2, Geils Street.	38,241	38,593	38,104	37,577	76,345	76,170	Nil	do.
9	19	1923	Mofuskhan	55, Thatha Muthiappan Street.	24,653	28,114	29,950	29,456	54,603	57,570	203	do.
10	20	1938	Mannady	47, Lingi Chetty Street	15,717	13,141	13,202	11,632	28,919	24,773	99	do.
11	21	1963	Tondiarpet	Thiruvathiur High Road.	...	19,551	...	37,916	...	57,467	25	do.
12	23	1913	Washermanpet	85, Thiruvathiur High Road.	38,948	31,620	53,846	62,977	92,794	94,597	100	do.
13	25	1923	Mint	244, Mint Street	32,034	28,696	44,736	44,313	76,770	73,009	15	do.
14	25	1957	Basin Bridge	50, Basin Bridge Road.	28,065	29,117	31,066	31,343	60,131	60,460	32	do.
15	28	1919	Trevelyan Basin	17, Basin Bridge Road.	22,624	20,810	36,199	35,758	58,823	56,568	70	do.
16	31	1928	Perambur	55, Madhavaram High Road.	23,583	19,617	50,754	56,818	74,337	76,435	Nil	do.
17	32	1929	Vyasarpadi	22, Gantz Road.	25,788	20,910	34,449	41,157	60,237	62,067	Nil	do.
18	33	1930	Pulian Thope	55, Pulianthope High Road	33,669	31,150	62,072	69,569	95,741	1,00,119	135	Unani.
19	34	1958	Otteri	83, Strahns Road	42,914	51,837	48,736	60,465	91,650	1,12,302	56	Allopathy
20	35	1931	Otteri Siddha	1-B, Bashiam Reddy 1st street	22,905	22,835	40,358	40,885	63,263	63,720	53	Siddha.
21	39	1931	Choolai Siddha	16, Alathur Subramania Achari st.	38,019	42,296	68,826	71,344	106,845	113,640	53	do.

2240	1899	Balah Naidu	6, Rotler Street	...	28,269	35,257	62,132	82,071	90,401	1,17,328	1,02,200	Allopathy
2341	1946	Sembiam	178, Paper Mills Road.	...	29,846	31,699	33,899	40,923	63,745	72,622	343	do.
2445	1948	Ayanavaram	127, Konnur High Road.	...	32,583	32,591	48,602	49,729	81,185	82,320	636	do.
2546	1960	Nammalwarpet	21-A, Subbaraya Chetty Street 2nd Lane.	...	53,088	72,273	48,514	43,437	101,602	115,710	200	Allopathy
2648	1929	Kosapet	1/7, Chellappa Mudali Street.	...	20,579	19,722	46,377	46,899	66,956	66,621	254	do.
2748	1961	Kosapet (New)	Satchidanandam Street	...	14,761	14,528	40,739	51,534	55,506	66,062	Nil	Allopathy
2851	1956	Aminjikarai	171, Poonamallee High Road.	...	14,508	14,007	44,866	42,021	59,374	56,028	220	do.
2953	1959	Chetput	241, Mc. Nichols Road.	...	26,413	32,272	42,303	42,824	68,716	75,096	26	do.
3055	1923	Nungambakkam	15, Noor Veerasamy Iyer Street.	...	26,546	32,675	40,436	41,319	66,982	72,594	184	do.
3156	1930	Thousand Lights	43, Model School Road.	...	53,726	61,411	45,136	52,167	98,862	1,13,578	143	Ayurvedic
3259	1924	Puddupakkam	369, Pycrafts Road.	...	8,232	39,875	61,200	47,543	69,432	87,418	140	Allopathy
3361	1919	Kilpauk	6, Gangadhareeswarar Koil Street.	...	31,434	25,652	46,511	50,123	77,945	75,775	184	do.
3463	1962	Ripon Buildings	Ripon Buildings	...	9,131	11,506	11,684	15,532	20,815	27,038	60	do.
3566	1909	Chintadripet	2/61, Arunachala Naicken Koil St.	...	30,635	34,173	55,375	48,989	86,010	83,162	79	do.
3667	1923	Egmore	34, Poorala Gengu Reddy Street	...	28,659	35,743	26,685	25,462	55,344	61,205	74	do.
3769	1939	Pudupet	83, Harris Road.	...	32,327	31,560	45,591	50,933	77,918	82,493	Nil	do.
3871	1932	Thiruvattes Waranpet	42, Thayar Sahib Street.	...	73,377	71,817	39,420	37,088	112,797	1,08,905	267	Unani
3972	1955	Chepauk	8, Khana Baugh Street.	...	31,996	36,979	33,404	37,245	65,400	74,224	60	Allopathy
4075	1918	Triplacane	25, Pycrafts Road	...	54,746	67,695	38,302	41,941	93,048	1,09,636	369	do.
4177	1956	Zam Bazaar	21, Gazette Begum Street.	...	42,590	41,845	36,302	39,075	78,982	80,920	110	Allopathy
4280	1938	Krishnampet	25, Dr. Nateasn Road.	...	29,136	34,437	20,548	23,837	49,684	58,274	289	do.
4381	1963	Teynampet (North)	56 C, Muthaiya Mudali Street, Madras	...	...	23,164	...	19,663	...	42,827	51	do.
4484	1959	Mylapore (North)	8, Karneeswarar Pagoda Street.	...	28,057	47,684	23,115	30,641	51,172	78,325	Nil	do.
4585	1924	Mylapore (South)	101, Kutcheri Road.	...	48,611	55,096	35,467	38,883	84,078	93,979	93	do.
4688	1927	Teyanmpet (South)	104, Mount Road.	...	16,473	15,997	28,058	26,575	44,531	42,572	7	do.
4789	1948	Adayar	13, Greenways Road.	...	20,370	25,044	24,442	26,131	44,812	51,175	107	Allopathy
4892	1948	Kodambakkam	107, Arcot Road.	...	5,872	10,092	21,092	26,305	26,964	26,397	3	do.
4993	1956	T. Nagar (North)	4, Dr. Sadasivam Road.	...	16,809	19,041	20,749	20,411	37,558	39,452	17	Allopathy
5094	1922	T. Nagar (South)	3, Sivagnanam Road.	...	15,020	24,939	20,556	29,265	35,576	54,204	44	do.
5197	1956	Saidapet	51, Sadarappa Mudali Street.	...	24,783	28,267	30,757	37,801	55,540	66,068	20	do.
5299	1957	Guindy	1-A, Sathani Street.	...	25,751	28,534	10,170	10,600	35,921	39,134	26	do.
				...	1436564	1634912	1854647	2062789	3291211	3697701	6,311	

MEDICAL INSPECTION

During the year 1963 school inspection was carried out by two Medical Inspectors, out of these two Inspectors, only one worked for a short time, i.e., from January to April and subsequently retired. But the place remained unfilled owing to shortage of medical Officers. The inspection of girls schools was carried out by three Medical Inspectresses during the whole year. Dr. B. L. N. Raj, was succeeded by Dr. A. S. Ramamurthy as Chief Medical Inspectors in July 1963. As usual the complement was insufficient to cope with the increased work for the following reasons : (1) The number of schools and children had increased, (2) Medical Inspectors and Inspectresses were posted frequently in the dispensaries on relieving duties as and when the dispensary doctors proceeded on leave and (3) The vacancy caused by retirement of one of the Medical Inspector remained unfilled.

The number of schools was 311 but only 44 schools were inspected. The types and number of Corporation Schools are given below :

(1) Higher Elementary Schools	...	89
(2) Elementary Schools	...	173
(3) Basic Schools	...	6
(4) Urudu Boys Schools	...	25
(5) Urudu Girls Schools	...	18
Total	...	<u>311</u>

In addition to these schools the Medical Inspector and Inspectresses examined the students of two High Schools maintained by the Corporation of Madras one at 277, T.H. Road, Tondaiarpatt and the other at Nungambakkam High School.

Only one school Medical Ambulance Van was under the charge of the Chief Medical Inspector during the year for taking the children of the schools of South Madras to Skin Clinics for examination and treatment and to attend to other functions. No van was available for attending to the same work in North Madras as the present condemned one had not been replaced and consequently, the Children of North Madras Schools could not be given the benefit of such medical treatment.

The statement given below shows in detail the number of Regular and Entrants both Boys and Girls medically examined and the number defective

Groups	Boys			Girls		
	Num- ber Examined	Number found defective	Percentage	Num- ber Examined	Number found defective	Percentage
Entrants	856	350	40.09	3 186	1 581	49.62
Regular ...	2 074	853	31.14	3 724	1 592	42.75
Total ...	<u>2 930</u>	<u>1 203</u>	<u>41.06</u>	<u>6 910</u>	<u>3 173</u>	<u>45.92</u>

Malnutrition.—152 boys (5.19%) and 755 girls (10.93%) were found undernourished against 621 boys (5.42%) and 1,908 girls (15.38%), respectively in the previous year. 1,412 children were given Shark Liver Oil and Calcium Lactate for Malnutrition and reekety chest and 1,017 children were given yeast tablet, Vitamin C tablets and Iron tonic for various forms of stomatite and border case anemic of mal-nutritional origin and other forms of B. Complex and Vitamin B deficiency diseases.

Medical Treatment.—652 boys and 2,221 girls were treated at their schools. 17 boys and 262 girls were sent to Corporation dispensaries for attention and treatment as they could not be attended to at the schools. 100 boys and 536 girls were sent to Government Hospitals for various ailments, such as pharyngitis tonsillitis, discharge from the ear and other ailments for further investigations and treatment.

Re-inspection.—46 re-visits were made to the various schools and 2,936 boys and 6,910 girls were examined and 184 parents met and given necessary advice.

Personal Hygiene.—583 boys and 658 girls were found unhygienic in respect of these clothes had nails and body. Instruction was given to the children and also to the parents of the children to pay more attention to the above defects.

Diseases of Bones and Joints.—71 boys and 69 girls with bone disease were suitably advised.

Infectious and contagious diseases.—116 boys (3.96%) and 663 girls (8.53%) had infectious and contagious diseases. They were suitably segregated and isolated by giving separate seats and others sent to infectious disease hospital and Corporation Dispensaries for treatment and a few were advised to have complete treatment at home. 76 boys and 475 girls having scabies were suitably treated at the schools by issuing sufficient amount of unguentum sulphuric. 114 cases of Hansen and other skin diseases were suitably treated at the skin and leprosy clinic at Ice House Road, Triplicane. The school ambulance Van was used for the purpose.

Other diseases and defects.—78 boys (2.66%) 185 girls (2.65%) having defects not mentioned under the above categories were suitably treated.

Circulatory System.—94 boys (3.21%) 174 girls (2.52%) were advised proper treatment. Anemic children were given Iron Tonic.

Co-operation of Teachers.—There was good co-operation of the staff in various schools inspected towards identification of defects and treatment first aid was administered by teachers with medicine supplied from the Medical Stores.

School Sanitation.—Defects of schools noted with special reference to sanitation. Water Supply play ground facilities, etc., were pointed out and suggestions made for remedy of the defects.

MEDICAL INSPECTION

Serial Number	Defects	Boys						Girls									
		Entrants		Regulars		Total No. of Entrance and Regulars		Entrant		Regulars		Total No. Entrants Regulars					
		No Defective	Percentage		No Defective	Percentage		No Defective	Percentage		No Defective	Percentage					
			1963	1962		1963	1962		1963	1962		1963	1962				
1	Malnutrition	32	3.74	6.73	120	5.78	4.64	152	5.19	345	10.83	17.09	410	11.01	14.51	755	10.93
2	Dirty head and body, nails	9	1.05	2.03	21	1.01	2.72	30	1.02	25	0.78	0.597	18	0.48	0.245	43	0.62
3	Teeth and Mouth	227	26.52	10.93	356	17.11	2.04	583	19.59	318	9.98	12.40	340	9.13	11.48	658	9.52
4	Nose and throat	9	1.05	4.75	26	1.25	1.44	35	1.19	340	10.67	7.28	460	12.35	6.86	800	11.59
5	Eye Diseases	11	1.28	2.91	15	0.72	1.52	26	0.88	352	11.05	4.01	143	3.84	2.00	495	7.16
6	Vision	1	0.12	0.233	...	...	0.069	1	0.03	13	0.41	0.369	24	0.64	0.461	37	0.53
7	Ear Disease	9	1.05	1.54	20	0.96	1.019	29	0.99	31	0.97	0.853	37	0.99	0.519	68	0.98
8	Hearing	...	...	0.136	...	...	0.041	...	...	2	0.06	...	4	0.11	...	6	0.09
9	Speech	...	...	...	...	...	...	...	...	...	...	...	3	0.08	...	3	0.24
10	Circulatory system	26	3.04	1.28	68	3.28	2.05	94	3.21	94	2.95	1.25	80	2.15	1.56	174	2.52
11	Tuberculosis	...	...	...	...	...	...	...	...	2	0.06	0.199	5	0.13	0.144	7	0.10
12	Respiratory System	...	...	0.186	...	...	0.014	...	...	65	2.04	1.88	48	1.29	1.67	113	1.63
13	Abdominal System	...	...	0.093	...	...	...	...	...	2	0.06	...	...	...	0.202	2	0.03
14	Bones and Joints	25	2.92	2.70	46	2.21	2.75	71	2.42	48	1.51	1.62	21	0.56	0.648	69	0.99
15	Nervous and Psychic system	...	...	0.303	...	...	0.139	...	...	...	...	0.113	5	0.56	0.201	5	0.07
16	Infectious and Contagious Diseases	43	5.02	4.52	73	3.52	4.26	116	3.96	387	13.15	8.82	276	7.41	6.63	663	9.59
17	Other Disease as Defects	49	5.72	4.40	29	1.40	2.22	78	2.66	88	2.67	2.02	97	2.60	1.76	185	2.67
18	Vaccination	3	0.35	0.512	9	0.43	0.474	12	0.41	...	...	...	...	...	...	...	...
19	Deformities	17	1.99	2.09	47	2.27	2.85	64	2.18	12	0.38	0.369	7	0.19	0.504	19	0.27

MEDICAL INSPECTION

Groups	No. on Roll		Average Daily Attendance		Number Examined		Number Defective		Percentage	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Transients ...	998	3,506	1,027	2,365	856	3,186	350	1,581	40.09	49.62
Regulars ...	2,660	5,418	2,076	5,018	2,074	3,724	853	7,592	41.14	42.75
Total ...	3,658	8,954	3,103	7,382	2,930	6,910	1,203	3,173	41.06	45.92

TREATMENT TABLE

Sex	Number treated at school	Number sent to Corporation Dispensaries	Number referred to Government Hospitals	Number referred to Government Ophthalmic Hospitals	Number referred to Government Tuberculosis Hospitals	Number of parents met	Number of re-visits paid to schools	Number of re-examination of school children
Boys ...	652	17	100	10	...	80	46	1,900
Girls ...	2,221	262	536	23	7	150	138	3,455
Total ...	2,873	279	636	33	7	230	184	5,455

MEDICAL INSPECTION

Height and Weight Table 1963

Age	Average height in inches		Average weight in pounds		Quinquennial average height in inches		Quinquennial average weight in pounds	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
6	39.22	39.60	36.10	31.40	38.69	39.44	33.09	31.5
7	40.75	41.51	38.88	34.17	40.12	40.96	35.78	34.0
8	41.41	44.36	38.92	37.97	41.58	42.75	38.05	38.3
9	45.46	46.35	45.30	42.04	44.54	45.56	42.15	41.0
10	47.60	49.29	46.81	47.26	46.42	47.82	44.95	46.0
11	49.49	51.05	49.61	53.42	48.46	40.37	47.42	51.3
12	51.00	54.50	53.93	58.68	50.39	52.44	52.47	55.3
13	52.73	57.27	43.13	65.77	52.15	54.33	51.47	60.3
14	49.96	59.51	62.50	72.71	51.17	57.37	61.32	65.0
15	55.69	64.11	65.01	85.89	55.21	59.38	65.27	80.3
16	57.17	60.65	65.30	79.04	56.24	61.11	64.27	86.3
17	...	59.00	...	73.78	...	61.41	...	87.3
18	...	60.72	...	102.47	...	60.73	...	102.3

Nature of sample.	1963			1958		1959		1960		1961		1962	
	Number of samples analysed.	Number of adulterated samples.	Percentage of adulterated samples.	Number of samples analysed.	Percentage of adulterated samples.	Number of samples analysed.	Percentage of adulterated samples.	Number of samples analysed.	Percentage of adulterated samples.	Number of samples analysed.	Percentage of adulterated samples.	Number of samples analysed.	Percentage of adulterated samples.
Milk	4,260	1,516	35.6	4,597	41.6	4,496	42.2	4,642	43.2	3,793	38.5	4,446	35.5
Butter	592	70	11.8	555	17.1	567	16.2	583	16.5	553	11.8	609	11.3
Ghee	950	30	3.2	918	5.3	854	7.7	892	8.6	672	6.8	810	7.5
Gingelly Oil	790	48	6.1	1,319	14.7	1,140	9.3	1,143	8.7	988	7.3	911	15.7
Groundnut Oil	227	19	8.4	154	10.4	109	4.6	143	16.8	169	7.4	307	7.5
Cocoanut Oil	321	4	1.2	209	5.3	273	2.9	385	2.6	354	1.4	350	1.4
Coffee Powder	230	25	10.9	322	11.8	452	8.0	286	7.7	265	6.8	255	4.3
Tea	107	10	9.3	73	15.1	63	7.9	102	5.9	71	8.5	162	4.3
Ghee substitutes	5	...	...	2	100.0	3	33.3	4	25.0	90	0.0	29	10.3
Other Articles	187	55	24.0	153	21.6	166	26.8	197	33.5	208	31.3	249	33.7
Total	7,669	1,777	23.2	8,302	28.5	8,123	27.8	8,377	28.7	7,163	24.4	8,128	24.4

Dhall—112; Turmeric—34; Maida—15; Chillies (Powder) —7; Asafoetida—3; Honey—3; Food Colour—3; Wheat (Samba—2; " —27; " —9; " —0; " —5; " —3; " —2; " —3; " —0;

Arrowroot—2; Ravai—1; Prepared Food Sweet Cake—1; Kesari Powder —1; Jaggery —1; Masoor—1; Aerated water—1; " —0; " —0; " —1; " —1; " —1; " —1;

FOOD ANALYSIS.

STATEMENT No. II

Circles divisions	I & II (1—20)			III & IV (21—40)			V & VI (41—60)			VII & VIII (61—80)			IX & X (81—100)			I to X (1 to 100)		
	Food Inspector 'A' Range			Food Inspector 'B' Range			Food Inspector 'C' Range			Food Inspector 'D' Range			Food Inspector 'E' Range			Sanitary Inspector (50)		
Nature of articles	Food Inspector 'A' Range			Food Inspector 'B' Range			Food Inspector 'C' Range			Food Inspector 'D' Range			Food Inspector 'E' Range			Sanitary Inspector (50)		
	Number of samples taken.	Genuine	Adulterated	Number of samples taken.	Genuine	Adulterated	Number of samples taken.	Genuine	Adulterated	Number of samples taken.	Genuine	Adulterated	Number of samples taken.	Genuine	Adulterated	Number of samples taken.	Genuine	Adulterated
1. Milk	623	301	322	550	319	231	562	383	179	528	374	154	603	381	222	1,394	986	408
2. Ghee and Ghee sub- stitutes	144	142	2	109	105	4	119	115	4	123	118	5	140	136	4	320	309	11
3. Butter	104	94	10	36	29	7	88	86	2	87	76	11	114	94	20	163	143	20
4. Edible oils	113	107	6	137	130	7	121	110	11	140	139	1	119	114	5	708	667	41
5. Coffee	47	39	8	45	39	6	38	36	2	50	49	1	48	40	8	2	2	...
6. Tea	28	21	7	17	15	2	13	13	...	25	24	1	24	24	...	...	...	...
7. Other articles	32	18	14	34	21	13	38	27	11	37	30	7	43	35	8	3	1	2
Total	1,091	722	369	928	658	270	979	768	219	990	810	180	1,091	824	267	2,590	2,108	482

Nature of samples	the samples analysed in 1963.						previous years pending disposal on 1-1-1963						rated samples dealt with during 1963						Average fine or conviction in 1963.	Number of convictions in 1962.	Total fines imposed in 1962.	Average fine per conviction in 1962.				
	Number of samples.	Number of convictions.	Number of articles seized and forfeited or destroyed without prosecution.	Number acquitted, warned, admonished or withdrawn.	Number not prosecuted.	Number pending disposal on 31st December 1963.	Number of samples.	Number of convictions.	Number of articles seized and forfeited or destroyed without prosecution.	Number acquitted, warned, admonished or withdrawn.	Number not prosecuted.	Number pending disposal on 31st December 1963.	Number of samples.	Number of convictions.	Number of articles seized and forfeited or destroyed without prosecution.	Number acquitted, warned, admonished or withdrawn.	Number not prosecuted.	Number pending disposal on 31st December 1963.								
Milk	1,516	731	...	3	98	684	4,952	595	...	12	...	4,345	6,468	1,326*	...	15	98	5,029	71,839	50	54	822	42,294	51	Rs.	Rs.
Butter	70	23	...	2	21	24	153	28	...	1	...	124	223	51†	...	3	21	148	3,165	00	62	27	2,555	95		
Ghee	30	17	...	...	3	10	242	17	...	3	...	222	272	34†	...	3	3	232	6,356	00	187	30	3,018	101		
Gingelly Oil	48	21	...	...	22	5	187	64	...	1	...	122	235	85**	...	1	22	127	3,335	00	39	58	2,590	45		
Groundnut Oil.	19	9	...	1	4	5	28	8	...	3	...	17	47	17	...	4	4	22	705	00	41	7	195	28		
Cocanut Oil	4	3	...	...	1	...	9	4	...	...	...	5	13	7	...	...	1	5	260	00	37	2	510	255		
Coffee Powder.	25	9	...	...	4	12	53	1	...	1	...	51	78	10	...	1	4	63	645	00	65	8	1,210	151		
Tea	10	7	...	...	...	3	16	3	...	...	...	13	26	10	...	...	...	16	445	00	45	7	380	54		
Ghee Substitutes	...	...	...	...	...	...	6	...	...	...	...	6	6	...	...	...	...	6	...	...	...	1	20	20		
Other Articles	55	32	...	1	4	18	79	32	...	6	...	41	134	64	...	7	4	59	2,125	00	33	66	2,735	41		
Total ...	1,777	852	...	7	157	761	5,725	752	...	27	...	4,946	7,502	1,604	...	34	157	5,707	88,875	50	55	1,028	55,507	54		

* 18 cases convicted with fines as well as imprisonment ranging from simple imprisonment till rising of Court to rigorous imprisonment upto one year.

† 1 case convicted with fines as well as imprisonment till rising of the Court.

‡ 2 cases convicted with fines as well as imprisonment till rising of the Court.

** 1 case convicted with fines as well as imprisonment till rising of the Court.

WATER ANALYSIS

STATEMENT No. 1

The number of samples of water tested for Chemical,
Bacteriological purposes in 1963

Serial No.	Description of samples	Number of samples
1	From the sources of the Kortalayar River System ...	24
2	From the Headworks at Kilpauk Water Works ...	1,733
3	From the Infiltration Gallery Wells at Sembiam ...	11
4	From the Infiltration Galley Well at Saidapet ...	12
5	From the City Distribution System ...	1,100
6	From Sembiam Distribution System ...	91
7	From Saidapet Distribution System ...	82
8	From the shallow wells at Adayar, Kodambakkam Guindy, Triplicane, Marina and North Madras ...	182
9	Private samples (including complaints) ...	226
10	Sewage and Sewage effluent ...	12
11	From the water mains under sterilisation ...	174
12	Special samples ...	74
13	Microscopical Examination ...	90
Total ...		3,811

Monthly average levels in three Reservoirs and the total monthly rainfall recorded in their catchments in 1963

Months 1963	Sathyamoorthy Sagar (Poondi Reservoir)		Sholavaram Reservoir		Red Hills Reservoir	
	Average lake level in feet	Rainfall in m.m.	Average lake level in feet	Rainfall in m.m.	Average lake level in feet	Rainfall in m.m.
January	137.27	75.00	60.04	115.40	45.23	76.20
February	136.13	Nil	61.48	Nil	45.18	Nil
March	134.96	Nil	60.13	Nil	45.02	2.50
April	133.52	85.44	59.96	Nil	44.30	7.10
May	131.85	25.40	60.16	Nil	43.75	Nil
June	127.23	82.60	59.47	67.70	43.79	22.80
July	120.10	89.10	60.14	72.50	44.42	74.40
August	120.26	209.95	58.92	94.46	43.47	106.90
September	124.21	106.10	58.19	100.20	42.57	77.20
October	130.04	150.40	58.02	180.50	42.35	161.71
November	136.62	232.80	59.93	328.90	45.31	252.55
December	137.91	129.80	63.75	213.50	45.87	172.70
		1186.59	...	1,173.16	...	954.06

WATER ANALYSIS

STATEMENT No. III

Linnological conditions of the sources of the City Water Supply (a) Sathyamoorthy Sagar in 1963.
(Results expressed in parts per 100,000)

Description	30-1-63	25-2-63	30-7-63	29-8-63	30-9-63	30-12-63	
<i>A. Physical Conditions :</i>							
Time	4-00 P.M.	3-40 P.M.	3-45 P.M.	3-15 P.M.	5-15 P.M.	5-45 P.M.	...
Depth in feet (above mean sea-level)	137.27	136.13	120.10	120.26	124.21	137.91	...
Colour	W	W	G	G	Y	W	...
Temperature (oC)	27.0	29.0	30.0	30.5	29.0	26.5	
Turbidity (p.p.m.) Silica Scale	12.5	6.0	125	165	80	11.0	
<i>B. Chemical conditions :</i>							
Total solids	32.4	34.4	42.4	40.8	31.0	27.2	
Total hardness	11.6	11.0	7.6	7.6	8.2	11.2	
Calcium hardness	4.6	4.2	3.8	2.4	4.0	5.6	
Magnesium hardness	7.0	6.8	3.8	5.2	4.2	5.6	
Chlorides	3.7	3.8	7.6	7.8	4.0	4.1	
Ammoniacal Nitrogen	Nil	0.004	0.002	0.003	0.016	0.002	
Albuminoid Nitrogen	0.019	0.040	0.096	0.096	0.048	0.004	
Nitrous Nitrogen	Nil	Tr.	Nil	Nil	Int.	Nil	
Nitric Nitrogen	Tr.	Nil	Nil	Nil	Tr.	Nil	
Oxygen absorbed (Tidy's)	0.172	0.192	0.350	0.510	0.280	0.165	
Alkalinity to Phenolphthalein	1.0	0.5	1.8	0.7	Nil	0.6	
Alkalinity to Methyl orange	21.5	19.1	20.2	18.2	14.8	17.8	
Phosphates	0.001	0.001	0.001	0.001	Nil	0.001	
Silicates	2.0	2.0	1.8	1.8	2.0	1.8	
Sulphate	1.0	0.6	1.7	1.8	1.8	1.4	
Iron	0.015	Tr.	0.04	0.02	0.02	0.01	
pH.		8.6	8.5	8.5	7.7	8.3	
Sp. conductivity at 25°C (micromhos/cm.)	440	415	615	585	425	420	
Dissolved oxygen (cc/l)	5.39	7.7	4.9	6.58	4.5	5.8	
<i>C. Bacteriological conditions :</i>							
B. coli present in how many cc. and up wards.	10 cc	20 cc	5cc	*79	*342	*542	
M.P.N. of coliforms in 100 ml.							

Results expressed in parts per 100,000)

Description	30-1-63	2-63	25-2-63	4-63	31-5-63	29-6-63	30-7-63	29-8-63	30-9-63	30-12-63
<i>A. Physical conditions:</i>										
Time	5-15 P.M.	5-45 P.M.	4-00 P.M.	4-00 P.M.	4-00 P.M.	5-15 P.M.	4-20 P.M.	4-00 P.M.	4-00 P.M.	
Depth in feet (above mean sea-level)	60.04	61.48	59.96	60.16	59.47	60.14	58.92	58.19	63.75	
Colour	W	W	C	S.Y.	S.Y.	Y	W	W	W	
Temperature (°C)	27.5	28.5	30.4	32.5	32.5	29.5	31.0	29.5	26.5	
Turbidity (p.p.m.) Silica scale	12.5	6.0	16.5	14.0	18.5	35.0	80.0	60.0	14.0	
<i>B. Chemical conditions:</i>										
Total solids	32.0	28.8	30.2	31.2	34.2	35.2	37.2	38.0	23.2	
Total hardness	12.2	10.6	8.8	8.0	6.6	7.0	7.4	7.8	9.8	
Calcium hardness	5.2	4.6	2.8	2.6	2.2	3.8	2.8	3.4	5.2	
Magnesium hardness	7.0	6.0	6.0	5.4	4.4	3.2	4.6	4.4	4.6	
Chlorides	4.3	4.8	5.0	5.2	5.9	5.8	6.3	6.1	3.8	
Ammoniacal Nitrogen	Nil	Nil	Nil	0.002	Nil	0.002	Nil	0.003	0.002	
Albuminoid Nitrogen	0.016	0.060	0.040	0.040	0.040	0.048	0.040	0.048	0.004	
Nitrous Nitrogen	Nil	Tr.	Nil	Tr.	Int.	Nil	Nil	Tr.	Nil	
Nitric Nitrogen	Tr.	Nil	Nil	Tr.	Tr.	Nil	Tr.	Nil	Nil	
Oxygen absorbed (Tidy's)	0.125	0.162	0.182	0.197	0.249	0.209	0.225	0.173	0.149	
Alkalinity to Phenolphthalein	0.8	1.0	1.9	1.4	2.0	2.0	1.0	0.4	0.3	
Alkalinity to Methyl orange	17.7	15.9	16.5	17.9	19.0	17.8	19.3	18.9	12.7	
Phosphates	0.001	0.001	0.001	0.001	0.001	0.001	0.001	Nil	0.001	
Silicates	2.5	1.8	2.0	1.8	1.8	2.0	1.6	2.0	1.8	
Sulphate	2.8	2.4	2.0	2.0	0.6	1.0	1.6	1.8	1.6	
Iron	0.01	Tr.	0.015	0.01	Tr.	0.03	0.08	0.04	0.015	
pH.	8.5	8.6	8.9	8.9	8.6	8.3	8.0	8.0	8.3	
Sp. conductivity at 25°C (micromhos/cm)	440	435	470	490	515	520	535	550	360	
Dissolved oxygen (cc./l)	5.6	6.0	5.46	5.46	5.32	5.88	5.74	6.6	5.6	
<i>C. Bacteriological conditions:</i>										
B. coli present in how many cc. and upwards	—60 cc.	20 cc.	1.0 cc.	1.0 cc.	1.0 cc.	1.0 cc.	*240	*240	*33	
M.P.N. of coliforms in 100 ml. or										

* From August, estimation of M.P.N. of coliforms in 100 ml. was adopted as per Standard Specification of W.H.O.

Salient Physical, Chemical and Bacteriological data for chlorinated raw water—1963.

(Results expressed in parts per 100,000)

Months (1963)	No. of samples	Colour	Turbidity (p.p.m.)	Total solids	Total hardness	Chlorides	Ammoniacal Nitrogen	Albuminoid Nitrogen	Nitrates	Nitrites	Oxygen absorbed (Tiddys)	Alkalinity to		P.H.	Iron	Phosphates	Silicates	Sp. Conductance (micronhos/cm)	% of samples showing absence of coliforms in 60 cc.
												P.T.H.	M.O.						
January	22	W.	12.5	30.0	8.8	4.5	Nil	0.044	Nil	Nil	0.146	0.8	13.8	8.3	Tr	0.001	1.6	390	82
February	22	S. W.	11.9	27.4	9.1	4.7	0.002	0.044	Tr	Nil	0.156	0.1	13.5	8.3	Tr	0.001	1.6	380	90
March	23	S. W.	13.2	26.0	9.2	4.8	0.002	0.044	Tr	Nil	0.162	0.5	13.1	8.3	Tr	0.001	1.6	390	52
April	24	S. W.	17.0	29.8	8.8	5.2	0.002	0.045	Tr	Nil	0.163	1.0	13.6	8.4	Tr	0.001	1.8	450	83
May	26	S. Y	15.5	30.4	8.6	5.5	Nil	0.045	Tr	Nil	0.164	1.4	13.9	8.7	0.01	0.001	1.6	460	74
June	23	S. Y	15.7	31.8	8.4	5.7	0.002	0.040	Nil	Nil	0.209	1.3	14.8	8.3	Tr	0.001	1.8	490	47
July	26	S. Y	12.8	32.0	8.1	5.8	0.003	0.050	Nil	Tr	0.188	1.2	16.0	8.5	0.01	0.001	1.7	510	46
August	22	S. Y	16.7	33.0	8.2	6.3	0.019	0.052	Tr	Nil	0.197	1.1	15.4	8.3	Tr	0.001	1.7	500	59
September	24	S. Y	12.5	34.2	7.8	6.2	0.002	0.042	Nil	Nil	0.218	1.2	15.8	8.4	Tr	0.001	1.8	505	33
October	24	S. Y	15.5	32.9	8.0	6.8	0.002	0.042	Nil	Nil	0.195	0.7	16.1	8.7	Tr	0.001	1.7	500	4
November	23	S. Y	14.0	31.6	7.8	6.0	Nil	0.042	Nil	Nil	0.187	0.8	14.7	8.3	Tr	Nil	1.8	460	22
December	24	S. Y	12.5	25.2	7.8	5.3	0.002	0.044	Nil	Nil	0.149	0.5	13.0	8.4	Tr	Nil	1.7	405	33

WATER ANALYSIS

Statement No. VII

Salient Physical, Chemical and Bacteriological data for filtrates from slow sand filters—1963.
(Results expressed in parts per 100,000)

Months (1963)	No. of samples	Colour	Turbidity (p.p.m.)	Total solids	Total hardness	Chlorides	Ammoniacal Nitrogen	Albuminoid Nitrogen	Nitrites	Nitrates	Oxy. absorbed (Tlids)	Alkalinity to		P H	Iron	Phosphates	Silicates	Sp. conductance (micro mhos/cm.)	% of samples showing absence of coli- forms in 60 cc.
												P.T.H.	M.O.						
January	22	C & C	3.9	28.6	8.6	4.5	0.012	0.044	Pr	Pr	0.117	Nil	14.0	7.9	Tr	0.001	1.6	390	32
February	22	C & C	4.1	27.6	9.2	4.6	0.004	0.042	Tr	Nil	0.143	Nil	13.3	8.1	Tr	0.001	1.6	385	14
March	23	C & C	4.4	25.4	9.4	4.8	0.018	0.038	Tr	Nil	0.146	— 0.2	13.7	7.9	Tr	0.001	1.6	390	9
April	24	C & C	5.0	28.6	8.6	5.2	0.028	0.042	Pr	Nil	0.141	Nil	13.5	8.0	Tr	0.001	1.8	450	4
May	26	C & C	6.6	29.4	8.5	5.4	0.012	0.050	Pr	Nil	0.160	0.7	13.9	8.3	0.01	0.001	1.6	460	4
June	23	C & C	7.3	31.8	8.4	5.7	0.019	0.048	Nil	Nil	0.200	0.9	14.6	8.3	Tr	0.001	1.8	490	13
July	26	C & C	4.8	32.0	8.3	5.8	0.019	0.052	Pr	Tr	0.169	0.6	15.7	8.3	0.01	0.001	1.7	510	4
August	22	C & C	5.6	31.6	8.1	6.3	0.034	0.044	Tr	Nil	0.175	0.8	15.4	8.1	Tr	0.001	1.7	500	5
September	24	C & C	7.5	33.2	7.8	6.3	0.024	0.042	Tr	Nil	0.210	0.9	15.6	8.2	Tr	0.001	1.8	505	4
October	24	C & C	7.1	32.3	8.3	6.8	0.010	0.045	Pr	Nil	0.176	0.5	16.0	8.3	Tr	0.001	1.7	500	0
November	23	C & C	8.3	31.3	7.9	6.1	0.009	0.045	Tr	Nil	0.174	0.4	14.8	8.2	Tr	Nil	1.8	460	4
December	24	C & C	6.6	25.0	7.9	5.4	0.008	0.044	Nil	Nil	0.137	0.4	13.1	8.3	Tr	Nil	1.8	410	0

Salient Physical, Chemical and Bacteriological Data for Filtrates from Rapid Gravity Filters—1963.
(Results expressed in parts per 100,000).

Months (1963)	No. of samples	Colour	Turbidity (p.p.m.)	Total solids	Total hardness	Chlorides	Ammoniacal Nitrogen	Albuminoid Nitrogen	Nitrite	Nitrate	Oxy. absorbed (Tidy's)	Alkalinity to		pH	Iron	Phosphate	Silicates	Sp. conductance (micro mhos/cm.)	% of samples showing absence of col- forms in 66 cc.
												P.T.H.	M.O.						
January	22	C & C	3.5	29.0	10.4	4.6	Nil	0.044	Nil	Nil	0.070	0.2	16.8	8.1	Nil	0.001	1.6	390	59
February	22	C & C	3.6	28.0	9.4	4.0	0.002	0.040	Tr.	Nil	0.087	0.1	13.0	7.9	Tr.	0.001	1.6	395	50
March	23	C & C	4.9	27.6	10.0	4.9	Nil	0.040	Tr.	Nil	0.092	0.1	12.7	8.0	Tr.	0.001	1.6	410	13
April	24	C & C	3.7	27.2	9.4	5.3	Nil	0.030	Tr.	Nil	0.096	Nil	12.7	8.0	Tr.	0.001	1.7	465	12
May	26	C & C	5.1	29.2	8.7	5.4	Nil	0.035	Tr.	Nil	0.105	0.5	13.4	8.2	Tr.	0.001	1.6	460	31
June	23	C & C	5.6	32.4	8.9	5.7	0.002	0.040	Tr.	Nil	0.144	0.6	14.0	8.2	Tr.	0.001	1.7	500	13
July	26	C & C	5.5	32.2	9.1	6.0	0.002	0.050	Tr.	Tr.	0.087	Nil	14.8	8.0	0.01	0.001	1.8	510	12
August	22	C & C	4.0	33.0	9.1	6.4	0.003	0.044	Nil	Nil	0.083	Nil	14.5	8.0	Tr.	0.001	1.8	525	5
September	24	C & C	2.9	34.0	7.9	6.4	Nil	0.040	Nil	Nil	0.120	Nil	13.7	7.6	Tr.	0.001	1.8	520	12
October	24	C & C	5.4	35.4	8.9	6.9	0.002	0.040	Tr.	Nil	0.092	Nil	13.9	8.9	Tr.	0.001	1.9	530	8
November	23	C & C	3.5	31.6	8.0	6.2	0.003	0.040	Nil	Nil	0.102	Nil	12.6	7.5	0.01	Tr.	1.8	475	16
December	24	C & C	3.1	25.3	7.8	5.4	0.002	0.042	Nil	Nil	0.075	Nil	11.3	7.5	Tr.	Nil	1.6	415	9

WATER ANALYSIS

STATEMENT No. IX

Salient Physical, Chemical and Bacteriological Data for Test Tap samples collected from Test Tap at the Kilpauk Pumping station—1963.

(Results expressed in parts per 100,000).

Months (1963)	No. of samples	Colour	Turbidity (p.p.m.)	Total solids	Total hardness	Chlorides	Ammonical Nitrogen	Albuminoid Nitrogen	Nitrite	Nitrates	Oxy. Absorbed (Tidy)	Alkalinity to		pH	Iron	Phosphates	Silicates	Sp. conductance (micro mhos/cm.)	Percentage of samples showing above of Coliforms in 60 cc.	
												P.T.H.	M.O.						11 A.M.	4 P.M.
January	22	C & C	3.5	28.3	9.1	4.5	Nil	0.044	Nil	Nil	0.094	Nil	12.8	8.1	Nil	0.001	1.6	395	100	100
February	22	C & C	2.8	28.6	10.3	4.7	Nil	0.040	Tr.	Nil	0.107	Nil	12.5	8.0	Tr.	0.001	1.6	405	90	77
March	23	C & C	4.1	27.4	9.2	4.9	0.003	0.040	Tr.	Nil	0.119	0.1	13.2	8.0	Tr.	0.001	1.6	395	34	32
April	24	C & C	4.6	29.0	8.8	5.2	0.008	0.043	Tr.	Nil	0.081	Nil	13.1	8.0	Tr.	0.001	1.8	450	29	32
May	26	C & C	4.7	29.1	8.6	5.5	0.006	0.046	Tr.	Nil	0.102	0.2	13.6	8.2	Tr.	0.001	1.7	460	15	20
June	23	C & C	5.5	31.6	8.4	5.7	0.005	0.043	Tr.	Nil	0.144	0.6	14.2	8.3	Tr.	0.001	1.7	500	22	23
July	26	C & C	4.2	32.2	8.5	6.2	0.006	0.052	Tr.	Tr.	0.116	Nil	15.2	8.0	0.01	0.001	1.8	510	58	60
August	22	C & C	4.1	31.2	8.5	6.5	0.006	0.048	Tr.	Nil	0.100	Nil	15.0	8.0	Tr.	0.001	1.7	510	82	71
September	24	C & C	3.1	33.4	7.8	6.4	0.006	0.040	Tr.	Nil	0.147	0.4	14.7	7.9	Tr.	0.001	1.8	510	87	64
October	24	C & C	5.4	34.2	8.1	7.0	0.009	0.045	Tr.	Tr.	0.118	Nil	15.2	8.1	Tr.	0.001	1.6	520	96	91
November	23	C & C	3.8	30.3	8.1	6.1	0.003	0.037	Nil	Nil	0.105	Nil	13.8	7.8	Tr.	Nil	1.8	470	100	95

WATER ANALYSIS

Chlorination Data for 1963—Furnished by the Water Works Department

H-70

Months 1963	Quantity of water filtered in million gallons per day			Dose of chlorine applied to raw water in p.p.m.			Dose of chlorine applied to filtered water in p.p.m.			Lbs. of chlorine used per month for R.W. chlorination	Lbs. of chlorine used per month for water chlorination	Total Lbs. of chlorine used per month and its K.G. equivalent	Total cost worked at 65 nP. per K.G. plus S.T.
	Max.	Min.	Mean.	Max.	Min.	Dean.	Max.	Min.	Mean.				
January	35.95	31.51	33.19	2.54	0.9	1.96	3.60	2.02	2.80	20,436	29,060	22,482 K.G.	Rs. 14,612 nP.
February	36.94	32.05	34.22	2.50	1.0	1.89	3.30	3.20	2.64	17,979	25,394	19,691 K.G.	12,799 15
March	36.76	32.75	35.00	2.03	1.0	1.79	3.0	1.3	2.46	19,739	26,788	21,123 K.G.	13,729 95
April	36.65	33.77	34.92	2.22	1.10	1.70	2.97	1.90	2.41	19,728	25,434	20,523 K.G.	13,341 19
May	37.0	32.71	35.06	2.08	0.8	1.37	3.20	2.19	2.74	15,728	29,836	45,753 K.G.	14,151 80
June	35.78	33.75	34.67	1.04	0.6	1.04	3.94	1.2	2.12	10,744	25,845	16,611 K.G.	10,807 15
July	35.62	33.45	34.54	1.04	0.40	0.69	3.70	0.82	3.10	6,492	33,512	36,589 K.G.	11,805 30
August	36.29	32.68	34.98	2.00	0.50	0.79	3.60	2.40	3.05	8,216	32,264	18,378 K.G.	11,945 70
September	32.52	33.53	34.50	1.30	0.70	0.98	3.40	2.17	2.74	10,073	28,966	40,004 K.G.	11,520 60
October	36.40	32.80	34.58	1.80	Nil	0.85	3.80	3.06	3.42	8,499	36,210	39,039 K.G.	13,193 70
November	38.64	33.78	34.90	1.06	0.70	0.79	3.80	2.40	3.20	8,138	34,356	20,298 K.G.	12,539 80
December	38.50	32.90	34.80	1.10	0.30	0.73	3.10	1.5	2.60	8,368	27,769	19,292 K.G.	10,563 25
Total cost	...	...	...	...	...	...	...	...	...	...	...	...	1,51,009 59

WATER ANALYSIS

Chemicals Data—Mechanical Filters—For 1

Months	Quantity of water filtered in million gallons per day			Dose of Alum in grains/ gallon			Dose of Chlorine in p. p. m.			Dose of Lime in grains/ gallon			Quant of Al us
	Max.	Min.	Mean.	Max.	Min.	Mean.	Max.	Min.	Mean.	Max.	Min.	Mean.	Tons
January ...	9.980	9.601	9.601	4.0	1.9	3.08	2.4	2.4	2.4	2.0	1.25	1.69	59
February ...	9.890	9.223	9.520	4.0	2.0	2.3	2.4	2.4	2.4	2.0	1.5	1.6	38
March ...	9.656	8.860	9.351	4.0	2.0	2.19	2.4	2.4	2.4	2.0	1.0	1.45	44
April ...	9.568	8.954	9.304	4.0	2.0	2.16	2.4	2.4	2.4	1.0	1.0	1.0	42
May ...	9.877	9.167	9.421	2.0	2.0	2.0	2.4	2.4	2.4	1.0	1.0	1.0	40
June ...	10.134	9.280	9.792	2.0	2.0	2.0	2.4	2.4	2.4	1.0	1.0	1.0	39
July ...	10.150	9.183	9.390	4.0	2.0	2.97	2.4	2.4	2.4	1.5	1.0	1.21	59
August ...	9.619	8.336	9.331	4.0	3.0	3.71	2.4	2.4	2.4	1.3	1.0	1.03	74
September ...	9.832	8.283	9.329	4.0	2.0	3.46	2.5	2.1	2.27	...	...	...	67
October ...	9.858	5.483	9.358	4.0	4.0	4.0	2.2	1.1	1.8	1.5	1.5	1.5	80
November ...	10.117	8.859	9.693	4.0	4.0	4.0	2.6	1.5	1.93	1.5	1.5	1.5	78
December ...	9.901	9.138	9.552	4.0	4.0	4.0	3.0	1.0	1.89	...	...	...	80

STATEMENT No. X (a)

shed by the Water Works Department

Alum s. 278 (33) and s. 355 (3-64)		Quantity of Chlorine used	Cost of Chlo- rine at 65 nP. per K.G.		Quantity of Lime used		Cost of Lime at Rs. 209 (1962-63) and Rs. 214 (1963-64)		Total Cost	
	nP.	K.G.	Rs.	nP.	Tons	K.G.	Rs.	nP.	Rs.	nP.
43	23	3,367	2,188	55	30	800	6,437	20	25,168	98
61	30	2,826	1,836	90	24	150	5,147	35	17,645	55
87	60	3,364	2,186	60	27	...	5,643	00	19,117	20
29	50	3,299	2,144	35	18	...	3,852	00	21,225	85
06	50	3,377	2,195	05	18	600	3,980	40	20,481	95
45	00	3,269	2,124	85	18	...	3,852	0	19,821	85
29	00	3,377	2,195	05	22	500	4,815	00	28,239	05
76	50	3,377	2,195	05	15	200	3,252	80	31,824	35
98	00	3,104	2,017	60	...	...	...		26,015	60
313	00	1,939	1,160	35	27	900	5,970	60	35,743	95
390	00	2,548	1,656	20	12	578	2,691	69	32,037	89
313	00	2,593	1,685	45	...	...	...		30,298	45
Total								...	3,07,620	67

STATEMENT No. XI

WATER ANALYSIS

Salient Physical, Chemical and Bacteriological Data for samples collected from High Pressure areas of the City Distribution—1963.

(Results expressed in parts per 100,000)

Months (1963)	No. of samples	Smell.	Total solids.	Total hardness	Chlorides	Ammoniacal Nitrogen	Albuminoid Nitrogen	Nitric	Nitrate	Oxygen absorbed (Tidy's)	Iron	pH.	% of samples showing absence of Coliforms in 60 cc.
January	13	Nil	28.0	8.8	4.6	0.003	0.040	Tr.	Nil	0.086	Nil	7.9	85
February	6	Nil	27.2	9.0	4.7	0.002	0.040	Tr.	Nil	0.097	Tr.	...	100
March	8	Nil	29.4	9.3	5.0	0.002	0.040	Tr.	Tr.	0.100	Tr.	8.0	62
April	27	Nil	28.7	8.8	5.3	0.015	0.036	Tr.	Nil	0.110	Tr.	7.9	44
May	21	Nil	29.6	8.6	5.4	Nil	0.040	Tr.	Tr.	0.100	0.01	8.1	33
June	24	Nil	32.0	8.8	5.7	0.005	0.040	Pr.	Tr.	0.139	Tr.	8.0	25
July	37	Nil	33.6	8.3	6.1	0.002	0.040	Pr.	Tr.	0.085	Tr.	7.9	70
August	21	Nil	32.8	8.2	6.6	0.002	0.048	Tr.	Nil	0.102	Tr.	8.0	52
September	9	Nil	32.0	7.8	6.2	0.002	0.036	Tr.	Nil	0.148	Tr.	8.0	89
October	8	Nil	33.0	8.2	6.9	0.003	0.048	Tr.	Tr.	0.110	Tr.	8.1	100
November	72	Nil	32.0	8.0	6.6	0.002	0.048	Nil	Tr.	0.121	Nil	8.1	83
					5.6	0.002	0.032	Nil	Nil	0.100	0.01	7.8	107

Salient Physical, Chemical and Bacteriological Data for samples collected from Low Pressure areas of the City Distribution System—1963

Months (1963)	No. of samples	Smell	Total Solids	Total hardness	Chlorides	Ammonical Nitrogen	Albuminoid Nitrogen	Nitric	Nitrate	Oxygen absorbed (Tidy's)	Iron	pH	% of samples showing absence of Coliform in 66 cc.
January	77	Nil	28.2	8.9	4.7	0.016	0.040	Tr.	Tr.	0.094	0.01	7.9	83
February	73	Nil	28.4	9.7	4.8	0.002	0.034	Tr.	Nil	0.114	0.015	...	63
March	37	Nil	27.6	9.2	4.9	0.002	0.040	Tr.	Tr.	0.100	0.01	7.9	27
April	84	Nil	28.6	8.8	5.2	0.003	0.036	Tr.	Tr.	0.109	0.01	7.9	34
May	104	Nil	29.8	8.6	5.4	0.008	0.040	Pr.	Tr.	0.102	0.01	8.0	27
June	107	Nil	32.0	8.6	5.8	0.003	0.042	Tr.	Tr.	0.134	0.01	8.1	32
July	87	Nil	32.4	8.4	6.0	0.005	0.040	Tr.	Tr.	0.081	0.01	8.0	53
August	71	Nil	32.8	8.4	6.6	0.003	0.044	Tr.	Nil	0.098	Tr.	8.0	53
September	58	Nil	33.8	7.8	6.3	0.002	0.040	Tr.	Nil	0.160	Tr.	7.9	45
October	15	Nil	34.0	8.4	7.0	0.003	0.048	Tr.	Tr.	0.099	0.01	8.1	66
November	50	Nil	33.0	8.1	6.3	0.002	0.040	Nil	Nil	0.112	Tr.	8.2	38
December	36	Nil	26.4	8.0	5.4	0.002	0.040	Nil	Tr.	0.085	0.01	7.8	75

WATER ANALYSIS

STATEMENT No. XIII

Salient Physical, Chemical and Bacteriological Data for samples collected from Booster areas of the City Distribution System—1963

(Results expressed in parts per 100,000)

Months (1963)	No. of samples	Smell	Total solids	Total hardness	Chlorides	Ammonical Nitrogen	Albuminoid Nitrogen	Nitric	Nitrate	Oxygen absorbed (Tidy's)	Iron	pH	% of samples showing absence of coliforms in 66 c.c.
January	11	Nil	27.4	9.0	4.6	0.002	0.040	Nil	Nil	0.104	0.01	8.0	55
February	9	Nil	29.2	9.4	4.9	Nil	0.032	Tr.	Nil	0.093	0.01	...	56
March	4	Nil	29.0	9.2	5.0	0.040	0.040	Tr.	Nil	0.096	0.01	7.9	25
April	6	Nil	28.2	8.8	5.3	0.004	0.040	Tr.	Tr.	0.115	0.01	7.9	50
May	16	Nil	29.4	8.7	5.4	0.010	0.040	Pr.	Tr.	0.100	Tr.	8.0	50
June	24	Nil	31.8	8.6	5.7	0.003	0.040	Tr.	Tr.	0.131	Tr.	8.1	8
July	9	Nil	34.0	8.4	5.9	0.006	0.056	Tr.	Tr.	0.086	0.01	7.9	...
August	18	Nil	33.0	8.1	6.6	0.002	0.048	Pr.	Tr.	0.096	0.01	8.0	39
September	10	Nil	34.2	7.8	6.4	0.002	0.044	Tr.	Tr.	0.166	Tr.	7.9	65
October	6	Nil	33.0	8.2	7.0	0.004	0.048	Tr.	Tr.	0.102	0.01	8.1	100
November	15	Nil	33.0	8.2	6.6	Nil	0.048	Nil	Tr.	0.093	Tr.	8.0	60
December	9	Nil	26.0	7.9	5.5	0.002	0.040	Nil	Nil	0.101	0.01	7.7	33

(Results expressed in parts per 100,000)

Months (1963)	Total solids	Total hardness	Chlorides	Ammoniacal Nitrogen	Albuminoid Nitrogen	Nitrite	Nitrate	Oxy. absorbed (Tidy)	Phenolphthalein Alkalinity	Methyl Orange Alkalinity	pH	Iron	Phosphates	Silicates	Sp. conductance (micro mhos/cm.)	Coliforms-present in low many cc. or M.P.N. in 100 ml
January	50.0	22.0	15.0	Nil	0.002	Nil	Nil	0.029	—	2.5	13.8	6.9	0.04	0.003	5.0	725—60 cc.
February	53.8	18.0	16.0	Nil	0.002	Nil	Nil	0.038	—	2.5	13.8	7.1	0.04	0.002	5.0	760—60 cc.
March	47.6	16.0	13.0	0.002	0.003	Nil	Nil	0.044	—	0.5	12.8	7.2	0.06	0.010	4.0	710—60 cc.
April	53.4	18.0	16.0	0.003	0.002	Nil	Tr.	0.038	—	1.1	12.6	7.1	0.04	0.010	4.0	770—60 cc.
May	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
June	65.4	23.0	20.0	0.003	0.003	Nil	Tr.	0.065	Nil	14.8	7.1	0.06	0.010	0.010	4.0	970 60 cc.
July	71.0	23.0	22.0	Nil	0.003	Tr.	Tr.	0.047	Nil	15.0	7.0	0.04	0.010	0.010	4.0	1,125 160 cc.
August	72.0	24.0	27.0	0.002	0.003	Nil	Tr.	0.071	Nil	15.2	7.1	0.10	0.020	0.020	5.0	1,125 *0
September	78	26.0	26.0	0.002	0.003	Tr.	Tr.	0.033	Nil	15.0	7.5	0.03	0.020	0.020	3.0	1,175 *0
October	70	22.0	29.0	0.002	0.003	Tr.	Tr.	0.038	Nil	14.6	7.1	0.15	0.010	0.010	6.0	1,075 *0
November	77	24.0	28.0	0.002	0.003	Nil	Nil	0.049	Nil	18.0	7.2	Tr.	0.002	0.002	5.0	1,225 *0
December	53.0	17.0	26.0	0.002	0.003	Int.	Tr.	0.033	Nil	11.0	7.0	0.04	0.002	0.002	4.0	765 *0

* From August, estimation of M.P.N. of Coliforms in 100 ml. was adopted as per standard specification of W.H.O.

WATER ANALYSIS.

STATEMENT No. XV

Salient Chemical and Bacteriological data for water samples collected from the Infiltration Gallery well at Saidapet—1963

(Results expressed in parts per 100,000)

Months (1963)	Total solids	Total hardness	Chlorides	Ammoniacal Nitrogen	Albuminoid Nitrogen	Nitrite	Nitrate	Oxy. absorbed (Tidy)	Phenolphthalein Alkalinity	Methye Orange Alkalinity	PH	Iron	Phosphates	Silicates	Sp. conductance (micro mhos/cm)	Coliforms—pre- sent in how many cc. or M.P.N. of coll- forms in 100ml.
January	59.0	23.0	17.6	Nil	0.002	Tr	Tr	0.029	—2.0	18.5	7.7	0.02	0.004	4.5	850	—60 cc
February	66.8	25.0	19.0	0.002	0.002	Tr	Pr	0.012	—3.0	19.2	7.1	0.02	0.002	5.0	950	—60 cc
March	63.0	25.0	19.0	0.002	0.003	Tr	Pr	0.034	—1.2	16.2	7.5	0.01	0.010	5.0	900	20 cc
April	70.4	27.0	20.0	Nil	0.003	Nil	Pr	0.043	—2.5	19.6	7.1	0.01	0.020	4.0	1050	—60 cc
May	68.2	25.0	24.0	Nil	Nil	Tr	Pr	0.017	Nil	18.4	7.3	0.015	0.010	4.0	1050	—60 cc
June	70.2	25.0	20.0	Nil	0.003	Nil	Pr	0.037	Nil	20.4	7.3	0.01	0.004	4.0	1120	—60 cc
July	65.0	24.0	18.0	0.002	0.003	Pr	Pr	0.030	Nil	17.6	7.3	0.01	0.020	6.0	1,020	—60 cc
August	65.2	24.0	21.0	0.002	0.003	Pr	Pr	0.059	Nil	18.4	7.5	0.01	0.020	6.0	1,020	0
September	66.0	25.0	23.0	0.002	0.003	Tr	Pr	0.035	Nil	19.5	7.4	Tr	0.010	6.0	1,020	0
October	65.0	26.0	30.0	0.002	0.003	Nil	Pr	0.016	Nil	19.0	7.6	0.01	0.010	5.0	1,025	0
November	63.0	24.0	22.0	Nil	0.002	Nil	Pr	0.038	Nil	18.4	7.2	0.015	0.008	6.0	9,25	0
December	56.0	20.0	18.0	Nil	0.004	Nil	Tr	0.024	Nil	16.8	7.3	0.02	0.001	6.0	790	0

WATER ANALYSIS

STATEMENT No. XVI.

Infiltration Gallery wells—Distribution system—Results of Chemical and Bacteriological Examination—1963.

(Results expressed in parts per 100,000).

Months (1963)	No. of samples	Total solids	Total hardness	Chlorides	Amm.—N.	Alb.—N.	Nitrons—N.	Nitric—N.	Oxy. absorbed (Tidy)	Iron	PH	B. coli—60 cc. %	No. of samples	Total solids	Total hardness	Chlorides	Amm.—N.	Alb.—N.	Nitrons—N.	Nitric—N.	Oxy. absorbed (Tidy)	Iron	PH	B. coli—60 cc.
January	...	6 42.0	14.4	12.2	0.002	0.015	Tr	Tr	0.064	0.02	7.6	100	7	35.0	12.3	9.9	Nil	0.022	Tr	Tr	0.070	0.01	7.8	100
February	...	7 40.6	13.2	10.3	0.002	0.021	Tr	Nil	0.062	0.01	7.4	100	6	46.6	15.9	13.9	0.002	0.042	Tr	Nil	0.089	Tr	7.8	83
March	...	7 39.4	13.9	9.9	Nil	0.019	Tr	Tr	0.075	0.02	7.5	86	6	45.6	18.1	13.6	0.002	0.016	Tr	Pr	0.024	0.01	7.9	0
April	...	5 40.4	17.3	14.0	0.002	0.028	Nil	Tr	0.070	0.02	7.4	60	13	52.0	14.1	9.5	0.002	0.025	Tr	Tr	0.077	0.01	7.9	54
May	...	8 44.6	11.1	8.5	0.002	0.043	Pr	Tr	0.097	0.01	7.7	63	8	42.2	13.7	10.5	Nil	0.027	Tr	Pr	0.042	0.01	7.9	63
June	...	9 48.8	11.2	9.0	0.004	0.032	Tr	Tr	0.129	0.02	7.7	67	6	48.2	14.2	10.8	0.003	0.030	Tr	Tr	0.069	Nil	8.0	17
July	...	15 52.2	14.2	11.6	0.003	0.025	Pr	Tr	0.070	0.015	8.0	93	10	47.8	15.2	10.8	0.003	0.017	Tr	Tr	0.053	0.01	8.0	60
August	...	9 55.5	16.5	16.1	0.003	0.030	Tr	Tr	0.086	0.025	8.0	56	6	49.0	13.3	11.8	0.002	0.018	Tr	Tr	0.092	0.015	7.9	34
September	...	7 58.0	25.8	12.1	0.002	0.031	Tr	Tr	0.117	0.015	7.9	100	6	48.4	17.8	17.0	0.002	0.021	Tr	Pr	0.091	0.020	7.6	33
October	...	7 44.5	10.3	9.4	0.002	0.044	Tr	Tr	0.068	Tr	7.7	71	4	53.0	18.7	17.1	0.002	0.022	Tr	Pr	0.086	Tr	8.1	75
November	...	7 51.3	15.4	19.0	0.003	0.028	Nil	Nil	0.120	0.05	7.7	100	10	50.5	17.2	17.0	Nil	0.021	Nil	Pr	0.064	Tr	7.6	60
December	...	6 43.3	15.4	17.2	0.002	0.022	Nil	Nil	0.075	0.03	7.5	100	5	46.8	14.2	8.1	0.002	0.022	Nil	Tr	0.042	0.01	7.8	60

Summarised Report on the Sterilisation
(Results expressed

Place	No. of days worked	Length of pipe line sterilised	Total Lbs. of Chlorine used	Before Sterilisation				
				Ammonical Nitrogen	Albuminoid Nitrogen	Oxygen Absorbed (Tidys.)	Iron	Phosphate
I. Trunk Main No. 8								
1 Jaganathan Road, V. S. Ring ganatha Pillai Street, Pragasam Mudali Street, Mount Road (opp. to S.I.E.T.)	41	2 miles	354	0.007	0.046	0.125	0.01	0.00
II. Trunk Main No. 7 and its Branches								
Poonamallee High Road ...	40	1 mile 6fr.	180	0.003	0.044	0.123	0.005	0.00
Barnaby Road ...								
Nungambakkam Road								
III. For Erradication of Worms								
Harrington Road, Dn. 54 ...	14	4 Fr	43	0.003	0.048	0.114	0.015	0.00
Appaswami Mudali Street, Dn. 54								
Adayar Bridge Road, Dn. 90	6	2 fr.	36	Samples could not be collected				
Guntz Road, Dn. 32 ...	14	4 fr.	17	0.003	0.044	0.141	0.015	Nil
Sundaram Mudali Street, Dn. 32.								
Singanna Chetti Stret, Dn. 70	8	2 fr.	48	Samples could not be collected.				
Anderson Road, Dn. 56 ...	6	2 fr.	46	0.008	0.032	0.097	0.01	0.00
Ramaswami Naidu Street, Dn. 59 ...	26	2 fr.	78	0.003	0.040	0.137	0.01	0.00
IV. Supplemental Chlorination in Cholera Affected Area								
Kannan Street, Dn. 22 ...	8	4 fr.	6	0.016	0.040	0.096	Nil	0.00
Pudmanikuppam, Dn. 3 ...	6	8 fr.	11	0.004	0.040	0.108	0.01	0.00
Md. Usman Road, Dn. 95 ...	2	2 fr.	8	...	...	0.126	0.01	0.00

ter Mains during the year 1963.
s per 100.00)

samples.	After Sterilisation						% of reduction or increase in the Ammoniacal Nitrogen content in the treated samples as compared with that of untreated samples.	% of reduction or increase in the Albuminoid Nitrogen content in the treated samples as compared with that of untreated samples.	% of reduction or increase in the iron content in the treated samples as compared with that of untreated samples.
	Ammoniacal Nitrogen	Albuminoid Nitrogen	Oxygen Absorbed (Tidys)	Iron	Phosphate	Bacteriological (%) of First Class samples			
%	0.009	0.045	0.075	0.04	0.001	88 %	+ 28	— 2	+ 400
%	0.001	0.036	0.112	0.040	0.001	100 %	— 66	— 18	+ 700
%	0.006	0.022	0.082	0.07	0.002	100 %	+ 100	— 54	+ 366
%	0.002	0.044	0.116	0.08	0.002	80 %	— 33	NI	+ 500
%	0.008	0.040	0.083	0.03	0.001	100 %	Nil	+ 25	+ 200
%	0.002	0.048	0.100	0.06	0.002	94 %	— 33	+ 20	+ 500
%	0.006	0.048	0.083	0.04	0.001	100 %	— 62	+ 20	+ 400
%	0.002	0.048	0.091	0.06	Nil	100 %	— 50	+ 20	+ 600
%	...	...	0.126	0.06	0.004	100 %	...	...	+ 500

WATER ANALYSIS

STATEMENT NO. XVII

Statement showing the variation in the concentration of the chemical constituents of water samples collected from the shallow wells, used as sources of water supply in certain outlying areas. (Results expressed in parts per 100,000)

Location of wells	Total solids	Total hardness	Chlorides	Oxy. absorbed (Tidys')	Alkalinity to		P H	Iron	Sp. conductance (micro mhos/cm.)	% of samples showing absence of coliforms in 60 cc.
					P.T.H.	M.O.				
Eastern well, Adyar ...	15.6-26.0	6.0-10.0	1.4-10.0	0.006-0.085	-0.3 to 0.5	5.8-10.8	7.7-8.2	0.01-0.03	230-270	67
Western well, Adyar ...	40.2-61.6	14.4-22.0	6.4-13.0	0.008-0.105	-0.5 to 0.5	18.2-24.8	7.5-8.4	Nil -0.02	605-820	50
United India Colony Kodambakkam ...	210-290	60-85	85-112	0.012-0.137	-3.0 to 6.3	50-8 58.6	8.0-7.6	0.01-0.20	3075-4200	25
Ganapathy Colony, Guindy ...	105-140	57-73	31-50	0.013-0.054	-0.2 to 2.5	21.2-50.0	8.3-8.3	Nil -0.01	1480-1650	8
Opp. Sunkumar Street, Marina ...	40-49	18.8-24	8.6-19	0.012-0.068	-0.2 to 1.0	12.0-16.6	7.2-8.4	Tr. -0.015	565-690	67
Opp. Wenlock Park, Marina ...	19-44	10.2-20	3.4-14	0.012-0.063	Nil to -0.7	8.5-13.8	7.8-8.9	Nil -0.01	285-510	50
Chellapillayar Koil St., Triplicane ...	65-112	27-38	20-30	0.016-0.095	-0.5 to -3.0	22.8-32	7.2-7.8	Nil -0.02	900-1600	75
Nagappier Street, Tri- plicane ...	57-78	16-24	11-28	0.017-0.103	-0.5 to -2.5	23.8-28.0	7.1-7.9	Nil -0.01	850-110	42
Kottur, Adyar ...	51.6-130	17-38	18-48	0.016-0.068	-0.9 to -4.4	17.2-22.2	6.9-7.3	Nil -0.02	770-1940	25
Cherian Nagar, 1st Division ...	52-84	19-26	7-19	0.033-0.082	-1.5-0.6	9.0-20.0	8.3-8.1	Nil -0.01	770-1145	0
Market Farm, 1st Division ...	40.4-115	14-25	12-28	0.026-0.080	2.0 to 5.0	9.4-4.30	7.4-8.1	Tr. -0.01	530-1600	0
Solayappa Street, 4t Division ...	70-96	28-40	18-38	0.020-0.102	-0.4 to 2.5	19.0-24.4	7.1-8.2	Nil -0.01	970-1300	67
Puliyur, Kodambak- kam ...	70-182	27-60	27-69	0.057-0.200	-3.5 to -4.0	31.4-42.0	7.1-7.8	Tr. -0.01	1025-2660	17
I.D. Hospital ...	80-112	33-39	16-30	0.0390.200	-0.4 to -2.3	12.2-23.8	7.2-8.1	Nil -0.02	1200-1560	36
Tower Clock T.H. Road.	91-143	35-57	26-47	0.022-0.165	-1.0 to 4.9	24.6-42.5	7.2-8.2	Tr. -0.03	1325-2250	75

CHILD WELFARE SCHEME

STATISTIC STATEMENT No. 1

Statement showing the number of cases of labour which came under the care and observation of Child Welfare Scheme during 1963

Serial number and Centre	How conducted					Castes			Twins.*	Triples.*	Still births.†	Macerated.†	Dead Born.†	Total.†
	By Nurses of	Taken to Hospitals.	Taken over after conducted by barber women.	Maternity Ward.	Total.	Hindus.	Muslims.	Christians.						
New Washermanpet	144	62	21	759	986	858	88	40	9	...	14	6	2	22
Grace Garden	231	14	10	...	255	139	109	7	3	...	1	...	...	1
Anjeevirayanpet	174	64	6	711	955	880	14	61	4	...	3	4	4	11
Royapuram	186	11	3	...	200	133	60	7	2	...	4	2	1	7
Muthialpet	257	17	...	...	274	151	123	...	5	...	8	1	...	9
Ammen Koil (Street)	214	43	4	709	970	748	183	39	15	...	2	2	5	9
Seven Wells (South)	147	60	...	553	760	664	78	18	4	...	2	2	...	4
Dr. Vijayaragavali Nagar	413	224	25	955	1,617	1,214	383	20	18	...	12	23	12	47
Konthithope	268	4	4	...	276	202	68	6	3	...	2	4	...	6
Peddunaickenpet	96	11	3	...	110	110	...	...	1	...	4	2	...	5
Trevelyan Basin	85	51	...	736	872	862	2	8	5	...	5	4	5	14
Elephant Gate	31	10	1	93	135	134	...	1	1	...	1	1	...	2
Perambur	186	35	12	465	698	660	6	32	3	...	2	6	...	8
Pulinathope	515	145	27	1,203	1,890	1,437	409	44	21	...	18	19	10	47
Chiruvika Nagar	261	19	9	...	289	152	134	3	...	...	2	4	...	6
Choolai	240	159	12	1,236	1,647	1,568	31	48	8	...	21	4	...	25
Hospital Maiden	85	5	2	...	92	89	1	2	...	...	2	...	...	2
Chembiam	308	68	9	610	995	841	39	115	4	...	14	7	3	24
Channavaram	189	32	12	910	1,143	1,056	45	42	11	...	8	15	11	34
Chammalwarpet	164	22	4	...	190	183	3	4	2	...	7	...	...	7
Chotteri	186	6	12	...	204	182	15	7	...	...	4	...	...	4
Perumalpet	29	57	2	710	798	722	12	64	6	...	2	8	6	16
Purasawalkam	123	57	1	700	881	801	35	45	8	...	17	3	...	20
Kilpauk	140	27	7	390	564	499	42	23	3	...	5	3	...	8
Chetput	104	13	2	108	227	202	9	16	1	...	2	2	...	4
Kungambakkam (South)	149	3	7	...	159	150	9	...	...	...	3	...	...	3
Thousand Lights (West)	162	3	6	...	171	116	44	11	3	...	1	4	...	5
Pudupakkam	302	53	10	619	984	572	405	7	6	...	2	5	11	18
Durgapuram	234	16	2	...	252	213	34	5	4	...	2	3	...	5
Ashok Vihar	76	39	8	765	888	746	79	63	8	...	7	3	...	10
Park Town	38	1	...	...	39	36	2	1	...	...	1	...	...	1
Chintadripet	225	11	4	...	240	197	40	3	1	...	3	...	...	3
Pudupet	203	3	1	...	207	120	83	4	2	...	1	3	...	4
Cham Bazaar	230	7	...	...	237	119	18	...	2	...	6	...	...	6
Mirsahibpet	320	10	1	...	331	148	182	1	1	...	10	...	...	10
Teynampet	327	13	2	...	342	337	3	2	...	...	1	...	...	1
Karneswarapuram	382	16	6	...	404	323	77	4	4	...	2	9	...	11
Raja Annamalaiputram	285	13	2	...	300	294	2	4	3	...	3	2	...	5
Adyar	49	35	1	363	448	422	17	9	3	...	8	2	...	10
Madapalani	229	134	1	1,365	1,729	1,572	65	92	14	...	7	13	29	49
Theagaraya Nagar.	114	12	5	...	131	126	...	5	3	...	3	2	...	5
Mathyamurthi Nagar.	124	12	5	...	141	139	2	...	2	...	1	1	...	2
Saidapet (North)	130	8	3	...	141	141	...	...	1	...	...	...	...	...
Periapet	175	127	...	1,678	1,980	1,830	99	51	15	1	7	12	10	29
Guindy	80	3	2	...	85	84	1	...	...	...	...	...	...	...
Total	8,610	1,735	254	15,638	26,237	22,172	3,151	914	209	1	230	181	109	521

* Twins and Triples.

† Still births and others.

CHILD WELFARE SCHEME

STATISTICS SUPPLEMENT No.

Statement showing deaths among cases brought under the care of Child Welfare Scheme during the year 1963.

S. No.	(Centre (New Name)		Deaths among cases brought under the care of C.W.S. but not under treatment			Death among cases brought under care and treatment of C.W.S.	Total
			Under Private Doctors.	Under Vaidian	In Hospitals		
1	Grace Garden	...	...	1	...	...	1
2	Sanjeevirayanpet	...	...	...	1	...	1
3	Elephant Gate	...	...	...	1	...	1
4	Pulianthope	...	...	...	2	1	3
5	Perumalpet	...	...	...	1	...	1
6	Purasawalkam	...	...	...	...	1	1
7	Ashok Vihar	...	...	...	...	1	1
8	Mirsahibpet	...	...	...	1	...	1
9	Teynampet	...	...	...	...	1	1
10	Vadapalani	...	...	...	1	...	1
11	Periapet	...	...	...	1	...	1
Total ...			...	1	8	4	13

CHILD WELFARE SCHEME

STATISTICS SUPPLEMENT No. 3

Statement showing deaths among cases brought under the care of Child Welfare Scheme during the year 1963

S. No.	Centre	Number of Deaths	Cause of Deaths
1	Grace Garden ...	1	Gardiovascular disease : Anaemia.
2	Sanjeevirayanpet ...	1	Cerebral Embolism.
3	Elephant Gate ...	1	Toxaemia : Cerebral Thormbosis.
4	Pulianthope ...	1	Garduovaseular disease : Heart failure.
		2	Haemorrhage : Intra and Post Partum Haemorrhage.
5	Perumalpet ...	1	Shock : Ruptured Uterus.
6	Purasawalkam ...	1	Toxaemia : Pre-eclamptic.
7	Ashok Vihar ...	1	Cardiovascular disease : Heart failure.
8	Mirsahipet ...	1	Shock : Obstetric Shock.
9	Teynampet	1	Haemorrhage : Intra and Post Partum Haemorrhage.
10	Vadapalani ...	1	Haemorrhage : Retained Placenta.
11	Periamet ...	1	Puerperal Mania.
	Total ...	13	

CHILD WELFARE SCHEME

Statement showing the number of pre-natal cases registered

Serial number.	Centre	Total number of mothers whether they had pre-natal care or not before confinement.	Booked			
			Booked by Midwives.	Booked of their own accord.	Total.	C.W.S.
1	New Washermanpet	1,266	229	561	790	409
2	Grace Garden	789	396	171	567	319
3	Sanjeevirayanpet	1,593	348	469	817	570
4	Royapuram	653	258	150	408	226
5	Muthialpet	1,156	335	290	625	442
6	Ammen Koil (South)	1,458	656	123	779	574
7	Seven Wells (South)	1,387	148	629	777	516
8	Dr. Vijayaragavalu Nagar	2,552	763	608	1,371	860
9	Kondithope	782	328	214	542	275
10	Peddunaickenpet	589	262	128	390	214
11	Trevelyan Basin	1,480	223	545	768	613
12	Elephant Gate	332	141	88	229	150
13	Perambur	1,309	144	508	652	651
14	Pulianthope	2,620	494	1,479	1,973	1,523
15	Thiruvika Nagar	923	217	451	668	266
16	Choolai	1,664	405	845	1,250	922
17	Hospital Maidan	679	294	180	474	299
18	Sembiam	1,460	153	768	921	650
19	Ayanavaram	1,491	343	621	964	728
20	Nammalwarpet	757	210	294	504	165
21	Otteri	1,319	577	486	1,063	807
22	Perumalpet	723	288	174	462	282
23	Pursawalkam	766	325	231	556	355
24	Kilpauk	951	333	256	589	333
25	Chetput	1,300	87	373	460	188
26	Nungambakkam (South)	625	317	132	449	192
27	Thousand Lights (West)	604	197	165	362	104
28	Pudupakkam	1,800	713	338	1,051	758
29	Durgapuram	700	341	228	569	203
30	Ashok Vihar	1,203	236	446	682	468
31	Park Tnow	445	108	42	150	80
32	Chintadripet	111	539	128	667	317
33	Pudupet	786	285	130	415	184
34	Zam Bazaar	941	280	228	508	217
35	Mirsahibpet	1,097	334	390	724	260
36	Teynampet	1,161	457	373	830	415
37	Karneswarapuram	1,232	570	304	874	406
38	Raja Annamalaipuram	762	323	160	483	269
39	Adyar	682	263	81	344	223
40	Vadapalani	2,425	314	1,374	1,688	886
41	Thegaraya Nagar	621	328	91	419	213
42	Sathyamurthi Nagar	685	228	238	466	246
43	Saidapet (North)	1,314	470	406	876	549
44	Periapet	1,788	800	546	1,346	860
45	Guindy	455	161	77	238	142
Total		50,137	15,221	16,519	31,740	19,330

and followed up during the year 1963

Cases						Unbooked Cases							
Hospitals.	Private Doctors.	Private Nurses.	Unskilled attendants.	Not traceable.	Not confined.	Total.	C.W.S.	Hospitals.	Private Doctors.	Private Nurses.	Unskilled Attendants.	Not traceable.	Not confined.
196	...	...	83	32	70	476	88	250	...	...	54	51	33
150	...	2	10	21	65	222	23	130	2	3	1	4	59
140	3	9	10	15	70	778	300	323	7	3	15	65	65
128	4	3	4	10	33	245	40	131	9	12	5	6	42
120	1	1	9	10	42	531	413	52	...	...	4	3	59
100	3	2	8	36	56	679	261	185	13	17	19	133	51
124	9	...	25	23	79	610	215	184	5	18	52	94	42
338	3	...	40	65	65	1,181	293	656	4	...	78	46	104
152	1	...	12	38	64	240	95	53	...	...	6	46	40
80	1	...	2	57	36	199	94	52	...	...	2	20	31
28	7	5	9	22	85	712	126	109	80	22	41	196	138
48	4	4	1	3	19	103	21	60	2	1	2	13	4
...	1	...	...	...	...	657	46	103	40	70	183	150	65
184	1	...	52	64	149	647	225	158	...	...	63	81	122
228	...	...	4	109	61	255	23	166	...	...	9	30	27
204	...	3	33	7	81	414	211	120	...	5	10	28	40
83	3	11	26	17	35	205	89	38	19	12	11	13	23
70	32	...	17	42	110	539	93	113	39	7	74	105	108
130	...	1	21	8	76	527	51	194	8	7	98	75	84
225	...	...	4	59	51	253	21	72	...	...	25	64	71
78	8	24	32	14	100	255	116	47	27	28	21	16	...
75	8	2	9	41	45	261	39	56	19	...	10	81	56
76	7	7	3	50	59	210	14	100	4	3	16	46	27
153	22	10	23	...	48	362	46	101	19	...	24	104	68
158	...	...	7	80	77	840	43	391	...	...	7	224	177
177	5	...	22	18	35	176	3	76	...	...	15	64	18
204	...	...	5	4	44	242	50	140	...	...	4	16	32
195	7	4	10	12	65	749	136	516	2	...	2	11	82
298	1	2	1	63	63	131	23	83	2	1	5	15	3
115	4	1	8	33	53	521	367	92	5	2	21	19	15
49	4	...	1	6	10	295	83	101	18	...	1	50	42
271	11	10	8	17	33	144	24	92	7	6	4	3	8
176	5	1	2	18	29	371	13	199	4	2	11	104	38
226	2	...	4	21	38	433	23	243	3	...	4	133	27
373	...	...	9	4	78	373	35	240	4	...	6	52	36
196	8	21	31	60	99	331	130	74	3	26	37	31	30
346	6	6	4	20	86	358	50	258	6	4	4	6	30
109	4	...	6	10	85	279	25	190	2	2	5	35	20
50	...	1	8	9	53	338	110	190	...	...	6	5	27
310	...	...	167	198	127	737	149	248	9	15	133	163	20
108	2	1	26	25	44	202	85	63	1	...	6	33	14
135	2	1	11	36	35	219	27	90	...	1	24	61	16
113	...	...	21	37	156	438	205	88	10	31	27	20	47
283	...	1	27	14	161	442	230	173	...	...	4	10	25
41	...	...	...	11	44	217	15	152	...	...	3	15	32
7,042	179	133	816	1,327	2,913	18,397	4,777	7,152	373	297	1,162	2,538	2,098

CHILD WELFARE SCHEME

Statement showing Pre-Natal cases registered and ailments

Serial number.	Child Welfare Centre.	Cardio-Vascular diseases.		Respiratory diseases.					Alimentary diseases.				Toxaemia of Pregnancy.						
		V.D.H.	Hypertension.	Varicose Venis.	Bronchitis.	Pneumonia.	Pulmonary Tuberculosis.	Asthma.	Constipation.	Dyspepsia.	Diarrhoea.	Dysentery.	Scanty Micturition.	Albuminuria.	Pyelitis.	Pre-exclamptic Toxaemia.	Eclampsia.	Jaundice.	General Anasarca.
1	New Washermenpet ...				6			12	2		1		3	3	1	6			
2	Grace Garden ...	1	2		30				38		10		8	23		10			
3	Sanjeevirayanpet ...				4				8		3		2	18		28		1	
4	Royapuram ...		3		18				30		8	2	10	16					1
5	Muthialpet ...				42				30		68	10	25	56	2	12		4	
6	Ammen Koil (South)		4	1	7			3	70			8	8	18	1	14			
7	Seven Wells (South)	1	6	2	26	1		1	1		13	3	5	5		16			
8	Dr. V.R Nagar ...	2	12	1	16			1	1		21	2	12		15	29			
9	Kondithope ...	1			44			2	1	42	63	4	2	7	1				
10	Peddunaickenpet ...				42			1	36		31	4	1	4	5		1		
11	Trevelyan Basin ...				37				5		28	6		8					
12	Elephant Gate ...	1		2	9	3		8	9		6	3	3	6	2	4		1	
13	Perambur ...	1	2	2	42				16		16	30	13	37					
14	Pulianthope ...		3		62			2	50		65	4	6	83	3	31			
15	Thiruvika Nagar ...				5						22			7		11			
16	Choolai ...			3	55	4		3	27		140	5	13	31	9	31			
17	Hospital Maidon ...		2		3						17		2	13		6			
18	Sembiam ...	5	2	1	23			2	2		3	3	2	16		15			
19	Ayanavaram ...	2			11			1			3	1	5	2	1	23		3	
20	Nammalwarpet ...				2			1	1		9	2	1	8		9			
21	Otteri ...	1			5						21		1		1	6			
22	Perumalpet ...	6		1	14			1	2	9	4	1				14			
23	Purasawalkam ...	2	2		9			1	2	10	15	2	1	3		14		3	
24	Kilpauk ...				4				30		63		1	27					
25	Chetpet ...			1	8			1	21		5	1	5	16			3		
26	Nungambakkam ...	1		2	11			1	8	8	9	3	5	10		10		3	
27	Thousand Lights ...			2	5				27		12		2	2	1	6			
28	Pudupakkam ...	6			8			1	20		2	2	1			33		5	
29	Durgapuram ...	1			6			1	2	38	19	3	2		9	6			
30	Ashok Vihar ...	2	3		1			2	4		1		4			5		1	
31	Park Town ...				4				1		17	2	4	17		1		2	
32	Chintadripet ...	3	2	7	16	2		25	13		30	10	34		8	13		1	3
33	Pudupet ...		1		12				9		10		2	23		19		2	
34	Zam Bazaar ...		2		26				10		10	4	4	8	2	2		6	
35	Mirsahibpet ...				46			1	27		8	8	8	22	1	2		19	
36	Teynampet ...				90				31		78	1	1			1			
37	Karneeswarapuram ...	4			63	4		2	1		112	22	12	3		47	33		
38	R.A. Puram ...	3			31						81	11	6	2		22	11		
39	Adyar ...	3		1	1				1		7	2	2		2			5	
40	Vadapalani ...	1		1	9			2	1		2		6	2	8		2	11	
41	Theagaroya Nagar ...				9				1			1	1	2		1			
42	Satyamurthy Nagar ...				13				1			1	1	6		9			
43	Saidapet North ...				112	2			1		62	82	2	9		27		1	
44	Periapet ...			1	2			1	1		39	1	2			5			
45	Guindy ...				2						3			3					
		47	46	28	99	16		21	85	628	1137	242	228	511	71	80	457	8	664

of pregnancy diagnosed and patients advised in 1963.

Calcium.	Deficiency diseases.		Pyrexia			Debi- lity.	Specific diseases.					Other diseases and abnormalities of pregnancy.						
	Vitamin.	Other Nutritional.	Influenza.	Malaria.	Rheumatism.		Skin diseases.	Ear, Nose and Throat.	Syphilis and Gonorrhoea.	Leucorrhoea.	Morning Sickness.	Anaemia.	Ante-partum Haemorrhage.	Breast Abscess.	Hydra minus.	Normal.	Other diseases.	Total.
1	57	3	2				2	3		22		493			4	100	69	790
	50	18	3				50	8				16				156		567
	120	30	6				74	19				250				254		817
7	24	3					33	4				120				126	2	408
2	20	12	25		4		5	5			4 10	66				200	27	625
17	67	33	4				30	8	7	25	2 5	204	1		3	150	94	779
1	80	7					109					250		1		199	49	777
23	122		69		2		46	8	1			353	1		7	589	38	1371
	11		1									133				187	43	542
	3				90											122	50	390
5	32	8	3				55					28				543	10	768
	45	9	5	4	4		19	4				45	2			17	18	229
16	31	6							10			40			15	233	142	652
46	167	95	13				44	17		55	9	258			2	221	737	1,973
9	49	33					79	4				160				268	21	668
2	138						4	12		20	7	222			1	389	134	1,250
19	113	4										110				157	28	474
8	63	2	1				1	2		20	1	42			6	676	25	921
	48	4					6	13		24	1	93				716	7	964
9	96	38	1				55	4			2	121				175	20	504
26	100	124	20				6				2	258	1			435	55	1,063
	19	3	3		1		29	1		2	1	61				268	22	462
10	96	4					102	6	1	4		56				184	29	556
	20	11					41					45				332	15	589
	81		1				66	1			1	25				179	44	460
	29	10	1		1		16	3		1	2	19			1	292	2	449
2	25						13	3	1		20	43				119	79	362
	147						148	3				93				428	154	1,051
2	49	13						7			17	67				215	112	569
	54						3	2				60				486	50	682
2	6	2	2		2			2				12				68	6	150
	169		8	1	12		30	11	2		21	144	2	7	3	62	28	667
16	11						14	2			2	35				253	2	415
	32	11					1	5				133				246	5	508
	41	12					3	2			2	137			1	376	8	724
	13	23										276				309		830
	371		25					7			6	135				12	15	874
	219	19						2			8	67					1	483
	78		2				4	1				27				191	19	344
404	16	2					2	5		6	1 1	463				678	6	1688
	50						24	5	2			62				238	20	419
	53						25					42				304	10	466
	31				2			1		1		300				259	12	876
	94						37	9			43	89			2	993	4	1346
	41						5	2		1		20				150	6	238
627	3131	539	204	5	18		1176	191	24	240	129 40	5817	7	8	45	12555	2281	31740

CHILD WELFARE SCHEME

Statement showing the total number of attendance of Expectant and Nurs

Serial number.	Centre	Attendants at Clinics								Total of New
		Infants		Pre-School children		Expectant Mothers		Nursing Mothers		
		New	Old	New	Old	New	Old	New	Old	
1	New Washermenpet	1,445	4,777	204	83	790	807	1,359	2,482	3,7
2	Grace Garden	618	945	60	18	567	585	713	1,008	1,9
3	Sanjeevirayanpet	1,434	3,698	160	74	817	1,517	1,809	4,650	4,2
4	Royapuram	494	677	62	22	408	485	567	736	1,3
5	Muthialpet	498	671	50	77	625	544	545	667	1,2
6	Ammen Koil (South)	1,411	4,402	378	478	779	1,680	1,733	4,849	4,3
7	Seven Wells (South)	1,061	4,646	299	650	777	1,297	1,603	5,089	3,7
8	Dr. V. R. Nagar	2,218	7,372	187	173	1,371	1,140	3,064	7,664	6,8
9	Kondithope	666	888	88	37	542	677	634	702	1,9
10	Peddunaickenpet	437	853	109	68	390	614	450	756	1,2
11	Trevelyan Basin	1,439	1,832	373	156	613	1012	1,449	2,046	3,9
12	Elephant Gate	305	758	80	97	229	447	451	850	1,0
13	Perambur	1,283	4,171	367	180	652	783	2,600	4,562	4,9
14	Puliyanthope	2,113	5,349	327	204	1,973	2,155	2,592	4,407	7,0
15	Thiru-vi-Ka Nagar	699	623	61	46	668	362	949	645	2,3
16	Choolai	3,902	7,637	4,879	1,069	1,250	1,935	3,191	6,913	13,2
17	Hospital Maidan	530	1,863	95	70	474	788	676	2,017	1,7
18	Sembiam	1,310	5,043	173	135	921	2,388	2,993	5,930	5,3
19	Ayanavaram	1,504	4,181	298	262	964	1,394	1,837	4,380	4,0
20	Nammalvarpet	633	599	68	60	504	276	815	631	2,0
21	Otteri	762	795	38	3	1,063	439	916	811	2,2
22	Perumalpet	1,068	3,255	583	1,013	462	1,476	1,314	2,725	3,4
23	Purasawalkam	1,650	3,933	499	396	556	896	1,925	3,839	4,0
24	Kilpauk	1,197	2,090	81	19	489	538	1,533	2,162	3,4
25	Chetpet	625	2,401	518	4,341	460	991	922	2,689	2,3
26	Nungambakkam (South)	353	78	30	4	449	90	423	80	1,2
27	Thousand Lights (West)	700	1,555	277	264	362	689	811	1,391	2,1
28	Pudupakkam	1,811	6,017	392	321	1,051	1,737	2,255	6,161	5,5
29	Ashok Vihar	2,510	2,082	2,321	620	682	712	2,166	2,233	7,0
30	Park Town	177	313	51	76	150	291	187	330	5
31	Chintadripet	454	502	41	23	766	443	764	700	1,9
32	Pudupet	612	880	143	54	415	330	775	718	1,9
33	Jam Bazaar	890	1,427	354	373	508	844	911	1,288	2,0
34	Mirsahibpet	1,027	1,590	306	170	724	890	978	1,363	3,0
35	Durgapuram	876	1,769	319	497	569	987	871	1,531	2,0
36	Tetnampet	503	624	359	112	830	556	775	670	2,4
37	Kanneeswarapuram	579	423	84	26	874	737	899	539	2,4
38	Raja Annamalaipuram	470	322	75	59	483	371	670	420	1,0
39	Adayar	625	507	449	144	344	424	817	499	2,2
40	Vadapalani	2,645	7,759	126	65	1,688	2,996	3,744	7,812	8,2
41	Theagaraya Nagar	423	374	41	12	419	335	463	152	1,3
42	Sathyamoorthi Nagar	294	134	26	3	466	248	319	80	1,1
43	Saidapet (North)	506	751	217	111	876	669	831	1,094	2,4
44	Periapet	3,284	11,268	2,007	3,959	1,346	1,484	4,497	11,446	11,1
45	Guindy	549	644	450	184	238	433	620	634	1,8
Total		48,590	111,878	18,105	16,808	31,585	40,494	60,460	1,12,351	1,58,

rs and Children at the Out-Patient Clinics in 1963

	Grand Total	Diseases Treated (New)										Total
		Respiratory	Alimentary	Skin Affec- tion	Influenza	Ear and Eye Diseases	Anaemia	Vitamin Diseases	Malaria	Normal	Other Diseases	
649	11,347	396	229	24	171	215	141	19	22	2,270	311	3,798
558	4,516	123	120	16	67	...	178	35	...	1,301	118	1,958
939	14,159	272	359	80	236	70	507	393	...	1,618	685	4,220
920	3,445	118	139	21	61	1	177	18	3	843	144	1,525
959	3,679	446	412	15	96	...	83	46	3	477	140	1,718
08	15,710	617	663	68	189	15	307	214	6	1,856	366	4,301
882	15,422	471	283	25	112	8	524	251	...	1,904	162	3,740
949	23,189	662	835	119	309	40	859	605	...	2,931	250	6,840
304	4,234	295	321	22	73	1	141	9	...	972	96	1,930
291	3,677	206	242	10	20	4	95	3	...	691	115	1,386
046	8,970	687	488	136	334	180	389	193	...	1,132	385	3,924
152	3,217	147	91	39	31	2	129	77	5	415	129	1,065
396	14,598	1,067	744	218	369	174	330	166	...	1,123	71	4,902
115	19,120	737	756	127	338	97	521	447	...	1,751	2,231	7,005
376	4,053	500	363	144	198	83	157	82	...	668	182	2,377
554	30,776	3,109	2,122	334	1,062	6	540	291	25	3,770	1,963	13,222
738	6,513	225	129	27	132	7	214	156	...	403	481	1,775
196	18,893	185	1,002	15	83	...	225	297	...	2,515	1,075	5,397
217	14,820	717	593	53	157	34	332	309	...	1,534	874	4,603
566	3,586	297	251	75	93	35	154	99	...	798	218	2,020
048	4,827	300	210	30	206	11	441	431	...	525	625	2,779
169	11,896	434	354	69	229	19	205	138	2	831	1,146	3,427
064	13,694	581	493	193	429	90	135	218	...	1,486	1,005	4,630
309	8,209	618	519	120	318	60	215	217	...	752	591	3,400
122	12,947	368	251	93	27	9	80	175	1	1,100	421	2,525
252	1,507	210	111	30	145	10	94	76	...	314	265	1,255
399	6,049	293	227	36	71	20	58	10	...	898	537	2,150
236	19,745	513	512	80	238	19	264	325	...	2,939	618	5,509
347	13,326	1,775	1,627	399	442	199	116	98	...	2,290	733	7,679
010	1,575	160	161	4	58	...	3	1	...	119	59	565
368	3,594	279	223	67	59	4	259	230	10	583	212	1,926
982	3,927	228	145	61	95	16	112	95	...	838	355	1,945
932	6,595	777	579	158	2	33	221	138	...	745	10	2,663
013	7,048	787	673	130	11	36	273	147	...	975	3	3,035
784	7,419	369	275	34	103	73	49	12	...	1,059	661	2,635
932	4,429	378	458	50	188	9	439	202	...	422	321	2,467
725	4,161	401	288	52	122	5	236	535	...	476	321	2,436
172	2,870	227	193	20	124	...	179	327	...	329	299	1,698
574	3,809	297	276	60	186	6	210	193	...	539	473	2,235
332	26,835	1,874	1,209	24	229	28	1,422	511	...	1,358	1,548	8,203
373	2,219	77	67	6	48	1	89	48	...	898	112	1,346
465	1,570	49	38	7	21	...	59	63	...	783	85	1,105
325	5,055	355	354	39	229	9	456	209	...	503	276	2,430
157	39,291	1,555	1,201	230	382	4	277	291	...	6,165	1,029	11,134
395	3,752	278	214	47	173	8	151	121	...	406	459	1,857
531	4,40,271	24,055	20,830	3,607	8,266	1,641	12,047	8,521	77	56,305	22,791	1,58,740

Statement showing Maternal Morbidity during the year 1963

Serial Number.	Centre	Ante-Partum.							Intra and Post-Partum.							Puerperium.							Total.			
		Accidental Haemorrhage.	Placenta Praevia.	Anaemia.	Abnormal presentation.	Hydatiform Mole.	Ectopic Gestation.	Retained placenta.	Post-Partum Haemorrhage.	Anatomical Abnor. mality contracted pelvis.	Malposition and disposition.	Tedious Labour delayed 2 Stage.	Perineal and Cervical laceration.	Urinary Complication.	Puerperal Sepsis.	Phlebitis.	Thrombosis.	Pyrexia	Uterine disorders	Puerperal toxaeimias.	Anaemia.	Psychosis.		Diseases of Breasts.	Other diseases.	
1	New Washermanpet	6	...	93	...	...	...	1	10	1	4	25	48	5	...	...	...	16	...	1	66	...	...	3	34	319
2	Grace Garden	1	...	74	...	...	...	2	1	...	...	25	2	...	...	...	5	...	...	...	96	...	...	...	2	211
3	Sanjeevirayanpet	2	1	263	15	...	...	4	18	...	...	21	87	...	...	...	9	...	...	1	158	...	...	...	16	595
4	Royapuram	...	...	42	...	...	...	1	1	...	...	15	5	...	...	...	9	...	2	...	51	...	...	...	3	128
5	Muthialpet	...	...	...	...	...	...	1	...	...	...	15	8	...	...	...	4	...	...	...	30	...	...	...	...	59
6	Ammen Koil (South)	5	1	204	7	...	...	1	2	2	1	11	57	1	...	...	8	...	...	2	70	...	...	...	62	439
7	Seven Wells (South)	6	...	14	3	...	...	...	3	3	...	30	20	7	1	...	4	...	...	1	9	2	...	...	4	108
8	Dr. Vijayaraghavalu Nagar	18	...	56	34	...	...	5	66	1	5	70	168	14	...	...	30	...	...	4	66	...	...	...	21	558
9	Kondithope	...	...	19	...	...	...	1	...	...	...	2	3	...	...	...	6	...	...	...	9	...	...	...	2	43
10	Peddunaickenpet	...	...	...	...	...	...	1	1	1	...	5	5	...	...	...	1	...	...	...	17	...	...	...	...	31
11	Trevelyan Basin	2	...	32	1	...	...	...	5	1	1	20	14	...	...	...	21	...	...	...	40	...	...	...	...	145
12	Elephant Gate	6	...	13	3	...	...	...	1	1	1	6	6	...	...	...	10	...	...	...	16	...	...	...	27	96
13	Perambur	1	...	7	1	...	...	...	1	1	1	24	7	...	...	...	5	...	...	...	233	...	...	...	3	56
14	Pulianthope	16	...	25	20	...	...	6	10	...	...	66	53	...	...	...	13	...	4	...	36	...	...	...	31	484
15	Thiruvika Nagar	2	...	32	...	...	...	...	1	...	...	...	1	...	...	...	12	...	...	...	36	...	...	...	8	95
16	Choolai	20	1	15	31	...	...	6	7	2	3	66	64	...	...	...	15	...	1	14	4	...	...	...	31	282
17	Hospital Maiden	...	...	...	...	...	...	1	...	...	...	3	1	1	...	...	1	...	...	...	23	...	...	...	18	48

CHILD WELFARE SCHEME

STATISTICS SUPPLEMENT No. 8

Statement showing Infants Born in 1962 and kept under Observation during the First year after Birth.

Serial number.	Centre.	No. of Infants born in 1962.	No. of Still Births in 1962.	Number of live births in 1962.	Period.												Total No. of deaths excluding still births.	Left the City or otherwise not traceable.	Said to be well.	Out of Division.	No. of Living children in the City where one year old.	Total No. of Living Children when one year old.
					1 to 7 days.		8 days to 1 month.		2 to 3 months.		4 to 6 months.		7 to 9 months.		10 to 12 months.							
					Died	Not traceable.	Died.	Not traceable.	Died.	Not traceable.	Died.	Not traceable.	Died.	Not traceable.	Died.	Not traceable.						
1	New Washermanpet	1,176	23	1,153	19	14	18	8	14	8	21	13	22	17	21	6	115	66	97	92	793	880
2	Grace Garden	321	6	315	9	...	3	...	3	...	14	1	5	3	3	2	37	6	29	...	243	272
3	Sanjeevirayanpet	1,140	22	1,118	17	23	8	...	17	...	16	6	20	13	10	10	88	60	129	...	841	970
4	Royapuram	230	2	228	5	1	1	...	2	...	2	...	4	1	4	1	18	3	27	...	181	207
5	Muthalpet	304	...	304	5	...	1	...	7	...	4	...	4	3	3	3	24	8	52	...	220	272
6	Amman Koil (South)	1,135	4	1,131	23	9	6	...	12	...	23	18	14	6	20	26	98	67	216	...	750	966
7	Seven Wells (South)	820	8	812	18	18	7	...	7	...	19	12	10	19	11	29	72	88	98	...	554	652
8	Dr. V.R. Nagar	1,766	39	1,727	30	9	30	5	43	21	48	58	40	45	16	77	207	215	288	35	982	1,270
9	Kondithope	270	3	267	4	...	5	...	4	2	4	2	8	5	4	8	29	17	60	...	161	221
10	Peddunaickenpet	130	5	125	4	...	...	...	3	1	2	...	2	...	1	4	12	5	30	...	78	108
11	Trevelyan Basin	1,083	19	1,064	23	42	...	...	14	7	10	11	16	14	15	23	82	104	248	...	630	878
12	Elephant Gate	86	...	86	1	...	2	...	2	1	...	2	1	...	1	...	7	3	15	...	61	76
13	Perambur	918	12	906	7	...	2	...	6	1	...	...	9	1	...	23	26	25	285	24	546	831
14	Pulianthope	1,984	34	1,950	51	31	7	16	27	7	32	...	26	17	25	23	144	101	315	52	1,219	1,534
15	Thiru-vi-Ka Nagar	274	6	268	4	...	2	...	2	...	2	10	3	3	3	...	16	18	58	...	176	234
16	Choolai	1,810	29	1,781	27	31	7	16	27	...	32	7	26	17	25	23	144	101	315	2	1,219	1,534
17	Hospital Maidan	116	4	112	2	...	1	...	...	1	2	2	...	1	...	...	5	4	33	...	70	103
18	Sembiam	1,099	21	1,078	15	...	7	...	...	...	17	10	11	17	7	...	63	96	90	90	760	856
19	Ayanavaram	1,242	36	1,206	22	19	8	6	19	8	20	17	10	19	9	54	88	123	217	112	666	883
20	Nammalwarpet	185	2	183	2	...	3	1	2	2	2	2	...	1	3	1	12	7	25	...	139	164

21	Otteri	234	4	230	4	16	10	...	1	2	4	4	1	1	2	3	2	14	10	42	...	164	206
22	Perumalpet	619	7	612	7	16	10	...	2	5	10	10	1	3	1	2	2	37	46	115	...	414	529
23	Purasawalkam	948	14	934	14	11	32	...	5	10	15	15	16	21	15	5	5	71	104	195	...	564	759
24	Kilpauk	596	7	589	7	11	12	...	2	6	4	4	10	7	9	4	4	36	61	91	7	594	485
25	Chetpet	167	7	160	7	7	...	...	...	...	...	...	...	1	2	1	3	20	6	16	...	118	134
26	Nungambakkam (South)	181	2	179	2	2	...	...	3	...	...	...	...	5	...	...	2	21	3	30	...	125	155
27	Thousand Lights (West)	191	3	188	3	4	...	...	1	1	2	2	...	2	...	...	3	14	5	41	...	128	169
28	Pudupakkam	1,109	16	1,093	16	22	2	...	2	14	11	20	28	17	24	19	49	98	116	200	...	679	879
29	Durgapuram	304	9	295	9	7	...	...	3	3	4	4	1	4	1	5	1	29	3	62	...	201	263
30	Ashok Vihar	921	17	904	17	10	13	...	5	5	...	4	12	8	9	10	10	48	41	226	25	554	790
31	Park Town	46	...	46	...	...	...	...	...	...	...	...	...	1	...	...	...	2	...	7	...	37	44
32	Chintadripet	236	1	235	1	5	...	...	1	4	4	3	2	1	3	...	...	18	10	52	...	155	207
33	Pudupet	229	8	221	8	5	...	...	2	2	...	4	...	3	...	2	2	18	2	40	...	161	201
34	Zam Bazaar	317	4	313	4	7	...	...	...	4	1	7	1	2	3	7	6	33	12	54	...	214	268
35	Mirsahebpet	343	11	332	11	13	...	...	1	8	2	13	3	9	9	7	8	56	23	55	...	198	253
36	Teynampet	370	10	360	10	7	...	...	6	6	2	3	2	1	15	7	45	29	66	40	...	225	265
37	Karneeswarapuram	432	10	422	10	5	...	...	1	4	3	12	9	9	12	2	2	33	28	59	...	302	361
38	Raja Annamalaipuram...	334	9	325	9	3	...	...	2	2	3	5	8	9	7	8	4	29	22	49	...	225	274
39	Adayar	465	14	451	14	14	...	...	...	1	3	9	5	1	9	4	27	36	46	49	35	285	334
40	Vadapalani	1,730	40	1,690	40	28	31	1	39	15	42	17	46	15	36	14	40	124	234	250	177	905	1,155
41	Theagaroya Nagar	136	4	132	4	1	1	...	1	1	...	3	1	1	4	2	3	9	9	16	...	98	114
42	Sathyamoorthy Nagar	146	4	142	4	2	...	...	3	3	...	...	4	2	4	...	2	9	10	25	...	98	123
43	Saidapet (North)	170	...	170	...	2	1	...	2	2	2	1	6	...	...	1	8	8	19	17	...	126	143
44	Periapet	2,110	32	2,078	32	30	75	20	5	33	13	28	28	25	21	21	110	157	252	660	...	1,009	1,669
45	Guindy	108	4	104	4	2	...	1	...	2	...	3	...	3	2	1	3	12	6	15	...	72	87
Total		28,531	512	28,019	512	506	383	270	169	361	210	457	394	382	422	321	779	2297	2357	5027	606	17,732	22,759

CHILD WELFARE SCHEME

Statement showing causes of deaths among infants born in 1962

Serial number	Centre.	Number of infants born in 1962.			Neo-natal deaths.					Infectious Diseases.								Fev	
		No. of still births in 1962.	No of live births in 1962.		Pre-maturity.	Asphyxia Neo Natorum.	Birth injuries.	Congenital maiformation and complications.	Others.	Chloera.	Small-pox	Diphtheria.	Measles.	Enetric fever.	Anterior Poliomyylitis.	Meningitis.	Others.	Malaria.	Kala Azar.
1	New Washermenpet	1,176	23	1,153	6	4	2	4	3	2									
2	Grace Garden	321	6	315	2	7													
3	Sanjeevirayanpet	1,140	22	1,118	8	9		1		1									
4	Royapuram	230	2	228	3	2											1		
5	Muthialpet	304		304	1	4													
6	Ammen Koil (South)	1,135	4	1,131	11	6	1	4	2	3								1	
7	Seven Wells (South)	820	8	812	5	6	6	1		1	1	1	2						
8	Dr. V.R. Nagar	1,766	39	1,727	27	6		1	2	7	1								
9	Kondithope	270	3	267	5	1													
10	Peddunaickenpet	130	5	125		3													
11	Trevelyan Basin	1,083	19	1,064	14	8		1		2	2		3				5		
12	Elephant Gate	86		86	2	1													
13	Perambur	918	12	906		1				2									
14	Pulianthope	1,984	34	1,950	29	22		20		5									
15	Thiru-vi-ka Nagar	274	6	268	1	3				1	1								
16	Choolai	1,810	29	1,781	14	17		2	2									1	
17	Hospital Maiden	116	4	112	2	1													
18	Sembiam	1,099	21	1,078	11	4				1									
19	Ayanavaram	1,242	36	1,206	16	5		1	8			1					1		
20	Nammalwarpet	185	2	183	2														
21	Otteri	234	4	230	3	1				1			4						
22	Perumalpet	619	7	612	6	3	3	3	1								1		
23	Purasawakkam	948	14	934	8	5			1		2		1					1	
24	Kilpauk	596	7	589	4	8			1		1							2	
25	Chetput	167	7	160	5	3			1	1	1								
26	Nungambakkam (South)	181	2	179	1	2													
27	Thousand Lights(West)	191	3	188	3	1													
28	Pudupakkam	1,109	16	1,093	16	8	1	1		7			1		1				
29	Durgapuram	304	9	295	2	3	1		2										
30	Ashok Vihar	921	17	904	6				2										
31	Park Town	46		46															
32	Chintadripet	236	1	235	5	2			1										
33	Pudupet	229	8	221	1	4						1							
34	Zam Bazaar	317	4	313	6				1		2								
35	Mirsahibpet	343	11	332	12	2					4								
36	Teynampet	370	10	360	6	1					3								
37	Karneeswarapuram	432	10	422	3						1								
38	R. A. Puram	334	9	325	1		1		1	1									
39	Adayar	465	14	451	5	3	1		2		1								
40	Vadapalani	1,730	40	1,690	18	1			2		3								
41	Thiagaroya Nagar	136	4	132	1						1	1							
42	Sathyamoorthy Nagar	146	4	142	1						1								
43	Saidapet (North)	170		170	2	1													
44	Periapet	2,110	32	2,078	29	6	6		9	10		4	2	1					
45	Guindy	108	4	104	1												2		
Total		28,531	512	28,019	304	164	17	58	31	2	57	9	5	9		1	10	5	

ter observation during First Year after Birth

Observation during 1901																									
Others	Alimentary Diseases.			Urinary Diseases.		Liver Diseases.		Nervous Diseases.				Deficiency Diseases.		General Causes.				Total No. of deaths excluding still births.	Left the City or otherwise not traceable.	Said to be well.	Out of Division.	No. of living children in the City when one year old.	Total No. living children when one year old.		
	Diarrhoea.	Dysentery.	Others.	Nephritis.	Others.	Cirrhusis.	Others.	Congenital syphilis V. D.	Convulsion.	Tetanus.	T. B. Meningitis.	Others.	Rickets.	Malnutrition.	Others.	Septicaemia and Pyaemia.	Accident injuries etc.							Snake bit etc.	Others.	Causes Unknown.
32	4	2				1		4		1			8		1			13		115	66	87	92	793	880
12	2												5							37	6	29		243	272
26	2												9					1		8	60	129		841	970
6	1												3						1	18	3	26		181	207
2	1												1							24	8	52		220	272
7	2												6		2					98	67	216		750	966
18	1					1		6		1			2	1	1				7	72	88	98		554	52
6	13	1						1				1	28		6					207	215	288	35	982	1,270
3	1	2																		29	17	60		161	228
4																				12	5	30		78	108
19	7							1					2	2				4		82	104	248		630	876
2	1																			7	3	15		61	71
2	1	1	2	1				7	2			1	4	2						26	25	285	24	546	835
48	8				1					1			19					6		193	225	314	7	1,211	1,521
2								1												16	18	58		176	234
38	5	1		1									19	6				1	1	144	101	315	2	1,219	1,534
													2						5	5	33	33		70	103
25	2												1	3						63	69	96	90	760	856
15		1	1		1								4		2			2		88	123	217	112	666	883
3	2																			12	7	25		139	164
5																				14	10	42		164	206
8	1												4							37	46	115		414	529
13	4	1			2							1	11	4						71	104	195		564	759
6	1							3					1						1	36	61	91	7	394	485
4				2									1						1	20	6	16		118	134
9	2	1						1					2							12	3	30		125	155
2								1					2							14	5	41		128	169
33	6			1											2					98	116	200		679	879
4	1							2					6	1				2		29	3	62		201	263
1	7	2	2					3					1						6	48	51	226	25	554	780
																				2		7		37	44
4	2												1							18	10	52		155	207
3	2							5					1							18	2	40		161	201
9																			1	33	12	54		214	268
13	1		2		2			3												56	23	55		198	253
3	4	1																2		29	66	40		225	265
2	7	19																1		33	28	59		302	361
8	13																			29	22	49		225	274
	12	1	2											1				1		36	46	49	35	285	334
	25	7						2				1	9	2	2			3	2	124	234	250	177	905	1,155
2		3																	9	9	8	16		98	114
																			9	9	10	25		98	123
1		1													2					8	18	17		126	143
2	44	2		1				5					3	1	1			1	2	157	252	660		1,009	1,669
	6							2												12	5	15		72	87
80	501	109	16	6	5	6	2	1	48	2	2	1	4	155	29	13	2	39	24	2,297	2,357	5,027	606	17,732	22,759

CHILD WELFARE SCHEME

STATISTICS SUPPLEMENT No.

Statement showing the number of Labour cases that came under the care and observation of Child Welfare Scheme—Infant mortality rate and Maternal Mortality rate of Child Welfare Scheme from the years 1944 to 1963

Year	No. of labour cases that came under the care and observation	Infant mortality rate (per 1,000)	Maternal mortality rate (per 1,000)
1944	10,591	140.60	2.20
1945	14,002	141.90	1.57
1946	19,147	102.80	2.50
1947	18,412	81.70	1.95
1948	26,051	83.00	1.91
1949	28,129	70.41	2.31
1950	26,957	95.52	2.00
1951	29,931	123.16	1.90
1952	32,264	125.43	1.73
1953	27,219	114.23	1.76
1954	29,209	10.31	1.27
1955	32,285	105.75	1.39
1956	31,267	109.30	1.15
1957	31,955	108.25	0.94
1958	30,671	104.32	1.01
1959	29,709	99.40	0.64
1960	29,087	94.51	0.89
1961	27,581	93.29	1.09
1962	28,531	86.28	0.77
1963	26,237	81.98	0.49

CHILD WELFARE SCHEME

STATISTICS SUPPLEMENT No. 11

Statement showing the Serological Examination of Blood conducted during the year 1961

S. No.	Centre	Total No. of Blood samples examined	No. of +ve cases	No. of +ve cases that took full course of treatment	No. of +ve cases that took partial treatment	No. of +ve cases that did not turn up for treatment
1	New Washermanpet ...	485	22	10	5	7
2	Sanjeevirayanpet ...	693	15	8	2	5
3	Ammen Koil (South) ...	697	25	15	...	10
4	Seven Wells (South) ...	737	22	16	1	5
5	Dr. Vijayaraghavalu Nagar ...	1,217	46	39	...	7
6	Trevelian Basin ...	518	18	4	5	9
7	Elephant Gate ...	197	5	3	1	1
8	Perambur ...	159	3	...	...	3
9	Pulianthope ...	1,697	55	20	1	34
10	Choolai ...	1,190	25	16	...	9
11	Sembiam ...	889	20	4	3	13
12	Ayanavaram ...	858	24	14	3	7
13	Perumalpet ...	429	3	...	...	3
14	Purasawalkam ...	516	11	9	...	2
15	Kilpauk ...	488	7	2	2	3
16	Chetpet ...	384	10	7	1	2
17	Pudupakkam ...	970	15	5	3	7
18	Ashok Vihar ...	662	14	4	3	7
19	Adayar ...	248	8	8	...	...
20	Vadapalani ...	1,566	65	9	20	36
21	Periapet ...	1,156	39	10	9	20
	Total ...	15,756	452	203	59	190

CHILD WELFARE SCHEME

STATISTICS SUPPLEMENT No. 12

Statement showing immunisation of children with Triple Antigen for the year 1963

S. No.	Name of the Centre	No. to whom the 1st injection was given	No. to whom the 2nd injection was given	No. to whom the 3rd injection was given
1	New Washermanpet	3	3	3
2	Grace Garden	103	58	48
3	Sanjeevirayanpet	80	63	49
4	Royapuram	61	24	10
5	Muthialpet	37	16	5
6	Ammen Koil (South)	116	70	41
7	Seven Wells (South)	82	23	3
8	Dr. Vijayaraghavulu Nagar	107	69	42
9	Kondithope	47	13	5
10	Peddunaickenpet	28	7	2
11	Trevelyan Basin	60	22	15
12	Elephant Gate	45	35	30
13	Perambur	9	...	4
14	Pulianthope	143	42	30
15	Thiruvika Nagar	4	1	1
16	Choolai	741	275	153
17	Hospital Maidan	...	...	...
18	Sembiam	35	16	12
19	Ayanavaram	133	38	26
20	Nammalwarpet	...	...	...
21	Otteri	...	...	...
22	Perumalpet	246	189	164
23	Purasawalkam	183	103	79
24	Kilpauk	10	10	10
25	Chetpet	79	45	41
26	Nungambakkam	35	27	13
27	Thousandlights	58	25	13
28	Pudupakkam	82	15	7
29	Royapettah	50	29	14
30	Ashok Vihar	...	...	...
31	Park Town	...	...	...
32	Chintadripet	40	38	32
33	Pudupet	242	131	70
34	Zam Bazaar	71	34	31
35	Mirsahibpet	25	6	4
36	Teynampet	92	21	15
37	Karneeswarapuram	...	...	...
38	Raja Annamalaipuram	...	...	...
39	Adayar	83	27	21
40	Vadapalani	45	36	33
41	Thiagaraya Nagar	32	18	18
42	Sathiyamurthi Nagar	14	7	5
43	Saidapet (North)	72	21	14
44	Periapet	677	232	114
45	Guindy	98	48	20
Total		4,088	1,837	1,197

CHILD WELFARE SCHEME

STATISTICS SUPPLEMENT No. 13

Statement showing the total number of periority milk consumers
during the year 1963

S. No.	Centre	Infants	Toddlers	Total
1	New Washermanpet	24	2	26
2	Grace Garden	51	...	51
3	Sanjeevirayanpet	64	...	64
4	Royapuram	64	...	64
5	Muthialpet	43	...	43
6	Ammen Koil (South)	106	1	107
7	Seven Wells (South)	95	...	95
8	Dr. Vijayaraghavalu Nagar	93	...	93
9	Kondithope	79	...	79
10	Peddunaickenpet	58	...	58
11	Trevelyan Basin	66	...	66
12	Elephant Gate	83	...	83
13	Perambur	67	...	67
14	Pulianthope	85	...	85
15	Thiruvika Nagar	77	...	77
16	Choolai	94	...	94
17	Hospital Maidan	103	...	103
18	Sembiam	34	...	34
19	Ayanavaram	47	...	47
20	Otteri	102	...	102
21	Perumalpet	70	4	74
22	Purasawalkam	87	...	87
23	Kilpauk	46	...	46
24	Chetpet	33	...	33
25	Nungabakkam (South)	79	...	79
26	Thousandlights (West)	85	...	85
27	Pudupakkam	63	...	63
28	Durgapuram	73	...	73
29	Ashok Vihar	96	...	96
30	Park Town	...	...	...
31	Chintadripet	47	...	47
32	Pudupet	62	...	62
33	Zam Bazaar	89	...	89
34	Mirsahibpet	83	...	83
35	Teynampet	101	...	101
36	Karneeswarapuram	...	...	...
37	Raja Annamalaipuram	...	...	...
38	Adayar	63	...	63
39	Vadapalani	58	...	58
40	Thiagaroya Nagar	94	4	98
41	Satyamurthi Nagar	...	...	...
42	Saidapet (North)	100	...	100
43	Peruapet	78	...	78
44	Guindy	72	...	72
45	Nammalwarpet	...	...	...
	Total	2,914	11	2,925

Serial Number	Centre	Brought under Care				
		Total number of mothers whether they had pre-natal case or not before confinement	Ante-natal	Labour	Infants	Pre-school
1	New Washermanpet	1,266	790	986	964	880
2	Grace Garden	789	567	255	254	272
3	Sanjeevirayanpet	1,595	817	955	944	970
4	Royapuram	653	408	200	193	207
5	Muthialpet	1,156	625	274	265	272
6	Ammen Koil (South)	1,458	779	970	961	966
7	Seven Wells (South)	1,387	777	760	756	652
8	Dr. V.R. Nagar	2,552	1,371	1,617	1,570	12,70
9	Kondithope	782	542	276	270	221
10	Peddunaickenpet	589	390	110	104	108
11	Trevelyan Basin	1,480	768	872	858	878
12	Elephant Gate	332	229	135	133	76
13	Perambur	1,309	652	698	690	831
14	Puliantope	2,620	1,973	1,890	1,843	1,525
15	Thiuvika Nagar	923	668	289	283	234
16	Choolai	1,664	1,250	1,647	1,622	1,534
17	Hospital Maidan	679	474	92	90	103
18	Sembiam	1,460	921	995	971	856
19	Ayanavaram	1,491	964	1,143	1,109	883
20	Nammalwarpet	757	504	190	183	164
21	Otteri	1,318	1,063	204	200	206
22	Perumalpet	723	462	798	782	529
23	Purasawalkam	766	556	881	861	759
24	Kilpauk	951	589	564	586	485
25	Chetpet	1,300	460	227	223	134
26	Nungambakkam (South)	625	449	159	156	155
27	Thousand Lights (West)	604	362	171	166	169
28	Pudupakkam	1,800	1,051	984	966	879
29	Durgapuram	700	569	252	247	263
30	Ashok Vihar	1,203	682	888	878	780
31	Park Town	445	150	39	38	44
32	Chintadripet	811	667	240	237	207
33	Pudupet	786	415	207	203	201
34	Z in Bazaar	941	508	237	231	268
35	Mirsahibpet	1,097	724	331	321	253
36	Teynampet	1,161	830	342	341	265
37	Karneeswarapuram	1,232	874	404	393	361
38	R.A. Puram	762	483	300	295	274
39	Adayar	682	344	448	438	334
40	Vadapalani	2,425	1,688	1,729	1,680	1,155
41	Theagaroya Nagar	621	419	131	126	114
42	Sethyemcorthy Nagar	685	466	141	139	123
43	Sidapet (North)	1,314	876	141	141	143
44	Peripet	1,788	1,346	1,980	1,951	1,669
45	Guindy	455	238	85	85	87
Total		50,137	31,740	26,237	25,717	22,759

the year 1963.

Home Visits

Woman Medical Officer					Health Visitors				
Ante-natal	Post-natal	Infant	Toddler	Total	Ante-natal	Post-natal	Infant	Toddler	Total
95	133	272	130	630	...	96	887	7,556	8,359
12	198	73	287	570	18	123	1537	368	2,046
27	184	193	184	588	12	100	6,821	758	7,691
7	167	56	205	435	23	197	1,339	254	1,813
14	360	98	74	546	...	44	1,734	597	2,375
176	227	140	200	743	37	767	4,155	654	5,613
35	185	310	360	890	118	185	5,642	4,599	10,544
57	548	125	359	1,089	18	1,149	10,642	1,405	13,214
19	105	52	88	264	...	199	1,480	366	2,045
30	52	60	50	192	...	104	1,588	384	2,076
160	78	300	210	748	...	1,038	3,343	2,400	6,781
41	20	128	98	287	...	24	1,477	144	1,645
52	153	209	288	702	...	775	2,044	890	3,709
42	349	527	180	1,098	9	1,683	11,141	2,300	15,133
48	56	158	99	361	...	105	2,348	555	3,008
13	201	203	264	681	70	310	10,735	1,294	12,409
23	91	63	221	398	...	59	1,502	370	1,931
198	29	162	393	782	...	760	2,599	978	4,337
46	169	243	353	811	...	830	3,351	481	4,663
26	37	61	64	188	...	80	2,194	429	2,708
22	156	74	210	462	...	61	1,772	705	2,532
81	72	286	330	769	2	42	3,097	191	3,332
62	93	236	446	837	2	126	2,297	862	3,287
16	285	274	117	692	...	91	2,007	250	2,347
50	97	238	335	720	3	68	1,742	224	2,037
15	159	74	18	266	...	254	811	159	1,224
25	177	212	47	461	...	103	1,117	138	1,358
43	238	200	310	791	111	217	5,517	773	6,618
41	216	304	37	598	...	105	1,194	190	1,489
65	139	97	221	522	...	231	5,521	477	6,259
16	82	129	161	388	8	18	1,258	147	1,431
48	69	118	100	335	...	136	1,835	314	2,285
12	182	58	26	278	...	282	733	189	1,204
37	193	159	...	392	...	11	1,653	338	2,002
40	185	25	...	250	...	15	1,759	341	2,115
113	269	195	112	689	...	106	476	376	958
...	206	492	...	698	...	161	1,968	357	2,486
...	156	453	...	609	...	130	1,778	310	2,218
20	46	286	160	512	7	260	1,140	287	1,694
238	254	301	350	1,143	...	759	8,488	817	10,064
15	58	176	88	337	...	292	1,296	178	1,766
26	76	278	87	467	...	345	1,566	189	2,100
10	180	172	292	654	...	118	596	590	1,304
2	166	417	364	949	...	912	10,957	898	12,767
29	60	181	68	338	5	60	1,091	131	1,287
2,147	7,159	8,838	7,983	26,160	443	13,560	1,38,228	36,213	1,88,444

Serial Number	Centre	Home Visits— (contd.)			Clinics	
		Mid-wives			Ante-natal	
		Ante-natal	Post-natal	Total	No. held	Attendance
1	New Washermanpet	749	5,522	6,271	144	789
2	Grace Garden	1,115	2,134	3,249	101	567
3	Sanjeevirayanpet	592	5,245	6,837	157	817
4	Royapuram	595	1,493	2,088	101	408
5	Muthialpet	552	3,357	3,909	149	625
6	Ammen Koil Street	458	4,098	5,556	141	779
7	Seven Wells (South)	515	3,564	4,079	132	777
8	Dr. V.R. Nagar	3,124	9,130	12,254	156	1,626
9	Kondithope	1,111	2,691	3,802	129	1,139
10	Peddinaickenpet	865	1,871	2,736	124	100.4
11	Trevelyan Basin	1,580	1,580	3,160	142	579
12	Elephant Gtae	324	1,288	1,612	102	676
13	Perambur	647	3,516	4,163	138	652
14	Pulianthope	1,363	11,072	12,435	154	1,973
15	Thiruvika Nagar	727	2,997	3,724	90	668
16	Choolai	1,265	7,777	9,042	145	1,250
17	Hospital Maidan	500	2,383	2,833	105	474
18	Sembiam	692	5,539	6,231	156	907
19	Ayanavaram	870	4,694	5,564	146	1,247
20	Nammalwarpet	958	2,121	3,790	88	504
21	Otteri	832	4,806	5,638	126	1,063
22	Perumalpet	540	1,406	1,946	150	462
23	Purasawalkam	923	2,949	3,872	138	556
24	Kilpauk	364	2,698	3,062	125	589
25	Chetpet	1,602	1,660	3,262	154	460
26	Nungambakkam (South)	483	1,580	2,063	130	494
27	Thousand Lights (West)	604	1,651	2,255	133	1,051
28	Pudupakkam	760	4,591	5,351	142	1,051
29	Durgapuram	700	2,179	2,879	133	1,556
30	Ashok Vihar	657	2,874	3,561	90	682
31	Park Town	474	688	1,162	81	150
32	Chintadripet	968	2,806	3,774	107	1,110
33	Pudupet	721	1,880	2,601	123	415
34	Zam Bazaar	713	2,220	2,933	134	508
35	Mirsahibpet	707	3,083	3,790	136	724
36	Teynampet	1,161	1,908	3,069	146	830
37	Karneeswarapuram	1,384	2,629	4,013	102	874
38	R.A. Puram	842	2,791	3,633	105	483
39	Adayar	632	12,01	18,33	108	344
40	Vadapalani	1,041	5,938	6,979	138	1,163
41	Theagaroya Nagar	481	1,790	2,251	139	419
42	Sathyamoorthy Nagar	446	1,456	1,902	138	466
43	Saidapet (North)	908	1,488	2,396	144	876
44	Periapet	1,133	4,888	6,021	155	1,346
45	Guindy	342	1,030	1,372	96	238
Total		40,020	1,44,242	1,84,262	5,773	35,328

he year 1963

Clinics—(contd.)								Mortality and Morbidity	
Post-natal		Well baby		Mother Craft		Group fathers		Mortality	Morbidity
No. held	Attendance	No. held	Attendance	No. held	Attendance	No. held	Attendance		
43	114	76	262	16	117	150	1,048	...	319
50	128	50	456	30	557	50	706	1	211
51	215	102	546	111	1,278	108	2,187	1	595
50	74	50	335	30	419	50	692	...	128
52	190	51	460	51	460	201	816	...	59
44	216	80	433	185	1,420	80	600	...	439
43	227	86	748	28	176	261	1,752	...	108
52	202	104	524	157	2,078	267	3,708	...	558
50	116	50	406	50	584	129	1,139	...	43
51	125	51	344	51	590	124	1,004	...	31
43	168	84	604	50	530	269	1,371	...	145
54	103	54	346	34	214	195	1,623	1	96
44	128	75	321	91	386	138	602	...	56
44	230	79	331	59	295	198	2,203	3	484
48	108	42	302	38	312	102	585	...	95
47	256	98	1,425	100	1,156	160	1,691	...	282
39	112	56	330	43	297	43	297	...	48
42	192	87	391	47	439	56	411	...	168
42	241	83	532	89	751	174	982	...	350
36	132	38	255	28	268	32	445	...	86
39	133	48	297	44	306	44	306	...	82
50	168	100	565	50	191	271	1,453	1	168
43	180	84	547	49	1,396	264	1,283	1	125
38	132	81	410	40	428	135	730	...	166
50	100	98	270	97	258	154	460	...	46
52	96	52	395	25	263	22	304	...	30
52	111	52	684	52	556	25	218	...	89
52	246	111	544	29	667	142	1,051	...	109
50	130	50	666	52	583	28	241	...	111
43	157	128	877	219	1,691	219	1,092	1	151
50	91	47	276	47	276	131	241	...	7
54	162	54	386	48	201	272	2,469	...	131
52	112	52	420	22	248	28	366	...	44
52	177	52	563	12	142	40	634	...	30
52	139	52	468	8	94	43	544	1	59
50	359	47	268	52	1,045	52	1,045	1	7
50	117	51	338	48	760	146	1,329	...	74
49	115	51	326	48	570	205	924	...	83
65	186	98	417	65	1,430	60	1,068	...	37
47	398	90	500	292	3,531	158	3,068	1	1,061
52	123	54	352	54	352	51	353	...	13
52	98	52	232	52	232	54	314	...	13
48	216	56	246	52	1,095	52	1,095	...	8
54	435	102	1,084	156	1,719	155	1,896	1	368
59	97	98	410	60	1,141	55	1,035	...	3
2,180	7,555	3,156	20,892	2,961	31,503	5,584	47,981	13	7,316

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