E. C. No. 100

ESTIMATES COMMITTEE 1958-59

THIRTY SEVENTH REPORT

(SECOND LOK SABHA)

MINISTRY OF HEALTH
PUBLIC HEALTH
Part I

LOK SABHA SECRETARIAT
NEW DELHI
December, 1958

C O R R I G E N D A
T O
THIRTY SEVENTH REPORT OF THE ESTIMATES COMMITTEE
ON THE MINISTRY OF HEALTH ON THE SUBJECT
"PUBLIC HEALTH - PART I"

Cover Page, line 1, read "EC NO 107" for "EC NO 100"
Page 6, para 12, line 11, read "covered for "overed"
Page 8, line 12, read "Committees" for "Committee"
Page 8, para 18, line 7, read "8.705" for "8:705"
Page 14, para 34(b), line 6, read "would" for "will"
Page 22, para 54, line 5, insert "," between "1957-58
and "66"
Page 23, para 57, line 9 insert "," after "Out of these"
Page 24, para 60, line 1, insert "of the Committee"
between "Study Group" and "learnt"
Page 26, line 2, read "courses" for "course"
Page 30, para 80, line 10, insert "the" between "that"
and "question"
Page 31, line 11, insert "a" between "or" and "group"
Page 33, para 88, line 3, read "undertakings" for
"undertaking"
Page 36, line 5, read "the " for "this"
Page 38, footnote, line 2, read "enclosure" for
"inclosure"
Page 44, line 7, read "is" for "are"
Page 48, item 13, column 7, read "1.41" for "1.4"
Page 60, line 8, read "services" for "serv ces"
Page 72, Sl. No. 52, line 2, insert "the" between
"that" and "question"
Page 80, heading, read "Report" for "Repot"

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Shri H. N. Trivedi—*Deputy Secretary.*
Shri R. P. Kaushik—*Under Secretary.*

INTRODUCTION

I, the Chairman, Estimates Committee, having been authorised by the Committee to submit the Report on their behalf, present this Thirty-seventh Report on the Ministry of Health on Public Health Part I.

2. The Committee wish to express their thanks to the Secretary and other officers of the Ministry of Health for placing before them the material and information that they wanted in connection with the examination of the Estimates. They also wish to thank the representatives of the Indian Medical Association for giving evidence and making valuable suggestions to the Committee.

BALVANTRAY G. MEHTA,
Chairman,
Estimates Committee.

NEW DELHI ;
The 22*nd December*, 1958.

PUBLIC HEALTH—PART I

I. INTRODUCTORY

A. Historical Background

(i) Pre-Independence period

The Health Survey and Development Committee 1943-45 (Bhore Committee) has mentioned the following four landmarks in the history of public health administration in India:

(a) the appointment of a Royal Commission to enquire into the health of the army in India in 1859;

(b) the report of the Plague Commission in 1904 following the outbreak of Plague in 1896;

(c) the reforms introduced by the Government of India Act of 1919; and

(d) the reforms introduced by the Government of India Act of 1935.

2. Another landmark in the history of public health administration in India was the appointment of the Bhore Committee itself. It was appointed to make (a) a broad survey of the position then existing in regard to health conditions and health organisation in British India and (b) recommendations for future development. That Committee's survey of the then existing conditions and of the factors associated with them revealed India's rate of mortality to be at least double that of most civilised countries, while her infantile death rate was found to be about five times that of Australia and New Zealand. Some of the main principles underlying their proposals for future health development in the country as given by that committee are given in Appendix I. *The Committee would like to observe that in the background of the principles enunciated therein, the position of Medical and Public Health as obtaining in the country today needs considerable further improvement.*

(ii) Post-Independence period

3. After the attainment of independence, Medical and Public Health Services have, no doubt, received a fresh impetus. In fixing the pattern of priorities in the First Five Year Plan, the Planning Commission has stated:—

"To the extent that the accent of the plan is on increasing production, the limitation of resources available would restrict the scope for expanding social services. And yet it is obvious that no plan can succeed unless it 'invests' in the improvement of the human material. Even from the point of view of increasing production, social

services like education, technical training and health bring in significant returns. Considerable advance in these directions can be made if the necessary urge to improvement is created among the people. The problem is partly psychological. There is also large scope in this field for direct community effort. The improvement of public health is often a matter of imparting elementary knowledge regarding sanitation and hygiene."

4. The Committee propose to deal in subsequent chapters of this report, with some important aspects of Public Health, such as certain important communicable diseases, water supply and sanitation and slum clearance in Delhi. *They would, however, like to lay special stress here on one point* viz. *that no amount of effort on the part of government alone will achieve the objectives set by the Constitution without the people's willing and active cooperation. They, therefore, recommend that greater emphasis should be laid on people's active participation in the various public health programmes.*

B. Five Year Plans

5. The committee regret to find that even though the provision for health was insufficient according to the representatives of the Ministry and the public, large amounts of funds allocated for various health schemes in the First Five Year Plan were not fully utilised, as will be evident from the following resolution of the 5th meeting of the Central Council of Health held in December, 1956:—

"The Council notes with regret that a considerable amount of funds allocated for Health Programmes in the First Five Year Plan had to be surrendered. Recognising the paramount importance of timely planning and the need for proper supervision of Health Programmes, the Council recommends to all State Governments to suitably strengthen their health Directorates so as to ensure that all the funds made available under the Second Five Year Plan are fully and effectively utilised."

Unfortunately, this resolution does not seem to have produced any appreciable results, in as much as the Committee find that in a large number of schemes included in the Second Five Year Plan there have been huge shortfalls in actual expenditure when compared to the budgeted amount during the first two years of the Plan.

6. A statement showing the expenditure incurred during the first two years of the Second Plan under various health schemes and their budget provision is enclosed as Appendix II. It is seen that even in certain important schemes which are vital to the nation, there have

been huge shortfalls for instance under the Rural Water Supply and Sanitation, Establishment of T.B. Clinics etc. *The slow progress of expenditure witnessed during the first two years of the Second Plan in a large number of health schemes indicates a lack of proper plan consciousness in various health departments. The Committee would like to make the following recommendations to end this state of affairs:—*

(a) *The Central Ministry should at regular intervals review the progress of different health schemes and devise measures for an organised approach to accelerate the pace of progress.*

(b) *In cases where the planned expenditure of a particular scheme is not likely to be incurred, funds may be diverted from one scheme to another so that there is maximum realisation of targets both physical and monetary in the Second Five Year Plan.*

(c) *Such a review will help the Ministry to find out the position of the Plan provision which it cannot usefully spend so that the amounts can be surrendered in consultation with the Planning Commission which can divert them to other schemes which are ready for execution but which have been held up for want of funds.*

(d) *While thus diverting the funds from any scheme, special efforts should be made for utilising the funds thus made avaliable for environmental sanitation and water supply schemes which should receive the highest priority.*

7. One of the reasons advanced generally in case of shortfalls in Centrally aided schemes has been that the State Governments did not fulfil their responsibilities in time. *The Committee, therefore, suggest that the Directorate General of Health Services at the Centre should have teams of experts who should visit the States and help their staff in formulating detailed plans well in advance so that allocated funds, meagre as they are, are not left unutilised. In formulating these plans more emphasis should be laid on medical facilities, personnel, equipment etc. and less on building works.*

8. As regards the preparation of a perspective plan for improving the general standard of health by increasing the medical facilities, both curative and preventive, the Committee were informed that the Ministry of Health have appointed a small Committee to take an overall picture and collect certain material and thereafter a Committee on the lines of the Bhore Committee will be appointed to scrutinise all the

schemes and suggest ways and means of implementing them. *The Committee feel that this is a step in the right direction. The medical facilities, both preventive and curative, available to the citizens of the country, are very meagre and a well integrated perspective plan is necessary to chalk out a long-range programme which will envisage provision of minimum facilities (maternity, child welfare, medicine, surgery and advice of specialists) to all the citizens by a target date. A short term plan harnessing all medical workers, trained or semi-trained, into a well organised net work is also necessary, so as to provide some rudiments of medical care to all the people here and now. The proposed Committee should take these factors into consideration while indicating the future provision of medical facilities and general public Health measures.*

II. MALARIA CONTROL

A. Introduction

9. Malaria is one of India's most important public health problems. It was estimated in 1953 that about two hundred million people live in malarious areas and that no less than seventy-five million persons suffered from it and 800,000 people died as a result of malaria every year. Malaria is a formidable foe not merely on account of the number of deaths it causes, but mainly because of the debilitated condition in which it leaves its victims after an attack.

10. The National Malaria Control Programme, particulars of which are given in the next section, has achieved substantial results in reducing malaria mortality and morbidity. In India as a whole, malaria morbidity has declined from 75 million in 1952-53 to 19·3 million in 1955-56. These figures are, however, still very high when compared to those of other countries. Vigorous efforts are, therefore, necessary to eliminate the incidence of Malaria from the country. *The Committee, therefore, welcome the introduction of the revised and intensified programme of Malaria eradication from 1st April,* 1958 *and hope that by well co-ordinated action and, constant vigilance the programme will succeed in achieving its objective of eradicating Malaria from the country.*

B. The National Malaria Control Programme

11. The National Malaria Control Programme was launched in April, 1953 with the objective of reducing morbidity in highly malarious areas of the country to such a low level that the disease would cease to be a major public health problem. In the first phase the programme aimed at affording protection to about 125 million people (by forming 125 malaria control field units) out of about 200 million people estimated to be living in malarial areas. However, the target was later raised from 125 units to 162 units to afford protection to 162 million people. The following table indicates the progress made by the Ministry during the First Five Year Plan in this respect:—

Year	No. of units allotted	Units actually functioning	No. of persons proposed to be afforded protection (in millions)	No. of persons afforded protection (in millions)
1953-54	90	84	90	55·77
1954-55	136	110¾	136	79·87
1955-56	162	113½	162	111·69

12. The target during the Second Five Year Plan was raised to cover 230 million people living in *hyper-meso-endemic* and epidemic areas. The National Malaria Control Programme continued to function during the first two years of the Second Five Year Plan. In the year 1956-57 the total number of units allotted was raised to 200. Another 30 units were allotted during 1957-58 thus bringing the total number of units allotted to 230. Actually, however, 169·25 units were functioning at the end of the year 1956-57 and 182·5 units at the end of the year 1957-58. Upto the end of the year 1956-57, 145·25 million people were protected from malaria. The reasons for shortfall in the number of units opened and the number of people overed by each Malaria Control Unit have been stated as under:—

(i) While formulating the National Malaria Control Programme it was assumed that the average surface area to be treated per house was 1,000 sq. ft. A review under actual working conditions showed that the average surface area was an under estimate and was near about 1,300 sq. ft. per house.

(ii) It was assumed that one pump unit would spray on an average about 60 houses a day. The actual performance of the pump unit, however, varied considerably and was less than half in difficult areas; averaging about 40-45 in plains and 20-25 in the hills and difficult areas.

(iii) On the basis of normal requirements of one unit, a pattern of staff was suggested by the Centre and it was left to the discretion of the State authorities to make adaptation of staff requirements to suit local conditions. In practice, however, the pattern suggested was adhered to more or less strictly as any variations meant extra expenses and the State Governments would not readily accept any departures from the standards laid down.

(iv) While the control programme took into account the total population to be protected in hyper meso-endemic areas, no special provision was made for areas where approach is difficult, areas which are sparsely populated and the distances between houses and villages are very great.

(v) In some States people refused to get their houses sprayed with insecticides on religious grounds *i.e.* Jain Community in Rajasthan and erstwhile State of Madhya Bharat.

(vi) Delayed supplies of equipment from T.C.M. in the initial stages of the Programme also contributed to not achieving the targets.

13. Besides these reasons, another reason stated by the representative of the Ministry of Health during the evidence tendered before the Committee was that there was always a time lag between the allotment

of a unit and the actual recruitment and getting the staff into position in each of these areas. *The Committee feel that the reasons furnished by the Ministry in this respect indicate lack of pre-planning and some rigidity of approach to the problem. They, therefore, suggest that concerted efforts should be made from the very beginning to achieve the targets aimed at in case of the Malaria Eradication Programme.*

14. Annual assessments of the results of operation of the Programme are also carried out every year by malariometric sample surveys and appraised through the various indices prescribed in malariometry. These indices have been compiled state-wise year by year upto 1956-57 but they are still under compilation for 1957-58 because reports from the 8 malaria control units have not yet been received.* The Committee were told that the State Governments have been repeatedly requested by reminders and personal contacts to furnish the reports without delay. *The Committee are of the opinion that the reasons for the delay in submission of reports should be investigated and responsibility fixed so as to avoid such recurrences in future. Some concrete measures appear to be necessary to receive reports from each of the Malaria Control Units by the due dates fixed.*

C. **Socio-Economic Benefit**

15. The Committee understand that a number of pilot studies carried out concurrently to study the socio-economic effects of the Control Programme on the population revealed interesting findings. A pilot study in Mysore revealed that an investment of one rupee in the Malaria Control Programme brought a return of Rs. 97. Another study in the same area revealed that the Control Programme stepped up the paddy yield in 2,800 acres. The increased yield of paddy was estimated to cost about Rs. 20,58,649. Similarly in the Punjab and U.P., Malaria Control rendered it possible to bring under cultivation large tracts of land. In the colliery areas of the country the reduction in the incidence of the disease led to an increased production of coal and a new lease of life was given to the betelnut industry of south Kanara largely as a result of the Malaria Control Programme. *The Committee are glad to learn about the results of these pilot studies. They hope that the authorities will succeed in eradicating the scourge of malaria completely by the target date, as envisaged in the Malaria Eradication Programme.*

16. As regards the procedure adopted to ensure public co-operation, the Committee were informed that instructions have been given to the field workers to maintain good public relations and to cultivate people's co-operation. The Committee are, however, surprised to learn that there are no Advisory Committees for assisting the administration of Malaria Control/Eradication programme. It was stated that local leaders are contacted to help to carry out the programme as framed by the officials. The Committee feel that indoor residual spraying

*The reports from the defaulting units are stated to have since been received and data for 1957-58 compiled.

which is the core of the Malaria Control|Eradication Programme is one of the public health activities which brings the public health staff into direct contact with every individual member living in the area and without people's active cooperation the programme cannot be completely successful. The complaints have been voiced that the staff of the Malaria Control Programme sometimes visit the localities without any prior intimation, that there is no consultation as to the manner in which spraying is to be done and that often a large number of people in the villages do not even know about the coming and going of these staff. *The Committee, therefore, suggest that people's representatives should be associated in the execution of the Malaria Eradication Programme in the form of Advisory Committee at the Central, State, District and Block levels. The Committees at the District or Block levels may also be entrusted the work of supervising the work of malaria staff working in villages so that all the personnel employed in the work are effectively utilised. Active co-operation of the village panchayats should also be sought to make the programme effective and broadbased. This will enable the general public to actively participate in the work, creating a sense of urgency for the whole scheme.*

D. National Malaria Eradication Programme

17. A note giving the main points of difference between a Control and an Eradication programme and salient features of the Eradication Programme is enclosed as Appendix III.

18. The Committee learnt that the total estimated cost of the eradication operation during the years 1958-59 to 1960-61 is Rs. 43·57 crores out of which the States are expected to spend Rs. 15·19 crores and the Centre Rs. 10·09 crores. The balance of Rs. 18·29 crores (equivalent to 38·4 million dollars) in foreign exchange is expected to be made available by foreign agencies. For the year 1958-59 W.H.O. have agreed to contribute 1·706 million dollars and the T.C.M. 8:705 million dollars. It has, however, been explained that the expenditure on Eradication Programme will be in excess of that on the Control Programme during the Second Plan period only and during the subsequent plans there will be considerable saving. The following comparative estimates for an Eradication and a Control programme have been furnished to the Committee:

(Rs. in crores)

Estimates for	Remaining three years of the Second Plan	Third Plan	Fourth and subsequent Plans
Malaria Eradication Programme	43	12	2 per plan period
Malaria Control Programme	14½	25	24 Do.

These figures indicate that the Malaria Eradication Programme, which has replaced the Malaria Control Programme from 1-4-1958, will be more economical in the long run.

19. The Committee learnt that the details of the Malaria Eradication Programme were furnished to the States in the month of December, 1957 and they were discussed later by the representatives of the States with the Planning Commission. After detailed scrutiny, the proposals were accepted by the Planning Commission and it was decided to put this programme into force from 1st April, 1958. With the exception of Madhya Pradesh, Madras and Assam all the State Governments are stated to have sanctioned the implementation of the Malaria Eradication Programme. *The Committee are, however, surprised to learn that the reasons for these three State Governments not sanctioning the implementation of Malaria Eradication Programme are not known to the Ministry of Health. They feel that active participation of all the States in a National Programme of this type is very essential. They, therefore, suggest that the Ministry should make efforts to persuade the three States to join the Programme.*

20. The Committee were informed that according to the Plan 230 units allotted for hyper and meso endemic areas under the Control Programme have continued operations in the year 1958-59 and another 160 units for hypo-endemic areas are to function from next year.

21. As regards the staff pattern employed in various Malaria Eradication units, the Committee were informed that the spraying staff as employed in each unit in the National Malaria Control Programme was not considered to be sufficient and its strength as also the number of sprayers has been raised by 50 percent to enable a complete coverage to be achieved. The staff pattern of each field unit in the National Malaria Control Programme was as under:—

(i) One Malaria Officer.

(ii) 4 Senior Malaria Inspectors and 4 Malaria Inspectors.

(iii) 24 superior field workers and 120 field workers out of these 4 and 10 respectively are for the whole year.

(iv) Ancillary staff like clerk, mechanic, driver, cleaner and peons etc.

Reinforcement, however, will be 100 percent in the case of 40 units which are estimated to operate in hilly areas or areas of difficult terrain with sparse population. The staff pattern indicates that a large number of staff is employed all over India in Malaria Eradication Programme, which will no longer be required for the present purpose after 1963-64 by which time Malaria is expected to be largely eradicated from the country. *The Committee, therefore, suggest that suitable proposals should be considered by the Ministry in advance as to how the staff, that would be released after the Malaria Eradication Programme is completed, could be usefully utilised.*

22. The Committee were informed that the Malaria Eradication Programme is quite distinct from a programme aiming at eradication of mosquitoes. After malaria eradication has been attained, mosquitoes will be still there, but they will cease to be the transmitters of malaria infection. Densities of mosquitoes will, no doubt, be brought down during the spraying operations, but these may again rise once spraying is withdrawn. The permanent measures for eradication of mosquitoes are environmental sanitation, adequate drainage and better housing. The mosquitoes can, however, also be eliminated by incurring recurring expenditure on the application of insecticides. *The Committee suggest that the mosquito nuisance should also be tackled in a systematic way. For this purpose the public should be educated about the breeding places of mosquitoes and the techniques of controlling the breeding of mosquitoes in these places, apart from improving the environmental sanitation through Primary Health Centres.*

23. *The Committee are also of the opinion that in the last two years of the campaign for Malaria Eradcation, the villagers themselves should be given materials for use by themselves under the supervision of the Malaria personnel so as to educate them in the techniques of malaria and mosquito control. Thus the villagers who have been informed of tha breeding places and who have been educated in the use of materials and equipment for destroying mosquitoes may be able to tackle the mosquito nuisance when the Malaria Eradication Programme is completed and the existing personnel are withdrawn. In this respect the feasibility of assisting the Panchayats with equipment and materials to eliminate the mosquitoes after the Malaria Eradication Programme is completed, should be examined.*

24. The Committee understand that sufficient indigenous production of D.D.T. is available in the country to meet the requirements of the Ministry for Malaria Eradication Programme. Even at present the Ministry is unable to consume all the D.D.T. produced in the two factories at Najafgarh and Alwaye because the T.C.M. gives a large quantity of D.D.T. as a free gift. There is, however, no surplus of D.D.T. as such in the country at present. But after the Malaria Eradication Programme is over, the Committee understand that the requirements of D.D.T. will be substantially reduced. This might result in the production capacity of D.D.T. factories at Delhi and Alwaye becoming far in excess of the requirements in the country. It appears that the Ministry of Commerce and Industry are taking steps to convert the D.D.T. Factory for some other use. *The Committee are of the opinion that properly co-ordinated and pre-planned measures are necessary to avoid any wastage of men, material and machinery employed in these two factories, when the requirements of D.D.T. are substantially reduced at the end of the Malaria Eradication Programme.*

E. Malaria Institute of India

25. In the National Malaria Control (now Eradication) Programme the Malaria Institute of India plays an important role. Besides providing training and research on the different aspects of Malaria and Filaria, the Institute advises upon and assists in carrying out the anti-malaria and anti-filaria measures and co-ordinates and directs nation-wide malaria and filaria control programmes.

26. The Committee learnt that the Malaria Institute of India, one of the oldest centres in the world for teaching and research for Malaria Control and allied subjects, was founded in 1909 as the Central Malaria Bureau. This Institute has been located at different times at Saharanpur, Kasauli and Karnal. It was shifted to its present site at 22, Alipore Road, Delhi in 1938. The Ministry and the authorities of the Malaria Institute of India stated that they had no objection to shift the office of the Institute outside Delhi if suitable accommodation is provided elsewhere. *The Committee, therefore, suggest that the feasibility of shifting the Institute at a place outside Delhi, provided suitable accommodation can be found for it, might be examined. This would serve to reduce the congestion of Government Offices in Delhi.*

27. On inquiring about the latest report of the Institute, the Committee were given to understand that the latest published annual report of the Institute relates to the years 1948-50 which was published in 1954. The combined annual report of the Institute for the years 1951-55 is stated to be in press and the material for the combined reports of the Institute for the years 1956 and 1957 is still under collection. *The Committee consider this an unhappy state of affairs. They, therefore, suggest that the Ministry of Health should ensure that the annual reports of all such Institutes in the affairs of which the Ministry has a say are not normally delayed beyond six months after the expiry of the year under review.*

Staff

28. A statement showing particulars of the Staff at Malaria Institute of India as on 31-3-1958 is enclosed as Appendix IV. It is seen from the statement that the non-technical staff employed are 33 U.D.Cs. 33 L.D.Cs., 7 Daftries, 36 Peons, 13 Chowkidars, 2 Farashes and 11 Sweepers. The Committee feel that in a technical Institute of this type, the non-technical staff appears to be on the high side. *They, therefore suggest that the workload of the non-technical staff of the Institute should be properly job analysed to see what reduction is possible.*

III. TUBERCULOSIS CONTROL

A. Introduction

29. It is now recognised that next to Malaria, Tuberculosis is the major public health problem that confronts the country. It is estimated roughly that 5 lakh people *i.e.*, about 1·4 persons per thousand of population die of this disease every year (in other words, on an average, one person die of tuberculosis every minute in India) and that at any particular time there are about 25 lakh tuberculosis patients in the country. A statement showing the comparative rate of mortality due to the disease of tuberculosis in different countries of the world is given in Appendix V. It is seen from that statement that the rate of mortality due to this disease in India is probably the highest in the world.

30. The Committee learnt that a National Sample Survey regarding the incidence of tuberculosis in the country was taken in 1955 under the auspices of the Indian Council of Medical Research to secure more reliable data about the extent of the disease. Though the survey is not yet complete the interim report shows that on an average about 1·5 percent of the population suffers from active tuberculosis thereby showing that the previous estimate of 2½ million sufferers was very much on the low side. The survey has also shown for the first time that prevalance of this disease in cities, small towns and easily accessible villages is more or less the same and that the earlier impression that the tuberculosis is mostly a problem of big cities has to be revised.

31. As regards the achievements made to control the disease the Committee were informed that at the time when the First Five Year Plan schemes were prepared a panel of experts drew up a scheme for tuberculosis control in the country, giving priorities for a programme which could be within the resources of the country and be implemented expeditiously.

This included:—

(i) B.C.G. Vaccination.

(ii) Establishment of T.B. Clinics and expansion of domiciliary service.

(iii) Establishment of few Demonstration and Training Centres.

(iv) Provision of beds for isolation of infective cases living in crowded areas.

(v) Establishment of a few work centres for the rehabilitation of *Ex*-T.B. patients.

(vi) Undertaking of certain research programmes in connection with tuberculosis.

32. It has, however, been admitted by the Ministry that it was found towards the end of the First Plan period that the progress made in the implementation of the schemes on the whole was meagre except for B.C.G. Programme which was started on a mass scale under the auspices of the Government of India with the help of UNICEF and WHO. The table below gives the progress of the B.C.G. Campaign in India:—

Year	Tested (in lakhs)	Vaccinated (in lakhs)	Mass Campaign Units	National expenditure (Rs. in lakh)
1949-50	5·3	1·8	No mass Campaign units formed	7·0
1950-51	20·7	6·8	,,	9·8
1951-52	27·2	11·2	15	14·5
1952-53	86·2	21·4	48	20·2
1953-54	124·9	38·6	85	24·8
1954-55	187·8	65·6	119	28·0
1955-56	253·7	100·4	131	30·3
1956-57	145·0	53·0	143	41·4
TOTAL	850·8	298·8	541	176·0

These figures bring out two important features *viz.*

(i) The campaign was steadily gaining momentum till 1955-56, but received a set back in 1956-57 during which year number of persons tested and vaccinated dropped substantially inspite of the fact that the number of Mass Campaign Units and the expenditure incurred had increased. *This point needs careful investigation and suitable remedial action.*

(ii) Even after eight years' efforts only about 8·6 crores of persons have been tested and about 3 crores vaccinated. *The tempo of work, therefore, needs to be increased so as to cover the entire susceptible population as expeditiously as possible.*

33. The remaining schemes were left to be implemented by State Governments on their own initiative. The Central Government provided advice and guidance only in this respect to the State Governments. The development in respect of the schemes left to be implemented by State Governments during the First Five Year Plan was stated to be quite haphazard. Most of the T.B. clinics established did not have the required equipment and personnel nor were they

functioning in a way indicated in the Plan. Nowhere attempts were made to provide and expand domiciliary treatment services. In so far as establishment of beds is concerned these were mainly established in sanatoria for providing treatment and not with emphasis on isolation as provided for in the Plan. Thus, the beds were established in out of the way places and not in the overcrowded areas as indicated in the Plan. No attempt was made to establish rehabilitation centres in the country.

34. The Committee learnt that because of the slow progress in the implementation of the T.B. schemes during the First Five Year Plan it was decided that tuberculosis control should be taken on the national basis in the same way as the Malaria Control Programme during the Second Five Year Plan. While the items of the programme were the same as indicated in the First Plan, it was decided that to enable the State Governments to push forward the schemes, Central assistance should be given for the implementation of these schemes. On this basis the programme for the Second Five Year Plan was drawn up in consultation with the State Governments which included the following schemes:

(a) The intensification of the B.C.G. Vaccination programme so as to complete the first round of the entire estimated susceptible population of the country (170 million) by 1961. The Government of India offered to give subsidy equal to 50% of pay and allowances of additional staff to be employed for the completion of the programme.

(b) Establishment or upgrading of 300 T.B. clinics with a view to provide modern diagnosing and preventive units for each district in the country. The State Governments were to provide buildings and staff necessary for the running of these clinics. The main emphasis on the work of the clinics will be domiciliary service (free) for the patients and educating the families and public in the prevention of the disease. The Central Government would provide modern X-ray diagnostic as well as laboratory outfits to these clinics doing scientific diagnostic work at a cost of about Rs. 50,000 per clinic.

(c) Establishment of 15 T.B. Control and Training Centres in States.

(d) Establishment of 4,000 additional beds for isolation of patients living in over-crowded areas.

(e) Establishment of 8 work centres for the rehabilitation of the *ex*-T.B. patients; and

(f) Expansion of research facilities.

The Committee suggest that wide publicity should be given to these schemes specially the free domiciliary service provided by the T.B. Clinics.

35. The budget provisions made, and the actual expenditure incurred, for the above mentioned schemes during the first two years of the Second Five Year Plan are as under:—

Scheme	Budget Provision 1956-57 Rs.	Budget Provision 1957-58 Rs.	Actual Expenditure 1956-57 Rs.	Actual Expenditure 1957-58 Rs.
Central Subsidy for B.C.G. Vaccination campaign	Nil	2 lakhs	Nil	2,000
Establishment of T.B. Clinics . .	30 lakhs	30 lakhs (29·5 lakhs revised estimates)	Nil	15·4 lakhs
Establishment of T.B. Demonstration and Training Centres . .	5 lakhs	4 lakhs	Nil	Nil
Establishment of T.B. Isolation Beds	10 lakhs	10 lakhs	2,80,840	10,18,103
Establishment of Aftercare and Rehabilitation Centres for T.B. Patients	3·67 lakhs	Nil	Nil	Nil

The Committee feel that considering the great importance of tuberculosis control which is the second major public health problem of the country, the funds provided for it are themselves inadequate for the effective and early control of this scourge. Even out of the inadequate funds provided, there have been huge shortfalls in the actual expenditure compared to the budgeted estimates for the various control schemes during the First Plan and the first two years of the Second Plan. This indicates that the urgent need of tackling the problem of Tuberculosis on a national basis has not yet been fully realised. The Committee, therefore, suggest that the Ministry should take urgent and effective steps for more rapid control measures and to at least fulfil the targets aimed at during the Second Plan.

B. Tuberculosis Clinics

36. Against the 4,000 clinics recommended by the Bhore Committee, the Committee were informed that by 1956 there were about 200 clinics in India. Many of these clinics required upgrading so that their work may be more scientific and their services more adequate. The scheme for the establishment of 200 new T.B. clinics and the upgrading of 100 existing T.B. Clinics, was, therefore, included in the Second Plan in order to provide facilities for diagnosis and domiciliary treatment of tuberculosis patients. Subsidy in the shape of X-ray and Laboratory equipment at a cost not exceeding Rs. 50,000 is payable

by the Centre in respect of each clinic. X-ray and Laboratory outfits for 60 clinics are already being provided by the Central Government and an indent for equipment for 25 more T.B. clinics is proposed to be placed on D.G.S. & D. shortly. The representative of the Ministry, however, informed the Committee that there have been considerable delays in getting the supplies through D.G.S. & D. Further, even where equipment has been supplied to State Governments they are unable to use it because of lack of preparation on their part. *The Committee suggest that prompt measures should be taken to get the supplies from D.G.S. & D. within reasonable time and to see that the equipment supplied to the State Governments is promptly and properly utilised as these are delicate instruments and if they are kept in packing cases unduly long, they are likely to be damaged. The Committee would like the Ministry to take precautionary measures to ensure that the funds provided in the Second Plan for this urgent and important purpose are not allowed to lapse.*

37. The Study Group of the Estimates Committee which visited the Civil Hospital at Manipur noticed that certain equipment had remained out of commission for a considerable period for want of repairs and replacements. In this connection, it was stated that the equipments are purchased by the Centre only from those suppliers who can provide servicing facilities. It has, however, been noticed that even when the servicing facilities are available considerable delays occur in repairs and replacement of the equipment supplied to various clinics and the Ministry have not got any machinery at present to find out whether the equipments supplied to various clinics are in working order or otherwise. *The Committee, therefore, suggest that the Ministry should keep a watch whether the costly equipments supplied by them to the various clinics are in working order. Steps should be taken to see that proper servicing and repairing agencies are made available, wherever necessary, so that the costly equipment does not remain idle. This should be included in the terms of purchase of such machinery and the clinics which have been supplied the equipment should be specifically informed about the servicing and repairing agencies available for the purpose.*

C. Isolation Beds

38. The Committee learnt that in 1947 there were about 6,500 T.B. beds in the country and at present there are about 22,500 beds as against the 5,00,000 beds recommended by the Bhore Committee. These beds are in different sanatoria and hospitals and are developed with the idea of taking care of cases that have a reasonable chance of getting better by treatment in an institution. For the isolation of infected cases living in crowded homes and unhygienic surroundings, the Second Plan provides for the establishment of 4,000 beds in crowded areas. These beds are intended for those patients, for whom chances of recovery are less bright and who cannot be isolated in their homes. According to the plan, the State Governments establish these beds and the Central Government give subsidy upto the maximum of Rs. 1,250

per bed. 2,010 beds were allotted to the States during 1956-57 and 1957-58. Of these 1,044 beds had been established by March, 1958. The reasons for the shortfall are stated to be:—

(a) the schemes were finalised late in 1956-57 and during that year only 362 beds could be established against the allotment of 777;

(b) as new buildings have to be put up at many places it takes considerably long to complete the establishment even though the work is taken in hand sufficiently early.

The Committee do not consider these reasons as very convincing and *suggest that concerted efforts should be made by the authorities concerned at the Central and State levels to achieve the target of establishing* 4,000 *beds during the Second Plan.*

39. The Committee understand that it is common experience of all workers in the line that by the time a person's disease is effectively controlled, some other members from the same house appears for treatment in clinic and what is more tragic, a child from the same family may be admitted in a ward with tubercular meningities. *As preventive work is very important in the scheme of the control of tuberculosis, and in view of the inadequacy of the number of beds under construction, the Committee recommend that stress should be laid on providing simply designed and cheaply constructed huts, in the local areas for the isolation of infective patients, where home isolation is not possible. These huts may be placed in charge of a nurse and treatment provided by mobile units.*

D. Tuberculosis Training and Demonstration Centres

40. The Committee understand that the scheme of establishment of National Tuberculosis Training Centre for imparting training to senior key persons was till recently under the consideration of the Ministry of Health. It has now been approved in principle but the working details have still to be finalised. *The Committee hope that the proposal will materialise early to meet the scarcity of trained tuberculosis personnel. The Committee suggest that the trained personnel should be used for the purpose for which they are trained and to ensure this a follow-up record of all those receiving specialised training should be maintained.*

E. After-care and Rehabilitation Centres

41. A scheme for the establishment of 8 After-care and Rehabilitation Centres for providing facilities for teaching tuberculosis patients suitable handicrafts such as tailoring, paper making, toy making, embroidery, soap making, basket making etc. which could be continued by such patients in their homes has been included in the Second Plan. *The Committee suggest that in addition to giving necessary training in suitable handicrafts, the Ministry may consider the feasibility of providing suitable avenues of employment by categorising or reserving*

certain jobs which do not require hard work in industries and other institutions both in private and public sectors for arrested tuberculosis patients who are really handicapped persons and on whom substantial sum has been spent during the course of their treatment, which would prove a waste unless adequate rehabilitation measures are evolved for every case that recovers after treatment.

F. Detection of T.B. Cases

42. The Committee learnt that a pilot project is now going to be started in which two types of approaches will be tried for detection and cure of T.B. cases in rural area. According to one approach the T.B. Control Programme would be integrated with the working of the Primary Health Centres. This means that a mobile unit would go on an appointed date to the Primary Health Centre to examine all those villagers who have been asked through the gram sevaks to come for examination. Those who are found to have tuberculosis will be treated by the mobile unit staff with the help of the Primary Health Centre staff. According to the other approach a mobile unit would go and screen the whole population of the village, discover all the cases that are suffering from tuberculosis and give them treatment. In the beginning about 3 or 4 mobile units are going to be started under this pilot project, and the number will be subsequently increased by 10 more units. *The Committee feel that the use of mobile units in treating and controlling tuberculosis will be more successful than any other method. They, therefore, suggest that the proposed pilot project involving the use of mobile units for detection and treatment of tuberculosis in rural areas should be started without any loss of time and gradually expanded as quickly as possible.*

43. In regard to the measures taken by the Ministry to find out the incidence of T.B. among students, the Committee were informed that a programme for having arrangements in schools and colleges for finding out T.B. among students was turned down for lack of funds. The total cost of the programme was stated to be approximately Rs. 60 lakhs for the whole country. The programme involved 50 per cent contribution by the Centre and 50 per cent by the States. *The Committee feel that it is very necessary that some arrangement should be made in schools and colleges to find out the incidence of T.B. among students, specially in view of the fact that with the modern advances in medicine and surgery, detection of this disease in early stages would mean that cure would be almost a certainty. They, therefore, suggest that the scheme should be re-examined, processed and finalised early with the assistance of State Governments, Local Authorities and All India and State Medical Associations.*

44. The Committee understand that giving proper doses of antibiotics to tuberculosis patients reduces substantially their infectivity to healthy persons. *The Committee, therefore, suggest that adequate supply of antibiotics should be given to tuberculosis patients either free or at concessional rates depending upon the economic condition*

of the patient, in the interest of public health. A suitable scheme may be prepared in this respect, commencing such supply in Union territories and extending it to other parts of the country in a gradual planned manner.

G. B.C.G. Vaccine Laboratory, Guindy

45. In furtherance of the object of introducing B.C.G. Vaccination in India, a Laboratory for the manufacture of Vaccine was established by the Government of India at the King Institute, Guindy in the year 1948. This Laboratory now supplies vaccine to Afghanistan, Burma, Ceylon, Pakistan, Malaya and Singapore on a no-profit basis. B.C.G. Vaccine and tuberculin required in connection with the B.C.G. Vaccination campaign in India are being supplied free of cost to all States in India. Only the cost of transport is being recovered from them.

46. The main function of this Laboratory is to manufacture B.C.G. Vaccine and prepare dilutions of tuberculin. In addition to the manufacture and supply of tuberculin and B.C.G. Vaccine, the Laboratory also undertakes occasional research relating to certain problems connected with the manufacture of vaccine. The Director of the Laboratory carried out a preliminary study during 1953 for finding a suitable dosage of tuberculin which would be used for retesting after B.C.G. vaccination. No regular research work has, however, been possible in the Laboratory as the present staff is fully occupied in the routine work of manufacture of B.C.G. Vaccine. Research is now considered desirable because improvements in the manufacture of the vaccine can only be effected after investigating the various problems that crop up from time to time in the routine work of the Laboratory. *The Committee, therefore, recommend that the Ministry should consider the feasibility of taking up regular research work at this laboratory with the assistance and advice of the Indian Council of Medical Research.*

47. The Study Group of the Committee that visited the Laboratory at Guindy have noticed that the storing space in the B.C.G. Vaccine Laboratory is not adequate. Therefore, at present, a small building adjacent to the Laboratory belonging to the State Government is being utilised for storage. The State Government is pressing for its release. In this connection, the Committee understand that the C.P.W.D. has suggested that a temporary building worth about Rs. 6,000 or Rs. 7,000 could be put up for storage and, later on, construction of a permanent building for storage could be taken up. The matter is, however, reported to be still under discussion. *The Committee suggest that the Ministry should examine the proposal and in any case ensure that necessary alternative arrangements are made for proper storage for the Laboratory before the extisting rented building is got vacated.*

H. Lady Linlithgow Sanatorium, Kasauli

48. This Sanatorium was established and managed by the Tuberculosis Association of India (T.A.I.) which is a non-official body. Three such institutions are run by the T.A.I. The Governing Body of the Institution is a managing committee appointed by the T.A.I. every year. There are, in all, 350 beds in the Sanatorium out of which 50 are in private wards. Of these 350 beds, 205 are reserved by bodies, including 30 for Government of India, 50 for Indian Army, 55 for the Northern Railway and 20 for the P & T Department. The reserving bodies pay actual costs of maintaining the beds and treatment of patients. In respect of C.H.S. patients, actual cost of maintenance and treatment are charged and paid by D.G.H.S. on presentation of bills. The cost was Rs. 2,124/- per patient in 1957. General ward patients pay Rs. 4|- a day including the cost of food, and private patients pay Rs. 3 to Rs. 6 a day excluding food. These charges amount to about 2/3 of the actual cost of maintenance and treatment.

49. The Study Group of the Estimates Committee that visited the T.B. Sanatorium at Kasauli were favourably impressed with the work done in the Sanatorium, which was being kept spick and span, and by the missionary zeal with which the Medical Superintendent and his assistants were working. They were, however, surprised to learn that at present, there are no free beds at the Sanatorium to accommodate poor patients. *The Committee suggest that the Ministry should give grants-in-aid or provide money from other sources to institutions of all India reputation like this Sanatorium, at Kasauli, to reserve some free beds or beds at concessional rates for poor patients from among the general public so that the common man can also utilise the excellent facilities available at such Institutions.* The Study Group were also informed that the surgical section, research laboratory and occupational therapy departments of the Sanatorium required improvements. The Sanatorium has not got enough funds to develop its various sections unless some special grants are received from some sources. *The Committee suggest that the Indian Council of Medical Research might utilise the equipment and personnel available in this Institution for research, simultaneously upgrading its various sections and giving necessary assistance to the Sanatorium for these purposes.*

IV. LEPROSY AND OTHER COMMUNICABLE DISEASES

A. Introduction

50. Leprosy has been prevalent in India from very ancient times. This disease creates not only public health and medical problems but also grave social problems. The Bhore Committee (1943-45) estimated the number of persons suffering from leprosy in India at least at ten lakhs out of a total number of 50 lakhs of leprosy patients in the world. According to the Report on Leprosy and its Control in India (1941) "there is a belt of high incidence including the whole of the east coast and the south of the peninsula including West Bengal, South Bihar, Orissa, Madras, Travancore and Cochin. In the central parts of India the incidence tends to be lower but there are some foci of higher incidence. There is a belt of moderate incidence in the Himalayan foot hills, running across the north of India while in most of the north-west of India there is very little leprosy."

51. A Committee to report on the control of leprosy was appointed in 1954 in accordance with the decision of the Central Council of Health. The terms of reference of that Committee are given in Appendix VI. Some of the important findings of that Committee are:

(i) The available data indicate that there are about 15 lakhs of cases of leprosy in the country. In the absence of adequate surveys all over the country, an exact assessment of the problem is not possible, but the available information indicates the situation to be quite serious and one which demands immediate attention.

(ii) The available data show (a) that the total number of in-patient institutions is about 152, with a total accommodation of 19,600 and (b) that there are about 1,203 clinics throughout the country for treatment of out-patients at which about 1,20,000 patients are treated. These activities are grossly inadequate to meet the situation and there is need for augmenting anti-leprosy work in all the different directions *e.g.* facilities for treatment, isolation, and training of anti-leprosy personnel etc.

B. Leprosy Control Scheme

52. Based mainly on the report of the Committee for the control of leprosy, a scheme for control of leprosy was initiated by the Government of India during the last two years of the First Five Year Plan. In the First Plan, it was a Central Scheme. In Second Plan this scheme has been included in the States Plan at a cost of Rs. 409·48 lakhs. The leprosy control scheme has been undertaken in collaboration

between the Government of India and the State Governments in areas where leprosy is highly endemic. The objective of this scheme is to put into action the new approach to the problem *i.e.* to try to control the spread of leprosy in an area by extensive and intensive mass scale treatment with modern chemotherapeutic drugs, specially the sulphone. There is provision to establish two types of Centres. In one type *i.e.* study and treatment centres not only treatment of cases of leprosy and necessary health education to the public on the subject of leprosy are given but also a complete survey as to the incidence and type of the diseases, and follow-up of healthy contacts in the area are undertaken by a special team. The necessary laboratory facilities are also provided for such studies. In the other type of centres *i.e.* subsidiary centres treatment is given on a mass scale and health education is given.

53. In order to co-ordinate the activities of these centres and to give the necessary technical help, the Government of India appointed a Director of Leprosy Control work in August, 1955. The Director is also responsible for inspecting and advising the operation of the Leprosy Control work. The Committee, however, learnt that in August, 1957 the Director was transferred to the Leprosy Teaching and Research Institute, Chingleput. So far no other person has been appointed in his place. The present officiating Director is associated with many other Institutes also and, therefore, has not been able to devote full time to this job. It is one of the duties of the Director, Leprosy Control work, to go round the various centres to make an on-the-spot study. The Committee regret to note that as there was no full time Director, no on-the-spot study had been undertaken throughout the year 1957-58. *The Committee suggest that a full time Director should be appointed without further delay. This officer should tour extensively, effect necessary coordination and give the necessary technical guidance to various centres opened in different parts of the country. He should also make it his business to see that the leprosy control work progresses according to schedule and does not in any way lag behind.*

54. Under the Leprosy Control Scheme, 4 treatment and study centres and 36 subsidiary centres were sanctioned to States during the First Plan period and 34 subsidiary centres during the first two years of the Second Plan. Out of the 74 centres sanctioned till the end of the year 1957-58 66 have started functioning. During the Second Plan period it is proposed to sanction 66 new centres in addition to those which have already been sanctioned.

55. The expenditure during the first year on each study and treatment centre, both recurring and non-recurring, is about Rs. 1,33,600 and that on each subsidiary centre is Rs. 73,560. The subsidiary centres are being established on the following terms:

(i) Government of India to meet full non-recurring expenditure.

(ii) Government of India to meet recurring expenditure to the extent of 80% for the first year, 70% for the second

year, 50% for the third year, 30% for the fourth year and 20% for the fifth year.

(iii) The grant to be given when the State Governments submit their proposals.

56. The Committee regret to note that a large amount of funds could not be utilised during the first two years of the Second Plan as is evident from the following figures:—

	Budget Provision	Expenditure
	Rs.	Rs.
1956-57	50,00,000	10,17,456
1957-58	20,00,000	11,12,546

It is stated that the funds provided for the implementation of the scheme during the years 1956-57 and 1957-58 could not be utilised in full due to delay on the part of the State Governments to establish the Centres and also due to the non-availability of trained medical and para-medical personnel. The Committee were informed that in order to overcome the shortage of trained personnel, the Ministry propose to start suitable training courses at Nagpur, Calcutta and Chingleput. The approximate cost of each course for 20 trainees is expected to be Rs. 59,000. *The Committee hope that this scheme for training of medical officers for anti-leprosy work will be implemented during the current year. To meet the shortage of medical personnel for leprosy work in the long run the Committee suggest that adequate training for the control and care of leprosy should be included in all under-graduate courses.*

57. The Committee learnt that a sample survey had been undertaken for the Leprosy Control Scheme. The total population of the pilot project areas (*i.e.* areas covered by study and treatment and subsidiary centres) taken together is 56 lakhs of which 43 lakhs have so far been included in the survey. Of this 43 lakhs, 30 lakhs or 60% have been actually examined and 44,000 cases of leprosy have been detected giving incidence of about 1·4% on the number of persons examined. The total number of known cases (by survey and otherwise) in the project areas is 64,000. Out of these 56,000 or 88% of the known cases have so far been registered for treatment. Of these 56,000 registered cases, 39,000 are non-lepromatous and 17,000 or 30% are lepromatous. 39,000 or 70% of the registered cases are taking regular treatment. Of these 39,000 having regular treatment, 28,000 are non-lepromatous and 11,000 are lepromatous. Thus of the total registered non-lepromatous and lepromatous cases, only 72 and 65 percent respectively are having regular treatment.

58. From the facts mentioned above it is clear that so far 60 per cent of the total population of the pilot project areas has actually been examined in the survey. As such it is possible that there are still a large

number of undetected cases. Moreover, of the total number of registered cases only 70 per cent are taking regular treatment, the percentage of registered lepromatous cases having regular treatment being still lower, namely 65%. *The Committee are of the opinion that more concerted efforts are necessary to impress upon the minds of the patients the importance and value of regular treatment. They suggest that the system of utilising the services of cured patients, for this purpose, might be introduced with advantage.*

C. **Leprosy Homes**

59. The Committee understand that at present there are no separate leprosy homes for those who are beyond help and need custodial care. *They, therefore, suggest that different categories of people such as those who are to be treated at the initial stage, with a good chance of cure and rehabilitation, advanced cases which may prove incurable or are left with permanent deformities and may have to remain more or less for the rest of their lives in institutions and those who are in the convalescent stage or rehabilitation stage, should, as far as practicable, be located in different homes. Particularly those incurable patients or burnt out cases with severe deformities who have to live for long periods should be housed separately in cottage type of accommodation instead of keeping them permanently in leprosy homes and dormitories with other patients. Moreover, there should be a separate place for the healthy children of lepdrous mothers with arrangements for their education and medical supervision watching for any appearance of signs and symptoms of the disease. The Committee suggest that the Ministry should evolve a suitable scheme, in consultation with the State Governments, to implement these proposals.*

60. The Study Group learnt that leprosy homes can at present be notified either under the Lepers Act or the Beggars Act. The former is a Central Act. As many beggars are also leprosy patients, the beggar homes set up under the Beggars Act also provide for treatment of leprosy. There are, however, certain leprosy homes which are not notified either under the Lepers Act or the Beggars Act. The Committee are given to understand that some of the leprosy homes particularly those which are not notified, are not working satisfactorily. *They, therefore, suggest that the Ministry of Health should use its good offices with the State Governments to improve the working of leper homes, particularly those which are not notified either under the Lepers Act or the Beggars Act. They also suggest that notifying such Homes should be made compulsory.*

61. As regards the segregation of beggars who are suffering from leprosy the Committee notice that in the action taken on a resolution of the 5th meeting of Central Council of Health held in December, 1956, it is stated that enabling legislation for compulsory segregation of leper-beggars with provisions for the relief and treatment should be promoted by the Central Government. *The Committee feel that such legislation is very necessary and, therefore, recommend that this should be undertaken expeditiously.*

62. The Committee understand that the Bombay Government has formulated a comprehensive scheme for the control and treatment of leprosy. *The Committee suggest that the Ministry should examine the scheme and urge the other State Governments to prepare schemes on similar lines, with such variations as are necessary to suit local conditions.*

D. V. D. Control

63. Facilities for the control of venereal diseases vary from State to State. Areas having a high incidence of these diseases often have inadequate treatment facilities. The Committee were informed that hitherto, the emphasis had been on the individual curative aspects, there being hardly any well developed organisation in States for dealing with preventive, epidemiological and clinical diagnosis. A scheme for the control of venereal diseases has, therefore, been included in the Second Five Year Plan to overcome these deficiencies. Under the scheme it is proposed to establish, within the framework of existing Public Health and Medical Services of States, an integrated programme of V. D. Control covering both curative and preventive aspects. The scheme also envisages, mass treatment of patients in areas where the incidence of these diseases is high. Under the scheme, 75 District Clinics and 8 Headquarter clinics are to be established. The Central Government's share of the expenditure on the scheme is estimated at Rs. 58·67 lakhs and that of the States at Rs. 54·28 lakhs.

64. The Scheme for the control of V.D. was sanctioned in February, 1957. During the year 1957-58 sanction was given for the establishment of 2 Headquarter and 22 District clinics of which 1 Headquarter and 15 District Clinics were only established. The rest of the clinics are stated to have not been established due to paucity of funds on the part of the States and non-availability of technical personnel. Due to the non-sanction of the scheme during the year 1956 and due to the inability of the State Governments to establish the sanctioned clinics the shortfalls during the first two years of the Plan were as under:—

	Budget Provision	*Expenditure*
	Rs.	Rs.
1956-57	5·00 lakhs	Nil
1957-58	8·000 lakhs	2,88,621

The Committee suggest that such cases of shortfalls due to lack of preparation by the State Governments should be discussed by the Central Council of Health so that remedial action can be taken to avoid recurrence in future.

65. As regards the training in the venereal diseases, the Committee were informed that a V.D. Training Centre is located in the premises of the Safdarjang Hospital, New Delhi. This Centre provides intensive refresher courses of three months duration to medical officers.

serologists, laboratory technicians, public health nurses, health visitors and V. D. social workers. During the year 1957-58 three course of training were held at this Centre. There was no course from January to March, 1957 because the venereologist had gone on a T.C.M. fellowship to the U.S.A. and the Serologist had gone for a V. D. Course to Madras. No candidates were deputed by the State Governments during July-September, 1957. During the subsequent courses held during 1957-58 also only 14 candidates were deputed for training. It was explained that the response from the States had been poor because most of the States have not created the posts of V. D. Control officers and, therefore, doctors were not forthcoming for attending the training course. There is thus an anomalous position that on the one hand sufficient doctors are not forthcoming for taking V. D. Control training course, and on the other hand the States are not able to open the V.D. clinics for want of trained personnel. *The Committee suggest that in view of the overall high incidence of this disease in certain parts of the country, the dearth of trained personnel and inadequate treatment facilities, special measures should be taken to see that the available training facilities are fully utilised.*

66. As a result of the application of Suppression of Immoral Traffic in Women and Girls Act, a large number of prostitutes from hill areas are reported to have gone back to the hilly areas. The incidence of V.D. is already high in the hill areas. *The Committee are of the opinion that V. D. control and treatment centres opened there and operated with the help of social workers would result in prevention of further spread of V.D. in the hill population and should, therefore, be undertaken without delay. They also suggest that all maternity clinics should be provided with a Serological Section for detection and free treatment given to those discovered to have venereal diseases, to afford cent percent protection to the newly born. If the mother is properly treated at an early stage, the child will not get the infection. Thus the interests of the coming generation will be protected.*

E. Goitre Control

67. A scheme for Goitre Control has been included in the Second Plan of the Ministry of Health at an estimated cost of Rs. 18 lakhs. The Scheme envisages the estimation of the Goitre Problem in certain selected areas, supply of iodised salt to the inhabitants of areas affected with endemic goitre and an assessment of the results of iodine prophylaxis through two field units. Iodised salt will be made available in the selected areas for human consumption at the same price as ordinary salt. The cost of iodisation of the salt will be met by the Central Government. A total population of 87·5 lakhs is expected to be covered during the Second Plan period. The UNICEF have agreed to make free supply of the iodiation plants and also the transport required for the survey teams.

68. The following was the provision and expenditure under this scheme during the first two years of the Second Plan:—

	1956-57	1957-58
Budget Provision	2,00,000	2,00,000
Actual Expenditure	Nil	1,100

In view of the poor progress made by this scheme during the first two years of the Second Plan it is not likely that the full provision would be usefully spent during the Plan period. *The Committee, therefore, suggest that the Goitre control scheme should be reviewed and revised early so that sufficient time is available to divert the surplus amount to other schemes such as Water Supply and Sanitation Schemes, if necessary.*

69. *The Committee further understand that Goitre can be wiped out in a few years if iodised salt is made available to the people living in the goitre belt. The Committee recommend that all such schemes for the elimination of any disease should be taken up in all earnestness and speed.*

F. **Control of other diseases**

(a) *Small-pox*

70. The Committee understand that the incidence of small-pox has been lowered to a marked extent since small-pox vaccination became an accepted feature of Indian life. It is, therefore, surprising that the Central Ministry of Health is, at present not thinking in terms of complete eradication of small-pox from the country. The Ministry has stated that it is premature to say as to when it will be possible to eradicate it from the country. The Committee regret to note the attitude of the Ministry in this respect. In this connection it is pertinent to quote the following observation of the Bhore Committee, made as early as in 1945:—

> "Nevertheless, it must be remembered that a disease like small-pox is perhaps more easily prevented than most other infectious diseases and should have been prevented long ago. India continues to be the largest reservoir of small-pox infection, although vaccination against it was the first preventive measure introduced into the country and has been practised on a large scale for the past seventy or eighty years."

The Committee, therefore, suggest that vigorous efforts should be made to root out small-pox completely as early as possible by arranging vaccination and revaccination on a large and comprehensive scale in a systematic way.

(b) *Plague*

71. Large scale inoculation is undertaken in case of plague only during epidemics generally. The Committee in this connection learnt

that plague vaccine worth Rs. 24 lakhs is written off annually at the Haffkine Institute. A stock of such vaccine is, however, required to be maintained for emergency requirements. *The Committee suggest that the Ministry should examine the possibility of selling the plague vaccine to an international organisation which may stock the vaccine at a Central place to serve as the emergency pool for countries which are periodically affected by plague, so that losses, if any, arising out of non-utilisation may either be avoided or substantially reduced.*

(c) *Cholera*

72. As in the case of plague, large scale inoculation is undertaken in case of Cholera only during epidemics which are still frequent and take a heavy toll of life. The Cholera Vaccine cannot, however, be preserved for a long time. There is, therefore, at times, a time lag between the appearance of the epidemic and the availability of the vaccine. The Study Group of the Committee which visited the Haffkine Institute, Bombay however, learnt that experiments were being made to produce a vaccine which could be preserved for a long time.

73. At present the Committee understand that the various State Governments which do not produce their own cholera vaccine have to write to the Directorate General of Health Services, New Delhi for acquiring such vaccine when required in an emergency. It takes considerable time for these States to replenish their stocks in time resulting in loss of time in starting an inoculation campaign to face a starting epidemic. *The Committee suggest that the feasibility of establishing Regional Depots with the assistance of State Governments to store the cholera vaccine so that the States needing the vaccine in a zone may have it from the depot in that zone may be examined by the Ministry of Health.*

74. *The Committee are distressed to note that though some of the countries have eliminated cholera epidemic, it still persists in the country. They recommend that a concerted drive should be taken up by the Government of India along with the State Governments to control diseases like cholera eliminating flies, prohibiting sale of exposed food and providing for protected water supply.*

V. WATER SUPPLY AND SANITATION

A. Introduction

75. Environmental sanitation is defined as the control of those factors in man's physical environment which may exercise a deleterious effect on his physical, mental or social well being. It includes, disposal of excreta and community wastes, water supplies, housing, insect and rodent control and industrial hygiene etc. Out of these, provision of pure water supply is important and constitutes the basic need of our villages which house about 82 per cent of the population of the country. The Committee understand that only 6·2 per cent of the total population in India is served by safe water supply.

76. In this connection the following observations of the Bhore Committee are worth noting:—

> "The provision of a safe water supply should receive the highest possible priority from the administration responsible for the welfare of its people. This has been recognised by every civilised country in the world. Many have yet to fulfil adequately their responsibility in this connection but few have as much leeway to make up as the Government in India."

77. Dr. A. L. Mudaliar, has also brought out the importance of water supply and sanitation in a memorandum to this Committee as under:—

> "Many water-borne diseases can be controlled in these days if suitable water supply is guaranteed......In a country where water is scarcely available or, if available, is in stagnant pools exposed to all the dangers of pollution from human excreta and other forms of dirt, the experience that the people at the centre of the Government of India have had must be an eye-opener to all as to the need for an effective and good supply of water."

B. Progress during the First and Second Plans

78. In the First Plan under the schemes for the Ministry of Health highest priority was given to the provision of water supply and sanitation. Unfortunately, however, this highest priority was not actually translated into action, as will be evident from the fact that large amounts of funds earmarked for this purpose remained unutilised during the First Five Year Plan period.

79. Rs. 30 crores were provided in the Plans of States for Water Supply and Sanitation projects in the First Five Year Plan. Of this amount Rs. 14 crores were for rural areas and Rs. 16 crores for urban areas. To promote more rapid development of water supply and sanitation services, the Central Government sponsored a water supply and sanitation programme on a national basis in 1954. For this purpose Rs. 12·72 crores as loans for urban water supply and sanitation schemes and Rs. 6 crores towards grants for rural schemes were made available. The pattern of Central assistance which has since been continued during the Second Five Year Plan was as follows:—

Rural Schemes	50 per cent grant-in-aid
Urban and Corporation Schemes	100 per cent loan.

Upto March, 1956, 196 Urban Water Supply Schemes and 58 drainage schemes were approved for execution in 17 different States and the expenditure incurred was about Rs. 8·3 crores against the plan provision of Rs. 12·72 crores. On the rural side, 134 schemes were approved in 19 States and the expenditure incurred was Rs. 2·8 crores out of the plan provision of Rs. 6 crores.

80. The reasons for these shortfalls are stated to be as under:—

(i) The Urban and Rural Programmes were started in August and September, 1954 respectively. So the States had hardly 18 months to organise the staff necessary for implementation of the programme.

(ii) Materials and equipment necessary for the schemes particularly G.I. pipes, could not be procured in adequate quantity within this period.

(iii) Lack of adequate number of trained technical personnel. *Whatever may be the reasons, the Committee feel that question of ensuring adequate supply of drinking water to all the citizens of the country does not seem to have received the urgent and close attention it deserves. In this connection the Committee would like to reiterate the following resolution of the 6th meeting of the Central Council of Health held in January,* 1958:—

> *"The Council taking due note of the difficulties and bottlenecks, in the execution of the rural water supply schemes to which the Council attaches the greatest importance recommends to the Central and State Governments to streamline the procedures involved with a view to cutting short delays to a minimum and to further strengthen the P.H.E. (Public Health Engineering) Organisations in the States. Available training facilities should be utilised to the maximum extent."*

81. The Committee are, however, distressed to find that even during the Second Plan, there have been shortfalls in respect of rural water supply and sanitation schemes. The following are

the figures of budget estimates and expenditure for the first two years of the Plan in this respect:—

Year	Budget Provision	Expenditure	Shortfall
1956-57	100 lakhs	84·945 lakhs	15·155 lakhs
1957-58	250 lakhs*	174·50 lakhs	75·50 lakhs

The Committee were informed by the representative of the Ministry during the evidence that one of the major difficulties in utilising the amount provided for rural water supply has been that the concurrence of the Planning Commission is not forthcoming to utilise the amount for constructing surface wells. The Central assistance is limited to the supply of piped water supply for a village or group of villages, while there is not adequate supply of pipes in the country. It was stated that the total production of the pipes in the country was about 50,000 tons a year but the Ministry required about 100,000 tons of pipes every year. Till the shortage of pipes for the construction of water works and other organisational difficulties are overcome *the Committee are of the opinion that it would be advisable to utilise the amount provided under the scheme for supplying water even by constructing surface wells, sinking tubewells etc. rather than to allow the funds to lapse year after year. Priority may, however, continue to be given to protected piped water supply schemes wherever and whenever they can be readily implemented. The Committee are of the opinion that in schemes of this nature the discretion should vest with the Ministry concerned which may decide, in consultation with the State Governments as to how best the funds should be utilised for a particular scheme, to suit local conditions, availability of material etc.*

82. *In view of the extremely unsatisfactory progress made so far in this respect, the Committee suggest that a team of experts may be appointed to conduct a comprehensive survey to find out:—*

(i) *how many villages have no perennial water supply worth the name;*

(ii) *how many villages have water supply of unsuitable type which is liable to cause diseases due to infectious, or abnormal mineral, content of water;*

(iii) *how much of the problem can be met by surface water schemes;*

(iv) *how much is necessary to be met by piped water schemes;*

(v) *what are the total requirements of pipes to meet the problem;*

(vi) *when will the pipes in requisite quantity be available; and*

*Though there was an original provision of Rs. 250 lakhs (150 lakhs for grants and 100 lakhs for adjustment of the cost of equipment) the Ministry of Finance later on advised the Ministry of Health that Rs. 150 lakhs only should be utilised for both the items and the remaining amount of Rs. 100 lakhs should be surrendered.

(vii) *approximate cost of meeting the problem.*

After such a survey is completed a target date should be fixed and a phased programme chalked out to tackle the problem on a national scale.

83. The Committee understand that in certain areas, there are various water supply schemes sponsored by different agencies. For instance, in Jhansi, the Defence Ministry, the Railway Ministry and the Local Government assisted by the Health Ministry have separate schemes for the cantonment, railway colony and the rest of the city and some villages respectively. *In such cases, it would be more economical and efficient, if the resources of the different agencies are pooled and an integrated scheme worked out. The Committee would like the Ministry of Health to take initiative in the matter and examine this aspect of the question.*

84. *The Committee are of the opinion that a Water Supply Board consisting of experts and non-officials to advise the Ministry on matters connected with rural and urban water supply, will prove of great help in co-ordinating the efforts of different agencies, engaged in supplying water, for instance Community Development Programme, Harijan Welfare programme, Schemes for local works etc. and also for preparing new schemes for the speedy solution of the problem of drinking water supply. They, therefore, suggest that such a Board should be set up early.*

C. **Water Supply through Tube-wells**

85. It may be possible to utilise the tube-wells installed for agricultural purposes for the supply of drinking water in the rural areas provided the water is of satisfactory quality from the public health point of view and necessary sanitary measures are adopted while sinking the tube-wells and installing the machine. The Committee regret to note that no information is available regarding experiments conducted in this respect with the Ministry of Health though they have learnt from non-Governmental sources that such experiments have been highly successful. The question of utilising tube-wells, unsuccessful for irrigation purposes, under the Ground Water Exploration projects for drinking water purposes was, however, examined by the Ministry of Health in consultation with the Ministry of Food and Agriculture in May, 1956 and the possibility of utilising such tube-wells with advantage was brought to the notice of all State Governments for necessary action. The Ministry have not got complete information as to the action taken by various States in this regard but it is stated that a few States have made use of such tube-wells.

86. From the facts mentioned above it appears that the Ministry have not considered seriously the problem of utilising the agency of tube-wells to meet the scarcity of drinking water in villages. *The Committee suggest that a special study should be made in those areas*

where there is lack of water supply but where tube-wells can be sunk to find out:

(i) *whether the tube-well water can be used for supplying drinking water.*

(ii) *whether a tube-well can serve both for irrigation and drinking water supply in a limited area.*

If the results are favourable, suitable steps should be taken to sink tube-wells (and artesian wells wherever feasible) and erect storage tanks in villages both for drinking water and irrigation in consultation with the Ministry of Food and Agriculture and the State Governments. The feasibility of utilising the large number of existing tube-wells to supply drinking water through storage tanks and conduit pipes to the neighbouring villages should also be examined.

D. Water Supply through Conduit Pipes from large reservoirs of perennial rivers

87. In the context of water supply and sanitation the Committee would also like to mention the following views of Dr. A. L. Mudaliar contained in his memorandum furnished to this Committee:—

"The State Governments generally think of investigating the problem of water supply for towns or major panchayats or villages and their vision does not extend beyond that. If water for Liverpool can be obtained from Wales, is there any reason for us to suppose that the water supply source must be limited to the particular town or village. Surely, the proper method of supply of water is to have water supplied through conduit pipes from large reservoirs of perennial rivers taken through the length and breadth of the country and distributed to the villages through storage tanks so that proper and adequate supply of water may be made available, in course of time, at any rate, to all the citizens of the country. If we could supply electricity, through the Grid system, to all the villages, in course of time, is it not conceivable that water supply can also be likewise distributed to the nook and corner of the country through a system of inter-communicating reservoirs and conduit pipes through the length and breadth of the country."

88. It has been contended by the Ministry that the question of water supply cannot be compared with the generation and transmission of electricity, that electricity undertaking have been conceived, promoted and operated purely as remunerative enterprises, first by private undertakings and subsequently by the State Governments and that unlike the concept of electricity as a commodity to be purchased, the urban and rural citizens expect drinking water to be given to them free by the Government in a welfare state. The Committee feel that in the urban areas the people are prepared to pay for water supplies like electricity and even at present in many cities where protected water

supply is available charges are levied. In case of rural areas it will take time to improve their economic standards and to reorient their ideas. But even the villager is prepared to pay for water for irrigation purposes and if the charges for drinking water can be united with irrigation charges it will not be difficult to collect them. In the meantime, *the Committee suggest that the Ministry of Health may examine in detail the feasibility of such schemes, in consultation with the Central Water and Power Commission and the State Governments.* The Committee were informed that the Ministry has sanctioned a scheme of similar nature for Sabarmati. *The Committee suggest that this scheme should be implemented early. If it is found to be practicable and results are encouraging, schemes of this nature for other areas also should be incorporated in the Third Plan.*

E. Pollution of river water by industrial effluents

89. Most cities and numerous villages in India are situated on river banks. A fair percentage of India's population is dependent on rivers for the supply of water for drinking and other purposes, and it may not be possible to provide alternative water supply, for some time to come, or for people who have been accustomed through the ages to use river water for their daily needs to give it up even if alternate sources are available. Moreover, India being a hot country, the quantity of water needed by an average person is much larger than in many other countries in the temperate zone where hot and spirituous drinks are more popular and bathing is less frequent. Baths in public rivers and sea bathing in many foreign countries may be a luxury and more often, a holiday pastime. In India, it is a daily necessity for crores of people.

90. In view of the above circumstances, the Committee feel that river water should not be allowed to be polluted as is being done at present. Modern industries need large quantities of water and hence have their location on river banks. They are often responsible for large scale pollution of river water by letting into the river untreated industrial waste water and sewage. In this connection, the following extract from Richard B. Gregg's book "Which Way Lies Hope?" (taken from an article in "Harijan" dated the 4th October, 1952) is of special interest:—

"Every gallon of gasoline (petrol) takes 7 to 10 gallons of water in its manufacture. One ton of viscose rayon demands 2,00,000 gallons of water in its process of making. To produce a ton of synthetic rubber takes three times that amount. Each ton of paper made in modern paper pulp mills requires 50,000 gallons of water in the making. At the beginning of the World War II there were about 200 paper mills in the United States, making about 10,000,000 tons or more of finished paper. That means 500,000,000,000 gallons of water. When it comes to the (textiles) mills, a ton of cotton cloth requires 60,000 gallons of water in the

bleaching and 80,000 gallons in the dyeing process. The manufacture of one pound of refined white sugar calls for 7 gallons of water. 160 gallons of water are needed to make a pound of aluminium. A ton of soap needs 500 gallons of water to make it. When an airplane engine is tested, the cooling of it requires from 50,000 to 125,000 gallons of water."

* * * * * *

"Streams are polluted and poisoned by city sewage, by coal mining, oil fields, food processing, paper pulp mills, steel plants, textile industries and chemical industries. This pollution kills all fish in the streams and makes the water unfit and dangerous for any domestic or agricultural use."

91. Though compared with U.S.A., U.K. and other Western countries, India is not so advanced industrially, yet the daily discharge of liquid wastes from industrial undertakings in India can be expressed in astronomical figures and illustrates the seriousness of the problem. From statistics available for the year 1952, it is learnt that the textile industries in India discharge seven thousand million gallons of liquid wastes per day. Similarly paper industry in India is responsible for the discharge of four thousand, six hundred and twenty million gallons of liquid wastes per day, the tannery industry contributes about 700 million gallons per day, the lac industry sixty million gallons per day, the distillery industry, two and half million gallons and the sugar industry, two hundred million gallons per day. Thus from these six industries alone, the total discharge of liquid wastes per day is about 12,583 million gallons.

92. While the pace of industrialisation cannot be stopped merely to keep river water pure, abundant precautions to avoid pollution of streams by industries must be taken. Processing of certain industrial effluents before they are discharged into public streams which may make it safe must be ensured. This aspect of the problem is often lost sight of in the efforts for rapid industrialisation. Industrialists, who set up new industries, or go in for expansion of their plants, very often lose sight of the effect of their efforts on public health. With perhaps slightly additional expenses for installing modern machinery for treatment of industrial effluents before their discharge into public streams, or making other suitable arrangement for the disposal of industrial waste, the deleterious effects of the effluents could be very much minimised and even eliminated. In many cases this would not only benefit the public but also result in positive gain to the industries, and sometimes decrease the utilisation of the valuable foreign exchange resources of the country. The case of effluents from paper mills will serve to illustrate the point. The main and most deleterious component of paper mill effluent is caustic soda, which can be recovered from the effluent in a reasonable form by proper processing. This would mean

not only less import of this chemical from abroad but also economy in the operation of the plant, due to the recovery of an appreciable quantity of caustic soda. *The Committee, feel that it is the duty and responsibility of the Public Health Engineering Department of Government to be watchful in this matter of proper processing of industrial effluents in all industries in the Public and Private sectors. To keep abreast of up-to-date know-how in the matter of treatment of sewage and industrial effluents, not only with a view to keeping public streams in a reasonable standard of purity but also for the sake of industrial economy and to disseminate such knowledge to the industries should be the responsibility of the Ministry of Health and its application that of the Ministry of Commerce and Industry. Before new industries are established or existing industries are expanded the consequences of such industries on pollution of local streams should be examined and adequate measures for its prevention by enforcing proper treatment of effluents be taken.* If particular plants and machinery can reasonably and effectively treat the industrial effluents of a particular industry, the Government while granting licence for establishment or expansion of that particular industry, should insist on the industry establishing an effluent-treating plant along with it. The representative of the Ministry of Health agreed that action was necessary at the highest possible level to prevent this serious menace to the public health of the country and promised to initiate necessary action. *The first step would be to have an intensive survey made of the situation, the results studied and remedies suggested. The following two aspects of the problem need special emphasis:—*

(i) *the positive aspect of treatment of industrial and sewage effluents before they are let out into public streams; and*

(ii) *the preventive aspect of maintaining a reasonably scientific standard of purity of streams below the point of discharge of effluents.*

This survey might include pollution of atmosphere by industries and by smoke emitting buses in big cities and also the misuse of stored water in tanks etc., by the public for bathing, washing of clothes, cattle, etc.

F. Public Health Legislation

93. The Committee understand that in 1955 the Government of India had drafted a Model Public Health Bill for its enactment and enforcement by the different State Governments. The comments of the State Governments were also invited on this Bill. Along with the comments of the State Governments, it was subsequently placed before the Central Council of Health at its fifth Meeting when taking note of the views expressed by the State Governments it recommended that the Union Ministry of Health should proceed with the early preparation of a Draft Bill for circulation to the State Governments. In furtherance of this recommendation, the Ministry of Health examined the position in consultation with the Ministry

of Law who advised that it was not necessary to undertake the drafting of a Model Bill of the kind recommended by the Council because the draft Model Bill included within its ambit a very large variety of subjects most of which were already covered by a wide range of Central or State laws or were the subject matter of existing legislation in States. *The Committee feel that the position may be reviewed again in view of the inadequate attention paid so far to the various public health problems. They also suggest that adequate provision for prevention of pollution of rivers and other sources of water supply should be made in this Model Bill.*

94. As regards the pollution of rivers and public streams, some States have enacted laws to prevent this menace to public health. But, no assessment has been made to see how far such legislation has been effective in abating actual or potential nuisance. *The Committee suggest that the feasibility of having such an assessment made with a view to evolving reasonably uniform standards might be examined by the Ministry in consultation with the State Governments.*

VI. SLUM CLEARANCE IN DELHI

A. Introduction

95. Slum clearance in general is the concern of the Ministry of Works, Housing and Supply. However, in a meeting convened by the Prime Minister on the 5th May, 1956 it was decided that in so far as work relating to slum clearance in Delhi is concerned, the Delhi Development (Provisional) Authority should be in overall charge of this work. As such, the Ministry of Health being the administrative Ministry in charge of the Delhi Development Authority and other local bodies in Delhi was entrusted with the responsibility of slum clearance or slum improvement in Delhi. The responsibility and powers of the Ministry of Health in regard to slum clearance in Delhi are as under:—

(i) Enactment of slum clearance legislation and framing of rules etc. thereunder;

(ii) Examination and approval of slum clearance schemes framed by the Competent Authority;

(iii) Provision of funds for slum clearance schemes.

B. Magnitude and extent of the problem

96. It is well known that slum conditions exist almost all over the old city of Delhi. The rapid growth of population during the last 2½ decades, specially since Independence, has practically turned the old city of Delhi into a slum area and added many slum *bastis* to New Delhi also. The increase of living accommodation has not kept pace with the growth of population. There are hardly any open spaces in the city. There are factories and offensive trades in residential areas. Further there are congested and sub-standard houses on land and congestion of people in houses. Today the population of the old city of Delhi is over 10 lakhs. The average density of population is between 400 to 600 per acre as against the desirable standard of 200 per acre. In some areas the density is as high as 1000 per acre.

97. A detailed screening of old Delhi has shown that there are as many as 1·787 slum units, 61 *bastis* and 1726 *katras* (including 727 large houses) which are considered to be unfit for human habitation on account of congestion, dilapidation, lack of sanitary amenities, unsuitable location etc. They are inhabited by 48,500 families or over 2,25,000 persons; 47·5 per cent of them live in *bastis* and 52·5 per cent in katras.*

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*A *Katra* typically is a group usually of single roomed tenements constructed normally in rows to capacity within a compound or an inclosure having a single common entrance. A *Basti* is however a cluster of small *kucha* houses or huts built on open land often in an unauthorised manner.

98. The situation in slum areas is further aggravated by the presence of obnoxious trades which are carried on by families in their slum dwellings and even in certain licensed premises in the midst of thickly populated areas. In some cases, the licences have been withdrawn yet the trade goes on. Then there is the practice of keeping milch cattle and other animals within the slum. It is stated that there are 126 factories dealing in the skin and hide business, about 200 potters and about 28 lime burning kilns. In addition there are quite a number of workshops, foundries, mills, timber and fodder dealers etc.

C. Delhi Development Authority

99. The Committee understand that there are two authorities *viz.* (i) the Municipal Corporation of Delhi and (ii) the Delhi Development Authority responsible for slum clearance in Delhi. The administrative control of the Corporation vests in the Ministry of Home Affairs while the Ministry of Health is responsible for the Delhi Development Authority. *The Committee, therefore, sugggest that all the slum improvement clearance schemes in Delhi should be processed through a single planning and controlling authority which is at present shared between Delhi Municipal Corporation and the Delhi Development Authority.*

100. The Committee here propose to deal mainly with the slum clearance work entrusted to the Delhi Development Authority. The functions of that Authority are as under:—

(a) preparation of a master plan and zonal plans;

(b) development of land including provision of civic amenities like roads, and lanes, water supply, drainage and sewage, parks, and play grounds and street lighting in development areas only. (The trunk sewers and pipe lines are, however, to be laid by the Corporation); and

(c) administration of the Government Nazul Estate Evacuee *Katras* and such other lands and properties as may be acquired from time to time for development.

101. As is clear from the second function mentioned above, the Delhi Development Authority is primarily concerned with the building activities in development areas. Under Section 12 of the Delhi Development Act, 1957, the Government of India have to declare certain areas in Delhi as "Development Areas" after consultation with the Municipal Corporation of Delhi. The proposals made by the Delhi Development Authority in this regard were accordingly referred to the Corporation of Delhi on the 5th June, 1958. The Committee were informed that the Corporation took considerable time in giving their

concurrence. Only very recently they have concurred and this too when the matter was taken up at the highest level. To avoid such delays in future, the Committee understand that it has now been decided that the Ministry of Health need only consult the Corporation, but need not wait for their concurrence, as the Corporation is represented on the Delhi Development Authority.

D. Planning for Slum Clearance

102. The Committee understand that a plan for Greater Delhi is being prepared by the Town Planning Organisation, while according to the Delhi Development Act, it is the responsibility of the Delhi Development Authority. Co-ordination is, however, maintained between the Authority and the Organisation as the Vice-Chairman of the Delhi Development Authority is also the Chairman of the Town Planning Organisation.

103. The Town Planning Organisation prepared and submitted to Government an Interim General Plan sometime in September, 1956. The Interim General Plan has rightly stressed that any programme of slum clearance and urban re-development must be a comprehensive programme, and one that will go beyond mere engineering and architectural solutions to the social, economic and human factors involved. In the light of this guiding statement, the Interim General Plan has made certain recommendations in regard to slum clearance and re-development of Delhi which are given in Appendix VII. *The Committee earnestly hope that each of these recommendations will be pursued vigorously.*

104. The Committee learnt that the Town Planning Organisation is now undertaking physical surveys to determine the problems associated with specific areas with a view to demarcating conservation, rehabilitation and clearance areas. In addition, social and economic aspects are being studied to help in the preparation of re-development plans. Information is being collected through schedules, group discussions and systematic observational studies on age, marital status, occupation, housing, etc. The wishes and needs of the people as well as their opinions on the different problems related to them are being ascertained. Neighbourhood studies are being made to gauge the extent of neighbourly feelings among the slum dwellers in different *mohallas*. This, the Committee were told, is a task of great magnitude but such information must be available before slum clearance and urban re-development on a large scale can be undertaken. The comprehensive general plan or the master plan for Greater Delhi being prepared by the Town Planning Organisation will be based on the data thus obtained. The first draft of the plan is expected to be ready sometime by the end of May, 1959. *Even after taking note of the magnitude of the task involved, the Committee feel that the progress of work of the Town Planning Organisation is rather slow. They hope that the draft General Plan will be ready by May, 1959 as*

expected and that not much time will be spent in finalising the same. The Committee would like to express a definite view that the Master Plan for Greater Delhi should lay greater stress on slum clearance and basic amenities for the common man, than on highly expensive grandiose schemes. The Committee also hope that the Master Plan will include a definite promise of eradicating slum conditions, by a target date, from the Capital of the Republic of India.

105. The Committee further learnt that in the past as there were no precise surveys preceding the allotment, no register showing the particulars of the slum dwellers of the area was maintained. Due to this, it so happened that certain people who had never lived in slums were rehabilitated and the people who were actually living in slums were not given alternative accommodation. The allotments in the beginning were made by an Executive Officer of the Delhi Improvement Trust and actually it was not possible for him to scrutinise all the applications. It is extremely unfortunate that this should have been so. At present, the Delhi Development Authority has set up an allotment committee consisting of a representative of the Bharat Sevak Samaj and a Member of Parliament who is a member of the Authority and an Officer of the Delhi Development Authority. All the allotments are made by this committee. The Delhi Development Authority are, however, now thinking of keeping a careful record including photographs of the heads of the families. *The Committee suggest that proper records of families evicted due to slum clearance should be maintained so that the magnitude of the problem of providing alternative accommodation is known beforehand and only the claims of actual families who are evicted are taken into consideration while providing alternative accommodation.*

106. The Study Group of the Estimates Committee which visited certain selected slum areas noticed lack of proper planning in the construction of poor class houses. They found that while providing business-*cum*-housing accommodation, the need for accommodation for a particular trade has not been carefully considered. For instance, while providing accommodation for a *dhobi*, his needs with regard to washing of clothes, storing of dirty and washed clothes, place for ironing etc. have not been taken care of nor is there any provision for washing and drying places. For the barber a place for shaving operations has not been provided. *The Committee suggest that such considerations should be properly taken into account in all future planning. Contiguity of suitable trades should also be borne in mind, for instance a barber's shop should not be located next to a confectioner's shop.*

E. Efforts made to solve the Slum Problem

107. The Committee were informed that the Improvement Trust (which has now been merged with the Delhi Development Authority) had engaged itself in the construction of subsidised quarters in different parts of the city for rehousing people living in *katras* or *bastis*. *An* attempt is now being made by the Delhi Development Authority and

the Competent Authority under the Slum Areas (Improvement and Clearance) Act, 1956 to proceed on more rational lines and to develop schemes which will not only fit into the coming comprehensive plan of Delhi but also be self-propelling, as it were. To this end, steps are being taken to carry out improvements in a number of existing *katras*. The main purpose of this activity is to provide at least the basic amenities (paved courtyards, drains, latrines, filtered water supply, electricity and minor repairs to buildings) to the inhabitants of these *katras* and the emphasis is on achieving quick improvements, though not necessarily on a long term basis, so as to make these *katras* habitable until long term housing schemes, according to plan, are implemented. Improvements have been carried out in 241 *katras* and a number of *bastis* so far and in this matter, the Delhi Development Authority, the Municipal Corporation of Delhi and the Bharat Sevak Samaj have taken a hand. The progress, unfortunately, is slow.

108. The major long term schemes consist of development of open areas for rehousing people and the construction of transit camps where families from *katras* could be housed temporarily until he property was reconstructed and the families brought back. The Committee learnt in this connection that the Government have approved in principle the development of an area beyond the Shahdara Bund for the construction of 1500 single roomed tenements. A notice under Section 4 of the Land Acquisition Act, 1894 for acquisition of about 207 acres of land in this area was, therefore, issued on 8-7-1957. But only 50 acres of land was kept and the remaining portion of land not required for the scheme was derequisitioned by the Delhi Administration on 4-8-1958. It is, however, stated that if additional land is required, it will be later re-acquired. The price of the land adjoining the developed area is bound to go up considerably resulting in profiteering by interested persons and the Government having to pay much more for the same land. *The Committee, therefore, suggest that the Ministry should take a serious view of this strange procedure which is likely to benefit a few owners of this land at the cost of the public exchequer, investigate the matter properly and ensure that such instances are not repeated in future.*

109. Construction of subsidised houses in different parts of the city for rehousing people living in *katras* or *bastis* has been one of the major activities to solve the slum problem. These are subsidised houses in the sense that subsidised rent is charged from the families of slum dwellers living in these tenements. The subsidised rent charged usually varies from Rs. 12 to Rs. 15 per month. This rent seems to be too high for majority of the persons to be shifted in such tenements who are at present paying a rent ranging between Rs. 1 to 5. *The Committee, therefore, suggest that the feasibility of linking up the rent to be charged with the income of the tenants may be examined, so that at least better relief can be provided to the poorer sections of the tenants.*

110. *The Committee also suggest that efforts should be made to reduce the cost of construction by making practical use of the various*

low-cost housing schemes which have been evolved from time to time. Further the planning of slum clearance housing should be done in such a way as to avoid over dependence on critical materials like cement and steel, the supply of which is both expensive and some what uncertain.

111. The Committee learnt that at present the construction work in new *bastis* created for rehabilitation of slum dwellers is undertaken through C.P.W.D. and, therefore, the cost has been excessive. *It might be economical and advisable to form the slum dwellers into co-operative societies and give them suitable plots with simple and clear specifications about the buildings to be constructed and a loan for building their own houses supplied in the form of materials and a little cash, recovering the loan in easy instalments. Some engineering supervision may also be provided during construction to help those who can build for themselves. The Committee suggest that this method may be tried at least in some cases as an experimental measure in the suburbs of Delhi.*

112. *The Committee are also of the opinion that it might be better for the Delhi Development Authority to take lands for development on long term lease, rather than acquiring land and paying large sums. It might appreciably reduce the cost of schemes. They, therefore, suggest that this aspect should be carefully examined and implemented wherever feasible.*

113. The Committee understand that the sub-letting of the tenements constructed by the Government has also become a problem with the Delhi Development Authority. From the enquiries made by the Authority it appears that in most of the colonies, sub-letting has taken place. *The Committee are of the opinion that concerted and prompt efforts are necessary on the part of authorities concerned to prevent sub-letting. Care should be taken to see that the staff required to check and detect sub-letting do not connive at it.*

114. The Committee understand that large amounts of dues of the Delhi Development Authority are outstanding in respect of ground rent, rent in respect of quarters, etc. *The Committee consider this an unfortunate state of affairs and suggest that proper and vigorous steps should be taken to ensure that past arrears are liquidated by a target date to be fixed by the Ministry and that new arrears are not allowed to accummulate in future.*

F. Expenditure Incurred

115. The estimated and actual expenditure during each of the last three years in respect of the Improvement Trust and D.D.P.A. are as under:—

Year	*Estimates*	*Actuals*
	Rs.	Rs.
1955-56	78,61,500	34,43,849
1956-57	1,72,00,500	76,05,652
1957-58	1,26,08,200	57,07,509

The above figures reveal that there are huge shortfalls in the actual expenditure as compared with the budgeted estimates. The shortfalls largely relate to the Works and Improvement Schemes, Rehousing Schemes and Slum Clearance Schemes. The Committee have no doubt that there must be many valid reasons why the allotted expenditure could not be incurred. All the same *they strongly feel that in an important activity like clearance and improvement of slums which are primarily for the benefit of the common man, the authorities concerned should evince a greater sense of urgency so that all the impediments in the achievement of targets—monetary and physical—envisaged in the budget estimates are removed and the benefits contemplated for the poorer sections of the community are actually made available to them.*

116. The Committee learnt that an allocation of Rs. 3·5 crores has been made for slum clearance work in Delhi during the Second Plan, as against the estimated cost of Rs. 4·45 crores of the programme of the Authority. A phased programme has been worked out and the Delhi Development Authority is proceeding on that basis. To an enquiry as to whether the Delhi Development Authority would be able to utilise Rs. 4·45 crores according to its programme, if the money is made available to it, it was stated that there were some difficulties in the implementation, as squatters did not want to move out and, therefore, the Authorities of D.D.A. did not want to encumber themselves with large sums of money which could not be utilised. *The Committee, however, hope that seeing the magnitude and urgency of the problem, the authorities of the Delhi Development Authority will be able to utilise usefully at least Rs. 3·5 crores placed at their disposal during the Second Plan.*

G. Office building and staff of the Delhi Development Authority

117. The Committee learnt that at present the office of the Delhi Development Authority is located at three places and since the Vice-Chairman of the Delhi Development Authority is also the Chairman of the Town Planning Organisation, he has to work at four places. It is stated that the Ministry of Health is constantly asking the Ministry of Works, Housing and Supply to provide the accommodation in one place, but in vain. The D.D.A. authorities are even prepared to locate their office in hutments constructed at one place. *The Committee suggest that the matter should be settled at a high level to provide accommodation for the Office of Delhi Development Authority at one place for smooth and efficient working.*

118. A statement showing the staff position of the Delhi Development Authority as on the 31st August, 1958 is enclosed as Appendix VIII. It is seen from that statement that there are at present 159 class IV staff and 162 other staff. *The strength of Class IV staff appears to be excessive. The Committee, therefore, suggest that a job analysis may be done of their work with a view to see what reduction can be effected.*

H. General

119. From the facts mentioned in the beginning of the Chapter it is evidently clear that the old city of Delhi is full of slums.

The problem is aggravated by the continuous influx of population because the city of Delhi is a very great attraction for people who are in search of livelihood, and who, for want of suitable accommodation, erect shacks anywhere they find a piece of land to settle upon. *The Committee strongly feel that in order to ensure removal of slums from Delhi some practical steps will have to be taken to stop the influx of population and prevent growth of new unauthorised structures. For this purpose they recommend that the Government of India should take a bold decision that no new offices will be located in Delhi and that those that can be shifted outside will be shifted to other parts of the country. The Committee also suggest that suitable steps should be taken to see that fresh squatting is effectively, prevented.*

120. One of the reasons of the continued existence of slum conditions is the living habits of the people and lack of education and community feeling. The Committee are, therefore, in full agreement with the view expressed by the Advisory Committee on Slum Clearance (1958) that the most effective way of dealing with the problem would be to set up urban community development centres and extension blocks through which the slums and depressed neighbourhoods in every urban area could be developed. The need of community development work in existing slum areas as well as in areas where slum dwellers are rehoused cannot be over-emphasised. Besides removing the lack of education and community feeling it will also eradicate the apathy and inertia of slum dwellers and remove the many environmental and psychological evils they are prone to and will inculcate in them a spirit of self-help and good neighbourliness. *The Committee, therefore, are of the opinion that rehousing alone will not help the slum dwellers unless their economic conditions, are also improved. They, suggest that suitable arrangements should be made for providing training-*cum-*production centres in the neighbourhood of localities where the slum dwellers are resettled or in the slum areas which are re-developed.*

121. In the context of slum clearance the Committee would like to mention that temporary hutments etc. are erected by the contractors for housing the temporary labour which are not cleared off when the particular building project is completed and after sometime such area becomes a permanent slum. It becomes difficult to get the area cleared when the persons have lived there for a considerable period. *The Committee, therefore, suggest that suitable measures should be taken to see that temporary hutments etc. erected by the contractors for housing the temporary labour are cleared off when a particular building project has been completed and that during the construction phase when labour has to be housed in those hutments the contractor provides minimum sanitary and other facilities to the labour working under him.*

BALVANTRAY G. MEHTA,
Chairman,
Estimates Committee.

NEW DELHI;
The 22nd December, 1958.

APPENDIX I

(*Vide* para 2)

Main principles underlying the proposals of the Bhore Committee for future health development in the country.

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(1) No individual should fail to secure adequate medical care because of inability to pay for it.

(2) In view of the complexity of modern medical practice, the health services should provide, when fully developed, all the consultant, laboratory and institutional facilities necessary for proper diagnosis and treatment.

(3) The health programme must, from the beginning, lay special emphasis on preventive work. The creation and maintenance of as healthy an environment as possible in the homes of the people as well as in all places where they congregate for work, amusement or recreation, are essential. So long as environmental hygiene is neglected, so long as the faulty modes of life of the individual and of the community remain uncorrected, so long as these and other factors weakening man's power of resistance and increasing his susceptibility to disease are allowed to operate unchecked so long will our towns and villages continue to be factories for the supply of cases to our hospitals and dispensaries.

(4) The need is urgent for providing as much medical relief and preventive health care as possible to the vast rural population of the country. The debt which India owes to the tiller of the soil is immense and, although he pays the heaviest toll when famine and pestilence sweep through the land, the medical attention he receives is of the most meagre description. The time has, therefore, come to redress the neglect which has hitherto been the lot of the rural areas.

(5) The health services should be placed as close to the people as possible in order to ensure the maximum benefit to the communities to be served. The unit of health administration should, therefore, be made as small as is compatible with practical considerations.

(6) It is essential to secure the active co-operation of the people in the development of the health programme. The idea must be inculcated that ultimately, the health of the individual is his own responsibility, and in attempting to do so, the most effective means would seem to be to stimulate his health consciousness by providing health education on the widest possible basis as well as opportunities for his active participation in the local health programme.

APPENDIX II

(*Vide* para 6)

Statement showing the expenditure incurred during the first two years of the Second Plan under various health schemes and budget provision.

(Rs. in lakhs)

Name of the Institution	1956-57			1957-58		
	Budget Provision	Expenditure	Shortfall	Budget provision	Expenditure	Shortfall
1	2	3	4	5	6	7
I. *Purely Central Schemes*						
1. All India Institute of Medical Sciences	27·11(R) 37·10(NR)	11·05 53·58	16·06	25·00 50·93	22·74 33·38	2·26 17·55
2. Grants to T.B. Cancer, Leprosy and other voluntary Institutions	30·00	30·00	..	20·00	20·00	..
3. Supply of Equipment to Medical Colleges and Research & other Institutions	20·00	3·85	16·15	20·00	18·96	1·04
4. Continuation and Expansion of Health Visitors Training at the Lady Reading Health School, Delhi	2·28	2·19	0·09	1·99	1·85	0·14
5. Establishment of Central Health Education Bureau	2·50	..	2·50	2·75	2·26	0·49
6. Installation of Dry Freeze Vaccine Plant at B.C.G. Vaccine Laboratory, Guindy Madras	3·00	..	3·00	2·00	1·35	0·65
7. Expansion of the Existing Willingdon Hospital and Nursing Home, New Delhi	4·50	3·50	1·00	2·37	4·29	..
8. Expansion of the Safdarjang Hospital New Delhi	5·50	4·40	1·10	15·00	6·75	8·25
9. Development of the Hospital for Mental Diseases, Ranchi	2·00	0·95	1·05	0·50	0·24	0·26
10. Health Survey in Community Project Areas	0·60	0·71	..	0·65	0·63	0·02
11. Establishment of the Central Food Laboratory	1·00	1·22	..	1·05	0·86	0·19
12. Expansion of Lady Hardinge Medical College	1·50	12·44	..	3·00	6·94	..

1	2	3	4	5	6	7
13. The Tata Memorial Hospital, Bombay	5·00	1·00	4·00	7·00	5·59	1·4
14. After-care and Rehabilitation Centres for the physically handicapped at Bombay	2·30	0·40	1·90	3·00	0·63	2·37
15. Isolation of Advanced cases of T.B. Topkhanawala Isolation Hospital, Mehrauli	2·75	2·16	0·59	0·75	0·75	..
16. Cancer Research Centres	7·00	..	7·00	10·00	6·50	3·5
17. Grant in aid to Indian Council of Medical Research for Medical Research	30·00	30·00	..	50·00	50·00	..
18. Building Programme of the Central Research Institute, Kasauli	0·68	1·03	..	0·50	0·24	0·26
19. Trachoma Pilot Project	0·63	1·18	..	0·80	1·00	..
20. Expansion of the All India Institute of Mental Health, Bangalore	5·00	..	5·00	5·00	2·85	2·15
21. Central Leprosy Teaching and research Institute	7·00	5·60	1·40	6·00	3·12	2·88
*22. Expansion of the Human Variation Unit at the Indian Cancer Research Centre Bombay	..	..	..	..	..	..
23. Training in Public Health Engineering	4·00	0·32	3·68	8·00	1·87	6·13
24. Training and Research in Medical Statistics	1·50	..	1·50	0·30	0·30	..
25. Goitre Control	2·00	..	2·00	2·00	0·01	1·99
II. *Centrally aided schemes provision for which is made in the Central Plans.*						
26. Upgrading of certain departments in Medical Colleges	5·02	3·37	1·65	6·00	4·05	1·95
27. After-care and Rehabilitation Centres for T.B. patients	3·67	..	3·67	..	..	..
28. Isolation of Advanced cases of T.B. Institutions other than mentioned under Scheme No. 15	10·00	2·81	7·19	10·00	10·18	..
29. Family Planning	30·00	9·12	20·88	25·00	26·13	..
30. Indigenous and other systems of Medicine—Assistance for establishment and upgrading of teaching Institutions	19·50	10·21	9·29	20·25	16·23	4·02

*Plan provision for this scheme is Rs. 9 lakhs.

1	2	3	4	5	6	7
31. Establishment of Departments of Social and preventive Medicine in certain Medical Colleges . .	8·50	0·25	8·25	7·00	1·53	5·47
32. Establishment of New and expansion of existing Dental Colleges . . .	15·00	..	15·00	5·00	5·88	..
33. Establishment of teaching hospitals of Child Guidance Clinics and Psychiatric Departments . . .	4·00	0·10	3·90	..	..	..
34. Establishment of Paediatric Centres . . .	2·00	..	2·00	2·00	2·00	..
35. National Malaria Eradication Programme . .	42·12(R) 348·52(NR)	73·94 325·42	.. 23·10	117·35 345·28	77·63 401·34	39·72 ..
36. National Filaria Control Programme . . .	11·42(R) 141·58(NR)	12·56 35·42	.. 106·16	11·79 111·37	11·06 96·05	0·73 15·32
37. Opening of New Medical Colleges and Expansion of existing medical colleges .	42·00	57·00	..	50·00	84·64	..
38. Training of 50,000 Dais under various MCH Schemes *viz.*, Welfare Extension Project, Health Centre NES Blocks . . .	5·00	..	5·00	4·00	4·19	..
39. Employment of Dietitions and establishment of diet kitchens . . .	1·24	..	1·24	0·90	0·33	0·57
40. Subsidy for B.C.G. Vaccination Campaign . .	..	..	..	2·00	0·02	1·98
41. Subsidy for full time teaching units in the Medical Colleges . . .	20·00	..	20·00	..	..	..
42. National Water Supply and Sanitation Programme (Urban and Corporation) .	350·00	364·14	..	550·00	914·55	..
III. *Centrally aided Schemes provision for which is made in State Plans.*						
43. Training of Lady Health Visitors to Staff M & C W Programme . . .	4·10	0·19	3·91	5·00	5·10	..
44. Training of Health Personnel under Community Development Programme .	8·90	4·08	4·82	8·00	9·51	..
45. Integration of Public Health with Basic course in Nursing	3·00	..	3·00	3·00	6·86	..
46. Training of Refractionists and Opticians . . .	5·63	..	5·63	4·00	1·52	2·48

1	2	3	4	5	6	7
47. Training of Laboratory Assistants	5·63	..	5·63	4·00	0·17	3·83
48. Opening of training Centres for Auxiliary Health Workers	5·63	..	5·63	4·00	0·15	3·85
49. Leprosy Control Scheme	50·00	10·17	39·83	20·00	11·13	8·87
50. Control of V.D.	5·00	..	5·00	8·00	2·89	5·11
51. Establishment of T.B. Clinics	30·00	..	30·00	30·00 (29·50 revised estimates)	15·40	14·10
52. T.B. Demonstration Centres	5·00	..	5·00	4·00	..	4·00
53. Establishment of Dental Clinics in District Hospitals	5·25	0·10	5·15	6·38	0·64	5·74
54. Development of Public Health Laboratory Services	10·00	..	10·00	5·00	2·18	2·82
55. School Health including School Feeding	12·60	..	12·60	..	..	..
56. National Water Supply & Sanitation Scheme—Rural	100·00	84·95	15·05	250·00*	174·50	75·50
57. Primary Health Units	22·00	..	22·00	53·12	74·77	..

Total Second Plan provision and shortfalls during the first two years.

(Rs. in lakhs)

	Plans Provision	Shortfalls during the first two years
Purely Central Schemes	1627·78	120·05
Centrally aided schemes for which provision is made in the Central Plan	7392·00	297·09
Centrally aided schemes for which provision is made in the State Plans	5340·11	285·93

***Though there was an original provision of Rs. 250 lakhs (150 lakhs for grants and 100 lakhs for adjustment of the cost of equipment) the Ministry of Finance later on advised the Ministry of Health that Rs. 150 lakhs only should be utilised for both the items and the remaining amount of Rs. 100 lakhs should be surrendered.**

APPENDIX III

(*Vide* para 17)

Note giving the main points of difference between Malaria Control and Eradication programme and salient features of Eradication Programme.

A. Introduction

The experience of large scale control programmes in malarious areas of different parts of the world over a period of years has brought out two very important factors. The first of these is the disappearance of malaria parasites in the human hosts in the population which had been effectively protected for a period of at least three years, thus making any further control operations superfluous. The second factor is the demonstration of the phenomenon of resistance which malaria carrying mosquitoes in some areas have developed against the insecticides in use. It has, however, been stated that none of the vectors of Malaria have so far shown any evidence of resistance in India. The first factor indicates that the fullest use should be made of the unprecedentedly potent weapon against malaria *viz*., the residual insecticides spraying. The second factor *i.e.* the possibility of development of resistance has introduced an element of urgency which has forced the issue for eliminating the disease when it is still possible. Otherwise, should the insects develop resistance, all efforts and huge funds which will have gone into control of disease, will be rendered infructuous. These were the considerations which promoted the Government of India to take the decision of changing the National Malaria Control Programme into one of Malaria Eradication with effect from April, 1958.

Malaria Eradication implies the reduction of the parasite reservoir in human populations to such a negligible degree that once it has been achieved, there is no danger of resumption of local transmission. Intensive spraying over three years will reduce the number of human beings who harbour parasites to an extremely low number and the degree of infection in them will be so mild as not to be conducive to transmission. Eradication Programme also aims at seeking out such human reservoirs of infection and bring about the disappearance of parasites in them by radical treatment.

B. Main points of difference between a malaria eradication programme and a control programme.

DEFINITION:

ERADICATION—To remove endemic malaria; malaria being no longer endemic when there has been no autochthonous case for three consecutive years (unless contracted from an imported case).

CONTROL—To reduce malaria occurrence to tolerable levels.

Items	Control programme	Eradication programme
1	2	3
(a) Objectives	To reduce or to eliminate morbidity and mortality.	To prevent the occurrence of any new case of malaria.
(b) Area of operations .	(a) "Accessible" Zones; (b) Localities of higher incidence; (c) Localities of higher social, political and economic importance.	Wherever transmission takes place.
(c) Minimum acceptable work; quality	Good. Reduction of transmission to tolerable levels can be accepted.	Perfect. Transmission must be interrupted in the entire area. Should new cases occur, the cause must be determined and removed.
(d) Duration of operations.	Without limit.	Programme finished when malaria is no longer endemic.
(e) Economic point of view	Measures applied where the cost is justified by the local economic importance of the problem. Expenditures must be continued indefinitely representing a recurring service.	Effective measures applied in all malarial areas will rapidly reduce expenditures representing capital investment and not a permanently recurring service.
(f) Control of other insects.	Convenient and feasible as an integrated public health programme.	Not feasible as this programme must have specific, well defined and time limit objectives.
(g) Case finding	Of secondary importance.	Of paramount importance by notification or otherwise.
(h) Parasitological verification of individual cases.	Relatively unimportant.	Of primary importance.

1	2	3
(i) Imported cases	Of relative interest—mostly academic.	Most important after antimalaria measures are stopped.
(j) Epidemiological investigation of individual cases.	Costly and non-productive.	Must be done ; it is increasingly important with the progress of the programme ; it is the clue to eradication.
(k) Administrative evaluation for the development of the programme.	Measurement of accomplishments.	Measurement of what remains to be accomplished.
(l) Epidemiological evaluation.	Reduction of the splenic parasitological indices.	Disappearance of indigenous malaria cases (as proved by the "epidemiological intelligence service").

C. The salient features of Malaria Eradication Programme.

The salient features of the scheme are :—

(i) intensification of the existing control programme.

(ii) Extension of the Malaria Control Operations to hypoendemic areas with spleen rates of less than 1%.

(iii) establishment of surveillance procedure ; and

(iv) interruption of spraying from the 4th year of Eradication Operations.

1. *Intensification of Programme.*

Under the intensification programme it is proposed that in order to provide complete and effective coverage to the endemic and hypoendemic areas which was not achieved under the National Control Programme, each unit may be supplied insecticides at the rate of 71 long tons of DDT 75% instead of 53·3 tons. The strength of the field staff and spraying equipment to be increased by 50% except in the case of units functioning in hilly areas or areas with difficult terrain and very sparse population, where the strength of the field staff and spraying equipment is to be increased by 100%. These additions in material, equipment and presonnel are expected to enable the spraying to be done according to the Schedule resulting in complete coverage.

2. *Extension of Malaria Eradication Operations to Hypoendemic areas.*

In the control programme the pupulation requiring protection was estimated on the basis of previously accepted classification of malaria endemicity and only such population in areas with spleen rates of 10% were not considered necessary to be included in the control programme. With eradication as the objective all areas even with low degree of transmission have to be brought within the scope of spraying. It is estimated that 160 million people residing

in hypoendemic areas will require protection necessitating the establishment of 160 additional units. The spraying period in the case of these units is proposed to be limited to 3 months as only one round of spraying of 100 mmgm. per sq. ft. is considered to be enough to give them effective protection. These units are expected to be in position in 1959-60 and will function during 1959-60 and 1960-61. As the Medical Officers and Malaria Inspectors required for these units have to be trained before they start functioning provision has been made for their recruitment in December, 1958 to allow a three months time for such training. It will be necessary to employ the field staff in these units only for a period of 3 months. Each of these units will be supplied 35·5 tons of DDT 75% or its equivalent per annum.

3. *Surveillance*

Provision is also made for the establishment of a special organisation for surveillance in areas where spraying is contemplated to be withdrawn. The duties of this staff would consist of making house to house visits detecting suspected malaria cases, taking blood slides of such cases, their microscopic examination, administration of potent antimalaria drugs like 4—aminoquinoline to such cases, epidemiological investigating of positive malaria cases, and treatment of all confirmed malaria cases with 8-aminoquinolines. Such an organisation is proposed to be established one year prior to contemplated interruption of spraying for a further period of three years. Thereafter the continuance of surveillance will become the responsibility of the normal public health staff. It has been proposed to establish 390 surveillance teams from the year 1960-61. Each surveillance team will have 100 superior field workers.

4. *Interruption of spraying.*

The following criteria for interruption of spraying have been suggested:—

(*a*) Childhood spleen rate less than 5% for two years consecutively;

(*b*) Childhood parasite rate less than 1% for two years consecutively; and

(*c*) Infant parasite rates for a consecutive period of two years.

Under the Malaria Control Programme 230 units have already been allotted to cover 230 million people living in hyper mesoendemic and epidemic areas. These 230 endemic units will be divided into two categories :—

(*a*) Plain units	190
(*b*) Difficult terrain units	40
	230

From 1959-60, 160 hypo-endemic units will be started.

The total estimated cost of the eradication operations during the year 1958-59 to 1960-61 is Rs. 43·57 crores out of which the States will be expected to spend Rs. 15.19 crores and the centre Rs. 10·09 crotres. The balance of Rs. 18·29 (crores equivalent to 38·4 million dollars) in foreign exchange is expected to be made available by foreign agencies. For the year 1958-59 W.H.O. have agreed to contribute 1·706 million dollars and the U.S.T.C.M. 8·705 million dollars.

APPENDIX IV

(*Vide* para 28)

Particulars of the staff at Malaria Institute of India as on 31-3-1958

S. No.	Designation of the post	Sanctioned Strength	Posts filled
1	2	3	4
1.	Supdt. (including Stores Supdt.) . .	4	3
2.	Accountant S.A.S.	2	2
3.	Head Clerk	1	1
4.	Librarian	1	1
5.	Stenographers (including Steno to Dir.) .	15	13
6.	Statistical Assistant	2	1
7.	U.D. Clerk	33	33
8.	L.D. Clerk	33	32
9.	Accountant	1	1
10.	Store Keeper	1	1
11.	Computors cum U.D. Clerk . . .	4	4
12.	Draftsman (including Mech. Draftsman)	5	5
13.	Malaria Assistant	2	2
14.	Technician	12	10
15.	Sr. Lab. Assistant	6	6
16.	Laboratory Assistant	18	17
17.	Insect Collector	24	23
18.	Driver	11	8
19.	Telephone Operator	2	2
20.	Curatory of Museum	1	0
21.	Overseer	3	3
22.	Mechanic	3	3
23.	Motor Mechanic	1	1
24.	Chainman	1	1
25.	Carpenter	1	1
26.	Laboratory Attendant	27	23
27.	Daftry	7	7

1	2	3	4
28.	Peon	36	36
29.	Chowkidar	13	13
30.	Farash	2	2
31.	Cleaner	9	8
32.	Head Animal Attendant . . .	1	1
33.	Animal Attendant	27	26
34.	Sweeper	11	11

APPENDIX V

(*Vide* para 29)

Statement showing the comparative rate of mortality due to tuberculosis in different countries of the world

(*Mortality per* 1,00,000)

S. No.	Country	Rate	Year
1.	Australia	9·2	1954
2.	Belgium	23·3	"
3.	Canada	7·8	1955
4.	Denmark	5·1	"
5.	England and Wales	13·1	"
6.	Finland	39·0	"
7.	France	27·6	"
8.	Germany	17·9	1954
9.	Iceland	6·5	"
10.	Italy	19·3	"
11.	Luxembourg	13·9	1955
12.	Netherlands	5·5	"
13.	North Ireland	12·9	"
14.	Norway	13·0	1954
15.	Portugal	52·5	1955
16.	Sweden	11·6	1954
17.	Switzerland	17·5	"
18.	U.S.A.	9·3	"
19.	Egypt	21·6	1954
20.	Mauritius	24·4	1955
21.	Seychelles	44·0	"
22.	Union of South Africa	9·9	1953
23.	Brazil	95·8	1954
24.	Chile	69·9	"
25.	Columbia	24·2	1955
26.	Costa Rica	20·8	"
27.	Dominican Republic	33·7	1954

S. No.	Country	Rate	Year
28.	Guatemala	35·8	1955
29.	British Guiana	24·1	,,
30.	Jaimaica	38·0	1953
31.	Mexico	28·9	1954
32.	Nicaragua	20·6	,,
33.	Uruguay	24·3	1953
34.	Japan	45·0	1955

APPENDIX VI

(*Vide* para 51)

Terms of reference of the Committee (1954) appointed to report on the Control of Leprosy

(i) to assess the leprosy problem in India;

(ii) to review the anti-leprosy work in the country particularly with reference to facilities in respect of treatment, isolation, training of anti-leprosy personnel and research;

(iii) to recommend measures to further intensify anti-leprosy work in various States where the disease is a serious public health problem. In making the recommendations, the Committee should keep in view the financial resources of the States concerned;

(iv) to assess the problem of inter-State migration of beggars suffering from leprosy and to recommend measures for its solution;

(v) to examine the existing legislation dealing with leprosy, and in case it is considered defective, to suggest a model legislation which the Centre and the States should enact with such modifications as local conditions may necessitate; and

(vi) to make suggestions regarding the co-ordination of the activities of Central and State Governments and the voluntary organisations, e.g., the Gandhi Smarak Nidhi, and the Hind Kusht Nivaran Sangh.

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APPENDIX VII

(*Vide* para 103)

Recommendations made in the Interim General Plan in regard to Slum Clearance and redevelopment

1. The city should take over and fulfil the responsibilities for street cleaning and removal of garbage, nightsoil and other refuse from the slum areas.

2. Civil serv ces should be extended to the conservation areas, and an attempt made to provide community facilities.

3. Dairy farms should be established on the out-skirts of the city, so as to remove existing cattle sheds from residential areas. In the meantime, the stabling of cattle should be prohibited in congested areas, and a licensing system set up for other areas of the city.

4. The slaughter houses should be moved from the heart of the city to a selected area outside, along with their ancillary trades.

5. Obnoxious trades such as lime kilns, potteries etc., and major industrial concerns should be moved out of the old city and into the area recommended in the Interim General Plan.

6. Land made available by the shifting and removal of these uses should be used for dispersing and resettling the excess population from presently over crowded areas, and for providing necessary community facilities.

7. Dilapidated and structurally dangerous buildings should be demolished and the areas redeveloped within the framework of the Interim General Plan.

8. A rehousing programme should be undertaken keeping the following two considerations in mind :—

(*a*) Selecting sites for rehousing slum dwellers as near as possible to their existing work centres or creating new work centres near the proposed rehousing areas.

(*b*) Where rehousing is involved, care should be taken so that the existing community and social patterns of the people are maintained and strengthened.

9. A detailed physical and socio-economic survey should be taken within the slum area. After completion, the physical survey should show the type, construction and condition of every building within the area. The socio-economic survey need not be conducted on a house to house basis, but may take advantage of random sampling or other techniques to arrive at a valid result. This survey should cover family size, number of employed, unemployed and under-employed persons, age and sex distribution, place of employment, mode and cost of transportation, living space, presence of sickness and disease, average income of family and other related matters.

APPENDIX VIII

(*Vide* para 118)

Statement showing the staff position of the Delhi Development Authority as on the 31st August, 1958

Sl. No.	Name of category of post	Sanctioned posts	No. actually working	Remarks
1	Whole time paid Members	3	3	
2	Officers . . .	15	12*	*Two posts held in abeyance : one vacant.
3	Office Staff:			
	(a) Superintendents and Accountants	4	3	
	(b) Head Assistants .	4	4	
	(c) Counsel . . .	1	1	
	(d) U.D.Cs. . . .	32	30	
	(e) L.D.Cs. . . .	82	75	
	(f) Stenographers . .	9	8*	*One post in abeyance.
4	Field Staff (other than officers):			
	(a) Naib Tehsildar . .	1	1	
	(b) Kanungo . . .	2	2	
	(c) Patwaris . . .	9	8	
	(d) Building Inspector .	1	1	
	(e) Overseers . .	9	8	
	(f) Lady Welfare Workers	2	2	
5	Drawing Staff:			
	(a) Draftsman . .	1	1	
	(b) Tracer . . .	3	1*	*Two held in abeyance.
	(c) Ferroprinter . .	1	1	
6	Sanitary Staff:			
	(a) Chief Sanitary Inspector . . .	1	1	
	(b) Class IV Staff . .	72	72	
7	Other Class IV Staff: . (Daftries, Peons, Process Servers, Khallasis, Farash, Chawkidars, Staff Car Driver, and Office Sweepers)	98	87	

APPENDIX IX

Statement showing the summary of Conclusions/Recommendations

S. No.	Reference to Para No.	Summary of conclusions/recommendations
1	2	3
1	2	The Committee would like to observe that in the background of the principles (given in Appendix I) mentioned by the Bhore Committee for future health development in the country, the position of Medical and Public Health as obtaining in the country today needs considerable further improvement.
2	4	The Committee would like to lay special stress on the point that no amount of effort on the part of Government alone will achieve the objective set by the Constitution without the people's willing and active co-operation. They, therefore, recommend that greater emphasis should be laid on people's active participation in the various public health programmes.
3	6	The slow progress of expenditure witnessed during the first two years of the Second Plan in a large number of health schemes indicates a lack of proper plan consciousness in various health departments. The Committee would like to make the following recommendations to end this state of affairs : (a) The Central Ministry should at regular intervals review the progress of different health schemes and devise measures for an organised approach to accelerate the pace of progress. (b) In cases where a planned expenditure of a particular scheme is not likely to be incurred, funds may be diverted from one scheme to another so that there is maximum realisation of targets, both physical and monetary, in the Second Five Year Plan. (c) Such a review will help the Ministry to find out the position of the Plan provision which it cannot usefully spend so that the amounts can be surrendered in consultation with the Planning Commission which can

1	2	3
		divert them to other schemes which are ready for execution but which have been held up for want of funds.
		(d) While thus diverting the funds from any scheme special efforts should be made for utilising the funds thus made available for environmental sanitation and water supply schemes which should receive the highest priority.
4	7	The Committee suggest that the Directorate General of Health Services at the Centre should have teams of experts who should visit the States and help their staff in formulating detailed plans well in advance so that allocated funds, meagre as they are, are not left unutilised. In formulating these plans more emphasis should be laid on medical facilities, personnel, equipment, etc. and less on building works.
5	8	The Ministry of Health have appointed a small committee to take an overall picture and collect certain material and thereafter a committee on the lines of Bhore Committee will be appointed to scrutinise all the schemes and suggest ways and means of implementing them. The Committee feel that this is a step in the right direction. The medical facilities, both preventive and curative, available to the citizens of the country, are very meagre and a well integrated perspective plan is necessary to chalk out a long range programme which will envisage provision of minimum facilities (maternity, child welfare, medicine, surgery and advice of specialists) to all the citizens by a target date. A short term plan harnessing all medical workers, trained or semi-trained, into a well organised net work is also necessary, so as to provide some rudiments of medical care to all the people here and now. The proposed Committee should take these factors into consideration while indicating the future provision of medical facilities and general public health measures.
6	10	The Committee welcome the introduction of the revised and intensified programme of Malaria Eradication from 1-4-1958 and hope that by well co-ordinated action and constant vigilance the programme will succeed in achieving its objective of eradicating Malaria from the country.
7	12-13	According to the original Malaria Control Programme it was proposed to cover 200 million people by opening 200 centres uptil 1956-57. Actually, however, only 145·25 million people were

1	2	3
		covered by 169·25 centres. The reasons given by the Ministry (mentioned in paras. 12-13) indicate lack of pre-planning and some rigidity of approach to the problem. The Committee, therefore, suggest that concerted efforts should be made from the very beginning to achieve the targets aimed at in case of the Malaria Eradication Programme.
8	14	The Committee are of the opinion that the reasons for the delay in submission of reports on the part of certain Malaria Control Units should be investigated and responsibility fixed so as to avoid such recurrences in future. Some concrete measures appear to be necessary to receive reports from each of the Malaria Control Units by the due dates fixed.
9	15	The Committee are glad to learn about the results of pilot studies (mentioned in para 15) made to assess the socio-economic effects of the Malaria Control Programme. They hope that the authorities will succeed in eradicating the scourge of malaria completely by the target date as envisaged in the Malaria Eradication Programme.
10	16	The Committee suggest that people's representatives should be associated in the execution of the Malaria Eradication Programme in the form of Advisory Committees at the Central, State, District and Block levels. The Committees at the District or Block levels may also be entrusted the work of supervising the work of malaria staff working in villages so that all the personnel employed in the work are effectively utilised. Active co-operation of the village panchayats should also be sought to make the programme effective and broad based. This will enable the general public to actively participate in the work, creating a sense of urgency for the whole scheme.
11	19	The Committee are surprised to learn that the reasons for the three State Governments (Madhya Pradesh, Madras and Assam) not sanctioning the implementation of Malaria Eradication Programme are not known to the Ministry of Health. They feel that active participation of all the States in a National Programme of this type is very essential. They, therefore,, suggest that the Ministry should make efforts to persuade the three States to join the programme.
12	21	The Committee suggest that suitable proposals should be considered by the Ministry in advance as to how the staff, that would be released after the Malaria Eradication Programme is completed, could be usefully utilised.

1	2	3
13	22	The Committee suggest that the mosquito nuisance should also be tackled in a systematic way. For this purpose the public should be educated about the breeding places of mosquitos and the techniques of controlling the breeding of mosquitoes in these places, apart from improving the environmental sanitation through Primary Health Centres.
14	23	The Committee are of the opinion that in the last two years of the campaign for Malaria Eradication, the villagers themselves should be given materials for use by themselves under the supervision of the Malaria personnel so as to educate them in the techniques of malaria and mosquito control. Thus the villagers who have been informed of the breeding places and who have been educated in the use of materials and equipment for destroying mosquitoes may be able to tackle the mosquito nuisance when the Malaria Eradication Programme is completed, and the existing personnel are withdrawn. In this respect the feasibility of assisting the Panchayats with equipment and materials to eliminate the mosquitoes after the Malaria Eradication Programme is completed, should be examined.
15	24	The Committee are of the opinion that properly coordinated and pre-planned measures are necessary to avoid any wastage of men, material and machinery employed in the D.D.T. factories at Delhi and Alwaye when the requirements of D.D.T. are substantially reduced at the end of the Malaria Eradication Programme.
16	26	The Committee suggest that the feasibility of shifting the Malaria Institute of India at a place outside Delhi, provided suitable accommodation can be found for it, might be examined. This would serve to reduce the congestion of Government offices in Delhi.
17	27	The latest published annual report of the Malaria Institute of India relates to the years 1948—50 which was published in 1954. The combined annual report of the Institute for the years 1951—55 is stated to be in press and the material for the combined reports of the Institute for the years 1956 and 1957 is still under collection. The Committee consider this an unhappy state of affairs. They, therefore, suggest that the Ministry of Health should ensure that the annual reports of all such Institutions in the affairs of which the Ministry has a say, are not normally delayed beyond six months after the expiry of the year under review.

1	2	3
18	28	The Committee suggest that the workload of the non-technical staff of the Malaria Institute of India should be properly job analysed to see what reduction is possible.
19	32	The table (given in para 32) showing the progress of the B. C. G. campaign in India indicates that the campaign was steadily gaining momentum till 1955-56, but received a set back in 1956-57 during which year number of persons tested and vaccinated dropped substantially in spite of the fact that the number of Mass Campaign Units and the expenditure incurred had increased. This point needs careful investigation and suitable remedial action.
20	32	Even after eight years' efforts only about 8·6 crores of persons have been tested and about 3 crores vaccinated under the B C. G campaign. The tempo of work needs to be increased so as to cover the entire susceptible population as expeditiously as possible.
21	34	The Committee suggest that wide publicity should be given to the schemes of tuberculosis included in the Second Five Year Plan, specially the free domiciliary service provided by the T. B. Clinics.
22	35	The Committee feel that considering the great importance of tuberculosis control which is the second major public health problem of the country, the funds provided for it are themselves inadequate for the effective and early control of this scourge. Even out of the inadequate funds provided, there have been huge shortfalls in the actual expenditure compared to the budgeted estimates for various control schemes during the First Plan and the first two years of the Second Plan. This indicates that the urgent need of tackling the problem of tuberculosis on a National basis has not yet been fully realised. The Committee, therefore, suggest that the Ministry should take urgent and effective steps for more rapid control measures and to at least fulfil the targets aimed at during the Second Plan.
23	36	The Committee suggest that prompt measures should be taken to get the supplies of T. B. equipment from D. G. S. and D. within reasonable time and to see that the equipment supplied to the State Governments is promptly and properly utilised as these are delicate instruments and if they are kept in packing cases unduly long they are likely to be damaged. The Committee would like the Ministry to take precautionary measures to ensure that the funds provided in the Second Plan for this urgent and important purpose are not allowed to lapse.

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24	37	The Committee suggest that the Ministry should keep a watch whether the costly equipments supplied by them to the various clinics are in working order. Steps should be taken to see that proper servicing and repairing agencies are made available, wherever necessary, so that the costly equipment does not remain idle. This should be included in the terms of purchase of such machinery and the clinics which have been supplied the equipment should be specifically informed about the servicing and repairing agencies available for the purpose.
25	38	The Committee suggest that concerted efforts should be made by the authorities concerned at the Central and State levels to achieve the target of establishing 4,000 T. B. isolation beds during the Second Plan.
26	39	As preventive work is very important in the scheme of the control of tuberculosis, and in view of the inadequacy of the number of isolation beds under construction, the Committee recommend that stress should be laid on providing simply designed and cheaply constructed huts in the local areas for the isolation of infective patients, where home isolation is not possible. These huts may be placed in charge of a nurse and treatment provided by mobile units.
27	40	The Committee hope that the proposal of establishing a Tuberculosis Training Centre will materialise early to meet the scarcity of trained tuberculosis personnel. They suggest that the trained personnel should be used for the purpose for which they are trained and to ensure this a follow up record of all those receiving specialised training should be maintained.
28	41	The Committee suggest that in addition to giving the necessary training in suitable handicrafts, the Ministry may consider the feasibility of providing suitable avenues of employment by categorising or reserving certain jobs which do not require hard work in industries and other institutions both in private and public sectors for arrested tuberculosis patients who are really handicapped persons and on whom substantial sum has been spent during the course of their treatment, which would prove a waste unless adequate rehabilitation measures are evolved for every case that recovers after treatment.
29	42	The Committee feel that the use of mobile units in treating and controlling tuberculosis will be more successful than any other method. They, therefore, suggest that the proposed pilot project involving the

1	2	3
		use of mobile units for detection and treatment of tuberculosis in rural areas should be started without any loss of time and expanded as quickly as possible.
30	43	A programme for having arrangements in schools and colleges for finding out T. B. among students was turned down for lack of funds. The Committee feel that it is very necessary that some arrangements should be made in schools and colleges to find out the incidence of T. B. among students specially in view of the fact that with the modern advances in medicine and surgery detection of this disease in early stages would mean that cure would be almost a certainty. They, therefore, suggest that the scheme should be re-examined, processed and finalised early with the assistance of State Governments, Local Authorities and All India and State Medical Associations.
31	44	The Committee suggest that adequate supply of antibiotics should be given to tuberculosis patients either free or at concessional rates depending upon the economic condition of the patient, in the interest of public health. A suitable scheme may be prepared in this respect, commencing such supply in Union Territories and extending it to other parts of the country in a gradual planned manner.
32	46	The Committee recommend that the Ministry should consider the feasibility of taking up regular research work at B. C. G. Vaccine Laboratory, Guindy with the assistance and advice of the Indian Council of Medical Research.
33	47	The Committee suggest that the Ministry should examine the proposal of the C. P. W. D. in regard to the scarcity of storing space in the B. C. G. Vaccine Laboratory, Guindy that a temporary building worth about Rs. 6000 or 7000 could be put up for storage and later on construction of a permanent building for the purpose could be taken up. In any case, it should be ensured that necessary alternative arrangements are made for proper storage for the Laboratory before the existing rented building is got vacated.
34	49	The Committee suggest that the Ministry should give grants-in-aid or provide money from other sources to institutions of all India reputation like the Lady Linlithgow Sanatorium at Kasauli to reserve some free

1	2	3
		beds or beds at concessional rates for poor patients from among the general public so that the common man can also utilise the excellent facilities available at such Institutions.
35	49	The Committee suggest that the Indian Council of Medical Research might utilise the equipment and personnel available in the Lady Linlithgow Sanatorium, Kasauli for research, simultaneously upgrading its various sections and giving necessary assistance to the Sanatorium for these purposes.
35	53	The Committee suggest that a full time Director at the office of the Director, Leprosy Control Work, Calcutta should be appointed without further delay. This officer should tour extensively, effect necessary co-ordination and give necessary technical guidance to various centres opened in different parts of the country. He should also make it his business to see that the leprosy control work progresses according to schedule and does not in any way lag behind.
37	56	The Committee hope that the scheme for training of medical officers for anti-leprosy work will be implemented during the current year. To meet the shortage of medical personnel for leprosy work in the long run the Committee suggest that adequate training for the control and care of leprosy should be included in all under graduate courses.
38	58	The Committee are of the opinion that more concerted efforts are necessary to impress upon the minds of the leprosy patients the importance and value of regular treatment. They suggest that the system of utilising the services of cured patients for this purpose might be introduced with advantage.
39	59	The Committee suggest that different categories of leprosy patients such as those who are to be treated at the initial stage with a good chance of cure and rehabilitation, advanced cases which may prove incurable or are left with permanent deformities and may have to remain more or less for the rest of their lives in such institutions and those who are in the convalescent stage or rehabilitation stage, should as far as practicable be located in different homes. Particularly those incurable patients or burnt out cases with severe deformities who have to live for long periods should be housed separately in cottage type of accommodation instead of keeping them permanently in leprosy homes and dormitories with

1	2	3
		other patients. Moreover, there should be a separate place for the healthy children of leprous mothers with arrangements for their education and medical supervision watching for any appearance of signs and symptoms of the disease. The Committee suggest that the Ministry should evolve a suitable scheme, in consultation with the State Governments, to implement these proposals.
40	60	The Committee suggest that the Ministry of Health should use its good offices with the State Governments to improve the working of leper homes, particularly those which are not notified either under the Lepers Act or the Beggars Act. They also suggest that notifying such Homes should be made compulsory.
41	61	In the action taken on a resolution of the 5th Meeting of Central Council of Health held in December 1956, it is stated that enabling legistation for compulsory segregation of leper-beggars with provision for relief and treatment should be promoted by the Central Government. The Committee feel that such legislation is very necessary and, therefore recommend that this should be undertaken expeditiously.
42	62	The Committee suggest that the Ministry should examine the comprehensive scheme formulated by the Government of Bombay for the control and treatment of leprosy and urge the other State Governments to prepare schemes on similar lines, with such variations as are necessary to suit local conditions.
43	64	The Committee suggest that cases of shortfalls in expenditure as compared with the budget estimates due to lack of preparation by the State Governments should be discussed by the Central Council of Health so that remedial action can be taken to avoid recurrence in future.
44	65	The Committee suggest that in view of the over-all high incidence of venereal diseases in certain parts of the country, the dearth of trained personnel and inadequate treatment facilities, special measures should be taken to see that the available training facilities are fully utilised.
45	66	As a result of the application of Suppression of Immoral Traffic in Women and Girls Act, a large number of prostitutes from hill areas are reported to have gone back to the hilly areas. The incidence of V.D. is already high in the hill areas. The Committee are of the opinion that V.D. control and treatment centres

1	2	3
		opened there and operated with the help of social workers would result in prevention of further spread of V.D. in the hill population and should, therefore be undertaken without delay. They also suggest that all maternity clinics should be provided with a Serological Section for detection and free treatment given to those discovered to have venereal diseases to afford cent per cent protection to the newly born. If the mother is properly treated at an early stage, the child will not get the infection. Thus the interests of the coming generation will be protected.
46	68	In view of the poor progress made by the Goitre Control Scheme during the first two years of the Second Plan, it is not likely that the full provision would be usefully spent during the Plan period. The Committee, therefore, suggest that this scheme should be reviewed and revised early so that sufficient time is available to divert the surplus amount to other schemes such as water supply and sanitation schemes, if necessary.
47	69	The Committee understand that goitre can be wiped out in a few years if iodised salt is made available to the people living in the goitre belt. The Committee recommend that all such schemes for the elimination of any disease should be taken up in all earnestness and speed.
48	70	The Committee suggest that vigorous efforts should be made to root out small-pox completely as early as possible by arranging vaccination and revaccination on a large and comprehensive scale in a systematic way.
49	71	The Committee suggest that the Ministry should examine the possibility of selling plague vaccine to an international organisation which may stock the vaccine at a central place to serve as the emergency pool for countries which are periodically affected by plague, so that losses, if any, arising out of non-utilisation may either be avoided or substantially reduced.
50	73	The Committee suggest that feasibility of establishing regional depots with the assistance of State Governments to store the cholera vaccine so that the States needing the vaccine in a zone may have it from the depot in that zone may be examined by the Ministry of Health.

1	2	3
51	74	The Committee are distressed to note that though some of the countries have eliminated cholera epidemic, it still persists in the country. They recommend that a concerted drive should be taken up by the Government of India alongwith the State Governments to control diseases like cholera by eliminating flies, prohibiting sale of exposed food and providing for protected water supply.
52	80	Whatever may be the reasons, the Committee feel that question of ensuring adequate supply of drinking water to all the citizens of the country does not seem to have received the urgent and close attention it deserves. In this connection the Committee would like to reiterate the following resolution of the 6th Meeting of the Central Council of Health held in January, 1958 : "The Council taking due note of the difficulties and bottlenecks in the execution of the rural water supply schemes to which the Council attaches the greatest importance recommends to the Central and State Governments to streamline the procedure involved with a view to cutting short delays to a minimum and to further strengthen the P.H.E. (Public Health Engineering) Organisations in the States. Available training facilities should be utilised to the maximum extent."
53	81	The Committee are of the opinion that it would be advisable to utilise the amount provided under the rural water supply and sanitation schemes for supplying water even by constructing surface wells, sinking tubewells etc. rather than to allow the funds to lapse year after year. Priority may, however, continue to be given to protected piped water supply schemes wherever and whenever they can be readily implemented. The Committee are of the opinion that in schemes of this nature the discretion should vest with the Ministry concerned which may decide in consultation with the State Governments, as to how best the funds should be utilised for a particular scheme, to suit local conditions, availability of material etc.
54	82	In view of the extremely unsatisfactory progress made so far in regard to rural water supply, the Committee suggest that a team of experts may be appointed to conduct a comprehensive survey to find out :— (i) How many villages have no perennial water supply worth the name.

1	2	3
		(*ii*) How many villages have water supply of unsuitable type which is liable to cause diseases due to infectious, or abnormal mineral content of water; (*iii*) How much of the problem can be met by surface water schemes; (*iv*) How much is necessary to be met by piped water schemes ; (*v*) What are the total requirements of pipes to meet the problem ; (*vi*) When will the pipes in requisite quantity be available; (*vii*) Approximate cost of meeting the problem. After such a srvey is completed a target date should be fixed and a phased programme chalked out to tackle the problem on a national scale.
55	83	The Committee understand that in certain areas there are various water supply schemes sponsored by different agencies. In such cases it would be more economical and efficient if the resources of the different agencies are pooled and an integrated scheme worked out. The Committee would like the Ministry of Health to take initiative in the matter and examine this aspect of the question.
56	84	The Committee are of the opinion that a Water Supply Board consisting of experts and non-officials to advise the Ministry on matters connected with rural and urban water supply, will prove of great help in co-ordinating the efforts of different agencies engaged in supplying water for instance Community Development Programme, Harijan Welfare Programme, Schemes for local works etc. and also for preparing new schemes for the speedy solution of the problem of drinking water supply. They, therefore, suggest that such a Board should be set up early.
57	86	The Committee suggest that a special study should be made in those areas where there is lack of water supply but where tubewells can be sunk to find out:— (*i*) whether the tubewell water can be used for supplying drinking water ; (*ii*) whether a tubewell can serve both for irrigation and drinking water supply in a limited area.

1	2	3
		If the results are favourable suitable steps should be taken to sink tubewells (and artesian wells wherever feasible) and erect storage tanks in villages both for drinking water and irrigation in consultation with the Ministry of Food and Agriculture and the State Governments. The feasibility of utilising the large number of existing tubewells to supply drinking water through storage tanks and conduit pipes to the neighbouring villages should also be examined.
58	88	The Committee suggest that the Ministry of Health may examine in detail the feasibility of supplying water through conduit pipes from large reservoirs of perennial rivers taken through the length and breadth of the country and distributed to the villages through storage tanks, in consultation with the Central Water and Power Commission and the State Governments. The Ministry has, however, sanctioned a scheme of similar nature for Sabarmati. The Committee suggest that this scheme should be implemented early. If the scheme is found to be practicable and results are encouraging, the schemes of this nature for other areas also should be incorporated in the Third Plan.
59	92	The Committee feel that it is the duty and responsibility of the Public Health Engineering Department of Government to be watchful in the matter of proper processing of industrial effluents in all industries in the Public and Private sectors before their discharge into the public streams. To keep abreast of up-to-date know how in the matter of treatment of sewage and industrial effluents, not only with a view to keeping public streams in a reasonable standard of purity, but also for the sake of industrial economy and to disseminate such knowledge to the industries should be the responsibility of the Ministry of Health and its application that of the Ministry of Commerce and Industry. Before new industries are established or existing industries are expanded, the consequences of such industries on pollution of local streams should be examined and adequate measures for its prevention by enforcing proper treatment of effluents be taken.
60	92	The representative of the Ministry of Health agreed that action was necessary at the highest possible level to prevent the serious menace to the public health of the country caused by pollution of rivers by industrial effluents and sewage disposals and promised to initiate necessary action. The first step would be to have an

1	2	3
		intensive survey made of the situation, the results studied and remedies suggested. The following two aspects of the problem need special emphasis :— (*i*) the positive aspect of treatment of industrial and sewage effluents before they are let out into public streams ; and (*ii*) the preventive aspect of maintaining a reasonably scientific standard of purity of streams below the point of discharge of effluents. This survey might include pollution of atmosphere by industries and by smoke emitting buses in big cities and also the misuse of stored water in tanks etc. by the public for bathing, washing of clothes, cattle etc.
61	93	In the 5th meeting of the Central Council of Health, it was decided that the Central Ministry should prepare and circulate a draft Model Public Health Bill. This was not done as the Ministry of Law advised that it was not necessary. The Committee feel that the position may be reviewed again in view of the inadequate attention paid so far to the various public health problems. They also suggest that adequate provision for prevention of pollution of rivers and other sources of water supply should be made in this Model Bill.
62	94	As regards the pollution of rivers and public streams, some States have enacted laws to prevent this menace to public health. But, no assessment has been made to see how far such legislation has been effective in abating actual or potential nuisance. The Committee suggest that the feasibility of having such an assessment made with a view to evolving reasonably uniform standard might be examined by the Ministry in consultation with the State Governments.
63	99	The Committee suggest that all the Slum Improvement/ Clearance Schemes in Delhi should be processed through a single planning and controlling authority which is at present shared between Delhi Municipal Corporation and the Delhi Development Authority.
64	103	The Committee earnestly hope that each of the recommendations of the Interim General Plan mentioned in Appendix VII will be pursued vigorously.
65	104	The first draft of the Master Plan for Greater Delhi is expected to be ready sometime by the end of May, 1959. Even after taking note of the magnitude of the task involved, the Committee feel that the progress

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		of work of the Town Planning Organisation is rather slow. They hope that the draft General Plan will be ready by May, 1959 as expected and that not much time will be spent in finalising the same. The Committee would like to express a definite view that Master Plan for Greater Delhi should lay greater stress on slum clearance and basic amenities for the common man than on highly expensive grandiose schemes. The Committee also hope that the Master Plan will include a definite promise of eradicating slum conditions by a target date from the Capital of the Republic of India.
66	105	The Committee suggest that proper records of families evicted due to slum clearance should be maintained so that the magnitude of the problem of providing alternative accommodation is known beforehand and only the claims of actual families who are evicted are taken into consideration while providing alternative accommodation.
67	106	While providing business-*cum*-housing accommodation the Committee find that the need for accommodation for a particular trade has not been carefully considered. For instance, while providing accommodation for a Dhobi his needs with regard to washing of clothes storing of dirty and washed clothes, space for ironing etc. have not been taken care of nor is there any provision for washing and drying places. For the barber a place for shaving operations has not been provided. The Committee suggest that such considerations should be properly taken into account in all future planning. Contiguity of suitable trades should also be borne in mind, for instance, a barber's shop should not be located next to a confectioner's shop.
68	108	Notice under section 4 of the Land Acquisition Act, 1894 was issued for acquisition of about 207 acres of land beyond Shahdara Bund for execution of the scheme of development. Only 50 acres of land was kept and the remaining portion of land not required for the scheme was derequisitioned by the Delhi Administration. It is, however, stated that if additional land is required it will be later reacquired. The price of the land adjoining the developed area is bound to go up considerably resulting in profiteering by interested persons and the Government having to pay much more for the same land. The Committee therefore, suggest that the Ministry should take a serious view of this strange procedure which is likely to benefit a few owners of this land at the cost of the

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		public exchequer, investigate the matter properly and ensure that such instances are not repeated in future.
69	109	Rs. 15 per month (which is 50 per cent of the economic rent) is to be charged from each family living in one room tenements constructed by the Government. This rent seems to be too high for majority of the persons to be shifted in such tenements who are at present paying a rent ranging between Rs. 1 to 5. The Committee, therefore, suggest that the feasibility of linking up the rent to be charged with the income of the tenants may be examined so that at least better relief can be provided to the poorer sections of the tenants.
70	110	The Committee suggest that efforts should be made to reduce the cost of construction by making practical use of the various low cost housing schemes which have been evolved from time to time. Further the planning of slum clearance housing should be done in such a way as to avoid over dependence on critical materials like cement and steel the supply of which is both expensive and some what uncertain.
71	111	At present, the construction work in new bastis created for rehabilitation of slum dwellers is undertaken through C.P.W.D. and, therefore, the cost has been excessive. It might be economical and advisable to form the slum dwellers into co-operative societies and give them suitable plots with simple and clear specifications about the building to be constructed and a loan for building their own houses supplied in the form of materials and a little cash, recovering the loan in easy instalments. Some engineering supervision may also be provided during construction to help those who can build for themselves. The Committee suggest that this method may be tried at least in some cases as an experimental measure in the suburbs of Delhi.
72	112	The Committee are of the opinion that it might be better for the Delhi Development Authority to take lands for development on long term lease rather than acquiring land and paying large sums. It might appreciably reduce the cost of schemes. They, therefore, suggest that this aspect should be carefully examined and implemented wherever feasible.
73	113	The Committee are of the opinion that concerted and prompt efforts are necessary on the part of authorities concerned to prevent sub-letting of the tenements constructed by the Government. Care should be taken to see that the staff required to check and detect subletting do not connive at it.

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74	114	Large amount of dues are outstanding with the Delhi Development Authority in respect of ground rent, rent in respect of quarters etc. The Committee consider this an unfortunate state of affairs and suggest that proper and vigorous steps should be taken to ensure that past arrears are liquidated by a target date to be fixed by the Ministry and that new arrears are not allowed to accumulate in future.
75	115	The Committee strongly feel that in an important activity like clearance and improvement of slums which are primarily for the benefit of the common man, the authorities concerred should evince a greater sense of urgency so that all the impediments in the achievement of targets—monetary and physical—envisaged in the budget estimates are removed and the benefits contemplated for the poorer section of the community are actually made available to them.
76	116	The Committee hope that seeing the magnitude and urgency of the problem of slum clearance, the authorities of the Delhi Development Authority will be able to utilise usefully at least Rs. 3·5 crores placed at their disposal during the Second Plan.
77	117	At present the Office of the D.D.A. is located at three places and since the Vice-Chairman of the D.D.A. is also the Chairman of the Town Planning Organisation, he has to work at four places. It is stated that the Ministry of Health is constantly asking the Ministry of Works, Housing and Supply to provide accommodation in one place but in vain. The D.D.A. authorities are even prepared to locate their office in hutments constructed at one place. The Committee suggest that the matter should be settled at a high level to provide accommodation for D.D.A. Office at one place for smooth and efficient working.
78	118	At present 159 class IV staff and 162 other staff are working in the Delhi Development Authority. The strength of Class IV staff appears to be excessive. The Committee, therefore, suggest that a job analysis may be done of their work with a view to see what reduction can be effected.
79	119	The Committee strongly feel that in order to ensure removal of slums from Delhi some practical steps will have to be taken to stop the influx of population and prevent growth of new unauthorised structures. For this purpose they recommend that the Government of India should take a bold decision that no new Offices will be located in Delhi and that those that

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		can be shifted outside will be shifted to other parts of the country. The Committee also suggest that suitable steps should be taken to see that fresh squatting is effectively prevented.
80	120	The Committee are of the opinion that rehousing alone will not help the slum dwellers unless their economic conditions are also improved. They, therefore, suggest that suitable arrangements should be made for providing training-*cum*-production centres in the neighbourhood of localities where the slum dwellers are resettled or in the slum areas which are redeveloped.
81	121	The Committee suggest that suitable measures should be taken to see that temporary hutments etc. erected by the contractors for housing the temporary labour are cleared off when a particular building project has been completed and that during the construction phase when labour has to be housed in those hutments, the contractor provides minimum sanitary and other facilities to the labour working under him.

APPENDIX X

Analysis of recommendations contained in the Repot

I. *Classification of recommendations* — TOTAL

A. Recommendations for improving the organisation and working.

S. Nos. 2 to 5, 7, 8, 10, 11, 17, 19 to 27, 29, 32, 33, 35 to 40, 43, 44, 50, 53, 54, 56, 63 to 68, 73, 74, 76 & 77 . . — 43

B. Recommendations for improving and/or extending the welfare activities in the country.

S. Nos. 1, 6, 9, 12 to 14, 16, 28, 30, 31, 34, 41, 42, 45, 47, 48, 51, 52, 57 to 62, 69, 75 & 79 to 81 . . . . — 29

C. Recommendations for effecting economy

S. Nos. 15, 18, 46, 49, 55, 70 to 72 & 78 . . . . . — 9

II. *Analysis of the more important recommendations directed towards economy*

S. No.	No. as per summary of recommendations	Particulars
1	2	3
1	15	Properly co-ordinated and pre-planned measures are necessary to avoid any wastage of men, material and machinery employed in the D.D.T. factories at Delhi and Alwaye when the requirements of D.D.T. are substantially reduced at the end of the Malaria Eradication Programme.
2	18	The workload of the non-technical staff of the Malaria Institute of India should be properly job analysed to see what reduction is possible.
3	46	In view of the poor progress made by the Goitre Control Scheme during the first two years of the Second Plan, it is not likely that the full provision would be usefully spent during the Plan period. This scheme should be reviewed and revised early so that sufficient time is available to divert the surplus amount to other schemes, if necessary.

1	2	3
4	49	The possibility of selling plague vaccine to an international organisation which may stock the vaccine at a central place to serve as the emergency pool for countries which are periodically affected by plague, may be examined so that losses, if any, arising out of non-utilisation may either be avoided or substantially reduced.
5	55	It would be more economical and efficient if the resources of the different agencies sponsoring water supply schemes are pooled and an integrated scheme worked out.
6	70	Efforts should be made to reduce the cost of construction by making practical use of the various low cost housing schemes which have been evolved from time to time. Further the planning of slum clearance housing should be done in such a way as to avoid over dependence on critical materials like cement and steel, the supply of which is both expensive and somewhat uncertain.
7	71	At present, the construction work in new bastis created for rehabilitation of slum dwellers is undertaken through C.P.W.D. and, therefore, the cost has been excessive. It might be economical and advisable to form the slum dwellers into co-operative societies and give them suitable plots with simple and clear specifications about the buildings to be constructed and a loan for building their own houses supplied in the form of materials and a little cash, recovering the loan in easy instalments. Some engineering supervision may also be provided during construction to help those who can build for themselves.
8	72	It might be better for the Delhi Development Authority to take lands for development on long term lease rather than acquiring land and paying large sums. It might appreciably reduce the cost of schemes.
9	78	At present 159 class IV staff and 162 other staff are working in the Delhi Development Authority. The stength of Class IV staff appears to be excessive. A Job analysis may be done of their work with a view to see what reduction can be effected.

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