Chapter-4

National Health programme

4.1.1. The Centre takes concerted measures to combat communicable, non-communicable and other major diseases. For this purpose, several National Programmes are directly run by the Ministry which can have a bearing in the reduction of mortality and morbidity and also have a salutary effect on efforts to improve the quality of life of the common man. These programmes also reinforce the delivery of primary, secondary and tertiary health care through out the country. This chapter details the progress made in the conduct of these programmes during the period under report.

4.2. National Anti Malaria Programme

4.2.1. For controlling Malaria, a nation-wide Malaria Control Programme was launched as early as in 1953.The National Malaria Eradication Programme (NMEP) was launched by the Govt. on the basis of the excellent results achieved through Malaria Control Programme. The NMEP had spectacular success initially and the incidence of Malaria could be brought down from 75 million with 0.8 million deaths during pre-eradication to 0.1 million with no deaths by 1965. Thereafter, the programme received a set-back due to a combination of factors like financial, logistics, administrative and technical nature and there was resurgence of the disease during early 70s and a Modified Plan of Operation(MPO) was launched in 1977 to tackle the situation. The objectives of the MPO are:-(a) Effective Control of Malaria to reduce Malaria Morbidity; (b) Prevent deaths due to Malaria and (c) Retention of the achievements gained.

4.2.2. Strategy: The main strategies adopted are (i) Early case detection and prompt treatment; (ii) Vector control by house spraying in rural areas with annual parasite incidence of 2 and above per 1000 population with appropriate insecticides and by recurrent anti-larval measures in urban areas; and (iii) Health education and community participation.

4.2.3. With the implementation of the revised approaches through the MPO, the incidence of Malaria could be brought down from 6.47 million in 1976 to 2.18 million cases in 1984 and since then total Malaria cases are contained around 2-3 million

annually as evident from the following table:-

Year	BSE (in Million)	ABER	Positive Cases (in million)	API	SPR	P.f Cases (in million)	SFR	Deaths due to Malaria
1997	89.45	10.1	2.66	3.01	2.97	1.01	1.13	879
1998	89.38	9.81	2.22	2.44	2.49	1.03	1.15	664
1999*	88.33	9.31	2.28	2.41	2.59	1.14	1.29	1048
1999#	59.28	-	1.24	-	2.09	0.54	0.91	467
2000#	57.75	-	1.10	-	1.91	0.52	0.90	394

* Provisional

\# Comparative data for 2000 with corresponding period of 1999, as per reports received from states up to 25th November, 2000

4.2.4. Implemetation of NAMP: The NAMP is a Category II Centrally Sponsored Scheme on 50:50 Cost Sharing Basis between the Centre and the State Govts. As the Central share, the Central Govt. provides drugs, insecticides and larvicides and also technical assistance/guidance as and when required by the State Govts. The State Govt. meet the operational cost including salary of the staff. However, considering the difficulties faced by the seven North-Eastern States namely Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland and Tripura, 100% Central Assistance except salary of the staff, which is a Non-Plan activity, is being provided since December, 1994. The Union Territories without Legislatures are also covered under 100% Central Assistance.

4.2.5. Epidemic-logical situation: In the year 2000(upto 25th November), a total 1101243 malaria cases including 517476 Pf cases have been reported. During 2000, malaria incidence in the country has shown a decrease by (-) 11.18% in total malaria cases and (-) 41.02% in Pf cases as compared to the corresponding period of 1999.

4.2.6. Budget: The budget provision under the NAMP including expenditure during IX th Plan period have been as under:-

(Rs. In lakh)

Year	Budget Provision	Actual Expenditure
1997-98	20000.00*	14352.00
1998-99	29700.00*	16393.97
1999-2000	25000.00*	17662.00
2000-2001	25500.00*	9778.00*

- Including budget for Enhanced Malaria Control Project with World Bank support.

* As of 2ndFeb. 2001

4.2.7. Enhanced Malaria Control Project with World Bank Support: An Enhanced Malaria Control Project with World Bank support is being implemented since September, 1997 covering a population of around 62.2 million in 1045 PHCs in 100 predominantly P.falciparum malaria endemic and tribal dominated districts in the

peninsular States namely Andhra Pradesh, Bihar/Jharkhand, Gujarat, Madhya Pradesh/Chhattisgarh, Maharashtra, Orissa and Rajasthan. In addition 19 cities/towns reporting high malaria cases have also been covered under the Project in these States and in the States of Tamilnadu, Karnataka and West Bengal. The details of the districts and towns are as under :-

Details of States/districts

State	Number of Districts	Number of PHCs	Population (In million)
Andhra Pradesh	10	79	2.7
Bihar/Jharkhand	10	108	10.8
Gujarat	8	239	7.8
Madhya Pradesh/Chhattisgarh	14	246	16.9
Maharashtra	26	181	5.5
Orissa	22	158	13.6
Rajasthan	10	34	4.9
Total	100	1045	62.2

Details of States - cities/towns

State	Town
Andhra Pradesh	Vishakhapatnam, Hyderabad
Bihar/Jharkhand	Chaibasa
Gujarat	Bharuch, Dohad, Godhara Vadodara, Ahmedabad
Madhya Pradesh/Chhattisgarh	Bhopal
Maharashtra	Navi Mumbai
Orissa	Sambalpur
Rajasthan	Jodhpur, Bharatpur
Tamil Nadu	Madras, Tuticorn, Erode, Dindigul
Karnataka	Bellary
West Bengal	Calcutta

4.2.8. The project lays emphasis on the following components (i) Early diagnosis and prompt treatment ; (ii) Selective vector control; (iii) Innovative eco-friendly methods like introduction of medicated mosquito nets(MMNs), larvivorus fishes, bio-larvicides etc. (iv) Epidemic Planning and rapid response including inter-sectoral coordination; and (v) institutional and human resources development through

training/reorientation training, strengthening management Information System(MIS), Information, Education and Communication(IEC) and operational research.

4.2.9. The salient aspects of this Project is that it aims to cover the most problematic areas as given above and also has the flexibility to divert resources to any needy areas in the country in case of any outbreak of malaria. Moreover components like training, strengthening of management information system and information, education and communication covers not only the Core Project States but also the entire country. The Project is being implemented through the Primary Health Care System.

4.2.10. The total outlay for the Project is Rs. 891.04 Crore for five years. World Bank will provide Rs. 726.29 Crore and the Govt. of India will Contribute Rs. 164.75 Crore which is about 15 per cent of the total Project cost.

4.2.11. Under the Project additional inputs are being provided to the identified districts including Synthetic Pyrethroids, mosquito bednets, newer drugs, rapid diagnostic kits etc. besides Cash grant for effective implementation of the Project. The Commodity and Cash Grant are sent as per need and technical requirement of the Core Project States covered under the project. Cash and Commodity Assistance given to each of the Project States from the inception of World Bank assisted EMCP in September, 1997 uptil 31.10.2000 through District Malaria Control Societies (DMCs) is shown hereunder-

(Rs. in lakhs)

States	Cash Assistance released	Commodity (Provisional) (including Vehicles, Synthetic Pyrethroids, Bednets)
1. Andhra Pradesh	193.34	1651.28
2. Bihar/Jharkhand	100.00	109.68
3. Gujarat	236.33	2071.84
4. Madhya Pradesh/ Chhattisgarh	472.73	2146.53
5. Maharashatra	338.72	4011.19
6. Orissa	411.00	969.06
7. Rajasthan	165.00	98.50
Total:	1917.12	11058.08

4.2.12. In addition, the EMCP funds were also spent for IEC (Rs.8.50 crore approximately) and Training (Rs.7.49 crore approximately) activities in the country.

4.2.13. Malaria in Urban Areas : Urban Malaria Scheme (UMS) was launched in 1971 with the objective of controlling malaria by reducing the vector population in the urban areas through recurrent anti larval measures and detection and treatment of cases through the existing health care services.

4.2.14. Passive surveillance (case detection and treatment) and anti-larval measures are the main components of UMS strategy. In this scheme ail the towns having more than forty thousand population and showing more than 2API in last 3 years are to be covered. This scheme was sanctioned for 131 towns in 17 states and UTs. It has so far been implemented in 132 towns. 19 towns under the UMS have been included under the world Bank supported enhanced Malaria Control Project. The reported Malaria cases & Pf cases in towns under Urban Malaria Scheme are as under.

Year	Positive	Pf.	SPR%	SFR%	Increase Decrease
1996	247146	15627	-	-	-
1997	174101	15627	-	-	-29.5
1998	231691	36826	5.02	0.79	+33.0
1999	288477	53420	5.37	0.09	+24.5
2000 Up to July	10495	1418	0.40	0.05	-96.3

4.3. National Filaria Control Programme (NFCP)

4.3.1. The National Filaria Control Programme (NFCP) was launched in 1955. NFCP activities are mainly confined to urban areas. However, the programme has been extended to rural areas since 1994 to treat the acute & chronic filaria cases. These activities are conducted through Primary Health Centers in endemic States.

4.3.2. At present about 48 million urban population is being protected through recurrent anti-larval measures by 206 Control Units and 199 Filaria Clinics. There are 27 Survey Units in the control for delimiting the areas.

4.3.3. The main control strategy under the programme are as follows: (I) Vector control - Anti-larval at Weekly intervals with approved larvicides; (ii) Biological control through larvivorous fishes.; (iii) Environmental engineering - through source reduction and water management; (iv) Anti-parasitic measures - through diagnosis and "treatment' of microfilaria carriers and cases; and (v) IEC - community awareness.

4.3,4. Overview of Filaria: It has been observed that on " All India" basis, the micro filarial rate is ranging from 0.7 to 1.2 and disease rate from 0.7 to 1.07 during last five years, in Urban areas. The year wise microfilaria rate and disease rate as reported by the states are indicated below: -

Year	No of Person Examined	Blood smear positive for micro Filaria	mf Rate	No. of Filaria	Disease Rate
1994	396013	47427	1.2	35219	0.89
1995	3807596	44974	1.18	33527	0.88
1996	2511868	28942	1.15	18819	0.75
1997	2620615	30317	1.15	21012	0.80
1998	2492788	22046	0.88	26142	1.04
1999*	2333282	16317	0.70	16404	0.70
2000	376751	4939	0.85	10503	0.52

*Provisional

4.3.5. Revised Strategy: Research indicated that single dose mass drug administration was effective and therefore a project was initiated in 1997, with single dose mass drug administration of DEC annually in 13 identified districts of 7 States namely East Godavari, Srikakulam (Andhra Pradesh); Darbhanga, Siwan (Bihar); Alapuzha, Kozhikode (Kerala); Khurda, Puri (Orissa); North Arcot, South Arcot (Tamil Nadu); Gorakhpur, Varanasi (U.P.) and Purulia (West Bengal) covering about 41 million population. The states of Tamilnadu and U.P. have completed 3 rounds of mass drug administration of DEC while the states of Kerala and West Bengal have completed two rounds. The states of A. P. Bihar and Orissa could complete only single round of MDA. It was observed that the coverage of the distribution of DEC among targeted population remained between 43.77- 95.23% in the states.

4.4. Kala-Azar

4.4.1. Kala-azar is a serious public health problem in Bihar and West Bengal. After its resurgence in Bihar in the early seventies the disease spread from the four districts to adjoining areas. At present 36 districts of Bihar and 10 districts of West Bengal are affected by Kala-azar. The disease is however present predominantly in the districts adjoining the Ganges. The increasing trend of the disease is evident from the fact that the total number of cases which were 17806 with 72 deaths in 1986 rose to a total of 77102 cases with 1419 deaths in 1992. However with the launching of Kala-azar control programme in 1991, diseases incidence has been contained with a declining trend. During 1997 and 1998 total cases and deaths due to Kala-azar have been 17429 and 13577 and 255 and 226 respectively. Total Kala-azar cases of 12728 and deaths 284 have been listed during 1999. During 2000, 7538 cases and 87 deaths have been reported upto July.

4.4.2. Strategies: The strategy for Kala-azar control are (i) Interruption of transmission for reducing vector population by undertaking indoor residual

insecticidal spray twice annually; (ii) Early diagnosis and complete treatment of Kala-azar cases; and (iii) Health education for community awareness.

4.4.3. Assistance provided by the Government of India for Kala-Azar control: During 2000-2001 budgetary provision of Rs.10.00 crore has been made in respect of this programme. This provision is for supply of insecticide DOT and Ants Kala-Azar drugs.

4.5. Japanese Encephalitis:

4.5.1. Japanese Encephalitis is caused by a virus of flavivirus group and manifests as high fever, convulsions, confusion, of the neck and altered levels of consciousness from stupor to deep coma. The fatality rate of the disease is very high ranging from 10-40% and even those children who survive have to cope up with various degrees of neuropsychiatric sequilae like paralysis to cognitive deficiencies. It is a zoonotic disease mainly occurring in pigs and birds and man is an accidental dead-end host to the disease.

4.5.2. JE is transmitted from animals to humans through Culex mosquitoes of C. Vishnui group, which usually breed in dean waters of rice fields and other irrigated lands and ponds etc.

4.5.3. In the last five years JE has acquired serious magnitude in 11 states of A.P.(15 districts), Assam(3 districts), Goa(2 districts), Haryana(6 districts) Karnataka (12 districts), Kerala(7 districts), Manipur(3 districts), Punjab(2 districts), Tamil Nadu(6 districts), UP.(16 districts) and West Bengal(5 districts) though earlier it had been reported from 24 states since1979.

4.5.4. Total number of cases and deaths reported from states for last 5 years is as below:

Year	JE Cases reported	Deaths Reported
1995	2974	942
1996	2244	593
1997	2516	632
1998	2120	507
1999	342	630
2000*	111	271

* - Cases reported upto October-2000 are included.

4.5.5. Major Strategies for the control of J.E. include: (I) Strengthening case management at PHCS, CHCs and hospitals through trainings of medical and nursing staff; (ii) Sentinel serological and clinical surveillance in endemic and their adjoining areas; (iii) Vector Control measures mainly fogging during outbreaks and space spraying; and (iv) Development of better vaccine production facilities to enable vaccination of all children below 15 years.

4.5.6. Budget: As there is no separate budget provision for the control of this disease, resources of Malaria control viz. insecticides and drugs (Tab. Paracetamol) are diverted for the control of outbreaks whenever necessary.

4.6. Dengue

4.6.1. A number of high level review meetings are being regularly convened to take stock Dengue situation and the measures carried out for its preventive control in Delhi and other major endemic states. An intensive IEC campaign is launched for preventing and containing all vector borne diseases including Dengue. The Anti Malaria Month was also observed in June,2000. The services of Voluntary Health Agencies including the Indian Medical Association are also utilised for spreading the message of prevention and control. An EFC Memorandum for integrated diseases vector control including Dengue has also been prepared and is under the consideration of Government.

4.6.2. Compared to 1996 to 1997 there has been a significant reduction in the number of dengue cases (93%) and deaths (92%). Similarly during 1998 reduction of 40% in cases and 50% in deaths was reported, as compared to 1996. During 1999 there was an increase of above 33% in cases due to the focal outbreak in Dengue/DHF in district Ludhiana (Punjab), however, the number of deaths fell from 18 to 17 during the year. In the year 2000,457 cases and 4 deaths due to Dengue have been reported.

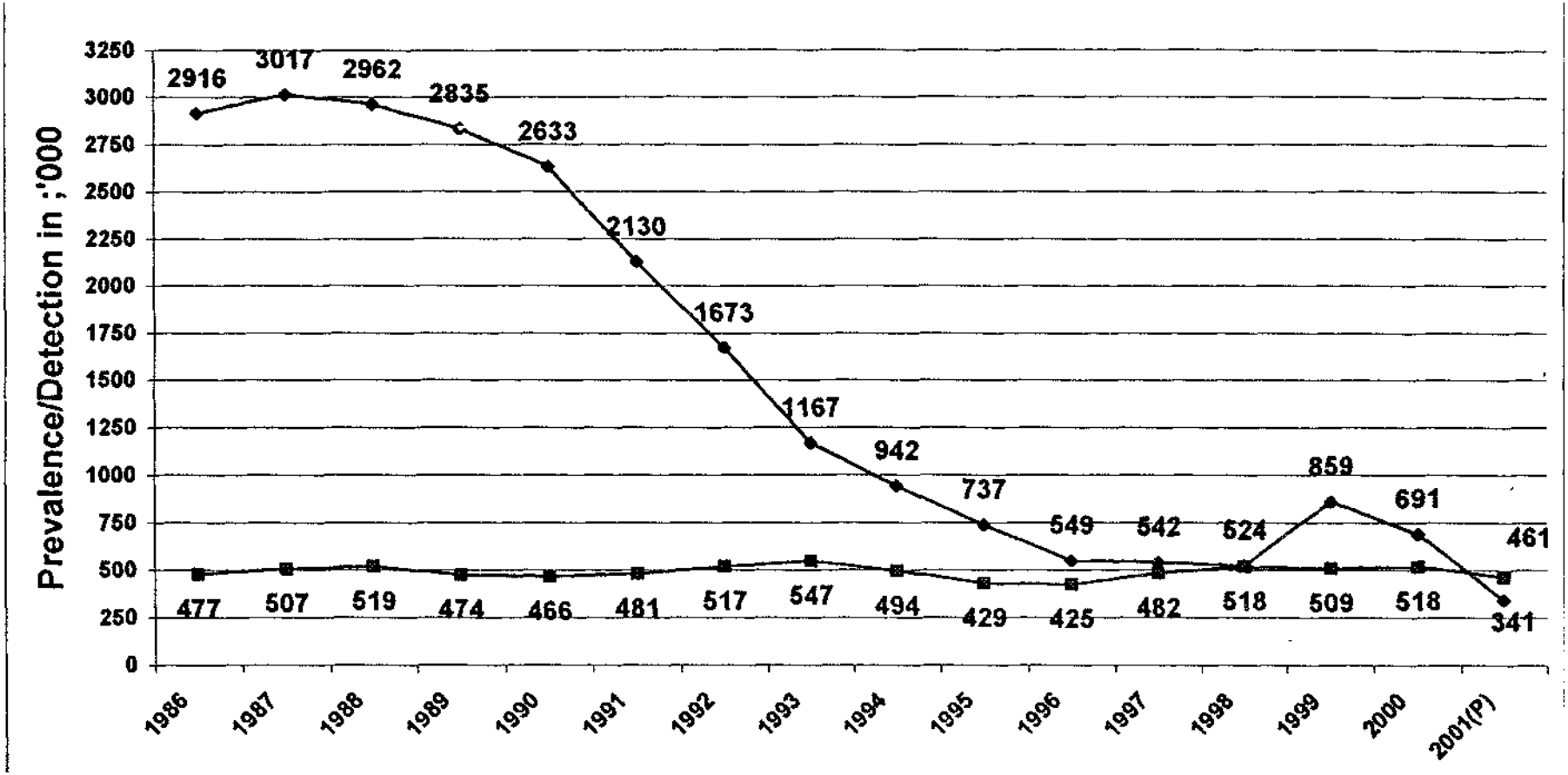
4.7. National Leprosy Eradication Programme in India

4.7.1. The Problem:

4.7.1(i) *Disease:* Leprosy is caused by Mycobacterium Leprae which morphologically resembles Mycobacterium Tuberculosis. The reservoir of leprosy is a infectious category patient who is not taking Multi Drug Therapy (MDT) and is in prolonged contact with healthy persons. About 95% of people in the community are immune to the disease. Only 20% of leprosy patients are of infectious type and with modern Multi Drug Therapy the patient becomes non infectious very rapidly. Even single dose of MDT kills 99.9% leprosy bacilli under laboratory conditions. There is no threat of disease transmission if the patient is taking treatment at home. It takes 6 months to 1 year for complete treatment with MDT for pauci-bacillary and multi-bacillary type of patients respectively. Leprosy bacilli has very weak potential of causing the disease and it multiplies very slowly as compared to most of the bacteria. Now single dose with ROM Multi Drug Therapy is sufficient to cure leprosy patient with single lesion. Under the programme, domiciliary treatment is advised. Leprosy deformity is not associated with infectivity of the disease and the cases are like post scar on skin after small pox.

4.7.1(ii) *Magnitude:* State of health in India at the time of independence was grim and leprosy was no exception. There occurred a steady increase in the number of leprosy cases through successive decades after independence starting with 1.37 million in 1951 reaching 4.0 million estimated cases in 1981. The prevalence of disease was 57/10,000 in 1981. The main factor to account for this progressive rise

1986 - 2000 TREND



Year (by March end)

-- PREVALENCE --DETECTION

were rapid increase in the population, better case detection activities and greater community awareness leading to voluntary reporting.

4.7.1(iii) *Declining Trend:* With the implementation of MDT services under the programme since 1983 a large number of leprosy cases are being discharged as disease cured. For the first time in 1987 the number of cured cases exceeded new cases detected. Since then with rapid extension of MDT services to other endemic areas, the percentage of discharged cases has been increasing. During the year 1999-2000 the number of discharged cases was 5.7 lakh as against new case detection of 5.2 lakh cases. So far the programme has been able to treat and discharge from the registers about 12.76 million cases out of which 8.90 million are due to cure with MDT. In March, 2000 there were 5.20 lakh patients in the country and the prevalence rate was 5.20/10000.

4.7.1(iv) India today ranks foremost among the countries saddled with leprosy sufferers accounting for 70% of the global recorded leprosy patient level. About 14-20 percent of the patients are children. The proportion of multi-bacillary cases among total cases is 50.3% and among new cases the same is 33.6%. The deformity among newly detected cases in a year is 3.12 %.

4.7.1(v) Distribution of the disease is uneven, although it is present throughout the country. The inter-state variation in the prevalence rates and the percentage of population at risk were quite substantial. High number of patients are now present mainly in the state of U.P., Bihar, Orissa, West Bengal, and Madhya Pradesh. At present these five states contribute 71% of the country's caseload. Though the prevalence of disease was high earlier in Tamil Nadu, Andhra Pradesh, Pondicherry, Maharashtra, the same has reduced remarkably in these states.

4.7.2. *Objectives of the Programme:* National Leprosy Control Programme has been in operation since 1955. With the availability of highly effective treatment of leprosy the programme was redesignated as a National Leprosy Eradication Programme in 1983 with the objective to achieve elimination of leprosy by the end of century in the country there by reducing the case load to 1 or less/10000 population.

4.7.3. *Expansion of the Programme with World Bank Assistance:* The programme received further boost in 1993-94 with sanction of World Bank assistance of Rs. 302 crore. for a period of 6 years. The whole country came under MDT which is being implemented through 490 DLSs. The World Bank assistance is being used for extension of MDT services in uncovered areas, strengthening of existing services, health education and training activities, man-power development, diability and ulcer care including re-constructive surgery. The Phase I of World Bank assistance has completed on 30th Sept. 2000. World Bank has agreed for supporting the NLEP second project in principle and the project implementation plan is being appraised by them at present.

4.7.4. Achievement of World Bank supported NLEP Project: All the districts in the country have been sanctioned MDT. The extent of problem at National level figures is given in the next page:

1	Estimated number of leprosy cases	0.64 million
2	Geographical coverage of MDT	100%
3	PR has decreased from 57/10000 in 1981 to 5.2/10000 by March, 2000	
4	Cases released under the programme of which 8.90 million by MDT	12.76 million
5	Cases on record (3/2000)	0.52 million
6	Cases currently on MDT (3/2000)	99%

4.7.5. *Information, Education & Communication (IEC):* (i) IEC kits containing 9 standard items for different categories of peripheral staff including Medical Officers, patients and community members have been supplied to all the states and districts.; (ii) Learning material in regional languages have been supplied to Doctors, General Practitioners and all categories of health staff in regional languages which were developed with the help of ILEP.; (iii) Exhibition sets have been developed & one set has been sent to each District.

4.7.6. *NGOs Participation:* :A total of 285 voluntary organizations are working in the field of leprosy in India. 81 of them are getting grant in aid from Ministry of Health and Family Welfare for undertaking survey, education and treatment activities.29 NGO centres in the country having facility of Reconstructive Surgery, have been sanctioned reimbursement of expenditure on RCS, supply of MCR chappal and MCR insole and guidelines on the same have been provided.

4.7.7. *Staff Motivation & special projects for difficult areas:* Award based on performance has been sanctioned under the programme for each district, State/UT level and National level and guidelines on the same have been issued to all the district leprosy societies and state programme officers. Provision of Special Action Project for Elimination of Leprosy (SAPEL) in difficult and inaccessible areas has been included in the programme.

4.7.8. *MLEC:* Two rounds of Modified Leprosy Elimination Campaign has been implemented so far. During 1st MLEC, a total of 4.64 lakh cases were detected and during 2nd round, a total of 2.12 lakh cases were detected. MLEC has provided the pace of acceleration for achieving elimination by detecting and treating large number of cases even in areas where MDT services were well implemented in last 15 years. Elimination level has been reached in 9 states/UTs and 7 more states are very close to elimination level.

4.7.9. *Appraisal:* A mid-term appraisal of the World Bank supported NLEP project was undertaken in April, 1997 and final Appraisal Mission of World Bank has also completed the first phase of project has shown good results. However, the

extent of leprosy was more than expected. A 2nd phase project for 3 years has been proposed to complete the unfinished task of achieving elimination at National level and to integrate leprosy with General Health Care attaching greater responsibility to the states.

4.7.10. *Support from WHO* : WHO is currently providing support for supply of anti leprosy drugs free of cost for meeting the requirements of whole country. WHO is also providing support for 6 State Consultant posts under NLEP and 6 supportive staff for Central Coordination Cell. WHO is also providing assistance for Leprosy Elimination Campaign Project (LEG) for the State of Bihar for last 2 years which is highly endemic State for Leprosy. Recently WHO has also agreed to provide support for one additional Consultant for each of major 5 endemic States of Bihar, UP, MR, Orissa and West Bengal.

4.7.11. WHO has formed a Global Alliance for Elimination of Leprosy for enhancing the opportunities to eliminate leprosy by year 2005. The members of Global Alliance are Leprosy affected endemic countries, WHO & ILEP (International Federation of Anti Leprosy Association) agencies. WHO estimates that there will be about 11 countries which may not be able to achieve elimination by the end of year 2000 & thus need longer time for the same. The Govt. of India is Chairman of the Alliance for one year which was decided in the recently convened 3rd International Leprosy Congress held on 15th-17th Nov. 99 at Abidjan, Cote De Ivore. WHO has set the new target of elimination of leprosy as year 2005.

4.7,12. *Support from other agencies:* WHO and bilateral agency, DANIDA are currently helping the programme. WHO is providing MDT free of cost for meeting the total requirement of the country and has assured that they will supply free medicine til! end of year 2005. DANIDA, a bilateral agency of the Govt. of Denmark, is providing support to the programme in the States of Tamil Nadu, Orissa and M.P.

4.7.12(i) Many International Voluntary Organizations (ILEP Agencies) such as Leprosy Mission, German Leprosy Relief Association, Damien Foundation, Lepra India, Italian Leprosy Relief Association, Swiss Emmaus etc. are also helping the programme through their own centres or through the local NGOs

4.8. National TB Control Programme

4.8.1. Problem: Tuberculosis continues to remain one of the most pressing health problems in India. India accounts for nearly one third of Global TB burden and every year has more than 2 million new cases of tuberculosis. Approximately 500,000 people die from tuberculosis each year, more than 1,000 every day, one every minute. The spread of HIV/AIDS would increase number of TB cases as well as deaths.

4.8.2. National Tuberculosis Control Programme (NTCP): National Tuberculosis Control Programme (NTCP) was launched in 1962 and implemented through a network of District Tuberculosis Centres (DTC) with a support of 47,600 TB beds and 330 TB clinics in urban areas. Around 1.5 million cases of tuberculosis are detected every year of which 25% are sputum positive and rests are radiologically active

cases. Treatment completion is around 30%. The drug supply was shared 50:50 basis. In spite of the programme having been implemented for 30 years, no significant epidemiological impact was observed. In 1992 the NTCP was reviewed by a committee of experts. Since 1997 full requirement of anti TB drugs is met by the Centre.

4.8.3. Revised National Tuberculosis Control Programme: Based on the findings of this Review committee, a Revised Strategy for National TB Control Programme (RNTCP) was evolved with the objective of laying emphasis on cure of infectious cases through administration of directly observed intermittent short course chemotherapy to achieve a cure rate of over 85% and augmentation of case-finding activities to detect at least 70% of estimated cases, only after having achieved the desired cure rate. RNTCP comprised of DOTS (Direct Observed Treatment Short course Chemotherapy) strategy comprising five components viz. i. Political commitments, ii. Sputum microscopy as primary tool of diagnosis, iii. SCC with uninterrupted drug supply, iv. Direct Observation, and v. Accountability. This strategy was pilot tested with SIDA assistance in 1993-94 on a population of 2.35 million and thereafter was expanded for assessing its technical and operational feasibility covering a population of about 13.85 million. These project sites demonstrated good quality of diagnosis with sputum conversion rate of nearly 90% and a cure rate of over 80%.

4.8.4. Having proven the technical and operational feasibility of the revised strategy, Government of India decided to extend the revised strategy in the country in a phased manner coving 102 districts with a population of 272.21 million over a period of 3 years in 15 States/UTs with World Bank assistance. World Bank also included strengthening the NTP in 203 short course chemotherapy (SCC) districts with a population of 447 million and limited support to other districts. Out of the estimated expenditure of Rs. 749.00 crores required for a period of 5 years of the project, World Bank will contribute US $142.4 million (about Rs. 604 crores). The total coverage under RNTCP under the project has since been enhanced to about 400 million, which is targeted to be achieved by 2002.

4.8.5. After an initial delay there was rapid and effective expansion of RNTCP since 1999. Till January 2001 a population of approximately 330 million has been covered. With support of DFID and DANIDA the population coverage under RNTCP will be increased to about 500 million by end of 2002.

4.8.6. The technical performance of RNTCP has been good. The prgoramme is curing above 8 out of 10 patients as compared to less than 4 out of 10 in the earlier programme. Every month more than 23000 patients are being initiated on treatment saving about 4000 lives and preventing 40000 infections. To ensure uninterrupted drug supply an independent procurement agency has been hired.

4.8.7. *Budget and Expenditure:* There has been a regular increase in budget allocation and expenditure as depicted in table below. It is proposed to maintain the increase.

Year	B.E.	R.E.	Actual Expenditure (Rs. in Crore)
1996-1997	52.07	27.97	13.63
1997-1998	90.00	80.00	32.05
1998-1999	125.00	72.00	72.11
1999-2000	105.00	95.00	87.50
2000-2001	125.00	110	

4.8.8. *Training:* For imparting training in NTCP, training courses for medical and paramedical staff working in programmes in various States are regularly held at National, State and District levels.

4.8.9. Central Institutes, viz NTI Bangalore, TRC Chennai, and LRS Institute of TB and allied diseases and STDCs have been strengthened to provide good quality training in RNTCP. These institutes are rendering training to district and State-level officers in RNTCP. 17 State TB demonstration and training centres have been strengthened under RNTCP and these Institutes are imparting training to various categories of staff both in NTCP and RNTCP.

4.8.10. *Involvement of NGOs & Private Practitioners:* The involvement of private medical practitioners and other private sectors is being actively encouraged under National TB Control Programme. Under RNTCP detailed guidelines for involvement of NGOs under five different schemes have been prepared and widely distributed. Depending on the capacity of NGOs they are encouraged to participate in appropriate levels in planning, programme implementation, EC and evaluation of RNTCP. Seven sensitization programmes for private practitioners in form of workshops have already been conducted in metropolitan cities like Delhi, Mumbai, Chennai, Calcutta, Bhopal and Lucknow during 1999. A series of 10 workshops for involving private practitioners and NGOs in RNTCP have been planned in different cities of India for 2000-2001. The first national level workshop for NGOs was held in Delhi on 13.01.2001

4.8.11. A memorandum of understanding has been signed with Delhi Medical Association to implement RNTCP under three modules in various parts of Delhi, the service delivery under which has already been initiated. A RNTCP project with Bishop Conard Memorial Hospital at Sitapur is running successfully. Dairy Development Board through their volunteers are helping in service deliveries under DOTS strategy in Gujarat, Jaipur, Patna and Vaishali. Many reputed organizations have been contacted and are at present assisting for programme implementation. Few examples of NGO involvement are as under: -

4.8.12. Ram Krishna Mission at Delhi and Patna, Damien Leprosy Foundation in Nellore district, Christian Medical Association through its associated hospitals through out the country, Indian Red Cross Society, MSM Hospital, Samaj Kalyan Samiti, Nidan at Patna, Bhopal Charitable Trust Hospital, St. John's Ambulance in

Nadia of West Bengal, Mahavir Hospital in Hyderabad, SEWA in Ahmedabad, Muslim Samaj leaders in Rajkot, 'CHAD[1] of CMC Vellore, ACT (Advocacy for control of TB) at Chennai etc.

4.8.13. *Involvement of Corporate, Public /Private sector:* Initiative for involvement of corporate resource public/private sector has already been taken. Some of the activities are listed below:- (I) Sensitisation meeting held at Delhi with representative of various corporate associations and organizations. Meetings were held in Gurgaon, Faridabad and Pune.; (II) Meeting at Dhanbad and Bokaro for involvement of M/s Coal India Ltd. and SAIL, DVC and Renukot in UP for involvement of Hindalco Industries, NTCP etc.; (lll)Meeting with Director (Medical) ESI, Director (Medical) Railways at Delhi.; (IV) Sensitization programme of doctors of Indian Railways' TB association, Steel plant Hospital is already participating on RNTCP at Rourkela. Railways have agreed to participate in RNTCP at Delhi and Jaipur and ESI in Delhi.

4.8.14. *Strengthening of SCC/SR districts:* Present coverage of population under short course chemotherapy and standard regimen is about 750 million and more than nineteen thousand PHIs are included in implementation of NTCP in the country. Some steps have been taken to strengthen the service delivery in these districts which included imparting of instruction to all the DTOs to use revised reporting and recording formats, give stress on smear microscopy, ensuring of proper drugs distribution to PHIs, steps for default retrieval and strengthening of monitoring and supervision at all levels.

4.8.15. Binocular microscopes have been provided to many SCC districts and steps have been taken to train LTs of SCC districts in smear microscopy. Two modular training courses of DTOs were held in November and December 2000. Extensive monitoring of performance of these districts have been under taken by offices of Department of Health, Central TB Division and National TB Institute, Bangalore.

4.8.16. *Monitoring & Review:* Programme data is generated at the Peripheral Health Institutions on monthly basis and compiled by the districts every quarter. National Tuberculosis Institute, Bangalore, consolidates the quarterly reports and analyzes them for preparing the annual reports for submission to the Central TB Division and feed back to districts. The States also send information on sputum examination and new sputum positive case detection under 20 Point Programme directly to the Central TB Division. These reports are being used for promoting the concept of sputum microscopy and targeting such cases so as to reduce the pool of infection. Quarterly reports of RNTCP Project Areas are regularly analyzed at the Central TB Division of the Directorate General of Health Services and feed back sent to the district and state authorities.

4.8.17. The programme is regularly reviewed by the Ministry of Health and Family Welfare and the Directorate General of Health Services through meetings of the Programme Officers of all States and Union Territories and field level reviews by visits of the officers of Ministry of Health and Directorate General of Health Services. Now some of the States are also having regular review meeting with DTOs of RNTCP districts every quarter to monitor the performance of the programme.

4.8.18. Consultants have been hired by WHO to work under the direction of respective State Governments to ensure effective implementation and monitoring of RNTCP.

4.8.19. *DFID Support:* Department For International Development (DFID) has reached an agreement with the Government of India for support to the RNTCP, to the extent of Rs. 109.93 Crores. The areas of support include strengthening of Central TB Division, training activities and implementation of the Revised NTCP in entire Andhra Pradesh.

4.8.20. *DANIDA Support:* DANIDA assistance has been sought to implement the revised strategy of NTCP in the State of Orissa. Government of Denmark has agreed to provide a grant of DKK 54.8 million (approx. 31.95 crore) for implementation of Revised NTCP in 14 tribal districts of Orissa. Service delivery has already started in the districts of Mayurbhanj, Keonjhar, Sundergarh, Deogarh, Jharuguda and Sambalpur.

4.9. National Programme for Control of Blindness

4.9.1. National Programme for Control of Blindness was launched in the year 1976 as a 100% Centrally Sponsored programme. Various activities of the programme include establishment of Regional Institute of Ophthalmology, upgradation of Medical colleges and district hospitals and block level Primary Health Centres, development of mobile units, and recruitment of required ophthalmic manpower in eye care units for provision of various ophthalmic services. The programme also extends assistance to voluntary organizations for providing eye care services including cataract operations and eye banking. The goal is to reduce the prevalence of blindness from 1.4% to 0.3%.

4.9.2. *Budget Allocation:* The budget for various service components under this programme has been enhanced since 1994-95 after the launching of World Bank Assisted Cataract Blindness Control Project. Allocation and expenditure during the VIIIth and IXth Plans are as follows: -

Year	Budget Allocated (FE) (Rs. in crore)	Expenditure (Rs. in crore)
1992-93	20.00	19.94
1993-94	25.00	19.70
1994-95	40.00	37.24
1995-96	58.82	57.51
1996-97	59.48	58.58
1997-98	70.00	58.34
1998-99	75.00	72.74
1999-2000	84.00	83.83
2000-2001	110.00	103.80 *

Provisional as on 31 January, 2001

4.9.3. **Performance of cataract operations** has been steadily increasing since 1992-93 from 16 lakhs in 1992-93 to 35 lakhs cataract operations in 1999-2000. The target for 2000-01 is 36.90 lakhs cataract operations.

Year	Targets	Achievements	Percentage
1992-93	20,00,000	1,604,926	80
1993-94	23,40,000	19,13,683	82
1994-95	24,50,000	2165468	88
1995-96	25,50,000	2470499	97
1996-97	26,94,600	2720560	101
1997-98	30,17,952	3033303	101
1998-99	33,20,330	3320305	101
1999-2000	35,00,000	3500065	100
2000-2001	36,90,170	14,98,619	41 *

* As reported upto October /November, 2000

4.9.4. Cataract Surgery Rate of 400 operations per lakh population is required to enable the States to clear the backlog of cataract blindness. The States of Gujarat, Punjab, Tamilnadu, Andhra Pradesh, Maharashtra, Delhi and UTs of Pondicherry and Chandigarh have attained this norm. Bihar, Assam and Orissa are among the lowest performing States and have cataract surgery rate of <200/lakh. Implantation of intra-ocular lenses (lOLs) have increased in the States taken up under the World Bank Project. During the year 1999-2000, 46% of cataract surgeries were implanted lOLs, as compared to less than 5% at the beginning of the project in1994-95. While women account for 52% of surgeries during 1999-2000, SC/ ST and OBC beneficiaries account for nearly 47% of the total number covered.

4.9.5. Civil Works: Construction of Eye Wards, Operation Theaters and Dark Rooms was undertaken in 7 States covered under the World Bank Assisted Cataract Blindness Control Project. As on 31st January 2001, out of 307 units (Eye Ward plus OT) sanctioned, 270 (88%) units have been completed and the rest are at various stages of construction. On completion, these newly constructed eye wards would provide 5089 additional eye beds in District Hospitals of the Project States, which will substantially increase capacity for institutional surgery. Out of 1982 Dark Rooms sanctioned, 1623 (82%) have been constructed.

4.9.6. Training: Government of India is imparting training in ECCE/IOL surgery. Faculty members of Medical Colleges have been trained as trainers and District Eye Surgeons trained in ECCE/IOL surgery. Independent evaluation of trainers in

ECCE/IOL undertaken during 1999-2000 revealed that in nearly 80% cases, trained surgeons have acquired adequate skills to implant lOLs. It is further seen from the reports that there is a significant increase in the number of IOL surgeries performed by the trained surgeons. So far, 100 Faculty from Medical Colleges and 504 District Eye Surgeons have been trained in IOL implantation. For imparting various training courses, standard manuals have been published. Training of other categories of manpower like PHC Medical Officers, Ophthalmic Assistants, Health Workers etc. is being undertaken in various institutions by the States as per GOI guidelines.

4.9.7. Commodity Assistance: Consumable items like sutures and intraocular lenses are procured centrally and are being distributed to States and DBCS. Equipments required IOL surgery are also procured centrally. Major equipments supplied so far to the States under World Bank assisted project are as follows: -

Sl. No.	Equipments	Quantity
1.	Indirect Ophthalmoscope	393
2.	Slit Lamp	323
3.	Anterior Vitrectomy Unit	344
4.	Keratometer	383
5.	Operating Microscope	409
6.	A Scan Binometer	499
7.	Yag Laser	97

4.9.8. Drugs, medicines and other consumables as well as spectacles are procured locally by the DBCSs.

4.9.9. IEC Activities: IEC activities are undertaken at Central, State and DBCS level. During 1999-2000, IEC material such as poster, video spots, radio jingles etc. were produced in all major regional languages. The States and DBCSs carried out local IEC activities for which adequate funds were made available under the Project.

4.9.10. Voluntary organizations are playing an important role in this programme. With the success achieved and experience gained through the pilot districts, District Blindness Control Societies (DBCS) have been established throughout the country under the Chairmanship of District Collector/Deputy Commissioner. Till date, 522 DBCS have been established. During 1999-2000, Rs.37.60 crores were released to DBCSs including NGOs & Eye Banks. A provision has been made for Rs. 42 crores for this activity during 2000-01. Grants to NGOs are being released through DBCS to

NEXT