



सत्यमेव जयते

**PRESENT STATUS  
OF  
NATIONAL PROGRAMME  
FOR CONTROL OF BLINDNESS  
(NPCB)  
1993**



**OPHTHALMOLOGY SECTION  
DIRECTORATE GENERAL OF HEALTH SERVICES  
MINISTRY OF HEALTH & FAMILY WELFARE  
GOVERNMENT OF INDIA  
NEW DELHI-110011**



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**"ONE OF THE BASIC HUMAN RIGHTS IS THE RIGHT TO SEE. WE HAVE TO ENSURE THAT NO CITIZEN GOES BLIND NEEDLESSLY, OR BEING BLIND DOES NOT REMAIN SO, IF, BY REASONABLE DEPLOYMENT OF SKILL AND RESOURCES, HIS SIGHT CAN BE PREVENTED FROM DETERIORATION OR IF ALREADY LOST, CAN BE RESTORED."**

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*National Policy pronounced by  
the Central Council of Health  
in April, 1975*



## **ACKNOWLEDGEMENT**

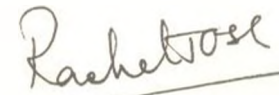
*I have the privilege to pay my gratitude to Shri M.S. Dayal, Secretary (Health), Ministry of Health & F.W. who has been constantly guiding us in the National Programme for Control of Blindness from time to time.*

*Dr. A.K. Mukherjee, Director General of Health Services deserves my sincere regards for taking keen interest in the Programme especially the role of voluntary sector, their individual performances, strength and weaknesses and areas of collaboration with the Govt. Sector.*

*I sincerely thank Mr. T.K. Das, Joint Secretary and Mr. Alok Perti, Director(ME) in the Ministry of Health & F.W. for their able outlook and deep understanding about the programme.*

*I am indebted to Dr, Prem Prakash, Adviser (Ophth.), Govt. of India for all technical guidance and advice.*

*I am thankful to Dr.D. Bachani for bringing out the report expeditiously. This has been a team work and I acknowledge contribution of all officials and staff of the Ophthalmology Section in accomplishing the task.*



**(DR. (MRS) R. JOSE)**  
**Deputy Director General (Ophth.)**  
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# **1. PROBLEM OF BLINDNESS IN INDIA:**

## **MAGNITUDE OF THE PROBLEM OF BLINDNESS**

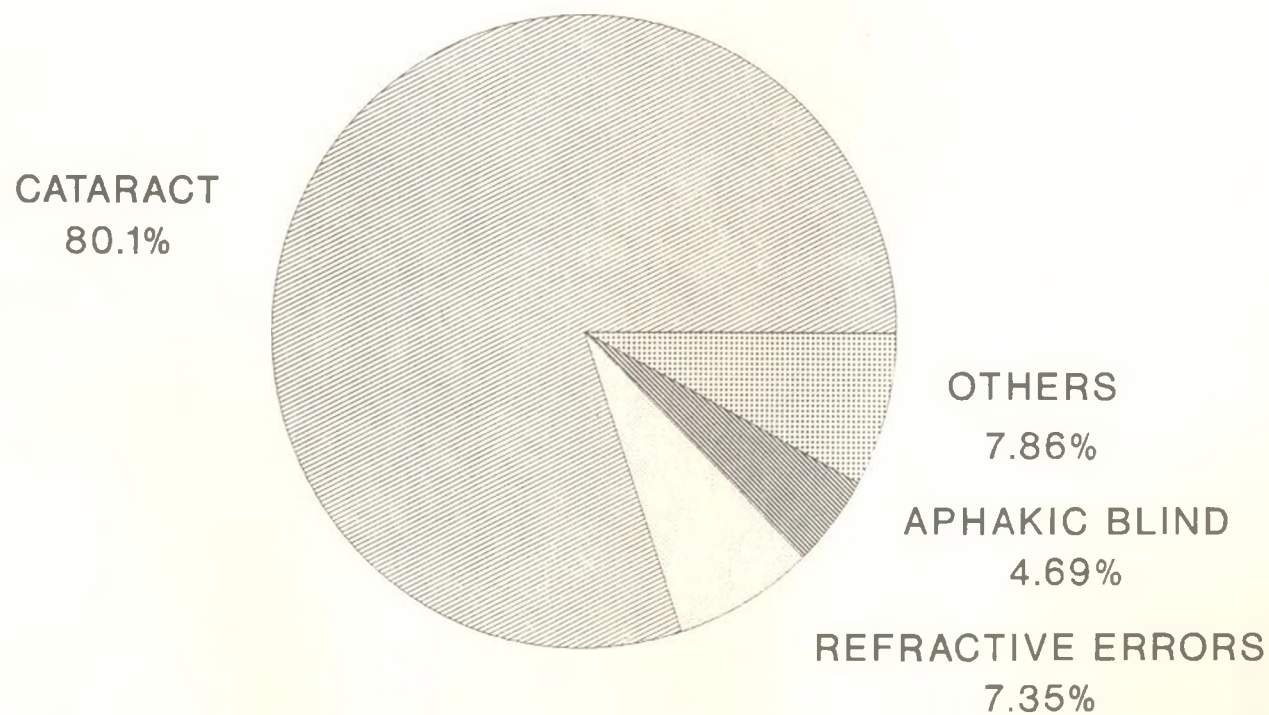
Of the total estimated 30 million blind persons (VA <3/60) in the world, 6 million are in India. So one out of every 5 blind persons in the world is an Indian. Two major surveys were conducted to find out prevalence of blindness in the country. The first survey was done by the ICMR on a national sample in 1974 and arrived at a figure of 1.38 percent prevalence rate for the economically blind. In the second and latest NPCB/WHO survey (1986-89), the prevalence rate increased to 1.49 per cent. This increase could be due to changes in age structure and could also be due to mounting backlog.

## **EPIDEMIOLOGY:**

In India, as per the National Survey results, it is estimated that there are 12.5 million economically blind persons (VA <6/60). Of the total, 80.1 are blind due to cataract. The distribution of remaining is 7.35 per cent refractive errors, 4.69 per cent aphakic blind, 1.70 per cent glaucoma, 1.52 per cent central corneal opacities, 0.39 per cent trachoma and the remaining 4.25 per cent suffer from other causes. In more than four fifths of cases cataract is the main cause for blindness. Of the total 12.5 million economically blind persons, about 10 million are blind due to cataract. Given this, any efforts to reduce prevalence rates of blindness have to concentrate on reduction of cataract cases. This is possible only when serious and systematic efforts are made to tackle cataract problem without further delay.

Prevalence of blindness is high in states like Jammu and Kashmir, Madhya Pradesh and Rajasthan. In absolute terms, more than two thirds of blind persons are in Andhra Pradesh, Bihar, Madhya Pradesh, Maharashtra, Rajasthan, Tamil Nadu and Uttar Pradesh.

# LEADING CAUSES OF BLINDNESS (INDIA)



SOURCE: NPCB/WHO SURVEY (86-89)



No major survey has been conducted in India to know about the incidence rates. So one has to rely on estimates to arrive at new additions to the pool of economically blind persons every year. A survey by ICMR has estimated that about 2.2 million subjects turn economically blind (visual acuity <math><6/60</math>) every year in India . To clear the backlog of cataract by surgery, the number of sight restoring operations should exceed incidence. The reported performance of cataract surgery is thus not enough and the pool of backlog swells every year. This is evident from the rise in the prevalence of blindness in the two national surveys from 1.38% to 1.49%.

### **SOCIAL DIMENSIONS OF THE PROBLEM**

In all states except Uttar Pradesh, West Bengal and Assam, prevalence of blindness was found to be higher in females than in males. Given the gender discrimination, probably, blind women get less attention and also their accessibility to services is limited. Under such circumstances, in all likelihood, cataract backlog among females is expected to be high. This calls for a specific service delivery strategy addressed to females. This would help to reduce male and female differences.

The national survey has not collected data on income levels of cataract cases. Based on several micro-level studies available, it is possible to conclude that the poor suffer more than affluent. The poor have low nutritional status, work for long hours outside the house, generally neglect disease during the early stages and do not have access to health services. Given all these factors, cataract prevalence can be expected too high among poor and particularly rural poor.

Rural and urban differences are much more sharp than male and female differences. While the prevalence of economic blindness in urban areas is only 1.01 per cent, the same for rural areas is 1.49 per cent. Proportion of blind persons is 17.6% in one fourth of the population in urban areas, In contrast 74.3 per cent population that lives in rural areas account for 82.4 per cent cataract cases. In all the states, except in Bihar and West Bengal, the prevalence of cataract is more in rural than in urban areas. Rural urban differences are more in states like Andhra Pradesh, Karnataka, Madhya

Pradesh and Uttar Pradesh. Easy access to service facilities, higher levels of health consciousness and ability to pay for services might have contributed to these differences. Given these differences, it is necessary to concentrate more on rural than urban areas.

Although the cataract problem is universal, the way people from different socio-economic backgrounds react to the situation varies. The Urban population as compared to the rural have more access to medical facilities. Persons living in urban areas given their income levels and literacy levels are more conscious of diseases and take immediate steps to seek professional advice. However, different economic groups within urban area behave in different ways. The upper and upper middle income groups largely depend on private hospital services. This is not only due to better quality services but also due to the prestige comfort and less waiting period that goes with paid services. Private sector offers services to all economic groups. While some private hospitals cater to middle income group others concentrate only on upper levels. The middle income group largely consisting of salaried employees in the organized sector have either reimbursement provision or insurance coverage for services obtained. The real dilemma is for the low income groups particularly workers in unorganized sector, slum dwellers and others who neither can pay for services nor can they afford to lose wages. These groups tend to neglect or avoid cataract problem to the extent possible. They finally approach the government hospitals, charitable institutions and mobile camps.

As compared to the urban areas, the groups in rural areas are at a disadvantaged position. Poverty is generally more wide spread and most persons are engaged in agricultural operations or agricultural labourers. Since there is an absence of the organized sector in rural areas they do not have reimbursement or captive hospital service facilities. Except in some developed districts, private sector presence in rural areas is limited. This is much more so in tribal areas. Spread of government health sector facilities are based more on universally applicable norms. The absence of a need based approach has led to concentration of facilities in some areas as compared to others. Added to these there is the problem of poor communication facilities in

## **THE PROGRAMME AND ITS GOALS:**

National Blindness Control Programme was launched in the year 1976 as a 100 % centrally sponsored programme. Various activities of this programme include establishment of Regional Institutes of Ophthalmology, upgradation of medical colleges and district hospitals, development of mobile eye units, recruitment of required ophthalmic manpower and provision of various ophthalmic services. National survey was conducted, during the period 1986-89, to evaluate the programme. The prevalence of blindness revealed by the survey was 1.49 %. The activities under this programme are yet to show an impact in reducing the prevalence of blindness to the goal level of 0.3 % by the year 2000 A.D.

## **ACHIEVEMENTS:**

### **INFRASTRUCTURE DEVELOPMENT:**

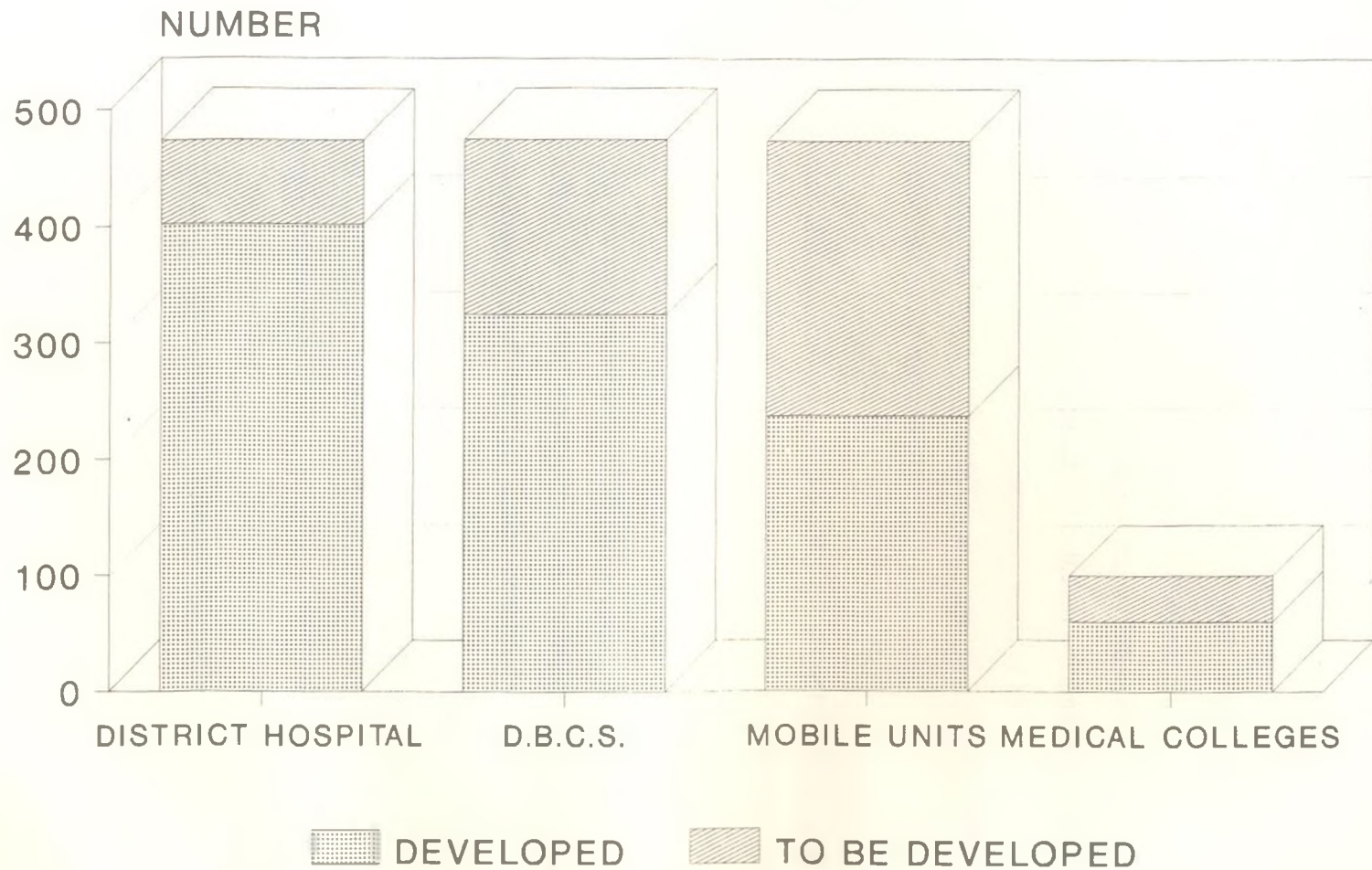
#### Tertiary level:

At the tertiary level of ophthalmic care there are ten Regional Institutes of ophthalmology including the Apex institute that is, Dr. R.P. Centre in the All India Institute of Medical Sciences, New Delhi. These centres have been established as centres of excellence in the field of eye care. In addition, 60 medical colleges have been upgraded under NPCB. There are 36 medical colleges which have been designated as training centres for Paramedical Ophthalmic Assistants. So far 92 eye banks have been developed including 22 in the non-government sector

Regional Institutes of Ophthalmology	10
Upgraded medical colleges	62
PMOA training centres	36
Eye banks	92



# INFRASTRUCTURE DEVELOPED UNDER NATIONAL PROG. FOR CONTROL OF BLINDNESS



D.B.C.S.=DISTT.BLINDNESS CONTROL SOCIETY



### Secondary level:

Out of 474 districts 404 have been equipped for ophthalmic services. These districts have been given ophthalmic equipments and requisite manpower have been posted.

Recently, the concept of District Blindness Control Societies has been successfully implemented in five pilot districts. Based on the success, as many as 303 DBCS have been formed till date. These societies have multi- disciplinary structure in which representatives of Government, non-government and private sector are members. The concept of District Blindness Control Society (DBCS) is to de-centralise management of ophthalmic services and evolve a partnership among Government, non-government and private sector.

District Hospitals Sanctioned	407
District Hospitals Developed	346
DBCS formed	333

### Primary level:

The problem of blindness is acute in rural areas and hence the programme has tried to expand accessibility of ophthalmic services. At present there are 80 central mobile units (attached to medical colleges) and 162 district mobile units which cater mobile eye camps for eye care in general and performance of cataract surgery in particular. These units have a vehicle, ophthalmic surgeon and other para medical staff. Most of the cataract operations in rural population are conducted through these mobile camps.

Primary health centres are the basic units in the rural areas. Till date 4046 primary health centres have been equipped with ophthalmic equipments and by posting para medical ophthalmic assistants. At present 3736 PMOAs are posted in various states.

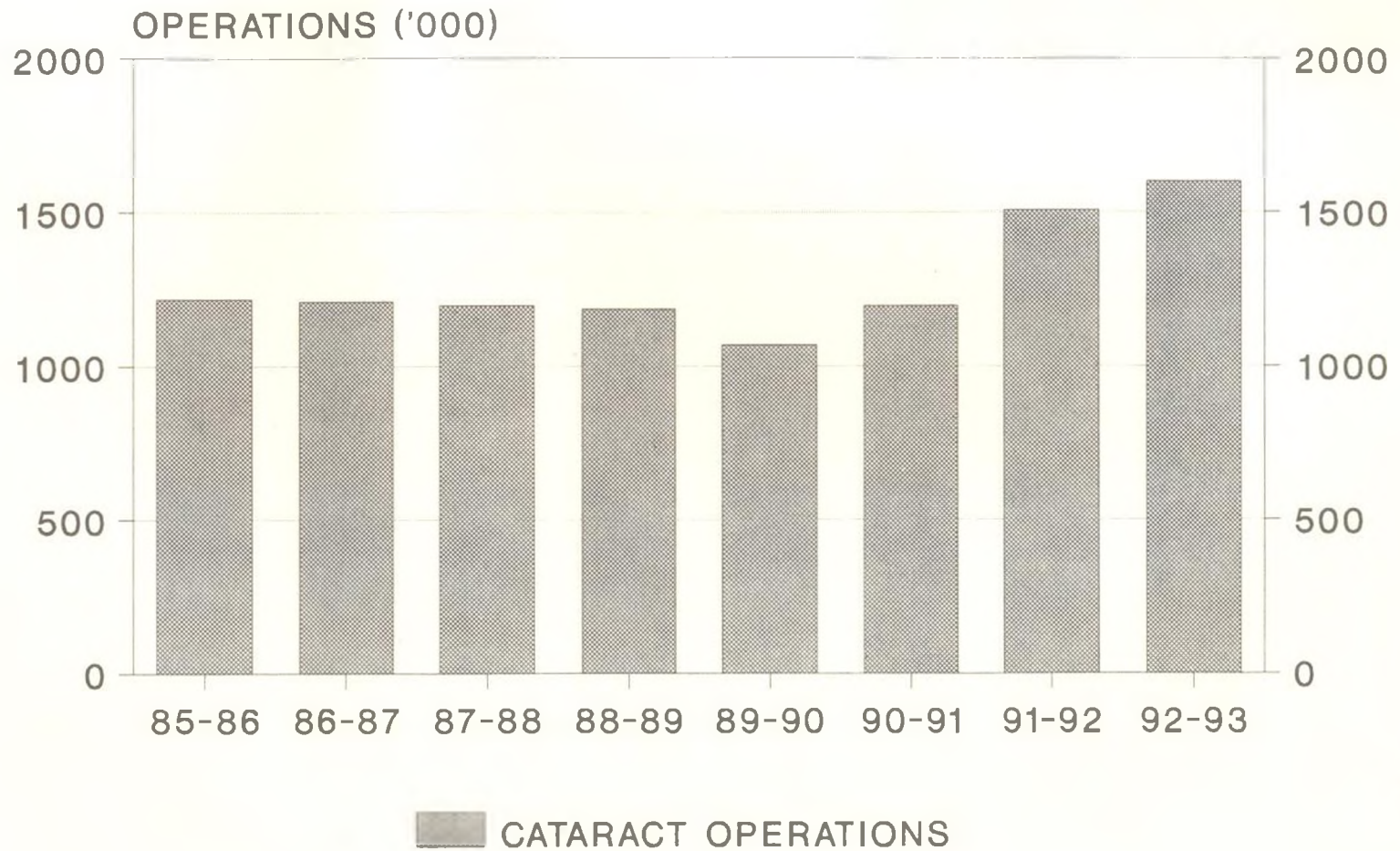
Central Mobile Units	80
District Mobile Unit	188
PHC upgraded	4125
PMOA posted	3776

Performance:

There are various activities under NPCB like general eye care, cataract surgery, correction of refractive errors etc. But the basic indicator to evaluate NPCB has been traditional performance in relation to cataract operations. There has been a gradual rise in the cataract operations performed from 5.5 lakhs in the year 1981-'82 to 11.34 lakhs in the year 1984-'85. However, after 1985 there has been a plateau in the performance between 11 to 12 lakhs operations till the year 1990-'91. There was sharp rise during the year 1991-'92 when more than 15 lakh operations were reported by various states.

Year	Operations (Lakhs)
1981-'82	5.50
1982-'83	8.04
1983-'84	10.49
1984-'85	11.34
1985-'86	12.19
1986-'87	12.09
1987-'88	11.96
1988-'89	11.85
1989-'90	10.69
1990-'91	11.97
1991-'92	15.12
1992-'93	16.05

# CATARACT OPERATIONS PERFORMED UNDER NPCB



1985-1993

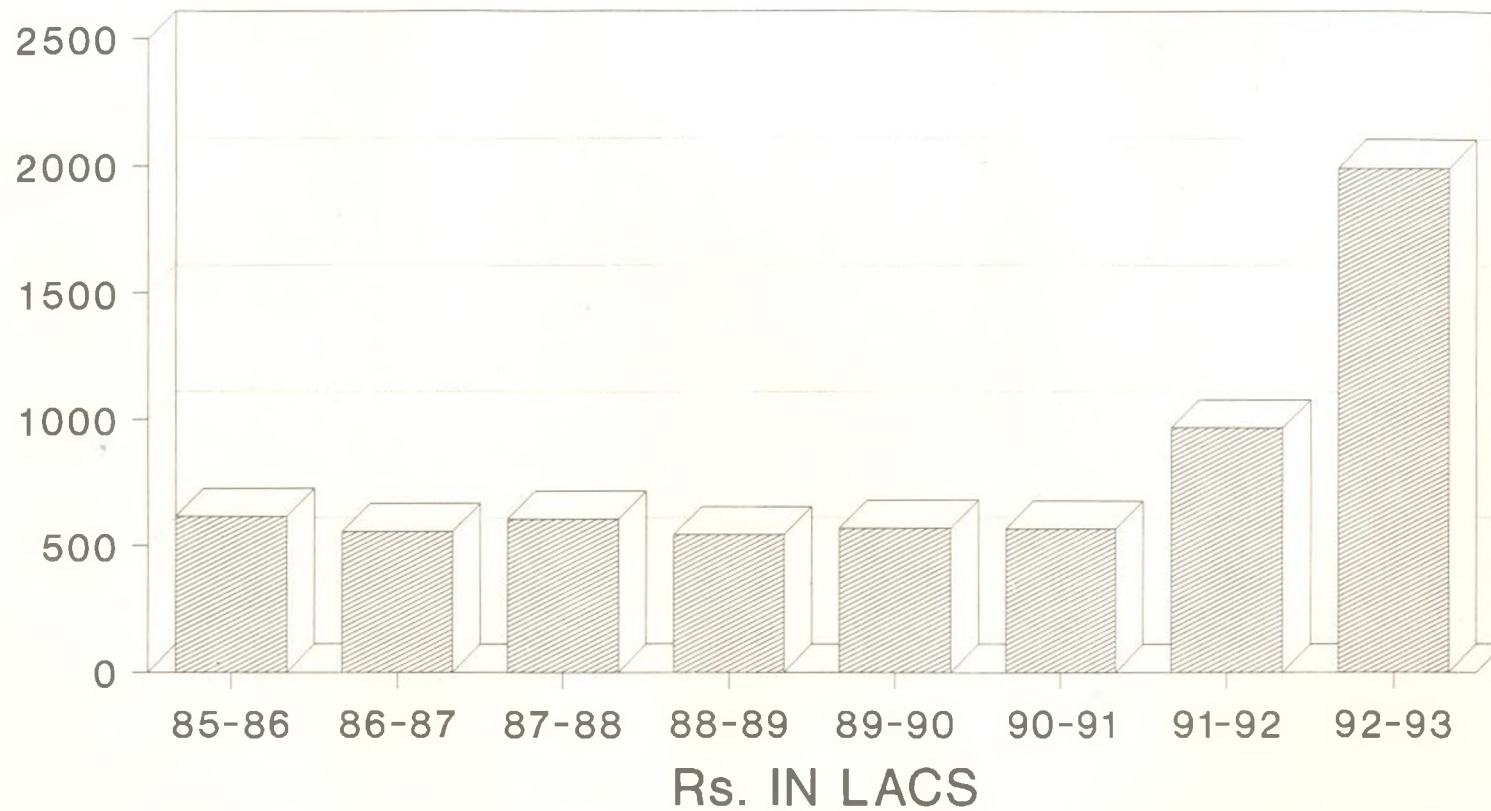
Budget:

Budgetary allocations for NPCB has remained more or less static. Budget released since 85-86 is as follows:

Year	Rs. in crores
1985 - 86	6.16
1986 - '87	5.56
1987 - '88	6.05
1988 - '89	5.44
1989 - '90	5.70
1990 - '91	5.67
1991 - '92	9.70
1992 - '93	19.90
1993 - '94	25.00 (Allocation)



# FUNDS RELEASED UNDER NPCB



■ FUNDS RELEASED

1985-1993

### 3. NEW DIMENSIONS IN THE IMPLEMENTATION OF NPCB:

To cover the backlog a two pronged approach is required :

- 1) improvement in efficiency levels of existing systems; and
- 2) additional inputs both in terms of infrastructure, manpower, new technologies and equipments.

Without attending to these two crucial issues, it is neither possible to wipe out the back log nor to reduce the incidence rate.

Improvement in efficiency levels of the existing systems calls for optimum utilisation of existing resources not only in the government but also in NGO and private sectors. This calls for the availability of an information base, innovative schemes and approaches and operations research. By doing this collaborative efforts between the government and other sectors can be further expanded and strengthen, operational constraints for project execution can be overcome, number of out reach camps can be increased and average number of operations prescribed per surgeon can be improved. In service training systems to constantly upgrade skills, introduction of new technologies, strengthening of monitoring systems are other areas that require equal and immediate attention.

The task before the NPCB is enormous and requires support of additional resources. There are several districts without mobile units; district hospitals, PHCs and CHCs are poorly equipped; no diagnostic instruments are available at the peripheral level; and there are many vacant positions at various levels. To make the coverage uniform and to maintain acceptable quality standards, it is necessary to man and equip existing units and to add new units particularly in the tribal and remote areas. Greater attention is required than has been paid so far to patient satisfaction, particularly in regard to post operative care.

- a) strengthening service delivery,
- b) developing human resources for eye care,

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- c) promoting outreach activities and public awareness and
- d) developing institutional capacity.

#### **a) STRENGTHENING SERVICE DELIVERY**

It is proposed to improve the physical, technical and managerial capabilities of medical colleges, district hospitals, community health centres, primary health centres and selected non-profit institutions to provide high quality cataract treatment in situ or through camps. The programme would be implemented through a combination of service delivery models: medical colleges, base hospitals, camps in fixed facilities, camps in improvised facilities (in exceptional cases) and if necessary in private facilities, in collaboration between the Central Govt., the State governments, non-governmental organisations.

The combination of models would depend on the geography, social composition, beneficiary assessment results, existing infrastructure and presence of the private and non-governmental sectors in each state. In States such as Tamil Nadu which has a developed network of hospitals but limited capacity for eye care, the strategy would be to strengthen these hospitals with basic infrastructure to carry out camps in fixed facilities and intensive screening camps. These facilities would be used by the government and NGO sector. Madhya Pradesh on the other hand, would provide similar services through Community Health Centres (CHCs) and Primary Health Centres (PHCs), particularly in tribal and other remote areas. In some instances, ophthalmic personnel would be permanently assigned to rural areas, while in others, services would be provided through itinerant personnel based in hospitals or other medical facilities.

#### **a(i) NORMS FOR SERVICE DELIVERY**

The emphasis should be on vision restoration with the patient satisfaction as the ultimate indicator of success. This would be achieved through the application of new service standards and technical norms being developed.

#### **a(ii) INCREASING THE OUTPUT OF RESOURCES ALLOCATED**

The emphasis would also be given to increase the volume of surgeries carried out by ophthalmological personnel. This would require strengthening the complete package for service delivery. The package would include an operation theatre, an ophthalmic ward, a medical team, medical equipment and consumables and a mobile unit if outreach facilities have to be provided.

#### **a(iii) REGULARISATION OF ORGANISATION OF CAMPS**

A fixed day approach or a yearly camp schedule would be used. All camps would be governed by the norms established by NPCB and will include three sequential activities: a) a screening camp to identify patients, b) surgical camp, c) post-operative follow-up. Mobile units are being assigned to medical colleges, distt. hospitals and selected CHCs for the purpose.

#### **a(iv) INVOLVEMENT OF NGOs AND PRIVATE SECTOR:**

Different modalities would be used for involvement of private and voluntary sectors.

- Payments to NGOs for service delivery through camps.
- Payments for screening and outreach activities based on time distance norm.
- Grants to strengthen facilities to selected non-profit institutions capable of expanding their services to underserved areas and seed capital to establish eye care unit in small towns and rural areas is under consideration.

#### **a(v) EXPANSION OF COVERAGE TO TRIBAL & REMOTE RURAL AREAS**

The thrust of the project is to emphasise coverage of these areas, including those isolated by water barriers through strengthening of peripheral facilities in tribal and remote areas and providing transportation and financial support to the potential beneficiaries.

## **b) HUMAN RESOURCES DEVELOPMENT**

This programme intends to strengthen medical colleges and RHOs to train ophthalmological and selected health personnel on cataract diagnosis, screening, surgery (ECCE/IOL and ICCE) and follow up care as required, and it would provide management training for Central and State project managers, District Society members, Project Coordinators and other project staff requiring managerial and administrative skills training.

### **b(i) TRAINING OF OPHTHALMIC PERSONNEL**

This would consist primarily in upgrading their skills to perform ECCE & refine abilities in ICCE. The training would involve:

- a) Training of trainers i.e. faculty at medical colleges
- b) Training of ophthalmologists (from the Govt. and selected NGOs) in ECCE with IOL, including refresher training in ICCE
- c) Training of Govt. ophthalmologists doing non-surgical jobs who will be redeployed on surgical posts.

This training will also include training of allied personnel and training of operating theatre personnel as a team is important for increased productivity. The ophthalmic assts. will be trained to provide outreach, screening, diagnostic referral and post-operative follow up services.

### **b(ii) TRAINING OF MANAGERS:**

An important component of training is development of managerial skills of programme administrators at the Central, State and Distt. levels in managerial skills. This training would include: programme management, interpersonal skills (patient-service provider relationship), inventory management, patient logistics, clinic operation, camp organisation, utility management, equipment maintenance and management of information. The objective would be to promote a common



management approach.

### **c) PROMOTING OUTREACH ACTIVITIES & PUBLIC AWARENESS**

Beneficiary assessment have to be revealed a variety of factors deterring potential patience from seeking surgery in the different areas. The project would provide inputs to generate patient demand for surgery through outreach camps and promotional campaigns. The outreach and communication strategy for the programme will take into account:

- i) The most appropriate time (season) and community places for outreach activities based on community gathering patterns to minimise transaction and financial costs.
- ii) The type of the deterrents that prevent patients to seek surgery for selecting the messages, media and strategy needed to promote the programme.
- iii) The link between outreach activities and service provision to ensure that patients identified service receive adequate and timely treatment.
- iv) The need to focus on "hard to reach" groups such as remote tribal groups and schedule castes.
- v) The need to involve community in outreach activities.

Outreach would be carried out through the following types of activities:

- i) Involvement of satisfied customers in outreach campaigns.
- ii) Promotion of the programme through schools by creating awareness amongst teachers and students.



- iii) Facilitating access to service delivery by providing transportation and compensation to patients from remote areas.
- iv) Outreach in IEC activities would be focused on tribal and remote areas and will be specifically focused on women.

#### **d) INSTITUTIONAL DEVELOPMENT**

This component of the project would include four main features:

- i) Developing institutional capability for eye care management at the Central, State and Distt. levels.
- ii) Developing collaborating mechanisms for cooperation between the Govt. and the private/voluntary sector.
- iii) Introducing, monitoring and feedback mechanisms to facilitate implementation and maintain quality control.
- iv) Building institutional capacity for human resources development.

#### International Assistance

The programme has been receiving assistance from Danish International Development Agency (DANIDA). It has been assisting in supply of equipments and vehicles, improving the management information system, training and development of district blindness control societies. This assistance likely to continue through 1996.

A Project is under consideration of the World Bank to boost up the activities of the programme in seven major States of the country namely Andhra Pradesh, Madhya Pradesh, Maharashtra, Tamilnadu, Orissa, Uttar Pradesh, Rajasthan. It is proposed to perform 1.1 Crore cataract operations during the project period 1994-2001. Major inputs of the Project are upgrading the ophthalmic services, expanding the coverage in rural and tribal areas, establishment and functioning of DBCS, training of ophthalmic manpower, improving the management and information

system and creating awareness about the programme in the masses. Cooperation of non govt. and private sector is also envisaged in the project. The proposed expenditure of the Project is Rs 554 Crores during the Project period.

#### **4. NORMS FOR SERVICE DELIVERY IN MOBILE EYE CAMPS.**

##### OBJECTIVES

Under the Scheme of National Programme for Control of blindness, it is desired that the eye camps be so organised as to provide comprehensive eye care to the community in the rural and outreach areas. The "camps" referred to in this chapter includes surgical camps. The aims and objectives of such camps should be to:

Provide medical and surgical treatment for the prevention and control of eye care diseases including Cataract Operations.

Educate people in methods of prevention of eye diseases and proper care of the eyes in order to ensure better and lasting eye-sight.

##### FUNCTIONS

The main purpose of conducting such camps is to provide comprehensive eye care services including preventive, promotive and curative aspects. The functions therefore will be as under:

1. Out patients' care -to examine all eye cases and provide treatment as out patients to cases not requiring admission. This will include proper arrangements for treatment of cases of refractive errors and ensuring availability of spectacles on reasonable cost.
2. Inpatients' care - to provide for admission of cases requiring surgery or treatment as indoor patients. This will include arrangements of a suitable operation theatre for safe surgery and also adequate postoperative followup of surgical cases.

3. Health Education of the community, with priority in schools, for observance of simple principles of personal hygiene, clean environment, nutrition and safety of eyes against injuries and diseases.
4. Screening of school students and local community to detect visual defects and eye diseases especially Refractive Errors, Glaucoma and those resulting from common systemic disorders.
5. Referral of eye cases requiring specialised care to institutions for adequate treatment/management.
6. Arranging a follow up of the operated cases after 4-6 weeks of closing of the camp for examination, refraction and distribution of glasses.

#### Guidelines to organize Eye Camps

1. The District Blindness Control Society will be setup where not yet formed. The Society shall plan and coordinate eye care services, organize camps, assess quality control and distribute money for all activities. The society shall exercise technical supervision of all eye camps held in the district.
2. As far as possible the camp should be held at CHC/PHC so that the O.T. facilities are used. However, if in out reach areas, such centres are not available, then some permanent structure (like school) can be used as camp site.
3. Cases needing referral should be sent to hospitals determined by DBCS as referred hospitals. These could be government or nongovernmental hospitals.
4. Constant supervision, monitoring and evaluation should be emphasized in all activities to ensure high quality clinical outcome.

5. Followup after 4-6 weeks should be arranged for examination, refraction, distribution of aphakic glasses, wherever possible.
6. DBCS shall exercise powers to grant permission for holding eye camp in the district. Such permission should be sought on prescribed proforma.
7. Assistance for holding eye camps shall be applicable in rural areas and urban slums.
8. The DBCS shall be the competent organization for administration, technical supervision and monitoring.
9. The minimum duration of eye camp shall be 7 days out of which 5 days would be post-operative and one day for pre-operative care.
10. Each surgeon must not perform more than 50 operations per day.
11. There is no need to instill local antibiotic drops before surgery. It is recommended that dilute betadine solution should be used before surgery.
12. It is recommended that a minimum of 5 corneo-scleral sutures must be applied with 8/0 Virgin Silk.
13. The patients can be mobilized at discretion of the Ophthalmic surgeon. If proper suturing is used an early mobility should be encouraged.

#### Organization of Camps

A "fixed day" approach or a yearly camp schedule would be used. Schedules would be prepared following consultation with NGOs and other

service providers to avoid service overlap. All camps would be governed by norms already established by the NPCB and will include three sequential activities:

- a) an outreach and screening camp to identify patients,
- b) a surgical camp to operate on selected patients and
- c) a post-operative followup camp or household visits.

1. No camp shall be held without the permission of the competent authority (DBCS).
2. The competent authority for granting permission to hold an eye camp, shall be the Chief Medical Officer of the concerned District Blindness Control Society (DBCS), or its nominee. The competent authority shall
  - (a) Ensure that the voluntary organisation and the team of Eye Surgeons planning to organise the camp have the requisite experience for conducting such eye camps, and unqualified persons are not permitted to operate in the camps.
  - (b) Shall supervise the proper education of the eye camps and help to provide such assistance as may be required by the camp organisers, irrespective of whether they apply for financial assistance from the Govt. or other voluntary funding agencies.
3. Ideally the number of operations performed in such a camp should not exceed 200, to be able to maintain the proper quality and safety of surgery sterilisation, and post operative care. However, the competent authority may permit such organisations who have experience of conducting bigger eye camps and have an adequate infrastructure, to hold camps to carry out more than 200 operations.



4. DBCS for the National Programme for the Control of Blindness should be constituted where they have not been formed so far. The DBCS shall play an active role for the planning, programming and coordination for uniform provision of services and for successful organisation of the camp.
5. The programme coordinator, along with local ophthalmic surgeons and doctors should be involved in the management and the conduction of the camp to ensure long term post-operative care. This recommendation should be followed by all camps conducted by the Government mobile units or by voluntary organisations.
6. State Programme officers/ Project Coordinators should ensure coordination and cooperation between the Directorate of Medical Education and Directorate of Health Services to ensure efficiency and smooth functioning.
7. Various bottlenecks and constraints in the organisation of eye camps should be critically evaluated by the Coordinators and if necessary, brought to the attention of the DBCS to eliminate them.
8. The State Ophthalmic Cell and the Central Coordination Committee should periodically review various issues brought up with regard to the organisation of eye camps, their critical evaluation and further recommendations.
9. Eye camp organising units:
  - (I) Government Sector
    - (i) Central Mobile Units
    - (ii) State Mobile Units
    - (iii) District Mobile Units

## (II) Voluntary Organisations

- (i) Lions club
- (ii) Rotary Clubs
- (iii) Zila Parishads
- (iv) Gram Panchayats
- (v) Others

## (III) Private Sector

- (i) Private Charitable Hospitals
- (ii) Nursing Homes
- (iii) Others

### 10. Registration of Eye Camp Organising Units

All such eye camp organising units shall apply with full particulars for registration to the DBCS, giving details of their experience, infrastructure and financial and manpower resources. No organisation shall hold eye camps in the community unless it has been duly registered with the DBCS. The registration may be withdrawn if the standards obtained are unsatisfactory.

#### Procedures for permission to hold Eye Camps

The permission to hold an eye camp shall be given on the application made on the prescribed proforma for this purpose.

#### Responsibilities of the Eye Surgeon-incharge of the Camps

1. It is the professional responsibility of the Eye surgeon to plan, implement and supervise the technical component of the eye camp organisation; he must ensure that the required inputs are available for conduct of the camp.
2. The technique, drugs and instruments routinely used by the surgeons at the base hospital should be used in the camp.

3. Informed consent should be obtained for all operations. Illiterate persons should be clearly told about steps and results.
4. I.O.L., Keratoplasty and other major surgical procedures should not be performed in eye camps.
5. The competent authority should be informed about any outward happening in the camp and remedial measures taken by him.
6. The surgeon shall not be responsible for outward happening which were not within his/her control.
7. He/she shall receive full protection from the government in the event of a mishap due reasons beyond his control.

Administration, Technical Supervision and Control

The District Coordinator of the concerned district, as the competent authority, and other officer deputed for this purpose shall:

1. exercise administrative and technical supervision and control of the camp.
2. allocate targets and ensure adoption of quality standards by the organisations, Mobile Ophthalmic units and Ophthalmic Surgeons as a common responsibility.
3. monitor at least 20% of the camps held in his district and carry out surprise checks as may be considered necessary to ensure proper observance of guidelines.
4. make the necessary arrangements for referral of all complicated eye cases which can not be treated in the eye camp, to the government

hospitals.

5. recommend name for awards and other incentive as may be prescribed by Central/State Governments.
6. investigate, pinpoint responsibility and take necessary action, as provided under the law in cases of complaints and mishaps or refer cases to the grievance committee.
7. arrange for refresher/orientation training course for local eye surgeons voluntary organisations, wherever necessary.

#### Mobilisation of Community Resources and Support for Eye Camps

A local eye camp committee should be formed in which persons interested in the voluntary service and their officials and non officials who can contribute to the success of the camp should be involved. The local committee shall be responsible for the mobilisation of the committee resources and support and shall organise:

- (i) Fund collection
- (ii) Publicity
- (iii) Arrangements for Accommodation and food for patients.
- (iv) Arrangements for the eye camp team of doctors & other personnel.
- (v) Volunteers and social workers
- (vi) Arrangement for transport for carrying and return from the camp site.

Members of this Committee should take all necessary precautions and provide essential help for the success of camp. It shall coordinate its activities with the voluntary organisation hosting the eye camps.



### Civic Amenities to be coordinated by DBCS

1. Civic amenities should be provided, proportional to the inpatient strength.
2. For one hundred patients, 4 safai karamcharis (Two male & two female), should be available round the clock.
3. If pucca lavatories are not available, arrangements should be made for the trench lavatories.
4. Lavatories for male and female patients should be separate.
5. Abundant supply of clean water should be made available.
6. Electric supply to all wards, lavatories and passages should be provided.
7. The place should be properly sprayed for insecticides, to get rid the fly & mosquito menace.
8. Necessary furniture and shamianas should be provided.
9. Special care should be taken for the supply of drinking water and a clean kitchen for the supply of food, or cooking facilities to the relatives and patients.

### Technical Aspects

#### Criteria for Selection of Camp Site

Eye camps should be carried out in permanent camp sites (eg. CHCs) where and when possible. If camps are held on improvised facilities, the following would be required:

The local community (voluntary organisation, social workers etc.) and Government agencies (Distt.Coordinator, BDO, CHC/PHC Medical Officer etc.) would coordinate. This should be assessed during the pre-camp visit.

Proper accommodation for the camp with a minimum of 2-3 pucca room, a PHC/School, Dharamshala building is available to house operation theatre.

Sufficient ground to pitch temporary tents for providing lodging and other facilities for accommodating patients, in the absence of a pucca building, is available.

The site has clean environment. It should in addition be sprayed with insecticides etc. Provision of good water supply and drainage and electric supply should be available. It is preferable to have in addition a portable electric diesel supply generator for emergency purposes.

Adequate arrangements for the stay of mobile camp team should be available.

#### Staff for a Mobile Eye Camp

1. For an eye operation camp a minimum of one ophthalmic surgeon, one operation theatre assistant and four paramedical personnel are required.
2. It is advisable to have 2 eye surgeons and 2 operation theatre assistants.
3. Personnel from the district hospital/DMU, private practitioners, medical colleges and regional institute may be mobilised to provide better care to the patients.
4. It is not considered practicable to have medical or anaesthesia specialists in the camp situation. Cases needing general anaesthesia and special medical care should be referred to the base hospital.

### Duration of the Camp

Eye camps should be held for such a period that ensures a minimum of five days followup with one day pre-operative care and one day for surgery.

### Number of Operations

Each surgeon must not perform more than 50 intraocular operations per day. The surgical period may be phased over 4-5 days, if so required.

### Operation Theatre

The medical and paramedical staff of the district hospital/district mobile unit, private practitioners, medical colleges or regional institute should be mobilised to provide services in the camps.

### Sterilization in Operation Theatres

1. The sterilization of instruments, blunt as well as sharp is most crucial. It is ideal to use autoclaves for this purpose. Oiling of instruments may be carried out for sterilization according to the prescribed norms.
2. Sterilization of operation theatre should be carried out as per approved standards.
3. Strict asepsis of hands and instruments must be adhered to. Masks, OT slippers and caps must be worn by all the people permitted inside the OT. Excessive or unnecessary movement in the OT must be avoided. Unauthorised persons should not be permitted in the theatre.
4. Sterilization of instruments should be done by an autoclave. If possible re-sterilization should be done by re-autoclaving. Otherwise, by chemical sterilization in Cidix for 10 minutes followed by the instruments being dipped in rectified spirit and finally washed with boiling water in the sterilizer. The spirit and the boiling water should be changed every 10 minutes.

5. The number of sets of instruments should be at least three times the number of operating tables.

#### Emergency Support

1. Arrangements to meet common emergencies should be available at the camp. For the management of serious emergencies, patients should be transferred to the nearest hospital.
2. The operation theatre should be equipped with life saving drugs and such equipment as can be provided at the eye camp for common emergencies.
3. A nursing station cum life saving emergency unit should be established at a prominent place in the camp with provision for the saving drugs and equipments and electricity generator.
4. Fire fighting equipment should be made available at each camp.

#### Standards for the In-patient Ward

1. Separate wards are to be provided for male and female patients.
2. The beds should be numbered and regularly arranged.
3. Clean sheets should be provided for each bed.
4. Overcrowding should be avoided. A 25 sq. feet should be allotted per patient.
5. Each ward should be kept under the charge of one worker. Other house keeping staff should help in catering and to provide other comforts to the patients.

#### Case Selection for Surgery in Eye Camps

During prescreening by the ophthalmic assistant, the camp surgeon should be



very judicious in selection of cases. The nature of eye surgery done in camps should be safe and result in complete visual restoration.

One eyed patients must be given special care and should be operated upon by the senior surgeon.

Operation on both the eyes at a time should not be done.

The following cases should not be operated at the camp but referred to base hospitals:

- (i) Eye with discharge/congestion or other complication
- (ii) Very tense and psychic patients
- (iii) children, if general anaesthesia is needed for operation
- (iv) Cases of poor surgical risk (severe diabetes, severe hypertension and those with cardiac problem)
- (v) Cases with a definite history of urinary problems.
- (vi) Unilateral cases for ECCE/IOL.

#### Referral

For those cases who cannot be treated at the camp site and those who develop complications, following surgery, it must be ensured that the base hospital admits them on priority basis.

#### Pre-Operative Investigation Care

1. On admission for surgery, the following investigations should be performed:
  - (i) Blood pressure
  - (ii) Urine analysis
  - (iii) Intraocular pressure
  - (iv) Lacrimal sac patency test.

2. The eye to be operated upon should be marked (on the forehead, with mercurochrome).
3. The eye and surrounding area should be cleansed with betadine solution.
4. The patient should be given instructions regarding the operation and post-operative care.

#### Anaesthesia in Eye Camp

Premedication should be given. The surgeon may choose the premedication of his choice. Standard methods of anaesthesia are to be used i.e. topical, facial and retrobulbar blocks.

#### Standardisation of Operation Techniques

1. Standard scientific techniques which give best results in the hands of the camp eye surgeon, who should be qualified & have adequate experience should be adopted.
2. A minimum of five corneo-scleral sutures must be given using 8-0 virgin silk or nylon.
3. Sub-conjunctival injection of antibiotics must be given at the end of surgery.
4. The surgeon/surgeons shall describe the usual procedure and steps followed by them for the cataract operation.

#### Post Operative Care

The patients should be kept for 5 days post-operatively.

1. Atleast one eye surgeon should stay in the camp till all patients are

discharged.

2. Post-operative dressing:

- (i) The bandaging of only one eye is preferred.
- ii) Use of cartella shield is advocated
- (iii) The first dressing should be done after 24 hours, and subsequent daily dressings should be done by the ophthalmic surgeon.

3. Medication:

- (i) Daily instillation of local antibiotic drops and ointments. When signs of iritis or infections are present, the drugs and frequency of application can be adjusted.
- (ii) Systemic antibiotics or chemotherapeutic agents are ordinarily not necessary as a routine, but should be given wherever indicated.
- (iii) Local corticosteroid usage should be used routinely but the timing of its use should be left to the judgement of the eye surgeon.
- (iv) Cough and constipation should be adequately managed.
- (v) Mydriatics should be used in aphakic cases.
- (vi) Oral analgesics like paracetamol should be given post-operatively.
- (vii) Patients with diabetes, hypertension and asthma should be taken care of as they used to be earlier.

4. Mobility:

The patients can be mobilised ordinarily after 24 hours or at the discretion of the ophthalmic surgeon, if proper suturing is performed.

### Discharge from Camp

1. The patients must be advised about do's and don'ts and the post operative instructions should be printed on the discharge slips.
2. Tropical antibiotics/Steroids and atropine drops/ointments are prescribed depending on the need of the individual patient.
3. Temporary aphakic glasses may be dispensed at the time of discharge or at the follow up camp.
4. The follow up date should be announced at the time of discharge of the patients.
5. Besides the discharge sheet, separate sheet with a followup date and health education messages should be issued at the time of discharge. This should include do's and don'ts and post-operative instructions printed in local language.

### Post Eye Camp Follow up

One ophthalmic surgeon with the help of ophthalmic assistant must conduct a follow up after 4-6 weeks of the closing of the camp for examination, suture removal and supply of aphakic glasses and further advise.

### Documentation

1. Essential documentation - names of the patient, age, sex and village should be entered in a register with father's/husband's name, full address, diagnosis, treatment given and results.
2. Serious operative and post operative complications like vitreous loss, expulsive haemorrhage, wound dehiscence, flat anterior chamber should be noted.



3. Abcission of iris prolapse, resuturing, reformation of AC or any other pre-operation should be recorded.
4. Post operative plastic iridocyclitis, endophthalmitis and the treatment given should be recorded and signed.
5. Brief reports on each eye camp be prepared by the Ophthalmic Surgeon Incharge of the eye camp and submitted to the DBCS for scrutiny and onward transmission, if needed.

#### Monitoring and Evaluation of Eye Camps

1. Each eye camp needs to be evaluated in terms of the various activities assigned to such camps and the results obtained. Some guidelines are given in order to ensure that preventive and rehabilitative aspects are not neglected. Check-list of points be developed for inspection.
2. Mini Eye Camp should be held to provide an O.P.D.type service in the rural areas and eye health clinics for school children should be carried out during the non- operative season.
3. Targets should be laid for both type of activities i.e. operations (including cataract, glaucoma) and other activities like O.P.D. examinations, investigations, refraction, health education school clinics and rehabilitation services.
4. The evaluation of various activities should be divided into surgical and non surgical units.

One surgical unit will be equivalent to performing: One cataract operation/one glaucoma operation/two optical iridectomies/one squint operation/onedacryocystectomyoperation/twoentropionoperations/five chalazion operations/ and five superficial foreign body removals.

One non-surgical unit will be equivalent to the examination of 25 OPD cases/20 refractions/10 refractions under cycloplegics/examination of 50 school children/ training of one blind person in the art of daily living and advice regarding vocational training/holding a community talk of one hour for over 20 persons/screening a film show of two hours duration.

Desirable annual targets for sight restoring operations for each Central Mobile Unit should be 3000 surgical and 1500 non-surgical units or a total of 3000 units. Similarly for District Mobile Unit the target should be 1500 surgical and 1500 non-surgical units.

5. Quality outcomes should be of paramount importance. Caution must be exercised to ensure that quality is not sacrificed for quantity. Patient satisfaction will be the ultimate measure of success.

Role of District Mobile Units:

1. Organising screening/surgical/followup camps in the rural/urban deprived areas of the district.
2. Referral of patients not fit for surgical intervention in subdistrict facilities/camps to district hospitals/medical colleges.
3. Performing comprehensive IEC activities in the district.
4. Organising follow up visits/camps including refraction of the operated cases and assessment of sight restoration.
5. Primary investigation of cases in which restoration of vision was not accomplished or post-operative complications have occurred.
6. Assistance to NGOs/Private Ophthalmologists on service contract

engaged under NPCB to perform surgery in the district.

7. Assistance to survey/evaluation team of experts during beneficiary survey, epidemiological survey and concurrent/terminal evaluation surveys.

#### Role of Primary Health Centres

1. Provision of comprehensive primary eye care in the area serviced by the PHC including eye care education.
2. Maintenance of "Blind Person Registry" by villages and updating thereof existing infrastructure in its jurisdiction.
3. Nodal point for primary screening of blind persons for referral to the screening/surgical camps and/or secondary eye care facilities.
4. Assistance in organisation of screening/ surgical/ followup eye care held by Govt./NGOs in the area of the jurisdiction.

### **5. DISTRICT BLINDNESS CONTROL SOCIETIES**

Decentralisation of project implementation would take place largely through the District Blindness Control Societies which would have the authority and accountability for project implementation at the district level. The District Blindness Control coordinator would be the secretary of the Society and would be accountable for day to day management of the project. The District ophthalmic surgeon would have the responsibility for technical quality of the project. A systematic management training of all project managers and coordinators is envisaged to enable them to effectively implement the project.

District Blindness Societies in the five Pilot Districts funded by DANIDA have done pioneering work in this regard. The performance in the Pilot Districts has gone up by 300% after the formation of DBCSs. This pattern is proposed to be replicated

at the National level. District Blindness Control Societies are proposed to be registered in all the districts.

The Society to begin with would have the following members:

1. District Collector (Chairman)
2. Chairman of Zila Parishad (Co-Chairman)
3. Chief Medical Officer of District
4. Superintendent of District Hospital
5. District Ophthalmic Surgeon
6. District Education Officer
7. NGO's Representative. In those districts where NGOs have performed more than 50% of cataract operations, NGO representative will be designated as Vice Chairman of the society.
9. Eminent persons of the District (two persons) one of them could be Chairman of IMA
10. Representatives of the people MPs/MLAs
11. District Blindness Control Coordinator (Member Secretary).

#### **FUNCTIONS OF DBCS:**

The primary purpose of the District Blindness Control Society is to plan, implement and monitor the blindness control activities in the district under overall guidance of the National Programme for Control of Blindness.

The functions of the DBCS will be as under:



1. To assess the needs of the district by collecting information and carrying out periodic surveys.
2. To assess the available resources in the district infrastructure, manpower, monetary (existing and potential).
3. To fund strengthening of the existing and new infrastructure for contribution to the programme.
4. To prepare each year a plan of action and monitor its implementation.
5. To prepare a list of the voluntary agencies and private hospitals/practitioners and actively involve them in the programme implementation.
6. To coordinate the activities within Health and other Govt. departments in the district.
7. To raise funds from philanthropists & other donors, sponsorships, user charges or any mechanism approved by the society and use it for fulfillment of the aims and objectives mentioned in the Memorandum of Association of the Society.
8. To receive and monitor use of funds and other materials from the government and other agencies/donors.
9. To do all such lawful acts as are conducive to attain its objectives.
10. The main focus of the Society will be on sight restoration of those already blind due to cataract and optical correction of those with refractive errors.

*STATISTICS*



All these activities will be organised by the DBCC in coordination with the District Ophthalmic Surgeon and under the overall guidance of the DBCS. As such the DBCC has to be a person who can carry out all these activities.

Apart from the above the DBCC will be expected to maintain proper accounts and get them audited at annual intervals from qualified chartered Accountants. He will also be responsible for all correspondence pertaining to DBCS and to take follow up actions on various decisions taken by DBCS. He shall provide all requisite inputs, so that Blindness Control work in the district proceeds smoothly in terms of the expected targets. He shall keep the District Ophthalmic Surgeon/ District Collector of the good work being done by various reporting units as well as the weaknesses so that appropriate corrective action can be taken by the governing body of the DBCS.

The DBCC will be appointed strictly on a contractual basis from amongst persons with a background in Public Health, Ophthalmology or Management with no restrictions of age etc. as long as the selecting authority is satisfied about his capability to organise the programme for the District. The DBCS Chairman will head a selection committee consisting of District Health Officer, Civil Surgeon and the District Ophthalmic Surgeon to select a suitable DBCC for the District. The selection will have to be approved by the State Govt. within three months. The appointment will be made purely on a temporary basis for an initial period of one year which can be extended subject to satisfactory performance.

The overall accountability for the performance of the DBCS and the use of funds placed at the disposal of DBCS will be that of District Collector/District Ophthalmic Surgeon. The DBCC will report to the Ophthalmic Surgeon and work under his guidance. The District Collector will be responsible for maintaining harmony and proper coordination between Ophthalmic Surgeon, DBCC and other relevant Officers in the district in the best interests of the programme. The Collector will also organise random checking of the DBCS funds through Government Auditors. The Secretary Health of each state will be responsible for effective functioning of all DBCSs in the state.





**STATEWISE PREVALENCE OF BLINDNESS AND ESTIMATED BLIND PERSONS**

STATE/UTs	POPULATION (1991)	PREVALENCE* /10000 POP.	ESTIMATED** BLIND PERSONS
Andhra Pradesh	66508008	150	10,88,000
Arunachal Pradesh	864558	123	13,500
Assam	22414322	134	3,00,000
Bihar	86374465	128	10,66,000
Delhi	9420644	63	62,000
Goa	1169793	203	25,000
Gujarat	41309582	144	5,83,000
Haryana	16463648	113	1,83,000
Himachal Pradesh	5170877	87	45,000
Jammu & Kashmir	7718700	280	2,11,000
Karnataka	44977201	129	5,59,000
Kerala	29098518	131	3,67,000
Madhya Pradesh	66181170	201	13,22,000
Maharashtra	78937187	164	12,52,000
Manipur	1837149	65	11,000
Meghalaya	1774778	22	3,000
Mizoram	689756	NA	--
Nagaland	1209546	38	4,000
Orissa	31659736	172	5,38,000
Punjab	20281969	73	1,40,000
Rajasthan	43997990	224	9,38,000
Sikkim	406457	45	3,000
Tamil Nadu	55858946	165	9,22,000
Tripura	2757205	118	34,000
Uttar Pradesh	139112287	158	20,98,000
West Bengal	68077965	96	6,54,000
A&N Islands	280661	67	1,900
Chandigarh	642015	189	11,400
D&N Haveli	138477	NA	--
Daman & Diu	101586	NA	--
Lakshadweep	51707	89	400
Pondicherry	807785	NA	--
<b>TOTAL</b>	<b>846302688</b>	<b>149</b>	<b>12435200</b>

\* Source: WHO/GOI National Survey (1986-89)

\*\* Survey results projected for 1991 census population

**STATEWISE PERFORMANCE OF CATARACT OPERATIONS  
(1992-93)**

STATE/UTs	TARGET	PERFORMANCE	%
Andhra Pradesh	200000	117936	59
Arunachal Pradesh	600	257	43
Assam	25000	17223	69
Bihar	155000	60083	39
Delhi	30000	30000	100
Goa	3000	3108	104
Gujarat	122000	124896	102
Haryana	62000	63834	103
Himachal Pradesh	10000	7938	79
Jammu & Kashmir	7000	4849	69
Karnataka	90000	77760	86
Kerala	50000	23079	46
Madhya Pradesh	150000	117968	74
Maharashtra	191000	207802	109
Manipur	1500	623	27
Meghalaya	4400	1030	23
Mizoram	400	132	33
Nagaland	250	158	63
Orissa	60000	28175	47
Punjab	90000	102531	114
Rajasthan	125000	81823	65
Sikkim	600	292	49
Tamil Nadu	160000	171946	107
Tripura	3000	2978	99
Uttar Pradesh	300000	234759	78
West Bengal	150000	116032	77
A&N Islands	400	140	35
Chandigarh	4500	2513	56
D&N Haveli	200	102	51
Daman & Diu	100	194	194
Lakshadweep	50	13	26
Pondicherry	4000	3337	83
E.S.I/A.F/C.R	----	1417	----
<b>TOTAL</b>	<b>2000000</b>	<b>1604928</b>	<b>80</b>

**STATEWISE PERFORMANCE OF CATARACT OPERATIONS  
PER LAKH POPULATION DURING 1992-93**

STATE/UTs	CENSUS POPULATION	OPERATIONS PERFORMED	OPERATIONS PER LAKH POP
Andhra Pradesh	66508008	117936	177
Arunachal Pradesh	864558	257	30
Assam	22414322	17223	77
Bihar	86374465	60083	70
Delhi	9420644	30000	319
Goa	1169793	3108	266
Gujarat	41309582	124896	302
Haryana	16463648	63834	388
Himachal Pradesh	5170877	7938	154
Jammu & Kashmir	7718700	4849	63
Karnataka	44977201	77760	173
Kerala	29098518	23079	79
Madhya Pradesh	66181170	117968	178
Maharashtra	78937187	207802	263
Manipur	1837149	623	34
Meghalaya	1774778	1030	58
Mizoram	689756	132	19
Nagaland	1209546	158	13
Orissa	31659736	28175	89
Punjab	20281969	102531	506
Rajasthan	43997990	81823	186
Sikkim	406457	292	73
Tamil Nadu	55858946	171946	308
Tripura	2757205	2978	108
Uttar Pradesh	139112287	234759	169
West Bengal	68077965	116032	170
A&N Islands	280661	140	50
Chandigarh	642015	2513	391
D&N Haveli	138477	102	74
Daman & Diu	101586	194	192
Lakshadweep	51707	13	25
Pondicherry	807785	3337	413
E.S.I/A.F/C.R	..	1417	..
<b>TOTAL</b>	<b>846302688</b>	<b>1604928</b>	<b>189</b>



**DISTRICT BLINDNESS CONTROL SOCIETIES FORMED  
UNDER N.P.C.B. (REPORTED TILL 31ST MARCH 1994)**

State	Total Distt.	DBCS formed
Andhra Pradesh	23	16
Arunachal Pradesh	11	1
Assam	23	8
Bihar	42	12
Delhi	5	1
Goa	2	1
Gujarat	19	16
Haryana	16	16
Himachal Pradesh	12	6
Jammu & Kashmir	14	4
Karnataka	20	20
Kerala	14	14
Madhya Pradesh	45	45
Maharashtra	30	24
Manipur	8	3
Meghalaya	5	4
Mizoram	3	3
Nagaland	7	1
Orissa	13	13
Punjab	12	7
Rajasthan	30	30
Sikkim	4	0
Tamil Nadu	24	24
Tripura	3	3
Uttar Pradesh	63	56
West Bengal	17	2
Andaman & Nicobar	2	1
Chandigarh	1	0
Dadra & Nagar Haveli	1	0
Daman & Diu	2	0
Lakshdweep	1	1
Pondicherry	4	1
<b>INDIA</b>	<b>476</b>	<b>333</b>

*STATE-WISE  
INFORMATION*

STATE:

ANDHRA PRADESH

PREVALENCE (per 10,000 population)	VALUE
Economic Blind (E)	77
Social Blind (S)	49
Manifest Blind (M)	19
Absolute Blind (A)	5
Total of Economic Blind (E+S+M+A)	150
Prevalence in Male population	131
Prevalence in Female population	170
Prevalence in Rural population	187
Prevalence in Urban population	100

CENSUS 1991	Population	Estimated blind Population
Rural	48620882	909,000
Urban	17887126	179,000
Total	66508008	1,088,000

DISTRICTS:

23

INFRASTRUCTURE UNDER NPCB	SANCTIONED	DEVELOPED
Regional Institute of Ophthalmology	1	1
Upgraded Medical Colleges	6	6
District Hospitals	21	20
Central Mobile Units	4	4
District Mobile Units	15	5
District Blindness Control Societies		16
Upgraded Primary Health Centres	350	230
Eye Banks	8	1+2*

\* in voluntary sector

STATE:

ANDHRA PRADESH

BUDGET UNDER NPCB (Rs. in Lakhs)		
YEAR	FUNDS RELEASED	EXPENDITURE INCURRED
1985-90	173.55	160.46
1990-91	53.96	39.02
1991-92	47.76	58.01
1992-93	68.09	54.77

PERFORMANCE OF CATARACT OPERATIONS			
YEAR	TARGET	ACHIEVEMENT	%
1985-86	1,00,000	1,21,643	122
1986-87	1,10,000	93,567	85
1987-88	1,25,000	95,467	76
1988-89	1,25,000	1,08,973	87
1989-90	1,25,000	1,12,923	90
1990-91	1,36,000	1,25,408	92
1991-92	2,00,000	1,29,365	65
1992-93	2,00,000	1,17,936	59

STATE:

ARUNACHAL PRADESH

PREVALENCE (per 10,000 population)	VALUE
Economic Blind (E)	49
Social Blind (S)	74
Manifest Blind (M)	0
Absolute Blind (A)	0
Total of Economic Blind (E+S+M+A)	123
Prevalence in Male population	205
Prevalence in Female population	47
Prevalence in Rural population	181
Prevalence in Urban population	0

CENSUS 1991	Population in lakhs	Estimated blind Population
Rural	753930	13,500
Urban	110628	---
Total	864558	13,500

DISTRICTS:

11

INFRASTRUCTURE UNDER NPCB	SANCTIONED	DEVELOPED
Regional Institute of Ophthalmology		
Upgraded Medical Colleges		
District Hospitals	5	2
Central Mobile Units	1	1
District Mobile Units	2	5
District Blindness Control Societies		1
Upgraded Primary Health Centres	15	11
Eye Banks		



STATE:

ARUNACHAL PRADESH

**BUDGET UNDER NPCB  
(Rs. in Lakhs)**

YEAR	FUNDS RELEASED	EXPENDITURE INCURRED
1985-90	7.09	7.99
1990-91	0.35	0.35
1991-92	11.56	8.95
1992-93	26.33	5.01

**PERFORMANCE OF CATARACT OPERATIONS**

YEAR	TARGET	ACHIEVEMENT	%
1985-86	1,000	109	11
1986-87	1,000	192	19
1987-88	500	114	23
1988-89	500	126	25
1989-90	500	203	41
1990-91	500	198	40
1991-92	600	245	40
1992-93	600	257	43

STATE:

ASSAM

PREVALENCE (per 10,000 population)	VALUE
Economic Blind (E)	60
Social Blind (S)	44
Manifest Blind (M)	28
Absolute Blind (A)	2
Total of Economic Blind (E+S+M+A)	134
Prevalence in Male population	152
Prevalence in Female population	112
Prevalence in Rural population	141
Prevalence in Urban population	78

CENSUS 1991	Population	Estimated blind Population
Rural	19926527	281,000
Urban	2487795	19,000
Total	22414322	3,00,000

DISTRICTS:

23

INFRASTRUCTURE UNDER NPCB	SANCTIONED	DEVELOPED
Regional Institute of Ophthalmology	1	1
Upgraded Medical Colleges	2	2
District Hospitals	10	10
Central Mobile Units	2	2
District Mobile Units	8	4
District Blindness Control Societies		8
Upgraded Primary Health Centres	156	181
Eye Banks	3	3

STATE:

ASSAM

BUDGET UNDER NPCB (Rs. in lakhs)		
YEAR	FUNDS RELEASED	EXPENDITURE INCURRED
1985-90	95.66	145.57
1990-91	16.96	9.31
1991-92	45.46	27.74
1992-93	53.89	2.30

PERFORMANCE OF CATARACT OPERATIONS			
YEAR	TARGET	ACHIEVEMENT	%
1985-86	40,000	10,218	26
1986-87	30,000	12,736	42
1987-88	15,000	8,792	59
1988-89	15,000	10,668	71
1989-90	15,000	11,089	74
1990-91	15,000	13,392	89
1991-92	25,000	17,252	69
1992-93	25,000	17,223	69

STATE:

BIHAR

PREVALENCE (per 10,000 population)		VALUE
Economic Blind (E)		72
Social Blind (S)		39
Manifest Blind (M)		12
Absolute Blind (A)		5
Total of Economic Blind (E+S+M+A)		128
Prevalence in Male population		118
Prevalence in Female population		139
Prevalence in Rural population		121
Prevalence in Urban population		139

CENSUS 1991	Population in lakhs	Estimated blind Population
Rural	75021453	908,000
Urban	11353012	158,000
Total	86374465	1,066,000

DISTRICTS:

42

INFRASTRUCTURE UNDER NPCB	SANCTIONED	DEVELOPED
Regional Institute of Ophthalmology	1	1
Upgraded Medical Colleges	2	2
District Hospitals	31	27
Central Mobile Units	6	5
District Mobile Units	16	15
District Blindness Control Societies		12
Upgraded Primary Health Centres	303	216
Eye Banks	7	2

STATE:

BIHAR

BUDGET UNDER NPCB (Rs. in lakhs)		
YEAR	FUNDS RELEASED	EXPENDITURE INCURRED
1985-90	111.35	25.21
1990-91	48.49	5.46
1991-92	38.52	22.84
1992-93	71.43	60.31

PERFORMANCE OF CATARACT OPERATIONS			
YEAR	TARGET	ACHIEVEMENT	%
1985-86	1,40,000	64,915	46
1986-87	1,40,000	64,498	46
1987-88	1,00,000	69,884	70
1988-89	1,00,000	55,989	56
1989-90	1,05,000	3,663	3
1990-91	1,05,000	56,412	54
1991-92	1,55,000	70,000	45
1992-93	1,55,000	600830	39



STATE:

DELHI

PREVALENCE (per 10,000 population)		VALUE
Economic Blind (E)		45
Social Blind (S)		10
Manifest Blind (M)		7
Absolute Blind (A)		1
Total of Economic Blind (E+S+M+A)		23
Prevalence in Male population		56
Prevalence in Female population		73
Prevalence in Rural population		218
Prevalence in Urban population		49

CENSUS 1991	Population in lakhs	Estimated blind Population
Rural	949019	21,000
Urban	8471625	41,000
Total	9420644	62,000

DISTRICTS:

5

INFRASTRUCTURE UNDER NPCB	SANCTIONED	DEVELOPED
Regional Institute of Ophthalmology	1	1
Upgraded Medical Colleges	1	1
District Hospitals	1	
Central Mobile Units	1	
District Mobile Units	1	
District Blindness Control Societies		1
Upgraded Primary Health Centres	11	8
Eye Banks	3	2+1*

\* in voluntary sector

STATE:

DELHI

BUDGET UNDER NPCB (Rs. in lakhs)		
YEAR	FUNDS RELEASED	EXPENDITURE INCURRED
1985-90	0.61	0.17
1990-91	8.83	
1991-92	0.00	
1992-93	2.25	2.25

PERFORMANCE OF CATARACT OPERATIONS			
YEAR	TARGET	ACHIEVEMENT	%
1985-86	15,000	14,947	100
1986-87	15,000	16,117	107
1987-88	15,000	19,648	131
1988-89	15,000	12,991	87
1989-90	17,000	14,417	85
1990-91	17,000	19,551	115
1991-92	25,000	15,035	60
1992-93	30,000	30,000	100

STATE:

GOA

PREVALENCE (per 10,000 population)	VALUE
Economic Blind (E)	43
Social Blind (S)	73
Manifest Blind (M)	87
Absolute Blind (A)	0
Total of Economic Blind (E+S+M+A)	203
Prevalence in Male population	148
Prevalence in Female population	256
Prevalence in Rural population	266
Prevalence in Urban population	148

CENSUS 1991	Population in lakhs	Estimated blind Population
Rural	690041	18,000
Urban	479752	7,000
Total	1169793	25,000

DISTRICTS:

2

INFRASTRUCTURE UNDER NPCB	SANCTIONED	DEVELOPED
Regional Institute of Ophthalmology		
Upgraded Medical Colleges	1	1
District Hospitals	1	2
Central Mobile Units	1	1
District Mobile Units	1	
District Blindness Control Societies		1
Upgraded Primary Health Centres	17	20
Eye Banks	1	

STATE:

GOA

BUDGET UNDER NPCB (Rs. in lakhs)		
YEAR	FUNDS RELEASED	EXPENDITURE INCURRED
1985-90	12.17	5.96
1990-91	7.11	2.24
1991-92	8.48	1.73
1992-93	9.03	7.30

PERFORMANCE OF CATARACT OPERATIONS			
YEAR	TARGET	ACHIEVEMENT	%
1985-86	2,000	2,090	105
1986-87	2,000	2,114	106
1987-88	2,000	1,962	98
1988-89	2,000	2,096	105
1989-90	2,000	2,152	108
1990-91	2,000	2,474	124
1991-92	2,200	2,568	117
1992-93	3,000	3,108	104

STATE:

GUJARAT

PREVALENCE (per 10,000 population)	VALUE
Economic Blind (E)	89
Social Blind (S)	43
Manifest Blind (M)	7
Absolute Blind (A)	5
Total of Economic Blind (E+S+M+A)	144
Prevalence in Male population	120
Prevalence in Female population	172
Prevalence in Rural population	161
Prevalence in Urban population	103

CENSUS 1991	Population in lakhs	Estimated blind Population
Rural	27063521	436,000
Urban	14246061	147,000
Total	41309582	583,000

DISTRICTS:

16

INFRASTRUCTURE UNDER NPCB	SANCTIONED	DEVELOPED
Regional Institute of Ophthalmology	1	1
Upgraded Medical Colleges	2	2
District Hospitals	19	17
Central Mobile Units	4	4
District Mobile Units	11	7
District Blindness Control Societies		13
Upgraded Primary Health Centres	275	250
Eye Banks	6	1+4*

\* in voluntary sector



STATE:

GUJARAT

**BUDGET UNDER NPCB  
(Rs. in lakhs)**

YEAR	FUNDS RELEASED	EXPENDITURE INCURRED
1985-90	190.69	244.79
1990-91	24.32	202.14
1991-92	51.70	248.95
1992-93	121.45	133.66

**PERFORMANCE OF CATARACT OPERATIONS**

YEAR	TARGET	ACHIEVEMENT	%
1985-86	70,000	49,273	70
1986-87	70,000	79,576	114
1987-88	70,000	81,340	116
1988-89	70,000	89,347	128
1989-90	77,000	83,118	108
1990-91	77,000	1,04,819	136
1991-92	1,10,000	1,22,239	111
1992-93	1,22,000	1,24,896	102

STATE:

HARYANA

PREVALENCE (per 10,000 population)	VALUE
Economic Blind (E)	42
Social Blind (S)	53
Manifest Blind (M)	15
Absolute Blind (A)	3
Total of Economic Blind (E+S+M+A)	113
Prevalence in Male population	112
Prevalence in Female population	115
Prevalence in Rural population	121
Prevalence in Urban population	81

CENSUS 1991	Population in lakhs	Estimated blind Population
Rural	12408904	150,000
Urban	4054744	33,000
Total	16463648	183,000

DISTRICTS:

16

INFRASTRUCTURE UNDER NPCB	SANCTIONED	DEVELOPED
Regional Institute of Ophthalmology		
Upgraded Medical Colleges	1	1
District Hospitals	12	12
Central Mobile Units	1	1
District Mobile Units	9	3
District Blindness Control Societies		16
Upgraded Primary Health Centres	123	90
Eye Banks	2	1+1*

\* in voluntary sector

STATE:

HARYANA

BUDGET UNDER NPCB (Rs. in Lakhs)		
YEAR	FUNDS RELEASED	EXPENDITURE INCURRED
1985-90	47.11	35.27
1990-91	9.59	6.19
1991-92	26.54	10.08
1992-93	121.45	133.66

PERFORMANCE OF CATARACT OPERATIONS			
YEAR	TARGET	ACHIEVEMENT	%
1985-86	30,000	34,780	116
1986-87	32,000	35,363	111
1987-88	35,000	36,688	105
1988-89	35,000	36,079	103
1989-90	39,000	22,730	58
1990-91	39,000	30,383	78
1991-92	60,000	51,782	86
1992-93	62,000	63,834	103

STATE:

HIMACHAL PRADESH

PREVALENCE (per 10,000 population)	VALUE
Economic Blind (E)	45
Social Blind (S)	33
Manifest Blind (M)	4
Absolute Blind (A)	5
Total of Economic Blind (E+S+M+A)	87
Prevalence in Male population	57
Prevalence in Female population	118
Prevalence in Rural population	88
Prevalence in Urban population	78

CENSUS 1991	Population in lakhs	Estimated blind Population
Rural	4721681	41,500
Urban	449196	3,500
Total	5170877	45,000

DISTRICTS:

12

INFRASTRUCTURE UNDER NPCB	SANCTIONED	DEVELOPED
Regional Institute of Ophthalmology		
Upgraded Medical Colleges	1	1
District Hospitals	12	12
Central Mobile Units	2	2
District Mobile Units	7	7
District Blindness Control Societies		6
Upgraded Primary Health Centres	92	95
Eye Banks	2	1

STATE:

HIMACHAL PRADESH

BUDGET UNDER NPCB (Rs. in lakhs)		
YEAR	FUNDS RELEASED	EXPENDITURE INCURRED
1985-90	43.32	43.39
1990-91	10.22	11.76
1991-92	21.72	6.32
1992-93	27.24	0.45

PERFORMANCE OF CATARACT OPERATIONS			
YEAR	TARGET	ACHIEVEMENT	%
1985-86	10,000	6,093	61
1986-87	7,000	7,015	100
1987-88	7,000	5,867	84
1988-89	7,000	6,597	94
1989-90	7,000	6,987	100
1990-91	7,000	4,698	67
1991-92	10,000	7,824	78
1992-93	10,000	7,938	79



STATE:

JAMMU &amp; KASHMIR

PREVALENCE (per 10,000 population)	VALUE
Economic Blind (E)	111
Social Blind (S)	140
Manifest Blind (M)	29
Absolute Blind (A)	0
Total of Economic Blind (E+S+M+A)	280
Prevalence in Male population	283
Prevalence in Female population	276
Prevalence in Rural population	289
Prevalence in Urban population	225

CENSUS 1991	Population	Estimated blind Population
Rural	5879300	170,000
Urban	1839400	41,000
Total	7718700	211,000

DISTRICTS:

14

INFRASTRUCTURE UNDER NPCB	SANCTIONED	DEVELOPED
Regional Institute of Ophthalmology		
Upgraded Medical Colleges	2	1
District Hospitals	10	10
Central Mobile Units	2	2
District Mobile Units	7	
District Blindness Control Societies		4
Upgraded Primary Health Centres	105	77
Eye Banks	2	1

STATE :

JAMMU &amp; KASHMIR

BUDGET UNDER NPCB (Rs. in lakhs)		
YEAR	FUNDS RELEASED	EXPENDITURE INCURRED
1985-90	27.36	58.58
1990-91	9.00	12.72
1991-92	24.16	17.78
1992-93	35.05	15.78

PERFORMANCE OF CATARACT OPERATIONS			
YEAR	TARGET	ACHIEVEMENT	%
1985-86	10,000	2,874	29
1986-87	10,000	4,067	41
1987-88	4,000	4,852	121
1988-89	4,000	5,443	136
1989-90	4,000	3,798	95
1990-91	4,000	4,730	118
1991-92	7,000	7,134	102
1992-93	7,000	4,849	69

STATE:

KARNATAKA

PREVALENCE (per 10,000 population)	VALUE
Economic Blind (E)	69
Social Blind (S)	40
Manifest Blind (M)	11
Absolute Blind (A)	5
Total of Economic Blind (E+S+M+A)	129
Prevalence in Male population	115
Prevalence in Female population	142
Prevalence in Rural population	151
Prevalence in Urban population	65

CENSUS 1991	Population	Estimated blind Population
Rural	31069413	469,000
Urban	13907788	90,000
Total	44977201	559,000

DISTRICTS:

20

INFRASTRUCTURE UNDER NPCB	SANCTIONED	DEVELOPED
Regional Institute of Ophthalmology	1	1
Upgraded Medical Colleges	3	3
District Hospitals	18	18
Central Mobile Units	4	4
District Mobile Units	12	6
District Blindness Control Societies		20
Upgraded Primary Health Centres	301	269
Eye Banks	8	2+1*

\* in voluntary sector

STATE :

KARNATAKA

BUDGET UNDER NPCB (Rs. in Lakhs)		
YEAR	FUNDS RELEASED	EXPENDITURE INCURRED
1985-90	241.24	235.72
1990-91	39.83	34.10
1991-92	46.77	36.10
1992-93	57.35	19.90

PERFORMANCE OF CATARACT OPERATIONS			
YEAR	TARGET	ACHIEVEMENT	%
1985-86	70,000	46,543	66
1986-87	70,000	52,859	76
1987-88	50,000	48,287	97
1988-89	50,000	45,714	91
1989-90	54,000	58,391	108
1990-91	54,000	34,149	63
1991-92	90,000	65,078	72
1992-93	90,000	77,760	86

STATE:

KERALA

PREVALENCE (per 10,000 population)	VALUE
Economic Blind (E)	75
Social Blind (S)	47
Manifest Blind (M)	8
Absolute Blind (A)	1
Total of Economic Blind (E+S+M+A)	131
Prevalence in Male population	101
Prevalence in Female population	158
Prevalence in Rural population	114
Prevalence in Urban population	160

CENSUS 1991	Population	Estimated blind Population
Rural	21418224	244,000
Urban	7680294	123,000
Total	29098518	367,000

DISTRICTS:

14

INFRASTRUCTURE UNDER NPCB	SANCTIONED	DEVELOPED
Regional Institute of Ophthalmology		
Upgraded Medical Colleges	2	2
District Hospitals	12	11
Central Mobile Units	2	2
District Mobile Units	8	7
District Blindness Control Societies		14
Upgraded Primary Health Centres	240	120
Eye Banks	5	5+2*

\* in voluntary sector



STATE:

KERALA

BUDGET UNDER NPCB (Rs. in Lakhs)		
YEAR	FUNDS RELEASED	EXPENDITURE INCURRED
1985-86	116.00	121.33
1990-91	12.52	21.28
1991-92	40.70	21.73
1992-93	29.69	20.42

PERFORMANCE OF CATARACT OPERATIONS			
YEAR	TARGET	ACHIEVEMENT	%
1985-86	50,000	14,045	28
1986-87	50,000	16,730	33
1987-88	50,000	17,056	34
1988-89	50,000	45,714	91
1989-90	20,000	19,083	96
1990-91	20,000	20,647	103
1991-92	50,000	24,003	48
1992-93	50,000	23,079	46

STATE:

MADHYA PRADESH

PREVALENCE (per 10,000 population)		VALUE
Economic Blind (E)		97
Social Blind (S)		79
Manifest Blind (M)		17
Absolute Blind (A)		8
Total of Economic Blind (E+S+M+A)		201
Prevalence in Male population		193
Prevalence in Female population		221
Prevalence in Rural population		217
Prevalence in Urban population		143

CENSUS 1991	Population in lakhs	Estimated blind Population
Rural	50842333	1,103,000
Urban	15338837	219,000
Total	66181170	1,322,000

DISTRICTS:

45

INFRASTRUCTURE UNDER NPCB	SANCTIONED	DEVELOPED
Regional Institute of Ophthalmology	1	1
Upgraded Medical Colleges	5	6
District Hospitals	45	46
Central Mobile Units	9	11
District Mobile Units	27	33
District Blindness Control Societies		45
Upgraded Primary Health Centres	530	502
Eye Banks	6	6+5*

\* in voluntary sector

STATE:

MADHYA PRADESH

BUDGET UNDER NPCB (Rs. in lakhs)		
YEAR	FUNDS RELEASED	EXPENDITURE INCURRED
1985-90	335.45	481.18
1990-91	44.39	191.00
1991-92	99.70	198.95
1992-93	130.62	108.73

PERFORMANCE OF CATARACT OPERATIONS			
YEAR	TARGET	ACHIEVEMENT	%
1985-86	1,00,000	94,196	94
1986-87	1,30,000	77,349	59
1987-88	1,00,000	78,903	79
1988-89	1,00,000	79,467	80
1989-90	1,08,000	76,564	71
1990-91	1,08,000	91,954	85
1991-92	1,50,000	1,13,227	75
1992-93	1,50,000	1,11,344	74

STATE:

MAHARASHTRA

PREVALENCE (per 10,000 population)		VALUE
Economic Blind (E)		82
Social Blind (S)		62
Manifest Blind (M)		14
Absolute Blind (A)		6
Total of Economic Blind (E+S+M+A)		164
Prevalence in Male population		157
Prevalence in Female population		200
Prevalence in Rural population		185
Prevalence in Urban population		117

CENSUS 1991	Population in lakhs	Estimated blind Population
Rural	48395601	895,000
Urban	30541586	357,000
Total	78937187	1252,000

DISTRICTS:

30

INFRASTRUCTURE UNDER NPCB	SANCTIONED	DEVELOPED
Regional Institute of Ophthalmology		
Upgraded Medical Colleges	5	5
District Hospitals	29	29
Central Mobile Units	5	xx
District Mobile Units	18	22
District Blindness Control Societies		24
Upgraded Primary Health Centres	374	394
Eye Banks	14	68

xx CMU converted into DMU \* in voluntary sector

STATE:

MAHARASHTRA

BUDGET UNDER NPCB (Rs. in Lakhs)		
YEAR	FUNDS RELEASED	EXPENDITURE INCURRED
1985-90	253.42	310.61
1990-91	40.97	46.38
1991-92	82.43	70.98
1992-93	130.62	108.73

PERFORMANCE OF CATARACT OPERATIONS			
YEAR	TARGET	ACHIEVEMENT	%
1985-86	1,30,000	1,95,385	150
1986-87	1,40,000	2,00,501	143
1987-88	1,00,000	1,51,726	152
1988-89	1,00,000	1,47,327	147
1989-90	1,10,000	1,54,173	140
1990-91	1,10,000	1,59,410	145
1991-92	1,80,000	1,88,251	104
1992-93	1,91,000	2,07,802	109



STATE:

MANIPUR

PREVALENCE (per 10,000 population)	VALUE
Economic Blind (E)	32
Social Blind (S)	22
Manifest Blind (M)	11
Absolute Blind (A)	0
Total of Economic Blind (E+S+M+A)	65
Prevalence in Male population	67
Prevalence in Female population	63
Prevalence in Rural population	87
Prevalence in Urban population	0

CENSUS 1991	Population in lakhs	Estimated blind Population
Rural	1331504	11,000
Urban	505645	--
Total	1837149	11,000

DISTRICTS:

8

INFRASTRUCTURE UNDER NPCB	SANCTIONED	DEVELOPED
Regional Institute of Ophthalmology		
Upgraded Medical Colleges	1	1
District Hospitals	6	5
Central Mobile Units	1	1
District Mobile Units	5	1
District Blindness Control Societies		3
Upgraded Primary Health Centres	36	16
Eye Banks	1	

STATE:

MANIPUR

BUDGET UNDER NPCB (Rs. in lakhs)		
YEAR	FUNDS RELEASED	EXPENDITURE INCURRED
1985-90	22.02	5.33
1990-91	11.52	7.12
1991-92	16.83	7.78
1992-93	10.30	8.86

PERFORMANCE OF CATARACT OPERATIONS			
YEAR	TARGET	ACHIEVEMENT	%
1985-86	3,000	379	13
1986-87	2,000	204	10
1987-88	1,000	582	58
1988-89	1,000	460	46
1989-90	1,000	401	40
1990-91	1,000	364	36
1991-92	2,000	364	18
1992-93	1,500	401	27

STATE:

MEGHALAYA

PREVALENCE (per 10,000 population)	VALUE
Economic Blind (E)	22
Social Blind (S)	0
Manifest Blind (M)	0
Absolute Blind (A)	0
Total of Economic Blind (E+S+M+A)	22
Prevalence in Male population	44
Prevalence in Female population	0
Prevalence in Rural population	22
Prevalence in Urban population	0

CENSUS 1991	Population in lakhs	Estimated blind Population
Rural	1444731	3,000
Urban	33047	--
Total	1774778	3,000

DISTRICTS:

5

INFRASTRUCTURE UNDER NPCB	SANCTIONED	DEVELOPED
Regional Institute of Ophthalmology		
Upgraded Medical Colleges		
District Hospitals	5	5
Central Mobile Units	1	1
District Mobile Units	5	3
District Blindness Control Societies		4
Upgraded Primary Health Centres	20	11
Eye Banks		

STATE :

MEGHALAYA

BUDGET UNDER NPCB (Rs. in lakhs)		
YEAR	FUNDS RELEASED	EXPENDITURE INCURRED
1985-90	16.23	27.48
1990-91	2.98	1.50
1991-92	9.42	4.56
1992-93	3.93	4.85

PERFORMANCE OF CATARACT OPERATIONS			
YEAR	TARGET	ACHIEVEMENT	%
1985-86	3,000	2,806	93
1986-87	2,000	3,302	165
1987-88	3,000	3,131	104
1988-89	3,000	3,740	124
1989-90	3,000	3,050	102
1990-91	3,000	2,312	77
1991-92	5,000	1,356	27
1992-93	4,400	1,030	23

STATE:

NAGALAND

PREVALENCE (per 10.000 population)	VALUE
Economic Blind (E)	0
Social Blind (S)	0
Manifest Blind (M)	0
Absolute Blind (A)	38
Total of Economic Blind (E+S+M+A)	38
Prevalence in Male population	36
Prevalence in Female population	39
Prevalence in Rural population	38
Prevalence in Urban population	0

CENSUS 1991	Population in lakhs	Estimated blind Population
Rural	1001323	4000
Urban	208223	--
Total	1209546	4000

DISTRICTS:

7

INFRASTRUCTURE UNDER NPCB	SANCTIONED	DEVELOPED
Regional Institute of Ophthalmology		
Upgraded Medical Colleges		
District Hospitals	7	7
Central Mobile Units	1	1
District Mobile Units	5	1
District Blindness Control Societies		1
Upgraded Primary Health Centres	21	11
Eye Banks		



STATE:

NAGALAND

BUDGET UNDER NPCB (Rs. in lakhs)		
YEAR	FUNDS RELEASED	EXPENDITURE INCURRED
1985-90	7.73	14.80
1990-91	6.63	
1991-92	9.74	9.39
1992-93	9.66	

PERFORMANCE OF CATARACT OPERATIONS			
YEAR	TARGET	ACHIEVEMENT	%
1985-86	2,000	51	3
1986-87	100	77	77
1987-88	600	189	32
1988-89	600	143	24
1989-90	600	78	13
1990-91	600	95	16
1991-92	600	76	13
1992-93	250	158	63

STATE:

ORISSA

PREVALENCE (per 10,000 population)	VALUE
Economic Blind (E)	85
Social Blind (S)	65
Manifest Blind (M)	19
Absolute Blind (A)	3
Total of Economic Blind (E+S+M+A)	172
Prevalence in Male population	165
Prevalence in Female population	179
Prevalence in Rural population	185
Prevalence in Urban population	74

CENSUS 1991	Population	Estimated blind Population
Rural	27424753	507,000
Urban	4234983	31,000
Total	31659736	538,000

DISTRICTS:

13

INFRASTRUCTURE UNDER NPCB	SANCTIONED	DEVELOPED
Regional Institute of Ophthalmology		
Upgraded Medical Colleges	3	3
District Hospitals	13	13
Central Mobile Units	3	3
District Mobile Units	10	6
District Blindness Control Societies		13
Upgraded Primary Health Centres	288	133
Eye Banks	3	1

STATE:

ORISSA

BUDGET UNDER NPCB (Rs. in Lakhs)		
YEAR	FUNDS RELEASED	EXPENDITURE INCURRED
1985-90	131.88	131.18
1990-91	29.16	32.83
1991-92	43.15	42.46
1992-93	65.45	33.66

PERFORMANCE OF CATARACT OPERATIONS			
YEAR	TARGET	ACHIEVEMENT	%
1985-86	50,000	25,300	51
1986-87	50,000	15,835	32
1987-88	35,000	20,113	57
1988-89	35,000	21,073	60
1989-90	35,000	31,944	91
1990-91	35,000	20,341	58
1991-92	70,000	18,641	27
1992-93	60,000	28,175	47

STATE:

PUNJAB

PREVALENCE (per 10,000 population)		VALUE
Economic Blind (E)		48
Social Blind (S)		21
Manifest Blind (M)		2
Absolute Blind (A)		2
Total of Economic Blind (E+S+M+A)		73
Prevalence in Male population		59
Prevalence in Female population		87
Prevalence in Rural population		85
Prevalence in Urban population		32

CENSUS 1991	Population	Estimated blind Population
Rural	14288744	121,000
Urban	5993225	19,000
Total	20281969	140,000

DISTRICTS:

12

INFRASTRUCTURE UNDER NPCB	SANCTIONED	DEVELOPED
Regional Institute of Ophthalmology		
Upgraded Medical Colleges	2	2
District Hospitals	12	12
Central Mobile Units	2	2
District Mobile Units	10	6
District Blindness Control Societies		7
Upgraded Primary Health Centres	140	133
Eye Banks	5	1+1*

\* in voluntary sector

STATE:

PUNJAB

BUDGET UNDER NPCB (Rs. in lakhs)		
YEAR	FUNDS RELEASED	EXPENDITURE INCURRED
1985-90	75.99	85.22
1990-91	12.73	10.77
1991-92	35.24	
1992-93	28.83	11.26

PERFORMANCE OF CATARACT OPERATIONS			
YEAR	TARGET	ACHIEVEMENT	%
1985-86	40,000	53,768	135
1986-87	35,000	52,753	151
1987-88	35,000	56,702	162
1988-89	35,000	55,486	159
1989-90	39,000	50,814	130
1990-91	39,000	67,081	172
1991-92	70,000	94,017	134
1992-93	90,000	1,02,531	114



STATE:

RAJASTHAN

PREVALENCE (per 10,000 population)	VALUE
Economic Blind (E)	97
Social Blind (S)	86
Manifest Blind (M)	37
Absolute Blind (A)	7
Total of Economic Blind (E+S+M+A)	224
Prevalence in Male population	214
Prevalence in Female population	236
Prevalence in Rural population	249
Prevalence in Urban population	92

CENSUS 1991	Population	Estimated blind Population
Rural	33930877	845,000
Urban	10067113	93,000
Total	43997990	938,000

DISTRICTS:

30

INFRASTRUCTURE UNDER NPCB	SANCTIONED	DEVELOPED
Regional Institute of Ophthalmology		
Upgraded Medical Colleges	4	4
District Hospitals	27	19
Central Mobile Units	5	5
District Mobile Units	18	10
District Blindness Control Societies		30
Upgraded Primary Health Centres	204	171
Eye Banks	5	2

STATE:

RAJASTHAN

BUDGET UNDER NPCB (Rs. in Lakhs)		
YEAR	FUNDS RELEASED	EXPENDITURE INCURRED
1985-90	130.18	145.08
1990-91	16.37	15.89
1991-92	51.89	32.11
1992-93	91.47	66.83

PERFORMANCE OF CATARACT OPERATIONS			
YEAR	TARGET	ACHIEVEMENT	%
1985-86	70,000	74,278	106
1986-87	75,000	75,007	100
1987-88	80,000	80,086	100
1988-89	80,000	80,025	100
1989-90	86,000	74,527	87
1990-91	86,000	84,830	99
1991-92	1,30,000	80,654	62
1992-93	1,25,000	81,823	65

STATE:

SIKKIM

PREVALENCE (per 10,000 population)		VALUE
Economic Blind (E)		45
Social Blind (S)		0
Manifest Blind (M)		0
Absolute Blind (A)		0
Total of Economic Blind (E+S+M+A)		45
Prevalence in Male population		89
Prevalence in Female population		0
Prevalence in Rural population		77
Prevalence in Urban population		0

CENSUS 1991	Population	Estimated blind Population
Rural	369451	3,000
Urban	37006	--
Total	406457	3,000

DISTRICTS:

4

INFRASTRUCTURE UNDER NPCB	SANCTIONED	DEVELOPED
Regional Institute of Ophthalmology		
Upgraded Medical Colleges		
District Hospitals	4	4
Central Mobile Units	1	1
District Mobile Units	4	4
District Blindness Control Societies		0
Upgraded Primary Health Centres	8	8
Eye Banks		

STATE:

SIKKIM

BUDGET UNDER NPCB (Rs. in lakhs)		
YEAR	FUNDS RELEASED	EXPENDITURE INCURRED
1985-90	9.31	4.66
1990-91	2.92	0.70
1991-92	9.72	17.38
1992-93	3.46	0.73

PERFORMANCE OF CATARACT OPERATIONS			
YEAR	TARGET	ACHIEVEMENT	%
1985-86	1,000	42	4
1986-87	100	96	96
1987-88	100	81	81
1988-89	100	76	76
1989-90	100	68	68
1990-91	100	116	116
1991-92	1,000	209	21
1992-93	600	292	49

STATE:

TAMIL NADU

PREVALENCE (per 10,000 population)	VALUE
Economic Blind (E)	111
Social Blind (S)	44
Manifest Blind (M)	9
Absolute Blind (A)	1
Total of Economic Blind (E+S+M+A)	165
Prevalence in Male population	134
Prevalence in Female population	200
Prevalence in Rural population	157
Prevalence in Urban population	181

CENSUS 1991	Population	Estimated blind Population
Rural	36781354	577,000
Urban	19077592	345,000
Total	55858946	922,000

DISTRICTS:

24

INFRASTRUCTURE UNDER NPCB	SANCTIONED	DEVELOPED
Regional Institute of Ophthalmology	1	1
Upgraded Medical Colleges	4	4
District Hospitals	15	15
Central Mobile Units	3	3
District Mobile Units	12	7
District Blindness Control Societies		24
Upgraded Primary Health Centres	253	162
Eye Banks	8	7+5*

\* in voluntary sector



STATE:

TAMIL NADU

BUDGET UNDER NPCB (Rs. in Lakhs)		
YEAR	FUNDS RELEASED	EXPENDITURE INCURRED
1985-90	134.52	97.89
1990-91	43.24	17.47
1991-92	46.62	5.92
1992-93	54.06	5.48

PERFORMANCE OF CATARACT OPERATIONS			
YEAR	TARGET	ACHIEVEMENT	%
1985-86	1,00,000	1,02,217	102
1986-87	1,00,000	1,04,218	104
1987-88	1,00,000	1,05,260	105
1988-89	1,00,000	1,10,267	110
1989-90	1,08,000	1,11,617	103
1990-91	1,08,000	88,634	82
1991-92	1,60,000	1,51,323	94
1992-93	1,60,000	1,71,946	108

STATE:

TRIPURA

PREVALENCE (per 10.000 population)	VALUE
Economic Blind (E)	47
Social Blind (S)	71
Manifest Blind (M)	0
Absolute Blind (A)	0
Total of Economic Blind (E+S+M+A)	118
Prevalence in Male population	61
Prevalence in Female population	179
Prevalence in Rural population	112
Prevalence in Urban population	183

CENSUS 1991	Population	Estimated blind Population
Rural	2335484	26.000
Urban	421721	8.000
Total	2757205	34.000

DISTRICTS:

3

INFRASTRUCTURE UNDER NPCB	SANCTIONED	DEVELOPED
Regional Institute of Ophthalmology		
Upgraded Medical Colleges		
District Hospitals	3	3
Central Mobile Units	1	1
District Mobile Units	5	2
District Blindness Control Societies		3
Upgraded Primary Health Centres	35	9
Eye Banks		

STATE :

TRIPURA

**BUDGET UNDER NPCB  
(Rs. in lakhs)**

YEAR	FUNDS RELEASED	EXPENDITURE INCURRED
1985-90	15.68	18.66
1990-91	6.88	2.94
1991-92	19.87	34.20
1992-93	3.48	25.13

**PERFORMANCE OF CATARACT OPERATIONS**

YEAR	TARGET	ACHIEVEMENT	%
1985-86	4,000	2,983	75
1986-87	3,000	3,004	96
1987-88	3,000	1,604	53
1988-89	3,000	1,474	49
1989-90	3,000	1,255	42
1990-91	3,000	1,928	64
1991-92	4,000	2,381	60
1992-93	3,000	2,978	99

STATE:

UTTAR PRADESH

PREVALENCE (per 10,000 population)	VALUE
Economic Blind (E)	84
Social Blind (S)	53
Manifest Blind (M)	19
Absolute Blind (A)	2
Total of Economic Blind (E+S+M+A)	158
Prevalence in Male population	168
Prevalence in Female population	145
Prevalence in Rural population	181
Prevalence in Urban population	29

CENSUS 1991	Population	Estimated blind Population
Rural	111506372	2,018,000
Urban	27605915	80,000
Total	139112287	2,098,000

DISTRICTS:

63

INFRASTRUCTURE UNDER NPCB	SANCTIONED	DEVELOPED
Regional Institute of Ophthalmology	1	1
Upgraded Medical Colleges	7	7
District Hospitals	56	56
Central Mobile Units	11	11
District Mobile Units	33	33
District Blindness Control Societies		56
Upgraded Primary Health Centres	689	679
Eye Banks	10	6+3*

\* in voluntary sector

STATE :

UTTAR PRADESH

BUDGET UNDER NPCB (Rs. in lakhs)		
YEAR	FUNDS RELEASED	EXPENDITURE INCURRED
1985-90	474.69	530.47
1990-91	63.95	49.89
1991-92	98.85	63.22
1992-93	165.55	92.55

PERFORMANCE OF CATARACT OPERATIONS			
YEAR	TARGET	ACHIEVEMENT	%
1985-86	2,20,000	2,24,045	102
1986-87	2,00,000	2,02,106	101
1987-88	2,00,000	2,15,852	108
1988-89	2,00,000	2,14,401	107
1989-90	2,16,000	1,42,097	66
1990-91	2,16,000	1,97,363	91
1991-92	3,20,000	2,47,083	77
1992-93	3,00,000	2,34,759	78



STATE:

WEST BENGAL

PREVALENCE (per 10,000 population)	VALUE
Economic Blind (E)	64
Social Blind (S)	24
Manifest Blind (M)	8
Absolute Blind (A)	0
Total of Economic Blind (E+S+M+A)	96
Prevalence in Male population	109
Prevalence in Female population	81
Prevalence in Rural population	95
Prevalence in Urban population	99

CENSUS 1991	Population	Estimated blind Population
Rural	49370364	469,000
Urban	18707601	185,000
Total	68077965	654,000

DISTRICTS:

17

INFRASTRUCTURE UNDER NPCB	SANCTIONED	DEVELOPED
Regional Institute of Ophthalmology	1	1
Upgraded Medical Colleges	5	5
District Hospitals	16	16
Central Mobile Units	11	11
District Mobile Units	3	3
District Blindness Control Societies		2
Upgraded Primary Health Centres	371	341
Eye Banks	8	4

STATE:

WEST BENGAL

BUDGET UNDER NPCB (Rs. in Lakhs)		
YEAR	FUNDS RELEASED	EXPENDITURE INCURRED
1985-90	192.34	256.00
1990-91	33.91	26.04
1991-92	41.18	24.50
1992-93	55.40	12.20

PERFORMANCE OF CATARACT OPERATIONS			
YEAR	TARGET	ACHIEVEMENT	%
1985-86	1,10,000	71,095	65
1986-87	1,00,000	80,524	81
1987-88	90,000	88,065	98
1988-89	90,000	74,397	83
1989-90	95,000	80,201	84
1990-91	95,000	57,930	61
1991-92	1,50,000	90,202	60
1992-93	1,50,000	1,16,032	77

U.T.: **ANDMAN & NICOBAR ISLANDS**

PREVALENCE (per 10,000 population)	VALUE
Economic Blind (E)	37
Social Blind (S)	26
Manifest Blind (M)	0
Absolute Blind (A)	4
Total of Economic Blind (E+S+M+A)	67
Prevalence in Male population	73
Prevalence in Female population	61
Prevalence in Rural population	61
Prevalence in Urban population	86

CENSUS 1991	Population	Estimated blind Population
Rural	205706	1,250
Urban	74955	650
Total	280661	1,900

DISTRICTS: **2**

INFRASTRUCTURE UNDER NPCB	SANCTIONED	DEVELOPED
Regional Institute of Ophthalmology		
Upgraded Medical Colleges		
District Hospitals	2	0
Central Mobile Units	1	1
District Mobile Units	1	1
District Blindness Control Societies		1
Upgraded Primary Health Centres	16	6
Eye Banks		

U.T.:

ANDAMAN &amp; NICOBAR ISLANDS

BUDGET UNDER NPCB (Rs. in Lakhs)		
YEAR	FUNDS RELEASED	EXPENDITURE INCURRED
1985-90	4.81	1.66
1990-91	0.17	
1991-92	6.00	2.08
1992-93	2.10	2.10

PERFORMANCE OF CATARACT OPERATIONS			
YEAR	TARGET	ACHIEVEMENT	%
1985-86	200	123	62
1986-87	200	175	88
1987-88	200	150	75
1988-89	200	204	102
1989-90	200	202	101
1990-91	200	171	86
1991-92	600	177	30
1992-93	400	140	35

U.T.:

CHANDIGARH

PREVALENCE (per 10,000 population)		VALUE
Economic Blind (E)		118
Social Blind (S)		47
Manifest Blind (M)		24
Absolute Blind (A)		0
Total of Economic Blind (E+S+M+A)		189
Prevalence in Male population		95
Prevalence in Female population		283
Prevalence in Rural population		206
Prevalence in Urban population		175
CENSUS 1991	Population	Estimated blind Population
Rural	66186	1,400
Urban	575829	10,000
Total	642015	11,400

DISTRICTS:

1

INFRASTRUCTURE UNDER NPCB	SANCTIONED	DEVELOPED
Regional Institute of Ophthalmology		
Upgraded Medical Colleges	1	1
District Hospitals	1	1
Central Mobile Units	1	
District Mobile Units	1	
District Blindness Control Societies		0
Upgraded Primary Health Centres	1	
Eye Banks	1	1



U.T.:

CHANDIGARH

BUDGET UNDER NPCB (Rs. in lakhs)		
YEAR	FUNDS RELEASED	EXPENDITURE INCURRED
1985-90	0.81	52.49
1990-91	1.02	0.95
1991-92	6.40	0.77
1992-93	0.19	1.15

PERFORMANCE OF CATARACT OPERATIONS			
YEAR	TARGET	ACHIEVEMENT	%
1985-86	1,000	2,717	272
1986-87	1,000	1,715	172
1987-88	1,500	1,791	119
1988-89	1,500	1,949	130
1989-90	2,000	1,805	91
1990-91	2,000	5,266	264
1991-92	5,000	2,579	52
1992-93	4,500	2,513	56

U.T.:

LAKSHADWEEP

PREVALENCE (per 10,000 population)	VALUE
Economic Blind (E)	78
Social Blind (S)	0
Manifest Blind (M)	11
Absolute Blind (A)	0
Total of Economic Blind (E+S+M+A)	89
Prevalence in Male population	123
Prevalence in Female population	61
Prevalence in Rural population	143
Prevalence in Urban population	23

CENSUS 1991	Population	Estimated blind Population
Rural	22593	330
Urban	29114	70
Total	51707	400

DISTRICTS:

1

INFRASTRUCTURE UNDER NPCB	SANCTIONED	DEVELOPED
Regional Institute of Ophthalmology		
Upgraded Medical Colleges		
District Hospitals	1	1
Central Mobile Units	1	
District Mobile Units	1	
District Blindness Control Societies		1
Upgraded Primary Health Centres	7	7
Eye Banks		

U.T.:

LAKSHADWEEP

BUDGET UNDER NPCB (Rs. in Lakhs)		
YEAR	FUNDS RELEASED	EXPENDITURE INCURRED
1985-90		
1990-91	0.17	0.04
1991-92	6.00	2.51
1992-93	2.15	0.17

PERFORMANCE OF CATARACT OPERATIONS			
YEAR	TARGET	ACHIEVEMENT	%
1985-86	100		
1986-87	100		
1987-88	100	50	50
1988-89	100	7	7
1989-90	100	6	6
1990-91	10	2	20
1991-92	100	19	19
1992-93	50	13	26

STATE:

MIZORAM

DISTRICTS:

3

INFRASTRUCTURE UNDER NPCB	SANCTIONED	DEVELOPED
Regional Institute of Ophthalmology		
Upgraded Medical Colleges		
District Hospitals	3	3
Central Mobile Units	1	
District Mobile Units	3	3
District Blindness Control Societies		3
Upgraded Primary Health Centres	27	12
Eye Banks		

STATE:

MIZORAM

BUDGET UNDER NPCB (Rs. in Lakhs)		
YEAR	FUNDS RELEASED	EXPENDITURE INCURRED
1985-90	11.90	6.45
1990-91	3.15	0.10
1991-92	6.10	3.26
1992-93	3.06	3.62

PERFORMANCE OF CATARACT OPERATIONS			
YEAR	TARGET	ACHIEVEMENT	%
1985-86	1,000	181	18
1986-87	1,000	123	12
1987-88	400	123	31
1988-89	400	158	40
1989-90	400	179	45
1990-91	400	237	59
1991-92	400	171	43
1992-93	400	132	33



STATE:

PONDICHERRY

DISTRICTS:

4

INFRASTRUCTURE UNDER NPCB	SANCTIONED	DEVELOPED
Regional Institute of Ophthalmology		
Upgraded Medical Colleges	1	1
District Hospitals	4	1
Central Mobile Units		
District Mobile Units	4	1
District Blindness Control Societies		1
Upgraded Primary Health Centres	23	10
Eye Banks	1	1

U.T.:

PONDICHERRY

BUDGET UNDER NPCB (Rs. in lakhs)		
YEAR	FUNDS RELEASED	EXPENDITURE INCURRED
1985-90	6.26	3.33
1990-91	3.00	
1991-92	6.00	1.27
1992-93	0.25	0.90

PERFORMANCE OF CATARACT OPERATIONS			
YEAR	TARGET	ACHIEVEMENT	%
1985-86	1,000	1,825	182
1986-87	1,000	2,006	201
1987-88	1,500	2,265	151
1988-89	1,500	2,440	163
1989-90	2,000	2,128	107
1990-91	2,000	2,547	128
1991-92	5,000	2,475	49
1992-93	4,000	3,337	84

STATE:

DAMAN & DIU

DISTRICTS:

2

INFRASTRUCTURE UNDER NPCB	SANCTIONED	DEVELOPED
Regional Institute of Ophthalmology		
Upgraded Medical Colleges		
District Hospitals	2	
Central Mobile Units		
District Mobile Units	2	
District Blindness Control Societies		0
Upgraded Primary Health Centres	6	
Eye Banks		

U.T.:

DAMAN &amp; DIU

BUDGET UNDER NPCB (Rs. in Lakhs)		
YEAR	FUNDS RELEASED	EXPENDITURE INCURRED
1985-90	2.04	
1990-91	2.97	1.10
1991-92	7.80	0.10
1992-93	2.12	4.33

PERFORMANCE OF CATARACT OPERATIONS			
YEAR	TARGET	ACHIEVEMENT	%
1985-86			
1986-87			
1987-88			
1988-89			
1989-90			
1990-91			
1991-92	1,000		
1992-93	100	194	194

U.T.:

DADRA & NAGAR HAVELI

DISTRICTS:

1

INFRASTRUCTURE UNDER NPCB	SANCTIONED	DEVELOPED
Regional Institute of Ophthalmology		
Upgraded Medical Colleges		
District Hospitals	1	
Central Mobile Units		
District Mobile Units	1	
District Blindness Control Societies		0
Upgraded Primary Health Centres	7	
Eye Banks		

U.T.:

DADRA &amp; NAGAR HAVELI

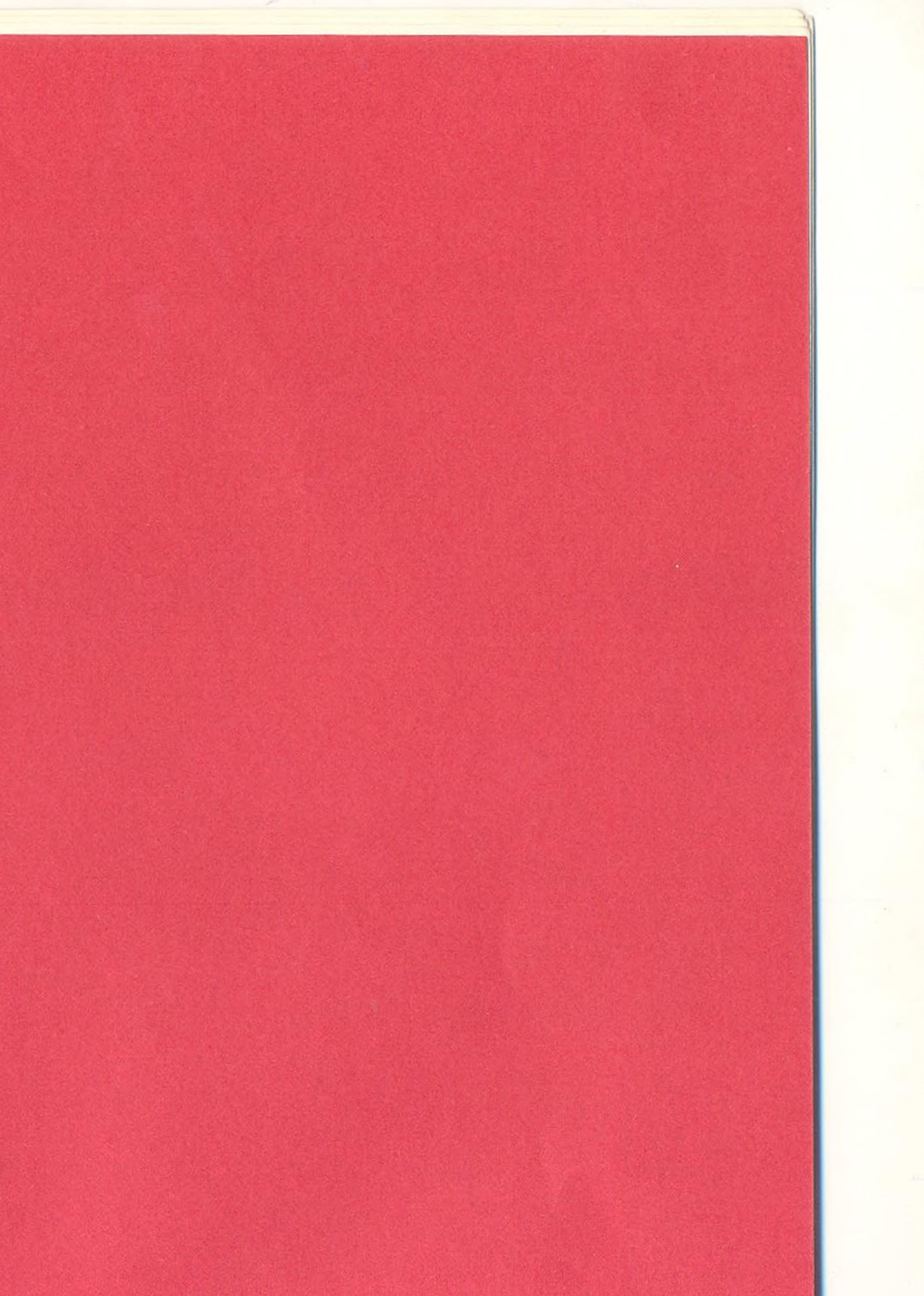
BUDGET UNDER NPCB (Rs. in lakhs)		
YEAR	FUNDS RELEASED	EXPENDITURE INCURRED
1985-90	1.52	0.19
1990-91	0.59	
1991-92		0.10
1992-93	0.19	0.02

PERFORMANCE OF CATARACT OPERATIONS			
YEAR	TARGET	ACHIEVEMENT	%
1985-86	200	104	52
1986-87	200	84	42
1987-88	200	47	23
1988-89	200	53	26
1989-90	200	55	27
1990-91	200	34	17
1991-92	500	40	8
1992-93	200	102	51





# ANNEXURES



## ANNEXURE I

### DEFINITIONS

#### Blindness:

"Blindness has been defined as inability to do any kind of work, industrial or otherwise for which sight is essential". Its functional notations depending on visual acuity, status have been evolved. For the present project classification has been adopted as follows:-

Category of impairment	Visual acuity in the better eye with usual correction	
	Maximum (Less than)	Minimum (Equal to more than)
Economic (E)	6/60	3/60
Social (S)	3/60	1/60
Manifest (M)	1/60	PL+PR Accurate
Absolute (A)	PR Faulty	PL Absent

(Visual acuity as determined on snellen's visual acuity chart)

Although all the above categories cause economic hardship to the affected individual, the latter three categories cause additional and more serious disabilities. The social blindness group implies serious handicap in education, social interaction and personality development. While manifest blindness in addition to limited mobility and difficulty in performance of daily chores is noticeable by other people. Absolute blindness is total loss of vision. The sum total of all the four categories constitutes the estimate of blindness in community.

#### Unilateral Blindness

Persons with vision equal to or less than 6/16 in one eye and the other vision better than 6/60 in other eye termed as one eye blind.

#### Aphakia

Absence of crystalline lens from the eye. Aphakia occurs if the lens has been surgically removed, as in cataract surgery, or if it has been destroyed by a penetrating injury. Aphakia causes severe loss of focussing in the affected eyes and requires correction by lens implants, cataract lenses or glasses.



## Cataract

Partial or complete opacification in the crystalline lens of one or both eyes. Cataract leads to progressive vision impairment and is the main cause of blindness in the world. Cataract common to old age can be treated by removing the opacified lens and wearing special glasses.

### Extracapsular Cataract Extraction (ECCE)

Cataract treatment by extracting lens material in small pieces while leaving the posterior lens capsule in place. Together with implantation of an intraocular lens (IOL) behind the iris, ECCE affords a greater level of visual rehabilitation than that possible with ICCE and results in fewer complications. This procedure requires provision of operating microscopes and microsurgical instruments and specialized training for surgeons.

### Intracapsular Cataract Extraction (ICCE)

Cataract treatment by removing the entire lens including its surrounding capsule. This method requires the use of aphakic spectacles after surgery. This operation is relatively simple to perform and is most commonly used in developing countries.

### Intraocular Lens (IOL)

A clear plastic lens implanted in the eye during ECCE surgery which serves as a substitute for the natural lens of the eye. IOLs also eliminate dependence of cataract patients on aphakic spectacles.

**ANNEXURE II**  
**STANDARD LIST OF OPHTHALMIC EQUIPMENTS**

I. EQUIPMENTS FOR MEDICAL COLLEGES

A. DIAGNOSTIC EQUIPMENTS:

1. Ophthalmoscopes (Battery operated)
2. Retinoscope Streak (Battery operated)
3. Indirect Ophthalmoscope
4. Keratometer
5. Lensometer (Focimeter)
6. Tonometer (Goldman)
7. Synoptophore
8. Perimeter Lister
9. Perimeter Goldman
10. Bjerrum Screen
11. Hess Screen
12. Trial Set
13. V.A. Drums
14. Biomags
15. Slit lamp of any standard variety
16. Low Visual aid Testing Set
17. Pachometer (Donal Son/Hegg Streit 900)
18. Gonioscope
19. 3 Mirror C Lens
20. Pseudo Isochromatic Charts Ishihara or A.U. Type
21. Pantoscope
22. Visuoscope
23. Euthyscope
24. Maddox Wing
25. Tangent Scale
26. Livingston Binocular Gauge
27. Roster's near point rule
28. Treatment Rack Sterilizer
29. Operating Microscope
30. Camera for Clinical Photography
31. Camera for fundus Nikon type
32. ERG, EOG Machine
33. Fundus Camera for Fluorescein  
Angiography (Zeiss or Nikon type)
34. Giant Magnet
35. Hand Magnet set
36. Photocoagulator (Zeiss)



37. Major Diathermy (Keelers)
38. Cryo unit (powered by gases like NO<sub>2</sub> or CO<sub>2</sub> (minimum temperature -40°C and does not contain any reheating capability)
39. Bray Applicator
40. Rust Ring Remover
41. Suction Apparatus
- 41a Yag Laser
42. Ultrasound A
43. Irrigation Aspiration Unit for ECCE
44. Surgeon's Stool with hydraulically operated seat.
45. Anterior Vitectomy Apparatus

B. SURGICAL INSTRUMENTS:

42. Extraocular Surgery Set
43. Cataract Glaucoma Operation Set
44. Detachment and squint set
45. Keratoplasty Operation set
46. Ophthalmoplasty and Orbital Surgery Set
47. Refrigerators
48. Audio visual Equipment
49. Deep Freeze-20

C. LABORATORY SCIENCES:

50. Microscope (Binocular)
- 51a Electrophoresis equipment Polyacryla-mide-paper electrophoresis
- 51b Electrophoresis equipment -paper electrophoresis
52. Refrigerators
53. Deep Freezer-70
54. Incubator (37.C)
55. Incubator (25.C)
56. Autoclave
57. Rotary Microtome
58. Tripple Headed Microscope

D. MICROSURGICAL INSTRUMENTS (ECCE/IOL)

1. Barraquer lid speculum
2. 5 ml syringe (2 nos.)
3. 26 G bent canula (2 nos.)
4. St.Martin forceps.

5. Superior rectus muscle holding forceps
6. Kalt needle holder
7. Round body curved needle
8. 4-0 silk suture
9. Curved mosquito clamp
10. Bishop-Harmon forceps
11. Westcott scissors
12. Cautery unit
13. Bard-Parker handle
14. No.15/No.11 blade (personal preference)
15. 22 G disposable needle
16. 2 ml syringe
17. 26 G needle cystitome
18. Castrovijeo blade breaker
19. Razor blade
20. Castro vijeo cornescleral scissors (right & left)
21. Colibri forceps
22. Simcoe cannula and handle
23. Mcpherson forceps (2 nos.)
24. Sinsky IOL dialling hook
25. Vannas scissors
26. Dewecker Scissors
27. Iris repositor
28. Barraquer needle holder
29. 10-0 nylon suture with needle
30. Harms suture tying forceps (2 Nos.)
31. Straight-tipped scissors
32. Muscle hook
33. Wire vectis or lens loop.
34. Castrovijeo callipers
35. Cotton-tipped buds
36. Intravenous drip set

## II. EQUIPMENTS FOR DISTRICT HOSPITALS:

Trial Lens Set and frames for children and adults  
 Retinoscopic mirror  
 Snellen charts and near vision charts  
 Tonometer (Schiotz) with manual  
 Dust-tight ophthalmoscope with battery handle  
 Torch  
 Corneal loupes (Unioocular)  
 Binomags  
 Lidretractors (Desmarre)

Fluoresceinstrips for corneal abrasions  
 Xylocaine eye drops for tonometry  
 Homatropine eye drops for pupil dilatation  
 Foreign Body Spud and Needles  
 Lacrimal cannula and punctum dilator  
 Lacrimal probe set  
 Slit lamp  
 Gonioscope  
 surgical set for cataract and glaucoma  
 Cryo-unit using CO<sub>2</sub> or NO<sub>2</sub> gas the minimum temperature needed is -40°C  
 Ambu emergency kit with oxygen cylinder  
 Power Generator  
 Operating theatre equipments: tables, lights, sterilizers/autoclaves.  
 surgical trays etc  
 Bag for carrying equipments  
 Perimeter  
 Indirect ophthalmoscope  
 Bgerrums sscreen  
 Maddox wing  
 Hess chart  
 Tangent scale  
 Rotating test drum  
 Prism bar  
 Bangolini glasses  
 Instruments for DCR and squint  
 Instruments for entropion and other lid operations  
 Instruments for enucleations  
 Instruments for ocular truauma  
 Keratoplesty set.

### III. EQUIPMENTS FOR DISTRICT MOBILE UNIT:

Trial Lens Set and frames for children and adults  
 Rationoscope (mirror)  
 Snellen charts and near vision charts  
 Tonometer (Schiotz) with manual  
 Dust-tight ophthalmoscope with battery handle  
 Torch  
 Corneal loupes (Unicular)  
 binomags  
 Lidretractors(Desmarro)  
 Fluorescainstrips for corneal abrasions  
 Xylocaine eye drops for tonometry  
 Homatropine eye drops for pupil dilatation Foreign Body spud and needles

Lacrimal cannula and punctum dilator  
Lacrimal probe set  
Slit lamp  
Gonioscope  
Surgical set for cataract and glaucoma  
Cryo-unit  
Ambu amergency kit with oxygen cylinder  
Power Generator  
Operating theatre equipments : tables, lights, strelizers  
Surgical trays etc.  
Bag for carrying equipments.

IV. LIST OF EQUIPMENTS FOR UPGRADED PRIMARY HEALTH CENTRES :

Trial Lens set and frames for children and adults  
Retinoscope (Mirror)  
Snellen charts and near vision charts  
Tonometer (Schiotz) with manual  
Dust-tight ophthalmoscope with battery handle  
Torch  
Corneal loupes (Uniocular)  
Binomags  
Lidretractors (Desmarre)  
Fluororosceinstrips for corneal abrasions  
Xylocaine eye drops for tonometry  
Homatropine eye drops for pupil dilatation  
Foreign Body Spud and Needles  
Lacrimal Cannul and Punctum dilator  
Bag for carrying equipments.

**ANNEXURE III**

**NATIONAL PROGRAMME FOR CONTROL OF BLINDNESS  
EXISTING PATTERN OF ASSISTANCE**

<b>NORMS</b>	<b>EXISTING PATTERN</b>
<b>1. PRIMARY HEALTH CENTRES :</b>	
Procure equipment as per list provided	One time assistance for equipment worth Rs. 7,500 per PHC (Rs. 2500 worth equipments to be procured by State Govts. directly and Rs. 5,000 worth equipments to be supplied by Central Govt.)
Appoint Ophthalmic Assistants in the strengthened PHC.	Recurring assistance of Rs. 24,000 per annum for salary of one ophthalmic assistant.
<b>2. CENTRAL MOBILE UNITS</b>	
Prepare material and equipments as per list (approved). This include vehicle/ camp material & ophthalmic equipments.	One time assistance of Rs.2.70 lacs for existing Mobile Unit. (Rs. 2.00 for replacement of vehicle and Rs. 0.7 lacs for equipments). (Rs. 0.50 worth equipments to be procured by State Govt. and Rs. 0.20 worth imported equipments to be supplied by Centre).
Recurring	Salary of staff 2.50 lacs POL Maintenances etc. 1.00 lacs Total 3.50 lacs
<b>3. DISTRICT HOSPITAL</b>	
Procure equipments as per list provided.	One time assistance for equipment worth Rs. 70,000 per district hospital (Rs. 58,000 worth equipments to be procured by state govt. and Rs.12,000 worth equipment to be supplied by Centre). (Additional input to district hospital worth Rs. 70,000 per district hospital).
Cost towards salary of one ophthalmic assistant in each strengthened Distt. hospital.	Recurring assistance of Rs.72,000 per annum per district hospital for salary of staff (Rs. 48,000 for Ophthalmic surgeon and Rs.24,000 for Ophthalmic Assistants) for further development of district hospital during 8th plan.
Provide facilities for OT,OPD, Refraction work etc.	



<b>4. MEDICAL COLLEGES</b>	
Raise bed strength to the minimum of 75 beds.	One time assistance for equipments worth Rs. 15 lakhs per Medical College in a phased manner (Rs. 5 lacs + Rs.5 lacs + Rs. 5 lacs).
Provide faculty strength to min.7.	Recurring assistance of Rs. 1 lac for faculty members per Medical College to be developed in future plan. Rs. 36,000 for one faculty member during 1st year, Rs.50,000 for II <sup>nd</sup> year and Rs.75,000 from III <sup>rd</sup> year onwards for the Medical Colleges to be developed in future plans.
Ophthalmic Instrument Technician.	Recurring assistance of Rs.24,000 p.a. for one post of Ophthalmic Instrument Technician.
<b>5. REGIONAL INSTITUTE OF OPHTHALMOLOGY</b>	
Raise bed strength to 250.	One time assistance for equipments worth Rs. 50.00 lacs per regional Institute in a phased manner. (Rs. 10.00 lacs + 10.00 lacs + 10.00lacs + 10.00lacs).
Provide Faculty Strength to the minimum of 21.	Rs. 3.50 lacs towards salaries for six faculty members per annum.
Participate in manpower development, continuing education & research activities.	
Have management Board as prescribed in guidelines.	
<b>6. OPHTHALMIC ASSISTANTS TRAINING SCHOOL.</b>	
Conduct two years training course as per guidelines in two batches per annum (30 students in each batch).	Stipend Rs. 500 per month (other recurring assistance discontinued).
<b>7. STATE OPHTHALMIC CELL</b>	
The Cell with full time Programme Officer will ensure effective implementation of programme to collect consolidate and transmit data in relation to programme.	Recurring assistance of Rs. 2.00 lacs per annum to meet the cost on salary of 4 staff; Joint/Dy director                    1 Stat. Asstt.                                1 Stenographer                            1 LDC    1 Class IV                                      1



<b>8. DISTRICT MOBILE UNITS</b>	
The unit will be attached with Distt. Hosp. and eye camp both for cataract clearance and school eye care including community education activities.	<p>One time assistance of Rs 2.70 lacs for material and equipments including one vehicle. Recurring assistance of Rs 1.50 lacs per annum towards salaries of staff, POL etc.</p> <p>Ophthalmic surgeon                    1 Ophthalmic assistant                    1 Camp Coordinator                        1 Staff Nurse                                1 class IV                                      1 Driver                                        1</p>
<b>9. EYE BANK</b>	
(a) Eye Banks in Govt. sector in Medical Colleges and Govt. Hospitals.	<p>One time assistance of Rs. 0.75 lacs for the development of eye banks. Recurring assistance of Rs. 0.50 lacs for the salaries of eye bank staff.</p>
(b) Eye Banks in Voluntary sector for setting up Eye Banks.	<p>One time assistance of Rs. 1.25 lacs for the development/estt. of eye banks. Recurring assistance of Rs.0.15 lacs (0.10 lac for M.K. Media, container bottles and their replacements + Rs.0.05 lacs for contingency expenditure).</p>
<b>10. GRANT IN AID</b>	
Grant in aid to Voluntary organisations to conduct cataract operations.	@Rs.120 per cataract operation and Rs.80 per cataract operation for those who do not use and use Govt. vehicle for cataract operations respectively.
<b>11. PILOT DISTRICT</b>	
The overall objective in the pilot district is to establish comprehensive eye care in these districts. The methodology used, resources required and the process followed should be sustained and replicable in other districts and states.	<p>Non-recurring - Rs 8.00 lacs. provision of equipment to District Hospital, PHCs and CHCs, not covered under Central assistance, studies on prevalence/ incidence of blinding disorders, Operational Research, Health Education materials, printing of manuals etc.</p> <p>Recurring - Rs. 8.00 lacs for training of Medical Officers of PHCs, in service training paramedical Ophthalmic Assistants, Dist. Ophthalmic Surgeon. Salaries for officers in experimental schemes, consultants, administration, MIS, development and production of Health education material etc. POL &amp; other expenditure as per decision of DBCs.</p>

**12. AID TO DISTRICT BLINDNESS CONTROL SOCIETIES**

Support to DBCS to manage efficient eye care services in the district.

Recurring- Rs. 3 lacs towards cost of consumables, POL and maintenance of vehicle, remuneration to coordinator and other contingent expenditure.

**13. REPLACEMENT OF EQUIPMENTS**

Equipments provided to various facilities as per requirements.

## ANNEXURE - IV

## MEDICAL COLLEGES SANCTIONED AND DEVELOPED UNDER NPCB

STATE/UTs	SANCTIONED					DEVELOPED	
	VI PLAN	VII PLAN	90-91	91-92	92-93		CUMULATIVE
A.P	6	0				6	6
ARUNANCHAL	0	0				0	0
ASSAM	2	0				2	2
BIHAR	2	0			1	3	2
GOA	0	0				0	1
GUJARAT	2	0				2	2
HARYANA	1	0				1	1
H.P.	1	0				1	1
J&K	1	0				1	1
KARNATAKA	3	0			1	4	3
KERALA	2	0				2	2
M.P.	4	1				5	6
MAHARASHTRA	5	0			1	6	5
MANIPUR	1	0				1	1
MEGHALAYA	0	0				0	0
MIZORAM	0	0				0	0
NAGALAND	0	0				0	0
ORISSA	3	0				3	3
PUNJAB	2	0				2	2
RAJASTHAN	4	0				4	4
SIKKIM	0	0				0	0
TAMILNADU	4	0			1	5	4
TRIPURA	0	0				0	0
U.P.	6	1				7	7
W.B.	5	0				5	5
A&N ISL.	0	0				0	0
CHANDIGARH	1	0				1	1
D&N HAVELI	0	0				0	0
DAMAN&DIU	1	0				1	1
DELHI	1	0				1	1
LAKSHADWEEP	0	0				0	0
PONDICHERRY	1	0				1	1
<b>TOTAL</b>	<b>58</b>	<b>2</b>			<b>4</b>	<b>64</b>	<b>62</b>

**DISTRICT HOSPITALS SANCTIONED AND DEVELOPED UNDER NPCB**

STATE/UTs	SANCTIONED					DEVELOPED	
	VI PLAN	VII PLAN	90-91	91-92	92-93		CUMULATIVE
A.P	21				0	21	21
ARUNANCHAL	5				1	6	5
ASSAM	10				2	12	10
BIHAR	31				2	33	31
GOA	0				0	0	3
GUJARAT	19				0	19	19
HARYANA	6				0	6	6
H.P.	12				0	12	10
J&K	10				0	10	10
KARNATAKA	18				0	18	18
KERALA	12				0	12	11
M.P.	45				0	45	46
MAHARASHTRA	29				0	29	29
MANIPUR	6				0	6	6
MEGHALAYA	5				0	5	5
MIZORAM	3				0	3	2
NAGALAND	7				0	7	7
ORISSA	13				2	15	13
PUNJAB	12				0	12	3
RAJASTHAN	27				0	27	27
SIKKIM	4				0	4	4
TAMILNADU	15				1	16	16
TRIPURA	3				0	3	3
U.P.	56				2	58	15
W.B.	16				0	16	16
A&N ISL.	2				0	2	2
CHANDIGARH	1				0	1	1
D&N HAVELI	1				0	1	1
DAMAN&DIU	3				0	3	0
DELHI	0				0	0	1
LAKSHADWEEP	1				0	1	1
PONDICHERRY	4				0	4	4
<b>TOTAL</b>	<b>397</b>				<b>10</b>	<b>407</b>	<b>346</b>

**DISTRICT MOBILE UNITS SANCTIONED & DEVELOPED UNDER NPCB**

STATE/UTs	SANCTIONED					DEVELOPED	
	VI PLAN	VII PLAN	90-91	91-92	92-93		CUMULATIVE
A.P	1	8	3	3	4	19	5
ARUNANCHAL	0	1	0	1	4	6	1
ASSAM	1	3	2	2	6	14	4
BIHAR	2	8	3	3	6	22	9
GOA	0	0	0	1	1	2	0
GUJARAT	3	4	2	2	3	14	3
HARYANA	1	4	2	2	4	13	3
H.P.	1	4	1	1	2	9	7
J&K	0	3	2	2	4	11	0
KARNATAKA	1	7	2	2	2	14	6
KERALA	1	5	1	1	2	10	7
M.P.	2	16	5	4	0	27	33
MAHARASHTRA	3	9	3	3	8	26	18
MANIPUR	0	1	2	2	6	11	1
MEGHALAYA	0	3	1	1	0	5	1
MIZORAM	0	1	1	1	0	3	4
NAGALAND	0	1	2	2	0	5	6
ORISSA	2	4	2	2	2	12	6
PUNJAB	1	5	2	2	8	18	9
RAJASTHAN	2	10	4	2	2	20	10
SIKKIM	0	2	1	1	10	14	4
TAMILNADU	1	5	33	3	0	42	7
TRIPURA	0	1	2	2	5	10	2
U.P.	6	17	6	4	0	33	35
W.B.	2	6	3	3	12	26	3
A&N ISL.	0	0	0	2	1	3	3
CHANDIGARH	0	0	0	1	0	1	0
D&N HAVELI	0	0	0	1	0	1	0
DAMAN&DIU	1	0	1	1	0	3	0
DELHI	0	0	0	1	0	1	0
LAKSHADWEEP	0	0	0	1	0	1	1
PONDICHERRY	0	2	0	1	0	3	0
<b>TOTAL</b>	<b>31</b>	<b>130</b>	<b>86</b>	<b>60</b>	<b>92</b>	<b>399</b>	<b>188</b>



**PRIMARY HEALTH CENTRES SANCTIONED AND DEVELOPED UNDE NPCB**

STATE/UTs	SANCTIONED					DEVELOPED	
	VI PLAN	VII PLAN	90-91	91-92	92-93		CUMULATIVE
A.P	120	150	40	40	50	400	230
ARUNANCHAL	5	0	0	10	10	25	15
ASSAM	85	61	0	10	10	166	181
BIHAR	118	105	40	30	50	343	203
GOA	0	0	0	10		10	13
GUJARAT	185	50	0	40	10	285	250
HARYANA	90	0	3	30	10	133	83
H.P.	60	0	7	15	10	92	70
J&K	80	10	10	15	10	125	76
KARNATAKA	80	181	0	40	40	341	269
KERALA	100	100	0	40	20	260	100
M.P.	160	280	50	40	20	550	502
MAHARASHTRA	125	190	15	44	80	454	374
MANIPUR	16	10	5	5	0	36	16
MEGHALAYA	11	4	0	5	0	20	11
MIZORAM	12	10	0	5	0	27	13
NAGALAND	11	0	5	5	0	21	11
ORISSA	75	178	20	15	10	298	133
PUNJAB	125	0	5	10	20	160	128
RAJASTHAN	147	27	0	30	40	244	171
SIKKIM	0	3	0	5	0	8	8
TAMILNADU	75	130	28	20	50	303	162
TRIPURA	20	0	5	10	0	35	9
U.P.	175	449	15	50	100	789	729
W.B.	100	240	1	30	60	431	341
A&N ISL.	0	10	0	6	0	16	10
CHANDIGARH	1	0	0	6	0	7	6
D&N HAVELI	1	0	1	6	0	8	0
DAMAN&DIU	7	0	0	6	0	13	1
DELHI	5	0	0	6	0	11	0
LAKSHADWEEP	0	0	0	6	0	6	8
PONDICHERRY	11	0	0	10	0	21	2
<b>TOTAL</b>	<b>2000</b>	<b>2188</b>	<b>250</b>	<b>600</b>	<b>600</b>	<b>5638</b>	<b>4125</b>





## NATIONAL PROGRAMME FOR CONTROL OF BLINDNESS

### INFORMATION REGARDING DISTRICT BLINDNESS CONTROL SOCIETY

(To be sent annually in the month of April)

State \_\_\_\_\_

State Code  

District \_\_\_\_\_

Distt Code  

Date of Registration of DBCS:

1 9

Date

Month

Year

Registration No.

(Societies Registration Act XXI of 1860)

Name, designation/Occupation of members of the Society:-

POSITION	NAME	DESIGNATION/OCCUPATION
CHAIRMAN		COLLECTOR/DM
VICE-CHAIRMAN		
MEMBER-SECRETARY		Distt. Programme Manager
TECHNICAL ADVISOR		Distt. Opth. Surgeon
MEMBER		
MEMBER		
MEMBER		
MEMBER		
MEMBER		
MEMBER		
MEMBER		
MEMBER		
MEMBER		

Cataract Surgery performed in the district before setting up DBCS:

YEAR	TARGET	ACHIEVEMENT
1990-91		
1991-92		
1992-93		



## NATIONAL PROGRAMME FOR CONTROL OF BLINDNESS

### INFRASTRUCTURE DEVELOPMENT IN THE DISTRICT

(To be sent annually in the month of April)

State _____	State Code	<input style="width: 20px; height: 20px;" type="text"/>	<input style="width: 20px; height: 20px;" type="text"/>
District _____	Distt Code	<input style="width: 20px; height: 20px;" type="text"/>	<input style="width: 20px; height: 20px;" type="text"/>
Reporting year		<input style="width: 20px; height: 20px;" type="text"/>	- <input style="width: 20px; height: 20px;" type="text"/>

**OPHTHALMIC MANPOWER:**

<u>Facility</u>	Ophthalmic Surgeon	Paramedical Oph. Asstt.
District Hospital	<input style="width: 20px; height: 20px;" type="text"/> <input style="width: 20px; height: 20px;" type="text"/>	<input style="width: 20px; height: 20px;" type="text"/> <input style="width: 20px; height: 20px;" type="text"/>
District Mobile unit	<input style="width: 20px; height: 20px;" type="text"/> <input style="width: 20px; height: 20px;" type="text"/>	<input style="width: 20px; height: 20px;" type="text"/> <input style="width: 20px; height: 20px;" type="text"/>
Taluka/Subdistt. Hospitals	<input style="width: 20px; height: 20px;" type="text"/> <input style="width: 20px; height: 20px;" type="text"/>	<input style="width: 20px; height: 20px;" type="text"/> <input style="width: 20px; height: 20px;" type="text"/>
Community Health Centres	<input style="width: 20px; height: 20px;" type="text"/> <input style="width: 20px; height: 20px;" type="text"/>	<input style="width: 20px; height: 20px;" type="text"/> <input style="width: 20px; height: 20px;" type="text"/>
Primary Health Centres	<input style="width: 20px; height: 20px;" type="text"/> <input style="width: 20px; height: 20px;" type="text"/>	<input style="width: 20px; height: 20px;" type="text"/> <input style="width: 20px; height: 20px;" type="text"/>
NGOs	<input style="width: 20px; height: 20px;" type="text"/> <input style="width: 20px; height: 20px;" type="text"/>	<input style="width: 20px; height: 20px;" type="text"/> <input style="width: 20px; height: 20px;" type="text"/>
Private sector	<input style="width: 20px; height: 20px;" type="text"/> <input style="width: 20px; height: 20px;" type="text"/>	<input style="width: 20px; height: 20px;" type="text"/> <input style="width: 20px; height: 20px;" type="text"/>
<b>Total</b>	<input style="width: 20px; height: 20px;" type="text"/> <input style="width: 20px; height: 20px;" type="text"/>	<input style="width: 20px; height: 20px;" type="text"/> <input style="width: 20px; height: 20px;" type="text"/>

**INFRASTRUCTURE :**

Mobile Unit/s developed	<input style="width: 40px; height: 25px;" type="text"/>
No. of functional Vehicles	<input style="width: 40px; height: 25px;" type="text"/>

OPHTHALMIC BEDS :	Developed during the Year	Total till date
District Hospital	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>
Subdistt./Taluka Hospital	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>
Community Health Centres	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>
NGOs	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>
Private Sector	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>
Total	<input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/>

Separate Ophthalmic Operation Theatre Developed :

District Hospital	<input type="text"/>
Subdistt.Hospitals	<input type="text"/>
Upgraded Community Health Centres	<input type="text"/>

UPGRADATION OF FACILITIES :

District Hospital upgraded (Y/N)	<input type="text"/>
Taluka/Subdistrict Hospitals	Total <input type="text"/> Upgraded <input type="text"/>
Community Health Centres	Total <input type="text"/> <input type="text"/> Upgraded <input type="text"/> <input type="text"/>
Primary Health Centres	Total <input type="text"/> <input type="text"/> Upgraded <input type="text"/> <input type="text"/>
No. of eye banks developed	Govt. <input type="text"/> NGO/Pvt. <input type="text"/>

**NATIONAL PROGRAMME FOR CONTROL OF BLINDNESS**  
**QUARTERLY MONITORING OF DISTRICT**  
 (To be sent in July, Oct, Jan, April)

State: \_\_\_\_\_ District: \_\_\_\_\_

Reporting Year:   -   Quarter:

**CATARACT PERFORMANCE:**

FACILITY	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	TOTAL
MED. COL.													
DIST. HOS													
CMU/DMU													
NGO													
PVT. PRAC													
TOTAL													
PROGRES. TOTAL													

**INCOME & EXPENDITURE:**

	Qtr I	Qtr II	Qtr III	Qtr IV	TOTAL
I. OPENING BALANCE					
II. INCOME:					
1. Grants from GOI					
2. Bank Interest					
3. Other receipts					
TOTAL INCOME (I+II)					
III. EXPENDITURE					
1. Remuneration					
2. Sutures & Drugs					
3. POL & mainten.					
4. Spectacles					
5. IEC activities					
6. Reimburs. to NGO					
7. Training					
8. Contingencies					
TOTAL EXPENDITURE					
BALANCE (I+II-III)					

Date: \_\_\_\_\_

Name & Signature of Reporting Officer \_\_\_\_\_





NATIONAL PROGRAMME FOR CONTROL OF BLINDNESS  
BLOCKWISE MONITORING IN THE DISTRICT  
(For use within the District)

State: \_\_\_\_\_ District: \_\_\_\_\_

Reporting Year:   -

CATARACT PERFORMANCE:

BLOCK	POPULATION	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	TOTAL
TOTAL														

Date: \_\_\_\_\_

\_\_\_\_\_  
Name & Signature of Reporting Officer



**NATIONAL PROGRAMME FOR CONTROL OF BLINDNESS  
DISTRICTWISE MONITORING IN THE STATE  
(For use within the State)**

State: \_\_\_\_\_

Reporting Year:   -

**CATARACT PERFORMANCE:**

DISTRICT	ANNUAL TARGET	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	TOTAL
<b>TOTAL</b>														

Date: \_\_\_\_\_

\_\_\_\_\_  
Name & Signature of Reporting Officer



**NATIONAL PROGRAMME FOR CONTROL OF BLINDNESS  
SUMMARY OF CATARACT OPERATIONS PERFORMED IN THE STATE  
(To be sent monthly to D.G.H.S.)**

State: \_\_\_\_\_

Reporting Year: 

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Target of the Year : \_\_\_\_\_

**PERFORMANCE OF CATARACT OPERATIONS :**

MONTH	PERFORMANCE	CUMULATIVE PERFORMANCE
APRIL		
MAY		
JUNE		
JULY		
AUGUST		
SEPTEMBER		
OCTOBER		
NOVEMBER		
DECEMBER		
JANUARY		
FEBRUARY		
MARCH		
TOTAL		

Date: \_\_\_\_\_

\_\_\_\_\_  
Name & Signature of S.P.O.



rural areas. Not many villages are connected by road or have transport facilities. Literacy rates are low particularly among female population.

Cataract backlog gets accumulated mainly due to the problem remaining out of focus both for the agency and the beneficiary. The back log is estimated to be more among rural areas than urban areas, more among females than males, more among agriculture labourers and urban slum dwellers than other social groups.

## **2. NATIONAL PROGRAMME FOR CONTROL OF BLINDNESS HISTORICAL ASPECTS**

With the launching of the National Programme for Trachoma in 1963, the first organised efforts to Control Blindness at National level commenced. This programme, without any major changes, was in operation for a decade. It was only in 1973-75, after the Indian Council of Medical Research survey results were received that the magnitude of the blindness problem was fully realised and the causes of blindness came into focus. The thrust of the strategies of the programme underwent extensive modifications as a result of this. The Central Council of Health and Family Welfare, at its meeting held in 1975, resolved that 'one of the basic human rights was the right to see and, therefore, it had to be ensured that no citizen goes blind need lessly; or being blind does not remain so, if, by reasonable deployment of skill and resources, his eye sight could be prevented from deteriorating and if already lost could be restored'. Following this, the strategy evolved for prevention and control of blindness included :

- (1) dissemination of information about eye care through mass communication with particular emphasis on ocular health among children and other vulnerable groups;
- (2) augmentation of ophthalmic services in a manner that relief can be given to the community in the shortest possible time; and
- (3) establishment of a permanent infrastructure of community oriented eye health care.

Based on the recommendations made by the Central Council of Health and given the new thrust areas, the National Programme for Trachoma was renamed as the National Programme for Prevention of Visual Impairment and Control of Blindness in 1976.